

Памяти Владимира Евгеньевича Фортова

PACS number: 01.60. +q

DOI: <https://doi.org/10.3367/UFNr.2020.12.038902>

Академик Владимир Евгеньевич Фортов — всемирно известный учёный, лауреат многих престижных премий и почётных званий. Он внёс огромный вклад в физику экстремальных состояний вещества и высоких плотностей энергии, неидеальной плазмы, ударных и детонационных волн, теплофизику, химическую физику, космические исследования, энергетику и ряд других областей физики и техники (включая оборонную тематику).

Фортов был Президентом Российской академии наук (РАН) с 2013 по 2017 гг., полным кавалером ордена "За заслуги перед Отечеством", мужественным гражданином и широкой души человеком. 23 января 2021 г. ему исполнилось бы 75 лет.

Не исполнится... Владимира Евгеньевича не стало 29 ноября 2020 года. Его могучий, богатырский от природы организм не справился с последствиями коронавирусной инфекции... А всем знавшим Владимира Евгеньевича казалось, что в мире нет препятствий, которые Фортов не сможет преодолеть.

Фортов родился в г. Ногинске Московской области менее чем через год после Победы в Великой Отечественной войне, в семье инженера-подполковника военно-воздушных сил Евгения Викторовича и школьной учительницы Галины Ивановны Фортовых. Дети тех лет, окрылённые подвигами поколения родителей, были нацелены на грандиозные свершения. Прошедшие рядом с военным аэродромом (в силу профессии отца) детские и школьные годы Владимира, несомненно, повлияли на его выбор жизненного пути. В 1962 г., после окончания школы, он в 16 лет поступает на факультет аэрофизики и космических исследований Московского физико-технического института (МФТИ), где преподавали звёзды отечественной науки, о которых Владимир Евгеньевич всегда вспоминал с большим почтением и благодарностью. Научную работу Владимир начинает ещё на 2-м курсе на базовой кафедре НИИ тепловых процессов (ныне Государственный научный центр им. М.В. Келдыша) под руководством члена-корреспондента Академии наук СССР В.М. Иевлева. В 1968 г. В.Е. Фортов с отличием заканчивает институт по специальности "Термодинамика и аэродинамика" и поступает в аспирантуру на кафедру физической механики МФТИ. В 1971 г. он досрочно защищает кандидатскую диссертацию на тему "Теплофизика ядерных ракетных двигателей" и направляется по распределению на Дальний Восток.

Однако судьбоносная встреча с академиком Я.Б. Зельдовичем, обратившим внимание на выступление В.Е. Фортова на конференции, круто изменила жизнь молодого учёного: Яков Борисович рекомендовал его Нобелевскому лауреату Н.Н. Семёнову. Так с лёгкой руки Я.Б. Зельдовича Фортов в 1971 г. приступил к работе в филиале Института химической физики АН СССР в Черноголовке и начал заниматься исследованиями в области физики неидеальной плазмы и экстремальных состояний вещества. Результаты легли в основу его докторской диссертации "Исследование неидеальной плазмы динамическими методами", которую он защитил в 1976 г., всего через 5 лет после начала своих исследований. Эта тематика оставалась в центре внимания Фортова всю его жизнь.

Фортов активно занимался изучением механики разрушения материалов при высоких давлениях и температурах, а также при высоких скоростях деформации. С 1980-х годов под его руководством проводятся экспериментальные и теоретические исследования механических свойств материалов и поражающих элементов, преград и конструкций специальной техники.

Когда в начале 1980-х годов коллектив учёных под руководством академика Р.З. Сагдеева приступил к выполнению Международной космической программы "Вега", направленной на изучение кометы Галлея, то опыт Фортова, накопленный в процессе изучения высокоскоростного удара, оказался весьма востребованным. Противометеоритная защита аппаратов "Вега" и комплекс пылеударных приборов успешно выполнили свою задачу, а использованные компьютерные коды были затем адаптированы для изучения проблем астероидной опасности. Так, в начале 1994 г. группой, возглавляемой Фортовым, было дано подробное предсказание возможных наблюдаемых последствий необыкновенного космического события — столкновения кометы Шумейкеров–Леви с Юпитером в июле 1994 г. Данные последующих наблюдений, проведённых во



Владимир Евгеньевич Фортов
(23.01.1946 – 29.11.2020)

многих обсерваториях мира, подтвердили высокую точность этих предсказаний. Аналогичная работа была выполнена в 2005 г. в связи с проектом "Deep Impact" — космическим экспериментом, в ходе которого впервые наблюдался процесс высокоскоростного столкновения металлического ударника с ядром кометы 9P/Tempel.

Многие годы Фортов активно сотрудничал с Институтом общей физики (ИОФАН) и Институтом высоких температур (ИВТАН) АН СССР, возглавляемыми в то время академиками А.М. Прохоровым и А.Е. Шейндлиным. Проводимые в ИОФАНе опыты по воздействию на мишени импульсного лазерного излучения позволили проверить расчётные и физические модели при мегабарных давлениях, характерные для гиперзвуковых соударений с высокоскоростными метеоритами. Для этого в ИВТАНе были созданы рельсотронные электродинамические ускорители и взрывные генераторы мощных ударных волн.

По инициативе Фортова в ИВТАНе с 1986 г. были развёрнуты исследования в области высокотемпературной теплофизику, созданы крупные стенды для реализации высоких импульсных давлений и температур, смонтирована сферическая взрывная камера 13ЯЗ — крупнейшее в мире и уникальное техническое сооружение. Разработанные генераторы мощных ударных волн и экспериментальные методы изучения физических свойств вещества в экстремальных условиях с использованием взрыва, лазерных, релятивистских электронных и ионных пучков позволили предложить широкодиапазонные полупырические уравнения состояния многих химических элементов и конструкционных материалов, которые применяются при разработке новой техники. Эти работы успешно продолжились в Объединённом институте высоких температур (ОИВТ) РАН, который Фортов возглавлял в 2007 г.

Фортов предложил ряд применений электронных и ионных пучков, а также мягкого рентгеновского излучения для решения специальных задач. В Отделении Института химической физики (ОИХФ) построена установка, где в 1987 г. были получены первые мультимегаваттные импульсы СВЧ излучения от взрывомангнитных генераторов. В сотрудничестве с петербургской школой лауреата Нобелевской премии академика Ж.И. Алфёрова и школой академика Г.А. Месяца были созданы гигаваттные излучатели гармонических колебаний сантиметрового диапазона, получены новые данные об устойчивости электронной техники к мощным электромагнитным излучениям, выполнен комплекс работ по специальной тематике, в том числе для создания устройств перспективной ракетной и оборонной техники, антитеррористических устройств.

Научные работы В.Е. Фортова способствовали созданию образцов ракетного ядерного оружия XXI века, что обеспечивает обороноспособность и безопасность нашей страны, и закреплению геополитической роли России как одного из лидеров, определяющих мировую политику на ближайшее десятилетие.

Ещё одно яркое направление исследований Фортова — это сильнонеидеальная пылевая плазма. Под его руководством был выполнен цикл пионерских экспериментальных исследований структурных и динамических свойств плазменно-пылевых кристаллов и жидкостей в широком диапазоне температур и давлений. Впервые были получены плазменные кристаллы и жидкости в тлеющем разряде, термической плазме, плазме ультрафиолетового излучения, в радиоактивной и криогенной плазме, выполнена серия ярких экспериментов "Плазменный кристалл" по кристаллизации плазмы на космических станциях "Мир" и Международной космической станции.

Владимир Евгеньевич принимал активное участие в экстремальных экспедициях. В мае 2005 г. Фортов был участником похода на атомной подводной лодке "Волк", в 2007 г. участвовал в Высокоширотной арктической глубоководной экспедиции на Северный полюс, в 2008 г. (в рамках программы Международного полярного года) участвовал в Международной антарктической экспедиции на Южный полюс и Полюс относительной недоступности, в 2010 г. опускался на дно озера Байкал и озера Леман (Швейцария), а в 2014 г. был на полярной станции Восток в Антарктиде. Фортов был призёром чемпионата СССР по парусному спорту, обошёл на яхте мыс Горн и мыс Доброй Надежды, пересёк на парусной яхте Атлантический океан. Он увлекался горными лыжами, теннисом, пилотированием, шахматами, горным туризмом.

И научный, и жизненный опыт экстремальных ситуаций Владимира Евгеньевича был востребован при изучении причин и последствий техногенных катастроф. В 1988 г. Фортов находился на Чернобыльской АЭС в составе рабочей группы от АН СССР для оценки последствий аварии, а в 2009 г. участвовал в комиссии по расследованию аварии на Саяно-Шушенской ГЭС.

Многие годы Владимир Евгеньевич вёл большую научно-организационную и общественную работу. Выдвижение В.Е. Фортова на ответственные академические и государственные должности пришлось на трудные для российской науки годы, последовавшие за развалом СССР. В.Е. Фортов делал всё возможное (и невозможное), чтобы приостановить негативные процессы. В 1993 г. он был назначен первым председателем Российского фонда фундаментальных исследований (РФФИ). В фонде была разработана первая в России грантовая система, основанная на независимой экспертизе. По меткому отзыву одного из получателей гранта, «эти гранты РФФИ в "лихие" 1990-е были, как хлебные карточки в блокадном Ленинграде, для брошенных в рыночные отношения совершенно неприспособленных учёных». Благодаря этим грантам в значительной степени удалось сохранить научные школы и поддержать отечественных учёных. За время работы председателем РФФИ Фортов смог добиться увеличения средств фонда в 3 раза. Это были весьма своевременные и очень нужные для отечественной науки шаги. Очень многие с благодарностью об этом помнят.

С 1996 г. по 1998 г. Фортов был заместителем председателя Правительства России, председателем Государственного комитета РФ по науке и технологиям, Министром науки и технологий России. За это время были приняты закон о науке и научно-технической политике РФ, концепция развития науки и технологий РФ и ряд других государственных документов, направленных на защиту и сохранение научно-технического потенциала страны. Ключевые положения этих документов (4%-ный размер ассигнований на науку от ВВП, статус Академии наук, собственность научных организаций, налог на землю, имущество, поддержка ГНЦ и т.п.) сыграли стабилизирующую роль для науки страны. За время работы В.Е. Фортова в Правительстве финансирование науки было увеличено в 1,8 раза, а РАН в 2,2 раза с увеличением доли РАН в научном бюджете страны с 17 % до 23 %.

Фортовым совместно с академиками А.В. Гапоновым-Греховым, В.Е. Захаровым и В.П. Скулачёвым была предложена и реализована специальная программа поддержки научных школ и выдающихся учёных России. Материальную поддержку получили

многие тысячи специалистов страны. Расширилось международное научно-техническое сотрудничество, упростился обмен приборами и оборудованием путём отмены налогов и пошлин.

В 1987 г. В.Е. Фортов был избран членом-корреспондентом АН СССР, а в 1991 г. — действительным членом РАН. С 1996 по 2001 гг. В.Е. Фортов являлся вице-президентом РАН.

С 2002 по 2013 гг. и с 2017 г. до конца своих дней В.Е. Фортов являлся академиком-секретарём Отделения энергетики, машиностроения, механики и процессов управления РАН.

С активным участием РАН была разработана и принята "Энергетическая стратегия России", подписано масштабное соглашение о научно-техническом сотрудничестве в области традиционной и перспективной энергетики страны. В целях ускоренного развития ядерной энергетики России было подготовлено и подписано крупное соглашение о сотрудничестве между Росатомом и РАН но широкому спектру фундаментальных и прикладных работ.

Фортов был избран действительным членом Европейской академии наук (1998), Научного общества Макса Планка (Германия, 2000), Королевской инженерной академии Великобритании (2003), Королевской инженерной академии Швеции (2004), Норвежской академии полярных исследований (2009), Королевской инженерной академии Испании (2013), Европейской академии наук и искусств (2014), Европейского инновационного фонда; иностранным членом Национальной инженерной академии США (2002), Национальной академии наук Грузии (2002), Национальной академии наук США (2014), Национальной академии наук Республики Казахстан (2015), почётным членом Американского физического общества, США (2001), Российской академии ракетных и артиллерийских наук (2016); почётным доктором и профессором многих университетов мира.

Высочайший международный авторитет Фортова способствовал развитию крупных международных проектов, таких, например, как строительство Центра по исследованию ионов и антипротонов (FAIR — Facility for Antiproton and Ion Research) — нового, крупнейшего в мире, международного исследовательского центра, строящегося в г. Дармштадт (Германия). Увы, завершение этого проекта состоится уже без Владимира Евгеньевича.

Много внимания В.Е. Фортов уделял работе на кафедре физики высокотемпературных процессов родного ему МФТИ. Под его руководством было защищено 14 докторских и более 40 кандидатских диссертаций, восемь его учеников избраны членами РАН. Педагогические заслуги Фортова и его коллег были отмечены премией Правительства РФ в области образования за 2010 г.

В.Е. Фортовым с коллегами выпущено более 30 монографий и более 800 оригинальных статей в ведущих зарубежных и отечественных журналах. Только в журнале *Успехи физических наук (УФН)* Владимир Евгеньевич опубликовал 28 больших обзоров, ежегодно приносящих около сотни ссылок *УФН*.

В.Е. Фортов являлся заместителем председателя Совета по науке и образованию при Президенте Российской Федерации, председателем ряда Межведомственных координационных советов и Научных советов РАН, членом научно-консультативного совета при Генеральном секретаре ООН и ряда других отечественных и зарубежных советов и комиссий. Фортов — главный редактор пяти отечественных журналов и член редколлегий ряда международных и отечественных научных изданий.

Научная и организационная деятельности В.Е. Фортова были отмечены многими отечественными и международными наградами и премиями. Только их сухое перечисление заняло бы не одну страницу.

В мае 2013 г., накануне начала сложного периода для российского научного сообщества, Владимир Евгеньевич Фортов был избран Президентом Российской академии наук. В этой должности ему приходилось решать тяжелейшие задачи по сохранению российской науки в процессе радикальных, болезненных преобразований, добиваться повышения роли и авторитета РАН в новых условиях. Его многочисленные статьи и выступления в СМИ, занятая им принципиальная позиция способствовали успешному проведению корабля Академии и всего научного сообщества через шторма и рифы в этот драматический период истории российской науки.

Блестящий учёный, выдающийся руководитель, талантливый педагог, человек высочайших моральных принципов и большого личного мужества, Владимир Евгеньевич Фортов всегда был и будет для нас примером беззаветного служения науке. Таким он и останется в нашей памяти, останется навсегда в своих трудах, в своих учениках, в примерах отношения к делу, к науке. В его стремлении ставить и решать невозможные задачи он останется в Российской науке как учёный, не только создавший новые направления и решивший принципиальные проблемы, но и как государственный деятель, на долю которого выпали самые сложные годы управления Российской академией наук.

В.Е. Захаров, Л.М. Зелёный, Р.И. Ильяев, Г.А. Месяц, Л.П. Пятаевский, В.А. Рубаков, О.В. Руденко, Г.Н. Рыкованов, А.М. Сергеев, Ю.С. Соломонов, Б.Ю. Шарков, И.А. Шербаков

Список основных научных публикаций В.Е. Фортова:

Книги:

- В. Е. Фортов, И. Т. Якубов, Неидеальная плазма. М.: Энергоатомиздат, 1994.
- В.Е. Фортов, Экстремальные состояния вещества на Земле и в космосе. М.: Физматлит, 2008.
- В.Е. Фортов, Экстремальные состояния вещества. М.: Физматлит, 2010.
- В. Е. Фортов, О. С. Попель, Энергетика в современном мире. М.: Интеллект, 2011.
- В. Е. Фортов, Уравнения состояния вещества от идеального газа до кварк-глюонной плазмы. М.: Физматлит, 2012.
- В.Е. Фортов, Физика высоких плотностей энергии. М.: Физматлит, 2013.
- В.Е. Фортов, Избранные статьи и доклады, в 4 томах. М.: ОИВТ РАН, 2015.
- Заметки о науке: сборник избранных статей и интервью президента Российской академии наук академика В. Е. Фортова. М.: РТСофт - КОСМОСКОП, 2016.
- В.Е. Фортов, Мощные ударные волны на Земле и в космосе. М.: Физматлит, 2018.
- В.Е. Фортов, Термодинамика динамических воздействий на вещество. М.: Физматлит, 2019.

Публикации В.Е. Фортова и о нем в УФН: <https://ufn.ru/ru/authors/121/fortov-vladimir-e/>

Список публикаций из WoS:

1. FILIPPOV, AV; FORTOV, VE; RESHETNIAK, VV; STAROSTIN, AN; TKACHENKO, IM.
ELECTROSTATIC INTERACTIONS AND STABILITY OF DUSTY PLASMAS AND THE MULTICOMPONENT ORNSTEIN-ZERNIKE EQUATION
AIP ADVANCES 10(4), - (2020)
2. SCHOENBERG, K; BAGNOUD, V; BLAZEVIC, A; FORTOV, VE; GERICKE, DO; GOLUBEV, A; HOFFMANN, DHH; KRAUS, D; LOMONOSOV, IV; MINTSEV, V; NEFF, S; NEUMAYER, P; PIRIZ, AR; REDMER, R; ROSMEJ, O; ROTH, M; SCHENKEL, T; SHARKOV, B; TAHIR, NA; VARENTSOV, D; ZHAO, Y.
HIGH-ENERGY-DENSITY-SCIENCE CAPABILITIES AT THE FACILITY FOR ANTI-PROTON AND ION RESEARCH
PHYSICS OF PLASMAS 27(4), - (2020)
3. FILINOV, V; LARKIN, A; FORTOV, V.
SCREENING PROPERTIES OF QUARK-GLUON PLASMA OBTAINED FROM DISTRIBUTION AND CORRELATION FUNCTIONS OF THE CONSTITUENT QUASIPARTICLE MODEL
PHYSICAL REVIEW C 101(2), - (2020)
4. EMELIANOV, AV; EREMIN, AV; MIKHEYEVA, EY; FORTOV, VE.
ON THE POSSIBILITY OF PROMOTING A DETONATION CONDENSATION WAVE IN ACETYLENE WITH METHANE ADDITIONS
DOKLADY PHYSICAL CHEMISTRY 490(1), 1-3 (2020)
5. ZELENER, BB; SAAKYAN, SA; SAUTENKOV, VA; VILSHANSKAYA, EV; ZELENER, BV; FORTOV, VE.
MEASUREMENTS OF THE RYDBERG TRANSITION ENERGIES FOR THE N(1)S(0) STATE AND THE IONIZATION POTENTIAL FOR CA-40 ATOMS
JETP LETTERS 110(12), 761-765 (2019)
6. KIVERIN, AD; YAKOVENKO, IS; FORTOV, VE.
MECHANISM OF DETONATION FORMATION UPON FREE FLAME PROPAGATION IN AN UNCONFINED SPACE
DOKLADY PHYSICS 64(12), - (2019)
7. FILIPPOV, AV; RESHETNYAK, VV; STAROSTIN, AN; TKACHENKO, IM; FORTOV, VE.

INVESTIGATION OF DUSTY PLASMA BASED ON THE ORNSTEIN-ZERNIKE INTEGRAL EQUATION FOR A MULTICOMPONENT FLUID

JETP LETTERS 110(10), 659-666 (2019)

8. STAROSTIN, AN; ZHITLUKHIN, AM; PETRUSHEVICH, YV; TARAN, MD; FILIPPOV, AV; FORTOV, VE; CHERKOVETS, VE.

ESTIMATES OF THE DEPENDENCE OF THE FUSION NEUTRON YIELD ON THE INITIAL PLASMA DENSITY AND TEMPERATURE IN FAST PINCHES

JETP LETTERS 110(6), 405-410 (2019)

9. WEI, Z; LIU, B; GOREE, J; PUSTYLNİK, MY; THOMAS, HM; FORTOV, VE; LIPAEV, AM; USACHEV, AD; MOLOTKOV, VI; PETROV, OF; THOMA, MH.

DIFFUSIVE MOTION IN A 3-D CLUSTER IN PK-4

IEEE TRANSACTIONS ON PLASMA SCIENCE 47(7), 3100-3106 (2019)

10. SYROVATKA, R; FILINOV, V; VASILYAK, L; FORTOV, V; DEPUTATOVA, L; VLADIMIROV, V; PECHERKIN, V.

SOLITARY DENSITY WAVES IN THE STRONGLY COUPLED ONE COMPONENT COULOMB PARTICLE STRUCTURES AS EXPERIMENTAL SUPPORT OF THE GENERAL VERSATILITY OF THE CAUSTIC THEORY
PHYSICS LETTERS A 383(16), 1942-1945 (2019)

11. YAROSHENKO, VV; KHRAPAK, SA; PUSTYLNİK, MY; THOMAS, HM; JAISWAL, S; LIPAEV, AM; USACHEV, AD; PETROV, OF; FORTOV, VE.

EXCITATION OF LOW-FREQUENCY DUST DENSITY WAVES IN FLOWING COMPLEX PLASMAS

PHYSICS OF PLASMAS 26(5), - (2019)

12. ZAPOROZHETS, Y; MINTSEV, V; FORTOV, V; REINHOLZ, H; ROPKE, G; ROSMEJ, S; OMARBAKIYEVA, YA.

POLARIZED ANGULAR-DEPENDENT REFLECTIVITY AND DENSITY-DEPENDENT PROFILES OF SHOCK-COMPRESSED XENON PLASMAS

PHYSICAL REVIEW E 99(4), - (2019)

13. FORTOV, VE; SHVARTSBERG, AB.

LABORATORY MODELING OF THE GIANT GRAVITATIONAL SHIFT OF GAMMA-RADIATION FREQUENCY

DOKLADY PHYSICS 64(3), 90-93 (2019)

14. ZELENER, BB; BOBROV, AA; VILSHANSKAYA, EV; ARSHINOVA, ID; SAAKYAN, SA; SAUTENKOV, VA; ZELENER, BV; FORTOV, VE.

TEMPERATURE MEASUREMENTS OF OPTICALLY COOLED CALCIUM ATOMS USING DIFFERENTIAL TWO-PHOTON SPECTROSCOPY

DOKLADY PHYSICS 64(3), 94-96 (2019)

15. THOMAS, HM; SCHWABE, M; PUSTYLNİK, MY; KNAPEK, CA; MOLOTKOV, VI; LIPAEV, AM; PETROV, OF; FORTOV, VE; KHRAPAK, SA.

COMPLEX PLASMA RESEARCH ON THE INTERNATIONAL SPACE STATION

PLASMA PHYSICS AND CONTROLLED FUSION 61(1), - (2019)

16. ZELENER, BB; ARSHINOVA, ID; BOBROV, AA; VILSHANSKAYA, EV; SAAKYAN, SA; SAUTENKOV, VA; ZELENER, BV; FORTOV, VE.

COHERENT EXCITATION OF RYDBERG STATES IN THE GAS OF COLD CA-40 ATOMS

JETP LETTERS 108(12), 820-824 (2018)

17. SHVARTSBERG, AB; PECHERKIN, VY; JIMENEZ, S; VASILYAK, LM; VETCHININ, SP; VAZQUEZ, L; FORTOV, VE.

SUB WAVELENGTH DIELECTRIC ELLIPTICAL ELEMENT AS AN ANISOTROPIC MAGNETIC DIPOLE FOR INVERSIONS OF MAGNETIC FIELD

JOURNAL OF PHYSICS D-APPLIED PHYSICS 51(47), - (2018)

18. BABAEVA, NY; NAIDIS, GV; TERESHONOK, DV; SON, EE; VASILIEV, MM; PETROV, OF; FORTOV, VE.

PRODUCTION OF ACTIVE SPECIES IN AN ARGON MICROWAVE PLASMA TORCH

JOURNAL OF PHYSICS D-APPLIED PHYSICS 51(46), - (2018)

19. D'YACHKOV, LG; RAMAZANOV, TS; PETROV, OF; VASILIEV, MM; MYASNIKOV, MI; FORTOV, VE; DZHUMAGULOVA, KN; GABDULLIN, MT; DOSBOLAYEV, MK; USSENOV, YA; MOLDABEKOV, ZA; SAVIN, SF; MUSABAYEV, TA; ZHANTAYEV, ZS; AIMBETOV, AA.

STRUCTURE OF A COULOMB CLUSTER IN THE CUSP MAGNETIC TRAP UNDER MICROGRAVITY CONDITIONS

CONTRIBUTIONS TO PLASMA PHYSICS 58(10), 940-945 (2018)

20. MOCHALOV, MA; IL'KAEV, RI; FORTOV, VE; MIKHAILOV, AL; ARININ, VA; BLIKOV, AO; OGORODNIKOV, VA; RYZHKOV, AV; KOMRAKOV, VA; MAKSIMKIN, IP.

MEASUREMENT OF QUASI-ISENTROPIC COMPRESSIBILITY OF GASEOUS HELIUM AT A PRESSURE OF SIMILAR TO 10 TPA

JETP LETTERS 108(10), 656-660 (2018)

21. CHEFONOV, OV; OVCHINNIKOV, AV; AGRANAT, MB; FORTOV, VE; EFIMENKO, ES; STEPANOV, AN; SAVEL'EV, AB.

NONLINEAR TRANSFER OF AN INTENSE FEW-CYCLE TERAHERTZ PULSE THROUGH OPAQUE N-DOPED SI

PHYSICAL REVIEW B 98(16), - (2018)

22. SCHWABE, M; DU, CR; HUBER, P; LIPAEV, AM; MOLOTKOV, VI; NAUMKIN, VN; ZHDANOV, SK; ZHUKHOVITSKII, DI; FORTOV, VE; THOMAS, HM.

LATEST RESULTS ON COMPLEX PLASMAS WITH THE PK-3 PLUS LABORATORY ON BOARD THE INTERNATIONAL SPACE STATION

MICROGRAVITY SCIENCE AND TECHNOLOGY 30(5), 581-589 (2018)

23. JAISWAL, S; PUSTYLNIIK, MY; ZHDANOV, S; THOMAS, HM; LIPAEV, AM; USACHEV, AD; MOLOTKOV, VI; FORTOV, VE; THOMA, MH; NOVITSKII, OV.

DUST DENSITY WAVES IN A DC FLOWING COMPLEX PLASMA WITH DISCHARGE POLARITY REVERSAL

PHYSICS OF PLASMAS 25(8), - (2018)

24. SHVARTSBERG, AB; PECHERKIN, VY; VASILYAK, LM; VETCHININ, SP; FORTOV, VE.

DIELECTRIC RESONANT MAGNETIC DIPOLES: PARADOXES, PROSPECTS, AND FIRST EXPERIMENTS

PHYSICS-USPEKHI 61(7), 698-706 (2018)

25. SUN, W; SCHWABE, M; THOMAS, HM; LIPAEV, AM; MOLOTKOV, VI; FORTOV, VE; FENG, Y; LIN, YF; ZHANG, J; GUO, Y; DU, CR.

DISSIPATIVE SOLITARY WAVE AT THE INTERFACE OF A BINARY COMPLEX PLASMA

EPL 122(5), - (2018)

26. MOCHALOV, MA; IL'KAEV, RI; FORTOV, VE; MIKHAILOV, AL; ARININ, VA; BLIKOV, AO; KOMRAKOV, VA; MAKSIMKIN, IP; OGORODNIKOV, VA; RYZHKOV, AV.

QUASI-ISENTROPIC COMPRESSIBILITY OF DEUTERIUM AT A PRESSURE OF SIMILAR TO 12 TPA

JETP LETTERS 107(3), 168-174 (2018)

27. ZOBININ, AV; USACHEV, AD; PETROV, OF; FORTOV, VE; THOMA, MH; FINK, MA.

TWO-DIMENSIONAL POSITIVE COLUMN STRUCTURE WITH DUST CLOUD: EXPERIMENT AND NONLOCAL KINETIC SIMULATION

PHYSICS OF PLASMAS 25(3), - (2018)

28. AGRANAT, MB; CHEFONOV, OV; OVCHINNIKOV, AV; ASHITKOV, SI; FORTOV, VE; KONDRATENKO, PS.

DAMAGE IN A THIN METAL FILM BY HIGH-POWER TERAHERTZ RADIATION

PHYSICAL REVIEW LETTERS 120(8), - (2018)

29. LARKIN, AS; FILINOV, VS; FORTOV, VE.

PECULIARITIES OF THE MOMENTUM DISTRIBUTION FUNCTIONS OF STRONGLY CORRELATED CHARGED FERMIONS

JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL 51(3), - (2018)

30. KNAPEK, CA; HUBER, P; MOHR, DP; ZAEHRINGER, E; MOLOTKOV, VI; LIPAEV, AM; NAUMKIN, V; KONOPKA, U; THOMAS, HM; FORTOV, VE.
EKOPLASMA - EXPERIMENTS WITH GRID ELECTRODES IN MICROGRAVITY
DIVERSE WORLD OF DUSTY PLASMAS 1925, - (2018)
31. LIU, B; GOREE, J; PUSTYLNİK, MY; THOMAS, HM; FORTOV, VE; LIPAEV, AM; USACHEV, AD; MOLOTKOV, VI; PETROV, OF; THOMA, MH.
PARTICLE VELOCITY DISTRIBUTION IN A THREE-DIMENSIONAL DUSTY PLASMA UNDER MICROGRAVITY CONDITIONS
DIVERSE WORLD OF DUSTY PLASMAS 1925, - (2018)
32. CHEFONOV, OV; OVCHINNIKOV, AV; ROMASHEVSKIY, SA; CHAI, X; OZAKI, T; SAVELEV, AB; AGRANAT, MB; FORTOV, VE.
GIANT SELF-INDUCED TRANSPARENCY OF INTENSE FEW-CYCLE TERAHERTZ PULSES IN N-DOPED SILICON
OPTICS LETTERS 42(23), 4889-4892 (2017)
33. SHVARTSBURG, AB; PECHERKIN, VY; VASILYAK, LM; VETCHININ, SP; FORTOV, VE.
RESONANT MICROWAVE FIELDS AND NEGATIVE MAGNETIC RESPONSE, INDUCED BY DISPLACEMENT CURRENTS IN DIELECTRIC RINGS: THEORY AND THE FIRST EXPERIMENTS (VOL 7, 2180, 2017)
SCIENTIFIC REPORTS 7, - (2017)
34. LARKIN, AS; FILINOV, VS; FORTOV, VE.
PAULI BLOCKING BY EFFECTIVE PAIR PSEUDOPOTENTIAL IN DEGENERATE FERMI SYSTEMS OF PARTICLES
CONTRIBUTIONS TO PLASMA PHYSICS 57(10), 506-511 (2017)
35. MOCHALOV, MA; IL'KAEV, RI; FORTOV, VE; MIKHAILOV, AL; ARININ, VA; BLIKOV, AO; ELFIMOV, SE; KOMRAKOV, VA; OGORODNIKOV, VA; RYZHKOV, AV.
THERMODYNAMIC PARAMETERS OF HELIUM UNDER SHOCK-WAVE AND QUASI-ISENTROPIC COMPRESSIONS AT PRESSURES UP TO 4800 GPa AND COMPRESSION RATIOS UP TO 900
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 125(5), 948-963 (2017)
36. BATURIN, VA; DAPPEN, W; MOREL, P; ORESHINA, AV; THEVENIN, F; GRYAZNOV, VK; IOSILEVSKIY, IL; STAROSTIN, AN; FORTOV, VE.
EQUATION OF STATE SAHA-S MEETS STELLAR EVOLUTION CODE CESAM2K
ASTRONOMY & ASTROPHYSICS 606, - (2017)
37. SCHWABE, M; ZHDANOV, S; HAGL, T; HUBER, P; LIPAEV, AM; MOLOTKOV, VI; NAUMKIN, VN; RUBIN-ZUZIC, M; VINOGRADOV, PV; ZAEHRINGER, E; FORTOV, VE; THOMAS, HM.
OBSERVATION OF METALLIC SPHERE-COMPLEX PLASMA INTERACTIONS IN MICROGRAVITY
NEW JOURNAL OF PHYSICS 19, - (2017)
38. DU, CR; NOSENKO, V; THOMAS, HM; MULLER, A; LIPAEV, AM; MOLOTKOV, VI; FORTOV, VE; IVLEV, AV.
PHOTOPHORETIC FORCE ON MICROPARTICLES IN COMPLEX PLASMAS
NEW JOURNAL OF PHYSICS 19, - (2017)
39. SHVARTSBURG, AB; PECHERKIN, VY; VASILYAK, LM; VETCHININ, SP; FORTOV, VE.
RESONANT MICROWAVE FIELDS AND NEGATIVE MAGNETIC RESPONSE, INDUCED BY DISPLACEMENT CURRENTS IN DIELECTRIC RINGS: THEORY AND THE FIRST EXPERIMENTS
SCIENTIFIC REPORTS 7, - (2017)
40. KANEL, GI; ZARETSKY, EB; RAZORENOV, SV; ASHITKOV, SI; FORTOV, VE.
UNUSUAL PLASTICITY AND STRENGTH OF METALS AT ULTRA-SHORT LOAD DURATIONS
PHYSICS-USPEKHI 60(5), 490-508 (2017)
41. ZELENER, BB; SAAKYAN, SA; SAUTENKOV, VA; FORTOV, VE.
TWO-PHOTON RYDBERG RESONANCES IN LITHIUM-7 OBTAINED BY RECORDING REDUCTION OF RESONANCE FLUORESCENCE
DOKLADY PHYSICS 62(3), 107-110 (2017)

42. MOCHALOV, MA; IL'KAEV, RI; FORTOV, VE; MIKHAILOV, AL; BLIKOV, AO; OGORODNIKOV, VA; GRYAZNOV, VK; IOSILEVSKII, IL.
QUASI-ISENTROPIC COMPRESSIBILITY OF A STRONGLY NONIDEAL DEUTERIUM PLASMA AT PRESSURES OF UP TO 5500 GPa: NONIDEALITY AND DEGENERACY EFFECTS
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 124(3), 505-529 (2017)
43. MYASNIKOV, MI; D'YACHKOV, LG; PETROV, OF; VASILIEV, MM; FORTOV, VE; SAVIN, SF; SEROVA, EO.
COULOMB SCATTER OF DIAMAGNETIC DUST PARTICLES IN A CUSP MAGNETIC TRAP UNDER MICROGRAVITY CONDITIONS
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 124(2), 318-324 (2017)
44. LARKIN, AS; FILINOV, VS; FORTOV, VE.
SOLUTION OF THE SIGN PROBLEM IN PAIR APPROXIMATION
MATHEMATICA MONTISNIGRI 39, 30-41 (2017)
45. MOLOTKOV, VI; NAUMKIN, VN; LIPAEV, AM; ZHUKHOVITSKII, DI; USACHEV, AD; FORTOV, VE; THOMAS, HM.
EXPERIMENTS ON PHASE TRANSITIONS IN THREE-DIMENSIONAL DUSTY PLASMA UNDER MICROGRAVITY CONDITIONS
INTERNATIONAL CONFERENCE - THE PHYSICS OF LOW TEMPERATURE PLASMA (PLTP-2017) 927, - (2017)
46. YANG, L; SCHWABE, M; ZHDANOV, S; THOMAS, HM; LIPAEV, AM; MOLOTKOV, VI; FORTOV, VE; ZHANG, J; DU, CR.
DENSITY WAVES AT THE INTERFACE OF A BINARY COMPLEX PLASMA
EPL 117(2), - (2017)
47. EBELING, W; FORTOV, VE; FILINOV, V.
PHYSICS OF DENSE GASES, NONIDEAL PLASMAS, AND HIGH ENERGY DENSITY MATTER
QUANTUM STATISTICS OF DENSE GASES AND NONIDEAL PLASMAS , 1-66 (2017)
48. EBELING, W; FORTOV, VE; FILINOV, V.
QUANTUM STATISTICS OF DENSE GASES AND NONIDEAL PLASMAS PREFACE
QUANTUM STATISTICS OF DENSE GASES AND NONIDEAL PLASMAS , V-VII (2017)
49. EBELING, W; FORTOV, VE; FILINOV, V.
STRONG CORRELATIONS AND EQUATION OF STATE OF DENSE GASES
QUANTUM STATISTICS OF DENSE GASES AND NONIDEAL PLASMAS , 67-115 (2017)
50. EBELING, W; FORTOV, VE; FILINOV, V.
COULOMB SYSTEMS. SCREENING AND IONIZATION PROBLEMS
QUANTUM STATISTICS OF DENSE GASES AND NONIDEAL PLASMAS , 117-191 (2017)
51. EBELING, W; FORTOV, VE; FILINOV, V.
COULOMB CORRELATIONS AND EOS OF NONDEGENERATE NONIDEAL PLASMAS
QUANTUM STATISTICS OF DENSE GASES AND NONIDEAL PLASMAS , 193-239 (2017)
52. EBELING, W; FORTOV, VE; FILINOV, V.
PLASMA BOUND STATES IN GRAND CANONICAL AND MIXED REPRESENTATIONS
QUANTUM STATISTICS OF DENSE GASES AND NONIDEAL PLASMAS , 241-278 (2017)
53. EBELING, W; FORTOV, VE; FILINOV, V.
EQUATIONS OF STATE FOR STRONGLY COUPLED PARTIALLY IONIZED PLASMAS
QUANTUM STATISTICS OF DENSE GASES AND NONIDEAL PLASMAS , 279-336 (2017)
54. EBELING, W; FORTOV, VE; FILINOV, V.
KINETIC EQUATIONS AND FLUCTUATIONS IN NONIDEAL GASES AND PLASMAS
QUANTUM STATISTICS OF DENSE GASES AND NONIDEAL PLASMAS , 337-366 (2017)
55. EBELING, W; FORTOV, VE; FILINOV, V.
HOPPING KINETICS, QUANTUM DYNAMICS AND TRANSPORT

QUANTUM STATISTICS OF DENSE GASES AND NONIDEAL PLASMAS , 367-396 (2017)

56. EBELING, W; FORTOV, VE; FILINOV, V.
THEORETICAL APPROACHES TO QUANTUM MONTE CARLO METHODS
QUANTUM STATISTICS OF DENSE GASES AND NONIDEAL PLASMAS , 397-442 (2017)

57. EBELING, W; FORTOV, VE; FILINOV, V.
SIMULATIONS OF GAS-, LIQUID-, AND CRYSTAL-LIKE STATES OF COULOMB SYSTEMS
QUANTUM STATISTICS OF DENSE GASES AND NONIDEAL PLASMAS , 443-485 (2017)

58. EBELING, W; FORTOV, VE; FILINOV, V.
APPLICATIONS TO MATTER WITH HIGH ENERGY DENSITY
QUANTUM STATISTICS OF DENSE GASES AND NONIDEAL PLASMAS , 487-519 (2017)

59. EBELING, W; FORTOV, VE; FILINOV, V.
TRANSPORT PROPERTIES OF QUARK-GLUON PLASMAS
QUANTUM STATISTICS OF DENSE GASES AND NONIDEAL PLASMAS , 521-557 (2017)

60. EBELING, W; FORTOV, VE; FILINOV, V.
QUANTUM STATISTICS OF DENSE GASES AND NONIDEAL PLASMAS
QUANTUM STATISTICS OF DENSE GASES AND NONIDEAL PLASMAS , 1-562 (2017)

61. RAMAZANOV, TS; D'YACHKOV, LG; DZHUMAGULOVA, KN; GABDULLIN, MT; DOSBOLAYEV, MK;
USSENOV, YA; MOLDABEKOV, ZA; PETROV, OF; VASILIEV, MM; MYASNIKOV, MI; FORTOV, VE; SAVIN,
SF; MUSABAYEV, TA; ZHANTAYEV, ZS; AIMBETOV, AA.
EXPERIMENTAL INVESTIGATIONS OF STRONGLY COUPLED COULOMB SYSTEMS OF DIAMAGNETIC
DUST PARTICLES IN A MAGNETIC TRAP UNDER MICROGRAVITY CONDITIONS
EPL 116(4), - (2016)

62. SHURUPOV, AV; KOSLOV, AV; SHURUPOV, MA; ZAVALOVA, VE; FORTOV, VE.
THE SOURCES OF PULSE CURRENT BASED ON EXPLOSIVE MAGNETIC GENERATORS FOR MOBILE
TESTING FACILITY
IEEE TRANSACTIONS ON PLASMA SCIENCE 44(10), 1956-1960 (2016)

63. NAUMKIN, VN; ZHUKHOVITSKII, DI; MOLOTKOV, VI; LIPAEV, AM; FORTOV, VE; THOMAS, HM;
HUBER, P; MORFILL, GE.
DENSITY DISTRIBUTION OF A DUST CLOUD IN THREE-DIMENSIONAL COMPLEX PLASMAS
PHYSICAL REVIEW E 94(3), - (2016)

64. PUSTYLNİK, MY; FINK, MA; NOSENKO, V; ANTONOVA, T; HAGL, T; THOMAS, HM; ZOBIN, AV;
LIPAEV, AM; USACHEV, AD; MOLOTKOV, VI; PETROV, OF; FORTOV, VE; RAU, C; DEYSENROTH, C;
ALBRECHT, S; KRETSCHMER, M; THOMA, MH; MORFILL, GE; SEURIG, R; STETTNER, A;
ALYAMOVSĀAYA, VA; ORR, A; KUFNER, E; LAVRENKO, EG; PADALKA, GI; SEROVA, EO;
SAMOKUTYAYEV, AM; CHRISTOFORETTI, S.
PLASMAKRISTALL-4: NEW COMPLEX (DUSTY) PLASMA LABORATORY ON BOARD THE
INTERNATIONAL SPACE STATION
REVIEW OF SCIENTIFIC INSTRUMENTS 87(9), - (2016)

65. KRASYUK, IK; PASHININ, PP; SEMENOV, AY; KHISHCHENKO, KV; FORTOV, VE.
STUDY OF EXTREME STATES OF MATTER AT HIGH ENERGY DENSITIES AND HIGH STRAIN RATES
WITH POWERFUL LASERS
LASER PHYSICS 26(9), - (2016)

66. SYSOLYATINA, E; VASILIEV, M; KURNAEVA, M; KORNIENKO, I; PETROV, O; FORTOV, V;
GINTSBURG, A; PETERSEN, E; ERMOLAEVA, S.
FREQUENCY OF CELL TREATMENT WITH COLD MICROWAVE ARGON PLASMA IS IMPORTANT FOR THE
FINAL OUTCOME
JOURNAL OF PHYSICS D-APPLIED PHYSICS 49(29), - (2016)

67. USACHEV, AD; ZOBIN, AV; PETROV, OF; FORTOV, VE; THOMA, MH; PUSTYLNİK, MY; FINK, MA;
MORFILL, GE.

ELONGATED DUST CLOUDS IN A UNIFORM DC POSITIVE COLUMN OF LOW PRESSURE GAS DISCHARGE
PLASMA SOURCES SCIENCE & TECHNOLOGY 25(3), - (2016)

68. DMITRIEVSKII, AN; BUZNIK, VM; SHEPELEV, GV; PARMON, VN; KHADZHIEV, SN; TSIVADZE, AY;
NIGMATULIN, RI; KOKOSHIN, AA; FORTOV, VE.

GAS CHEMISTRY AS AN INDUSTRY OF THE 21ST CENTURY PAPER DISCUSSION
HERALD OF THE RUSSIAN ACADEMY OF SCIENCES 86(3), 240-241 (2016)

69. WEBER, M; FINK, M; FORTOV, V; LIPAEV, A; MOLOTKOV, V; MORFILL, G; PETROV, O; PUSTYLNİK, M;
THOMA, M; THOMAS, H; USACHEV, A; RAETH, C.

ASSESSING PARTICLE KINEMATICS VIA TEMPLATE MATCHING ALGORITHMS
OPTICS EXPRESS 24(8), 7987-8012 (2016)

70. KHRAPAK, AG; MOLOTKOV, VI; LIPAEV, AM; ZHUKHOVITSKII, DI; NAUMKIN, VN; FORTOV, VE;
PETROV, OF; THOMAS, HM; KHRAPAK, SA; HUBER, P; IVLEV, A; MORFILL, G.

COMPLEX PLASMA RESEARCH UNDER MICROGRAVITY CONDITIONS: PK-3 PLUS LABORATORY ON
THE INTERNATIONAL SPACE STATION
CONTRIBUTIONS TO PLASMA PHYSICS 56(3-4), 253-262 (2016)

71. ZELENER, BB; SAAKYAN, SA; SAUTENKOV, VA; FORTOV, VE.

COHERENT AND NON-COHERENT COMPONENTS OF TWO-PHOTON RYDBERG EXCITATION OF
ULTRACOLD LI7 ATOMS
DOKLADY PHYSICS 61(4), 164-167 (2016)

72. ZELENER, BB; SAAKYAN, SA; SAUTENKOV, VA; MANYKIN, EA; ZELENER, BV; FORTOV, VE.

FORBIDDEN 2P-NP AND 2P-NF TRANSITIONS IN THE ENERGY SPECTRUM OF ULTRACOLD RYDBERG
LITHIUM-7 ATOMS
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 122(4), 645-649 (2016)

73. LARKIN, AS; FILINOV, VS; FORTOV, VE.

PATH INTEGRAL REPRESENTATION OF THE WIGNER FUNCTION IN CANONICAL ENSEMBLE
CONTRIBUTIONS TO PLASMA PHYSICS 56(3-4), 187-196 (2016)

74. MINTSEV, V; KIM, V; LOMONOSOV, I; NIKOLAEV, D; OSTRİK, A; SHILKIN, N; SHUTOV, A; TERNOVOI,
V; YURIEV, D; FORTOV, V; GOLUBEV, A; KANTSZYREV, A; VARENTSOV, D; HOFFMANN, DHH.

NON-IDEAL PLASMA AND EARLY EXPERIMENTS AT FAIR: HIHEX - HEAVY ION HEATING AND
EXPANSION
CONTRIBUTIONS TO PLASMA PHYSICS 56(3-4), 281-285 (2016)

74. SMIRNOV, VP; FORTOV, VE; BYKOV, YA; ERMOLAEV, VA; SON, EE; BAZELYAN, EM; SKOBARIKHIN,
YV; GRABOVSKI, EV; OLEINIK, GM; SHISHLOV, AO; GRIBOV, AN; GRIGOR'YANTS, VK; GORYUSHIN, YA.
PROPAGATION OF CURRENT PULSES WITH AN AMPLITUDE OF UP TO 85 KA IN SOIL OVER DISTANCES
OF SEVERAL TENS OF METERS

PLASMA PHYSICS REPORTS 42(2), 177-185 (2016)

76. GRYAZNOV, VK; IOSILEVSKIY, IL; FORTOV, VE.

THERMODYNAMICS OF HYDROGEN AND HELIUM PLASMAS IN MEGABAR AND MULTI-MEGABAR
PRESSURE RANGE UNDER STRONG SHOCK AND ISENTROPIC COMPRESSION
PLASMA PHYSICS AND CONTROLLED FUSION 58(1), - (2016)

77. FORTOV, VE.

EXTREME STATES OF MATTER: HIGH ENERGY DENSITY PHYSICS, 2ND EDITION
EXTREME STATES OF MATTER: HIGH ENERGY DENSITY PHYSICS, 2ND EDITION 216, 1-700 (2016)

78. FORTOV, VE.

EXTREME STATES OF MATTER HIGH ENERGY DENSITY PHYSICS SECOND EDITION INTRODUCTION
EXTREME STATES OF MATTER: HIGH ENERGY DENSITY PHYSICS, 2ND EDITION 216, 1-6 (2016)

79. FORTOV, VE.

MATTER UNDER EXTREME CONDITIONS: CLASSIFICATION OF STATES
EXTREME STATES OF MATTER: HIGH ENERGY DENSITY PHYSICS, 2ND EDITION 216, 7-22 (2016)

80. FORTOV, VE.
HIGH ENERGY DENSITIES IN LABORATORIES
EXTREME STATES OF MATTER: HIGH ENERGY DENSITY PHYSICS, 2ND EDITION 216, 23-89 (2016)
81. FORTOV, VE.
EXTREME STATES IN A NUCLEAR EXPLOSION
EXTREME STATES OF MATTER: HIGH ENERGY DENSITY PHYSICS, 2ND EDITION 216, 91-166 (2016)
82. FORTOV, VE.
HIGH-POWER LASERS IN HIGH-ENERGY-DENSITY PHYSICS
EXTREME STATES OF MATTER: HIGH ENERGY DENSITY PHYSICS, 2ND EDITION 216, 167-275 (2016)
83. FORTOV, VE.
RELATIVISTIC CHARGED PARTICLE BEAMS
EXTREME STATES OF MATTER: HIGH ENERGY DENSITY PHYSICS, 2ND EDITION 216, 277-402 (2016)
84. FORTOV, VE.
TECHNICAL APPLICATIONS OF THE PHYSICS OF HIGH ENERGY DENSITIES
EXTREME STATES OF MATTER: HIGH ENERGY DENSITY PHYSICS, 2ND EDITION 216, 403-464 (2016)
85. FORTOV, VE.
NUCLEAR TRANSFORMATIONS UNDER STRONG COMPRESSION
EXTREME STATES OF MATTER: HIGH ENERGY DENSITY PHYSICS, 2ND EDITION 216, 465-503 (2016)
86. FORTOV, VE.
HIGH ENERGY DENSITIES IN PLANETS AND STARS
EXTREME STATES OF MATTER: HIGH ENERGY DENSITY PHYSICS, 2ND EDITION 216, 505-590 (2016)
87. FORTOV, VE.
HIGH ENERGY DENSITIES OUTSIDE OF COMPACT ASTROPHYSICAL OBJECTS
EXTREME STATES OF MATTER: HIGH ENERGY DENSITY PHYSICS, 2ND EDITION 216, 591-698 (2016)
88. FORTOV, VE.
EXTREME STATES OF MATTER HIGH ENERGY DENSITY PHYSICS SECOND EDITION CONCLUSION
EXTREME STATES OF MATTER: HIGH ENERGY DENSITY PHYSICS, 2ND EDITION 216, 699-700 (2016)
89. ZELENER, BB; SAAKYAN, SA; SAUTENKOV, VA; MANYKIN, EA; ZELENER, BV; FORTOV, VE.
LASER DIAGNOSTICS OF THE ENERGY SPECTRUM OF RYDBERG STATES OF THE LITHIUM-7 ATOM
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 121(6), 950-954 (2015)
90. SYSOLYATINA, E; SOBYANIN, K; VASILIEV, M; PETROV, O; MORFILL, G; FORTOV, V; GINTSBURG, A; EMOLAEVA, S.
NON-THERMAL MICROWAVE ARGON PLASMA AFFECTS INTERACTIONS OF LISTERIA MONOCYTOGENES WITH MAMMALIAN CELLS BUT IT DOES NOT KILL THE INTRACELLULAR PATHOGEN
CLINICAL PLASMA MEDICINE 3(2), 87-92 (2015)
91. FORTOV, VE; SMIRNOV, VP; SON, EE; BYKOV, YA; GRABOVSKII, EV; GRIBOV, AN; OLEINIK, GM; SAVEL'EV, AS.
EXPERIMENTAL MODELING OF LIGHTNING DISCHARGE INTO SOIL
HIGH TEMPERATURE 53(6), 775-778 (2015)
92. KONYUKHOV, AV; LIKHACHEV, AP; FORTOV, VE.
BEHAVIOR OF RELATIVISTIC SHOCK WAVES IN NUCLEAR MATTER
HIGH TEMPERATURE 53(5), 622-626 (2015)
93. ZOBININ, AV; USACHEV, AD; PETROV, OF; FORTOV, VE.
RESPONSE TO "COMMENT ON 'TWO-DIMENSIONAL POSITIVE COLUMN STRUCTURE IN A DISCHARGE TUBE WITH RADIUS DISCONTINUITY'" [PHYS. PLASMAS 22, 094701 (2015)]
PHYSICS OF PLASMAS 22(9), - (2015)
94. PETROV, OF; VASILIEV, MM; VAULINA, OS; STACENKO, KB; VASILIEVA, EV; LISIN, EA; TUN, Y;

- FORTOV, VE.
SOLID-HEXATIC-LIQUID TRANSITION IN A TWO-DIMENSIONAL SYSTEM OF CHARGED DUST PARTICLES
EPL 111(4), - (2015)
95. GOLUB, VV; GURENTOV, EV; EMEL'YANOV, AV; EREMIN, AV; FORTOV, VE.
ENERGY GAIN OF THE DETONATION PYROLYSIS OF ACETYLENE
HIGH TEMPERATURE 53(3), 363-369 (2015)
96. AGRANAT, MB; ASHITKOV, SI; OVCHINNIKOV, AV; SITNIKOV, DS; YURKEVICH, AA; CHEFONOV, OV;
PEREL'MAN, LT; ANISIMOV, SI; FORTOV, VE.
THERMAL EMISSION OF HOT ELECTRONS IN A METAL
JETP LETTERS 101(9), 598-602 (2015)
97. FILINOV, VS; BONITZ, M; IVANOV, YB; ILGENFRITZ, EM; FORTOV, VE.
COLOR PATH INTEGRAL EQUATION OF STATE OF THE QUARK-GLUON PLASMA AT NONZERO CHEMICAL POTENTIAL
PLASMA PHYSICS AND CONTROLLED FUSION 57(4), - (2015)
98. MOCHALOV, MA; IL'KAEV, RI; FORTOV, VE; MIKHAILOV, AL; ARININ, VA; BLIKOV, AO; KOMRAKOV, VA;
RYZHKOV, AV; OGORODNIKOV, VA; YUKHIMCHUK, AA.
THERMODYNAMIC PROPERTIES OF A NONIDEAL HELIUM PLASMA AT QUASI-ISENTROPIC COMPRESSION BY A FACTOR OF 575 AT A PRESSURE OF 3000 GPA
JETP LETTERS 101(8), 519-526 (2015)
99. FILINOV, VS; FORTOV, VE; BONITZ, M; MOLDABEKOV, Z.
FERMIONIC PATH-INTEGRAL MONTE CARLO RESULTS FOR THE UNIFORM ELECTRON GAS AT FINITE TEMPERATURE
PHYSICAL REVIEW E 91(3), - (2015)
100. KONOVALOV, AN; PANCHENKO, VY; SHCHERBAKOV, IA; UGRYUMOV, MV; VOROZHTSOV, GN;
GRIGOR'EV, AI; FORTOV, VE.
THE DEVELOPMENT OF MEDICINE AND THE DEVELOPMENT OF BIG SCIENCE: ACHIEVEMENTS AND COMMON PROBLEMS
HERALD OF THE RUSSIAN ACADEMY OF SCIENCES 85(2), 118-121 (2015)
101. FAENOV, AY; SKOBELEV, IY; PIKUZ, TA; PIKUZ, SA; KODAMA, R; FORTOV, VE.
DIAGNOSTICS OF WARM DENSE MATTER BY HIGH-RESOLUTION X-RAY SPECTROSCOPY OF HOLLOW IONS
LASER AND PARTICLE BEAMS 33(1), 27-39 (2015)
102. MINTSEV, VB; FORTOV, VE.
TRANSPORT PROPERTIES OF WARM DENSE MATTER BEHIND INTENSE SHOCK WAVES
LASER AND PARTICLE BEAMS 33(1), 41-50 (2015)
103. FILINOV, VS; BONITZ, M; IVANOV, YB; ILGENFRITZ, EM; FORTOV, VE.
THERMODYNAMICS OF THE QUARK-GLUON PLASMA AT FINITE CHEMICAL POTENTIAL: COLOR PATH INTEGRAL MONTE CARLO RESULTS
CONTRIBUTIONS TO PLASMA PHYSICS 55(2-3), 203-208 (2015)
104. PETROV, OF; VASILIEV, MM; TUN, Y; STATSENKO, KB; VAULINA, OS; VASILIEVA, EV; FORTOV, VE.
TWO-DIMENSIONAL PHASE TRANSITION IN A STRONGLY NONIDEAL DUSTY PLASMA
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 120(2), 327-332 (2015)
105. ZHUKHOVITSKII, DI; FORTOV, VE; MOLOTKOV, VI; LIPAEV, AM; NAUMKIN, VN; THOMAS, HM;
IVLEV, AV; SCHWABE, M; MORFILL, GE.
MEASUREMENT OF THE SPEED OF SOUND BY OBSERVATION OF THE MACH CONES IN A COMPLEX PLASMA UNDER MICROGRAVITY CONDITIONS
PHYSICS OF PLASMAS 22(2), - (2015)
106. ABROSIMOV, SA; BAZHULIN, AP; BOLSHAKOV, AP; KONOV, VI; KRASIUK, IK; PASHININ, PP;

- RALCHENKO, VG; SEMENOV, AY; SOVYK, DN; STUCHEBRYUKHOV, IA; FORTOV, VE; KHISHCHENKO, KV; KHOMICH, AA.
STRENGTH OF SYNTHETIC DIAMONDS UNDER TENSILE STRESSES PRODUCED BY PICOSECOND LASER ACTION
JOURNAL OF APPLIED MECHANICS AND TECHNICAL PHYSICS 56(1), 143-149 (2015)
107. INOGAMOV, NA; ZHAKHOVSKY, VV; ASHITKOV, SI; EMIROV, YN; FAENOV, AY; PETROV, YV; KHOKHLOV, VA; ISHINO, M; DEMASKE, BJ; TANAKA, M; HASEGAWA, N; NISHIKINO, M; TAMOTSU, S; PIKUZ, TA; SKOBELEV, IY; OHBA, T; KAIHORI, T; OCHI, Y; IMAZONO, T; FUKUDA, Y; KANDO, M; KATO, Y; KAWACHI, T; ANISIMOV, SI; AGRANAT, MB; OLEYNIK, II; FORTOV, VE.
SURFACE NANODEFORMATIONS CAUSED BY ULTRASHORT LASER PULSE
ENGINEERING FAILURE ANALYSIS 47, 328-337 (2015)
108. VICARIO, C; OVCHINNIKOV, AV; ASHITKOV, SI; AGRANAT, MB; FORTOV, VE; HAURI, CP.
GENERATION OF 0.9-MJ THZ PULSES IN DSTMS PUMPED BY A CR:MG2SIO4 LASER
OPTICS LETTERS 39(23), 6632-6635 (2014)
109. ZELENER, BB; SAAKYAN, SA; SAUTENKOV, VA; MANYKIN, EA; ZELENER, BV; FORTOV, VE.
PREPARATION OF A HIGH CONCENTRATION OF LITHIUM-7 ATOMS IN A MAGNETO-OPTICAL TRAP
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 119(5), 795-801 (2014)
110. ZELENER, BB; SAAKYAN, SA; SAUTENKOV, VA; MANYKIN, EA; ZELENER, BV; FORTOV, VE.
EFFICIENT EXCITATION OF RYDBERG STATES IN ULTRACOLD LITHIUM-7 ATOMS
JETP LETTERS 100(6), 366-370 (2014)
111. ZOBININ, AV; USACHEV, AD; PETROV, OF; FORTOV, VE.
TWO-DIMENSIONAL POSITIVE COLUMN STRUCTURE IN A DISCHARGE TUBE WITH RADIUS DISCONTINUITY
PHYSICS OF PLASMAS 21(11), - (2014)
112. ZHUKHOVITSKII, DI; FORTOV, VE; MOLOTKOV, VI; LIPAEV, AM; NAUMKIN, VN; THOMAS, HM; IVLEV, AV; MORFILL, GE.
STUDY OF THE PROJECTILE MOTION IN A DUST CRYSTAL UNDER MICROGRAVITY CONDITIONS
IEEE TRANSACTIONS ON PLASMA SCIENCE 42(10), 2678-2679 (2014)
113. STARIKOV, SV; FAENOV, AY; PIKUZ, TA; SKOBELEV, IY; FORTOV, VE; TAMOTSU, S; ISHINO, M; TANAKA, M; HASEGAWA, N; NISHIKINO, M; KAIHORI, T; IMAZONO, T; KANDO, M; KAWACHI, T.
SOFT PICOSECOND X-RAY LASER NANOMODIFICATION OF GOLD AND ALUMINUM SURFACES
APPLIED PHYSICS B-LASERS AND OPTICS 116(4), 1005-1016 (2014)
114. ABROSIMOV, SA; BAZHULIN, AP; BOLSHAKOV, AP; KONOVA, VI; KRASYUK, IK; PASHININ, PP; RALCHENKO, VG; SEMENOV, AY; SOVYK, DN; STUCHEBRYUKHOV, IA; FORTOV, VE; KHISHCHENKO, KV; KHOMICH, AA.
EXPERIMENTAL INVESTIGATION INTO POLYCRYSTALLINE AND SINGLE-CRYSTAL DIAMONDS UNDER NEGATIVE PRESSURES FORMED BY PICOSECOND LASER PULSES
DOKLADY PHYSICS 59(7), 309-312 (2014)
115. GRINBERG, RS; KOLESNIKOV, VI; XIN, L; TITARENKO, ML; SENN, L; ASEEV, AL; OSIPOV, GV; IVANTER, VV; PRIMAKOV, EM; KNUROV, VA; FORTOV, VE.
THE PROJECT AS A REAL PROSPECT FOR RUSSIA'S DEVELOPMENT PAPER DISCUSSION
HERALD OF THE RUSSIAN ACADEMY OF SCIENCES 84(4), 237-241 (2014)
116. MAKAROV, AA; KIRPICHNIKOV, MP; KOMPANETS, ON; KOCHETKOV, SN; ZAKHIDOV, ST; GOTTIKH, BP; MYASOEDOV, NF; GRIGOR'EV, AI; FORTOV, VE.
ORIGINAL RUSSIAN TOPICS NEED SUPPORT PAPER DISCUSSION
HERALD OF THE RUSSIAN ACADEMY OF SCIENCES 84(4), 263-264 (2014)
117. MOCHALOV, MA; IL'KAEV, RI; FORTOV, VE; MIKHAILOV, AL; RAEVSKII, VA; OGORODNIKOV, VA; YUKHIMCHUK, AA; DAVYDOV, AI; ANASHKIN, NN; ARININ, VA; BLIKOV, AO; BAURIN, AY; DAVYDOV, NB; KOMRAKOV, VA; LOGVINOV, AI; MANACHKIN, SF; RYZHKOV, AV; TKACHENKO, BI; FEDOROV, AV; FINYUSHIN, SA; KALASHNIKOV, DA; CHUDAKOV, EA; PRONIN, EA; BAKULINA, EA.

QUASI-ISENTROPIC COMPRESSIBILITY OF DEUTERIUM AND HELIUM AT PRESSURES OF 1500-5000 GPA
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 119(1), 146-161 (2014)

118. MINAKOV, DV; LEVASHOV, PR; KHISHCHENKO, KV; FORTOV, VE.
QUANTUM MOLECULAR DYNAMICS SIMULATION OF SHOCK-WAVE EXPERIMENTS IN ALUMINUM
JOURNAL OF APPLIED PHYSICS 115(22), - (2014)

119. MOLODETS, AM; SHAKHRAI, DV; FORTOV, VE.
THERMOPHYSICAL PROPERTIES OF THE POLYMORPHIC MODIFICATIONS OF LITHIUM HYDRIDE IN
THE MEGABAR SHOCK PRESSURE RANGE
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 118(6), 896-903 (2014)

120. ZHUKHOVITSKII, DI; MOLOTKOV, VI; FORTOV, VE.
A SCALING LAW FOR THE DUST CLOUD IN RADIO FREQUENCY DISCHARGE UNDER MICROGRAVITY
CONDITIONS
PHYSICS OF PLASMAS 21(6), - (2014)

121. USACHEV, A; ZOBININ, A; PETROV, O; FORTOV, V; THOMA, MH; HOFNER, H; FINK, M; IVLEV, A;
MORFILL, G.
EXTERNALLY EXCITED PLANAR DUST ACOUSTIC SHOCK WAVES IN A STRONGLY COUPLED DUSTY
PLASMA UNDER MICROGRAVITY CONDITIONS
NEW JOURNAL OF PHYSICS 16, - (2014)

122. INOGAMOV, NA; PETROV, YV; KHOKHLOV, VA; ANISIMOV, SI; ZHAKHOVSKII, VV; ASHITKOV, SI;
KOMAROV, PS; AGRANAT, MB; FORTOV, VE; MIGDAL, KP; IL'NITSKII, DK; EMIROV, YN.
THE EFFECT OF AN ULTRASHORT LASER PULSE ON METALS: TWO-TEMPERATURE RELAXATION,
FOAMING OF THE MELT, AND FREEZING OF THE DISINTEGRATING NANOFOAM
JOURNAL OF OPTICAL TECHNOLOGY 81(5), 233-249 (2014)

123. BELYAEV, IA; MARGELOV, MV; SHERCHENKOV, VA; DYNKIN, AA; UGRYUMOV, MV; FORTOV, VE.
IS PEACE POSSIBLE IN THE ARAB WORLD?
HERALD OF THE RUSSIAN ACADEMY OF SCIENCES 84(3), 169-171 (2014)

124. DRAGON, AV; EMELIANOV, AV; EREMIN, AV; PETRUSHEVICH, YV; STAROSTIN, AN; TARAN, MD;
FORTOV, VE.
INFLUENCE OF QUANTUM EFFECTS ON THE INITIATION OF IGNITION AND DETONATION
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 118(5), 831-843 (2014)

125. ERMOLAEVA, SA; RAKOVSKAYA, IV; MILLER, GG; SYSOLYATINA, EV; MUKHACHEV, AY;
VASILIEV, MM; ADGAMOV, RR; LEVINA, GA; PETROV, OF; MORFILL, GE; GRIGORIEV, AI; FORTOV, VE;
GINTSBURG, AL.
NONTHERMAL PLASMA AFFECTS VIABILITY AND MORPHOLOGY OF MYCOPLASMA HOMINIS AND
ACHOLEPLASMA LAIDLAWII
JOURNAL OF APPLIED MICROBIOLOGY 116(5), 1129-1136 (2014)

126. ZHUK, A; DENSHIKOV, K; FORTOV, V; SHEINDLIN, A; WILCZYNSKI, W.
HYBRID ENERGY STORAGE SYSTEM BASED ON SUPERCAPACITORS AND LI-ION BATTERIES
JOURNAL OF APPLIED ELECTROCHEMISTRY 44(4), 543-550 (2014)

127. MOLODETS, AM; GOLYSHEV, AA; EMEL'YANOV, AN; SHUL'GA, YM; FORTOV, VE.
JUMP IN THE ELECTRICAL CONDUCTIVITY OF SHOCK-COMPRESSED GLASSY CARBON
JETP LETTERS 99(4), 237-241 (2014)

128. LISIN, EA; TARAKANOV, VP; PETROV, OF; POPEL', SI; DOL'NIKOV, GG; ZAKHAROV, AV; ZELENYI,
LM; FORTOV, VE.
EFFECT OF THE SOLAR WIND ON THE FORMATION OF A PHOTOINDUCED DUSTY PLASMA LAYER
NEAR THE SURFACE OF THE MOON
JETP LETTERS 98(11), 664-669 (2014)

129. ZELENER, BB; SAAKYAN, SA; SAUTENKOV, VA; AKULSHIN, AM; MANYKIN, EA; ZELENER, BV;
FORTOV, VE.

LASER COOLING OF LI-7 ATOMS IN A MAGNETO-OPTICAL TRAP
JETP LETTERS 98(11), 670-674 (2014)

130. BEL'KOV, SA; DERKACH, VN; GARANIN, SG; MITROFANOV, EI; VORONICH, IN; FORTOV, VE;
LEVASHOV, PR; MINAKOV, DV.

ISENTROPIC EXPANSION OF COPPER PLASMA IN MBAR PRESSURE RANGE AT "LUCH" LASER FACILITY
JOURNAL OF APPLIED PHYSICS 115(3), - (2014)

131. KANTSYREV, AV; GOLUBEV, AA; BOGDANOV, AV; DEMIDOV, VS; DEMIDOVA, EV; LADYGINA, EM;
MARKOV, NV; SKACHKOV, VS; SMIRNOV, GN; RUDSKOY, IV; KUZNETSOV, AP; KHUDOMYASOV, AV;
SHARKOV, BY; DUDIN, SV; KOLESNIKOV, SA; MINTSEV, VB; NIKOLAEV, DN; TERNOVOI, VY; UTKIN,
AV; YURIEV, DS; SHILKIN, NS; FORTOV, VE; TURTIKOV, VI; BURTSEV, VV; ZHERNOKLETOV, MV;
ZAVIALOV, NV; KARTANOV, SA; MIKHAILOV, AL; RUDNEV, AV; TATSENKO, MV; VARENTSOV, DV;
SHESTOV, LM.

TWAC-ITEP PROTON MICROSCOPY FACILITY

INSTRUMENTS AND EXPERIMENTAL TECHNIQUES 57(1), 1-10 (2014)

132. EKIMOV, EA; BOROVIKOV, NF; IVANOV, AS; PAL, AF; RUSINKEVICH, AA; RYABINKIN, AN; SEROV,
AO; STAROSTIN, AN; FORTOV, VE; GROMNITSKAYA, EL.

APPLICATION OF THE DUSTY PLASMA METHOD FOR PREPARATION OF DIAMOND CERAMICS
DIAMOND AND RELATED MATERIALS 41, 1-5 (2014)

133. ABROSIMOV, SA; BAZHULIN, AP; BOL'SHAKOV, AP; KONOVI, VI; KRASYUK, IK; PASHININ, PP;
RAL'CHENKO, VG; SEMENOV, AY; SOVYK, DN; STUCHEBRYUKHOV, IA; FORTOV, VE; KHISHCHENKO,
KV; KHOMICH, AA.

GENERATION OF NEGATIVE PRESSURES AND SPALLATION PHENOMENA IN DIAMOND EXPOSED TO A
PICOSECOND LASER PULSE

QUANTUM ELECTRONICS 44(6), 530-534 (2014)

134. IVANOV, MF; KIVERIN, AD; KLUMOV, BA; FORTOV, VE.

FROM COMBUSTION AND DETONATION TO NITROGEN OXIDES

PHYSICS-USPEKHI 57(3), 234-249 (2014)

135. PIKUZ, SA; FAENOV, AY; SKOBELEV, IY; FORTOV, VE.

PRODUCTION OF EXOTIC STATES OF MATTER WITH THE USE OF X-RAYS GENERATED BY FOCUSING A
PETAWATT LASER PULSE ONTO A SOLID TARGET

PHYSICS-USPEKHI 57(7), 702-707 (2014)

136. EFREMOV, VP; FROLOV, AA; DIANOV, EM; BUFETOV, IA; FORTOV, VE.

DYNAMICS OF LASER-INDUCED SHOCK WAVE IN SILICA

ARCHIVES OF METALLURGY AND MATERIALS 59(4), 1599-1603 (2014)

137. ISHINO, M; FAENOV, A; TANAKA, M; PIKUZ, T; TAMOTSU, S; HASEGAWA, N; NISHIKINO, M;
STARIKOV, S; STEGAILOV, V; NORMAN, G; FORTOV, V; SKOBELEV, I; KAIHORI, T; KAWACHI, T.

NANO-METER SIZE MODIFICATION OF METAL SURFACES INDUCED BY SOFT X-RAY LASER SINGLE
PULSE

X-RAY LASERS 2012 147, 121-124 (2014)

138. ASHITKOV, SI; KOMAPOV, PS; AGRANAT, MB; KANEL, GI; FORTOV, VE.

MEASUREMENTS OF STRENGTH OF METALS IN A PICOSECOND TIME RANGE

18TH APS-SCCM AND 24TH AIRAPT, PTS 1-19 500, - (2014)

139. FORTOV, VE; LOMONOSOV, IV.

YA B ZELDOVICH AND EQUATION OF STATE PROBLEMS FOR MATTER UNDER EXTREME CONDITIONS

PHYSICS-USPEKHI 57(3), 219-233 (2014)

140. ASHITKOV, SI; KOMAROV, PS; AGRANAT, MB; KANEL, GI; FORTOV, VE.

ACHIEVEMENT OF ULTIMATE VALUES OF THE BULK AND SHEAR STRENGTHS OF IRON IRRADIATED
BY FEMTOSECOND LASER PULSES

JETP LETTERS 98(7), 384-388 (2013)

141. LISIN, EA; VAULINA, OS; PETROV, OF; FORTOV, VE.
CONTACTLESS METHODS FOR STUDYING INTERACTIONS BETWEEN DUST PARTICLES IN A GAS-DISCHARGE PLASMA
PLASMA PHYSICS AND CONTROLLED FUSION 55(12), - (2013)
142. PETROV, OF; FORTOV, VE.
COLLECTIVE PHENOMENA IN STRONGLY COUPLED DISSIPATIVE SYSTEMS OF CHARGED DUST: FROM GROUND TO MICROGRAVITY EXPERIMENTS
CONTRIBUTIONS TO PLASMA PHYSICS 53(10), 767-777 (2013)
143. INOGAMOV, NA; ZHAKHOVSKY, VV; PETROV, YV; KHOKHLOV, V; ASHITKOV, SI; KHISHCHENKO, KV; MIGDAL, KP; ILNITSKY, DK; EMIROV, YN; KOMAROV, PS; SHEPELEV, VV; MILLER, CW; OLEYNIK, II; AGRANAT, MB; ANDRIYASH, AV; ANISIMOV, SI; FORTOV, VE.
ELECTRON-ION RELAXATION, PHASE TRANSITIONS, AND SURFACE NANO-STRUCTURING PRODUCED BY ULTRASHORT LASER PULSES IN METALS
CONTRIBUTIONS TO PLASMA PHYSICS 53(10), 796-810 (2013)
144. WORNER, L; IVLEV, AV; COUEDEL, L; HUBER, P; SCHWABE, M; HAGL, T; MIKIKIAN, M; BOUFENDI, L; SKVORTSOV, A; LIPAEV, AM; MOLOTKOV, VI; PETROV, OF; FORTOV, VE; THOMAS, HM; MORFILL, GE.
THE EFFECT OF A DIRECT CURRENT FIELD ON THE MICROPARTICLE CHARGE IN THE PLASMA AFTERGLOW
PHYSICS OF PLASMAS 20(12), - (2013)
145. FORTOV, VE; ISAENKOV, YI; MIKHAILOV, VM; NESTEROV, EV; OSTASHEV, VE; SEMENOV, YV; STROGANOV, VA.
A COMPACT RADIATOR OF HIGH-POWER ELECTROMAGNETIC PULSES
JOURNAL OF COMMUNICATIONS TECHNOLOGY AND ELECTRONICS 58(11), 1065-1069 (2013)
146. FORTOV, VE; MINTSEV, VB.
QUANTUM BOUND OF THE SHEAR VISCOSITY OF A STRONGLY COUPLED PLASMA
PHYSICAL REVIEW LETTERS 111(12), - (2013)
147. SUKHININ, GI; FEDOSEEV, AV; SALNIKOV, MV; ANTIPOV, SN; PETROV, OF; FORTOV, VE.
INFLUENCE OF ION DRAG FORCE ON RADIAL DISTRIBUTION OF DUST PARTICLES AND VOID FORMATION IN A DC GLOW DISCHARGE
EPL 103(3), - (2013)
148. BELYAEV, VS; KOVKOV, DV; MATAFONOV, AP; KARABADZHAK, GF; RAIKUNOV, GG; FAENOV, AY; PIKUZ, SA; SKOBELEV, IY; PIKUZ, TA; FOKIN, DA; FORTOV, VE; IGNATEV, GN; KAPITANOV, SV; KRAPIVA, PS; KOROTKOV, KE.
ON THE POSSIBILITY OF OBTAINING INCOHERENT FEMTOSECOND X-RAY PULSES FROM A LASER PLASMA
JETP LETTERS 97(12), 681-685 (2013)
149. FORTOV, VE; SULTANOV, VG; SHUTOV, AV.
CHELYABINSK SUPERBOLIDE EXPLOSION IN THE EARTH'S ATMOSPHERE: A COMMON PHENOMENON OR UNIQUE COINCIDENCE?
GEOCHEMISTRY INTERNATIONAL 51(7), 549-567 (2013)
150. PUSTYLNİK, MY; HOU, L; IVLEV, AV; VASILYAK, LM; COUEDEL, L; THOMAS, HM; MORFILL, GE; FORTOV, VE.
HIGH-VOLTAGE NANOSECOND PULSES IN A LOW-PRESSURE RADIO-FREQUENCY DISCHARGE (VOL 87, 063105, 2013)
PHYSICAL REVIEW E 87(6), - (2013)
151. KHRAPAK, SA; THOMA, MH; CHAUDHURI, M; MORFILL, GE; ZOBININ, AV; USACHEV, AD; PETROV, OF; FORTOV, VE.
PARTICLE FLOWS IN A DC DISCHARGE IN LABORATORY AND MICROGRAVITY CONDITIONS
PHYSICAL REVIEW E 87(6), - (2013)

152. ZHUKHOVITSKII, DI; IVLEV, AV; FORTOV, VE; MORFILL, GE.
ONSET OF CAVITY DEFORMATION UPON SUBSONIC MOTION OF A PROJECTILE IN A FLUID COMPLEX PLASMA
PHYSICAL REVIEW E 87(6), - (2013)
153. PUSTYLNİK, MY; HOU, L; IVLEV, AV; VASILYAK, LM; COUEDEL, L; THOMAS, HM; MORFILL, GE; FORTOV, VE.
HIGH-VOLTAGE NANOSECOND PULSES IN A LOW-PRESSURE RADIO-FREQUENCY DISCHARGE
PHYSICAL REVIEW E 87(6), - (2013)
154. LISIN, EA; TIMIRKHANOV, RA; VAULINA, OS; PETROV, OF; FORTOV, VE.
INFLUENCE OF EXTERNAL PERTURBATIONS ON THE INTERACTION BETWEEN GRAINS IN PLASMA
NEW JOURNAL OF PHYSICS 15, - (2013)
155. FORTOV, VE; PETROV, OF; VAULINA, OS; KOSS, KG.
BROWNIAN MOTION OF DUST PARTICLES IN A WEAKLY IONIZED PLASMA
JETP LETTERS 97(6), 322-326 (2013)
156. GRYAZNOV, VK; IOSILEVSKIY, IL; FORTOV, VE; STAROSTIN, AN; ROERICH, VK; BATURIN, VA; AYUKOV, SV.
SAHA-S THERMODYNAMIC MODEL OF SOLAR PLASMA
CONTRIBUTIONS TO PLASMA PHYSICS 53(4-5), 392-396 (2013)
157. FILIPPOV, AV; STAROSTIN, AN; TKACHENKO, IM; FORTOV, VE.
STATIC AND COLLECTIVE PROPERTIES OF DUSTY NON-EQUILIBRIUM PLASMAS
CONTRIBUTIONS TO PLASMA PHYSICS 53(4-5), 442-449 (2013)
158. VASILYAK, LM; VLADIMIROV, VI; DEPUTATOVA, LV; LAPITSKY, DS; MOLOTKOV, VI; PECHERKIN, VY; FILINOV, VS; FORTOV, VE.
COULOMB STABLE STRUCTURES OF CHARGED DUST PARTICLES IN A DYNAMICAL TRAP AT ATMOSPHERIC PRESSURE IN AIR
NEW JOURNAL OF PHYSICS 15, - (2013)
159. BELYAEV, VS; BATISHCHEV, PA; BOLSHAKOV, VV; ELKIN, KS; KARABADZHAK, GF; KOVKOV, DV; MATAFONOV, AP; RAYKUNOV, GG; YAKHIN, RA; PIKUZ, SA; SKOBELEV, IY; FAENOV, AY; FORTOV, VE; KRAINOV, VP; ROZANOV, VB.
PROMISING LINES OF INVESTIGATIONS IN THE REALMS OF LABORATORY ASTROPHYSICS WITH THE AID OF POWERFUL LASERS
PHYSICS OF ATOMIC NUCLEI 76(4), 404-422 (2013)
160. KRAUZ, VI; KHIMCHENKO, LN; MYALTON, VV; VINOGRADOV, VP; VINOGRADOVA, YV; GUREEV, VM; KOIDAN, VS; SMIRNOV, VP; FORTOV, VE.
FORMATION OF NANOSTRUCTURES IN A PLASMA FOCUS DISCHARGE
PLASMA PHYSICS REPORTS 39(4), 289-295 (2013)
161. FILINOV, VS; IVANOV, YB; FORTOV, VE; BONITZ, M; LEVASHOV, PR.
COLOR PATH-INTEGRAL MONTE-CARLO SIMULATIONS OF QUARK-GLUON PLASMA: THERMODYNAMIC AND TRANSPORT PROPERTIES
PHYSICAL REVIEW C 87(3), - (2013)
162. FAENOV, AY; PIKUZ, TA; FUKUDA, Y; SKOBELEV, IY; NAKAMURA, T; BULANOV, SV; HAYASHI, Y; KOTAKI, H; PIROZHKOVA, AS; KAWACHI, T; CHEN, LM; ZHANG, L; YAN, WC; YUAN, DW; MAO, JY; WANG, ZH; MA, JL; FORTOV, VE; KATO, Y; KANDO, M.
GENERATION OF QUANTUM BEAMS IN LARGE CLUSTERS IRRADIATED BY SUPER-INTENSE, HIGH-CONTRAST FEMTOSECOND LASER PULSES
CONTRIBUTIONS TO PLASMA PHYSICS 53(2), 148-160 (2013)
163. SUKHININ, GI; FEDOSEEV, AV; ANTIPOV, SN; PETROV, OF; FORTOV, VE.
DUST PARTICLE RADIAL CONFINEMENT IN A DC GLOW DISCHARGE
PHYSICAL REVIEW E 87(1), - (2013)

164. BATURIN, VA; AYUKOV, SV; GRYAZNOV, VK; IOSILEVSKIY, IL; FORTOV, VE; STAROSTIN, AN.
THE CURRENT VERSION OF THE SAHA-S EQUATION OF STATE: IMPROVEMENT AND PERSPECTIVE
PROGRESS IN PHYSICS OF THE SUN AND STARS: A NEW ERA IN HELIO- AND ASTEROSEISMOLOGY 479,
11-18 (2013)

165. ABROSIMOV, SA; BAZHULIN, AP; VORONOV, VV; GERAS'KIN, AA; KRASYUK, IK; PASHININ, PP;
SEMENOV, AY; STUCHEBRYUKHOV, IA; KHISHCHENKO, KV; FORTOV, VE.
SPECIFIC FEATURES OF THE BEHAVIOUR OF TARGETS UNDER NEGATIVE PRESSURES CREATED BY A
PICOSECOND LASER PULSE
QUANTUM ELECTRONICS 43(3), 246-251 (2013)

166. BELYAEV, VS; KOVKOV, DV; MATAFONOV, AP; KARABADZHAK, GF; RAIKUNOV, GG; FAENOV, AY;
PIKUZ, SA; SKOBELEV, IY; PIKUZ, TA; FOKIN, DA; IGNATEV, GN; KAPITANOV, SV; KRPIVA, PS;
KOROTKOV, KE; FORTOV, VE.
TEMPORAL STRUCTURE OF X-RAY RADIATION PULSES OF PICOSECOND LASER PLASMA
QUANTUM ELECTRONICS 43(9), 865-870 (2013)

167. FORTOV, VE; MINTSEV, VB.
EXTREME STATES OF MATTER ON THE EARTH AND IN THE COSMOS: IS THERE ANY CHEMISTRY
BEYOND THE MEGABAR?
RUSSIAN CHEMICAL REVIEWS 82(7), 597-615 (2013)

168. INOGAMOV, NA; ZHAKHOVSKY, VV; PETROV, YV; KHOKHLOV, VA; ASHITKOV, SI; MIGDAL, KP;
ILNITSKY, DK; EMIROV, YN; KHISHCHENKO, KV; KOMAROV, PS; SHEPELEV, VV; AGRANAT, MB;
ANISIMOV, SI; OLEYNIK, II; FORTOV, VE.
ULTRASHORT LASER - MATTER INTERACTION AT MODERATE INTENSITIES: TWO-TEMPERATURE
RELAXATION, FOAMING OF STRETCHED MELT, AND FREEZING OF EVOLVING NANOSTRUCTURES
FUNDAMENTALS OF LASER-ASSISTED MICRO- AND NANOTECHNOLOGIES 2013 9065, - (2013)

169. ISHINO, M; FAENOV, A; TANAKA, M; TAMOTSU, S; PIKUZ, T; HASEGAWA, N; NISHIKINO, M;
INOGAMOV, N; SKOBELEV, I; FORTOV, V; NORMAN, G; STARIKOV, S; STEGAILOV, V; KAIHORI, T;
KAWACHI, T; YAMAGIWA, M.
NANO-METER SCALE MODIFICATIONS ON MATERIAL SURFACES INDUCED BY SOFT X-RAY LASER
PULSE IRRADIATIONS
X-RAY LASERS AND COHERENT X-RAY SOURCES: DEVELOPMENT AND APPLICATIONS X 8849, - (2013)

170. MORFILL, G; BATURIN, Y; FORTOV, V.
THE DAWN OF THE SPACE AGE
PLASMA RESEARCH AT THE LIMIT: FROM THE INTERNATIONAL SPACE STATION TO APPLICATIONS
ON EARTH , 37-46 (2013)

171. MORFILL, G; BATURIN, Y; FORTOV, V.
THE BEGINNING
PLASMA RESEARCH AT THE LIMIT: FROM THE INTERNATIONAL SPACE STATION TO APPLICATIONS
ON EARTH , 1-5 (2013)

172. MORFILL, G; BATURIN, Y; FORTOV, V.
PLASMA RESEARCH AT THE LIMIT - FROM THE INTERNATIONAL SPACE STATION TO APPLICATIONS
ON EARTH
PLASMA RESEARCH AT THE LIMIT: FROM THE INTERNATIONAL SPACE STATION TO APPLICATIONS
ON EARTH , V-+ (2013)

173. MORFILL, G; BATURIN, Y; FORTOV, V.
BACKGROUND - THE YEARS BEFORE
PLASMA RESEARCH AT THE LIMIT: FROM THE INTERNATIONAL SPACE STATION TO APPLICATIONS
ON EARTH , 7-36 (2013)

174. MORFILL, G; BATURIN, Y; FORTOV, V.
MOSCOW - THE FIRST MEETING
PLASMA RESEARCH AT THE LIMIT: FROM THE INTERNATIONAL SPACE STATION TO APPLICATIONS
ON EARTH , 47-58 (2013)

175. MORFILL, G; BATURIN, Y; FORTOV, V.
SPACE - THE EARLY EFFORTS
PLASMA RESEARCH AT THE LIMIT: FROM THE INTERNATIONAL SPACE STATION TO APPLICATIONS
ON EARTH , 59-85 (2013)
176. MORFILL, G; BATURIN, Y; FORTOV, V.
SPACE - RUSSIA AND GERMANY JOIN HANDS
PLASMA RESEARCH AT THE LIMIT: FROM THE INTERNATIONAL SPACE STATION TO APPLICATIONS
ON EARTH , 87-94 (2013)
177. MORFILL, G; BATURIN, Y; FORTOV, V.
EXPANDING AND STABILISING THE RESEARCH
PLASMA RESEARCH AT THE LIMIT: FROM THE INTERNATIONAL SPACE STATION TO APPLICATIONS
ON EARTH , 95-98 (2013)
178. MORFILL, G; BATURIN, Y; FORTOV, V.
TWISTS AND TURNS OF EVENTS
PLASMA RESEARCH AT THE LIMIT: FROM THE INTERNATIONAL SPACE STATION TO APPLICATIONS
ON EARTH , 99-112 (2013)
179. MORFILL, G; BATURIN, Y; FORTOV, V.
MEETING AND TRAINING THE COSMONAUTS
PLASMA RESEARCH AT THE LIMIT: FROM THE INTERNATIONAL SPACE STATION TO APPLICATIONS
ON EARTH , 113-118 (2013)
180. MORFILL, G; BATURIN, Y; FORTOV, V.
BAIKONUR - THE RUSSIAN SPACEPORT
PLASMA RESEARCH AT THE LIMIT: FROM THE INTERNATIONAL SPACE STATION TO APPLICATIONS
ON EARTH , 119-142 (2013)
181. MORFILL, G; BATURIN, Y; FORTOV, V.
LAUNCH OF PK-3
PLASMA RESEARCH AT THE LIMIT: FROM THE INTERNATIONAL SPACE STATION TO APPLICATIONS
ON EARTH , 143-148 (2013)
182. MORFILL, G; BATURIN, Y; FORTOV, V.
KOROLEV - THE FORBIDDEN CITY
PLASMA RESEARCH AT THE LIMIT: FROM THE INTERNATIONAL SPACE STATION TO APPLICATIONS
ON EARTH , 149-157 (2013)
183. MORFILL, G; BATURIN, Y; FORTOV, V.
PK-3PLUS-HOW IT BEGAN
PLASMA RESEARCH AT THE LIMIT: FROM THE INTERNATIONAL SPACE STATION TO APPLICATIONS
ON EARTH , 159-161 (2013)
184. MORFILL, G; BATURIN, Y; FORTOV, V.
SOME SCIENCE RESULTS
PLASMA RESEARCH AT THE LIMIT: FROM THE INTERNATIONAL SPACE STATION TO APPLICATIONS
ON EARTH , 163-181 (2013)
185. MORFILL, G; BATURIN, Y; FORTOV, V.
SOME MORE SCIENCE RESULTS
PLASMA RESEARCH AT THE LIMIT: FROM THE INTERNATIONAL SPACE STATION TO APPLICATIONS
ON EARTH , 183-195 (2013)
186. MORFILL, G; BATURIN, Y; FORTOV, V.
PLASMA CRYSTAL - THE MOST SUCCESSFUL SPACE STATION EXPERIMENT
PLASMA RESEARCH AT THE LIMIT: FROM THE INTERNATIONAL SPACE STATION TO APPLICATIONS
ON EARTH , 197-200 (2013)
187. MORFILL, G; BATURIN, Y; FORTOV, V.

RECOLLECTIONS FROM THE COSMONAUTS

PLASMA RESEARCH AT THE LIMIT: FROM THE INTERNATIONAL SPACE STATION TO APPLICATIONS ON EARTH , 201-210 (2013)

188. MORFILL, G; BATURIN, Y; FORTOV, V.
THE FUTURE

PLASMA RESEARCH AT THE LIMIT: FROM THE INTERNATIONAL SPACE STATION TO APPLICATIONS ON EARTH , 211-217 (2013)

189. MORFILL, G; BATURIN, Y; FORTOV, V.
SOME PROBING QUESTIONS

PLASMA RESEARCH AT THE LIMIT: FROM THE INTERNATIONAL SPACE STATION TO APPLICATIONS ON EARTH , 219-222 (2013)

190. MORFILL, G; BATURIN, Y; FORTOV, V.
APPLICATIONS

PLASMA RESEARCH AT THE LIMIT: FROM THE INTERNATIONAL SPACE STATION TO APPLICATIONS ON EARTH , 223-249 (2013)

191. MORFILL, G; BATURIN, Y; FORTOV, V.
FINAL REMARKS

PLASMA RESEARCH AT THE LIMIT: FROM THE INTERNATIONAL SPACE STATION TO APPLICATIONS ON EARTH , 251-252 (2013)

192. MORFILL, G; BATURIN, Y; FORTOV, V.

PLASMA RESEARCH AT THE LIMIT: FROM THE INTERNATIONAL SPACE STATION TO APPLICATIONS ON EARTH

PLASMA RESEARCH AT THE LIMIT: FROM THE INTERNATIONAL SPACE STATION TO APPLICATIONS ON EARTH , 1-297 (2013)

193. ZHERNOKLETOV, MV; GRYAZNOV, VK; ARININ, VA; BUZIN, VN; DAVYDOV, NB; IL'KAEV, RI; IOSILEVSKIY, IL; MIKHAILOV, AL; NOVIKOV, MG; KHRUSTALEV, VV; FORTOV, VE.

QUASI-ISENTROPIC COMPRESSION OF DENSE GASEOUS HELIUM AT PRESSURES UP TO 500 GPA
JETP LETTERS 96(7), 432-436 (2012)

194. FORTOV, VE; MORFILL, GE.

STRONGLY COUPLED DUSTY PLASMAS ON ISS: EXPERIMENTAL RESULTS AND THEORETICAL EXPLANATION

PLASMA PHYSICS AND CONTROLLED FUSION 54(12), - (2012)

195. DRAGON, AV; EMELIANOV, AV; EREMIN, AV; GURENTOV, EV; PETRUSHEVICH, YV; STAROSTIN, AN; TARAN, MD; FORTOV, VE.

QUANTUM PHENOMENA IN IGNITION AND DETONATION AT ELEVATED DENSITY
PHYSICAL REVIEW LETTERS 109(18), - (2012)

196. MOCHALOV, MA; IL'KAEV, RI; FORTOV, VE; MIKHAILOV, AL; MAKAROV, YM; ARININ, VA; BLIKOV, AO; BAURIN, AY; KOMRAKOV, VA; OGORODNIKOV, VA; RYZHKOV, AV; PRONIN, EA; YUKHIMCHUK, AA.

MEASUREMENT OF QUASI-ISENTROPIC COMPRESSIBILITY OF HELIUM AND DEUTERIUM AT PRESSURES OF 1500-2000 GPA

JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 115(4), 614-625 (2012)

197. MOCHALOV, MA; IL'KAEV, RI; FORTOV, VE; MIKHAILOV, AL; ARININ, VA; BLIKOV, AO; BAURIN, AY; KOMRAKOV, VA; OGORODNIKOV, VA; RYZHKOV, AV; YUKHIMCHUK, AA.

MEASUREMENT OF THE QUASI-ISENTROPIC COMPRESSIBILITY OF A HELIUM PLASMA AT A PRESSURE OF ABOUT 5000 GPA

JETP LETTERS 96(3), 158-163 (2012)

198. PETROV, OF; MYASNIKOV, MI; D'YACHKOV, LG; VASILIEV, MM; FORTOV, VE; SAVIN, SF; KALERI, AY; BORISENKO, AI; MORFILL, GE.

COULOMB CLUSTERS OF DUST PARTICLES IN A CUSP MAGNETIC TRAP UNDER MICROGRAVITY

CONDITIONS

PHYSICAL REVIEW E 86(3), - (2012)

199. FAENOV, AY; SKOBELEV, IY; PIKUZ, TA; PIKUZ, SA; FORTOV, VE; FUKUDA, Y; HAYASHI, Y; PIROZHKOVA, A; KOTAKI, H; SHIMOMURA, T; KIRIYAMA, H; KANAZAWA, S; KATO, Y; COLGAN, J; ABDALLAH, J; KAND, M.

X-RAY SPECTROSCOPY DIAGNOSES OF CLUSTERS SURVIVING UNDER PREPULSES OF ULTRA-INTENSE FEMTOSECOND LASER PULSE IRRADIATION

LASER AND PARTICLE BEAMS 30(3), 481-488 (2012)

200. FORTOV, VE; PETROV, OF; VAULINA, OS; TIMIRKHAPOV, RA.

VISCOSITY OF A STRONGLY COUPLED DUST COMPONENT IN A WEAKLY IONIZED PLASMA

PHYSICAL REVIEW LETTERS 109(5), - (2012)

201. DU, CR; SUTTERLIN, KR; JIANG, K; RATH, C; IVLEV, AV; KHRAPAK, S; SCHWABE, M; THOMAS, HM; FORTOV, VE; LIPAEV, AM; MOLOTKOV, VI; PETROV, OF; MALENTSCHENKO, Y; YURTSCHICHIN, F; LONCHAKOV, Y; MORFILL, GE.

EXPERIMENTAL INVESTIGATION ON LANE FORMATION IN COMPLEX PLASMAS UNDER MICROGRAVITY CONDITIONS

NEW JOURNAL OF PHYSICS 14, - (2012)

202. ZHUKHOVITSKII, DI; FORTOV, VE; MOLOTKOV, VI; LIPAEV, AM; NAUMKIN, VN; THOMAS, HM; IVLEV, AV; SCHWABE, M; MORFILL, GE.

NONVISCOSUS MOTION OF A SLOW PARTICLE IN A DUST CRYSTAL UNDER MICROGRAVITY CONDITIONS

PHYSICAL REVIEW E 86(1), - (2012)

203. DOLGOBORODOV, AY; STRELETSKII, AN; MAKHOV, MN; TESELKIN, VA; GUSEINOV, SL; STOROZHENKO, PA; FORTOV, VE.

PROMISING ENERGETIC MATERIALS COMPOSED OF NANOSILICON AND SOLID OXIDIZERS

RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY B 6(4), 523-530 (2012)

204. NORMAN, G; STARIKOV, S; STEGAILOV, V; FORTOV, V; SKOBELEV, I; PIKUZ, T; FAENOV, A; TAMOTSU, S; KATO, Y; ISHINO, M; TANAKA, M; HASEGAWA, N; NISHIKINO, M; OHBA, T; KAIHORI, T; OCHI, Y; IMAZONO, T; FUKUDA, Y; KANDO, M; KAWACHI, T.

NANOMODIFICATION OF GOLD SURFACE BY PICOSECOND SOFT X-RAY LASER PULSE

JOURNAL OF APPLIED PHYSICS 112(1), - (2012)

205. TUHVATULIN, AI; SYSOLYATINA, EV; SCHEBLYAKOV, DV; LOGUNOV, DY; VASILIEV, MM; YUROVA, MA; DANILOVA, MA; PETROV, OF; NARODITSKY, BS; MORFILL, GE; GRIGORIEV, AI; FORTOV, VE; GINTSBURG, AL; ERMOLAEVA, SA.

NON-THERMAL PLASMA CAUSES P53-DEPENDENT APOPTOSIS IN HUMAN COLON CARCINOMA CELLS

ACTA NATURAE 4(3), 82-87 (2012)

206. KHRAPAK, SA; KLUMOV, BA; HUBER, P; MOLOTKOV, VI; LIPAEV, AM; NAUMKIN, VN; IVLEV, AV; THOMAS, HM; SCHWABE, M; MORFILL, GE; PETROV, OF; FORTOV, VE; MALENTSCHENKO, Y; VOLKOV, S.

FLUID-SOLID PHASE TRANSITIONS IN THREE-DIMENSIONAL COMPLEX PLASMAS UNDER MICROGRAVITY CONDITIONS

PHYSICAL REVIEW E 85(6), - (2012)

207. ANTONOV, NN; GAVRIKOV, AV; IVANOV, AS; PETROV, OF; TIMIRKHAPOV, RA; FORTOV, VE.

LASER EXCITATION OF LONG-LIVED OSCILLATORY STATES IN A DUSTY-PLASMA TRAP

JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 114(6), 1072-1077 (2012)

208. ERMOLAEVA, SA; SYSOLYATINA, EV; KOLKOVA, NI; BORTSOV, P; TUHVATULIN, AI; VASILIEV, MM; MUKHACHEV, AY; PETROV, OF; TETSUJI, S; NARODITSKY, BS; MORFILL, GE; FORTOV, VE; GRIGORIEV, AI; ZIGANGIROVA, NA; GINTSBURG, AL.

NON-THERMAL ARGON PLASMA IS BACTERICIDAL FOR THE INTRACELLULAR BACTERIAL PATHOGEN CHLAMYDIA TRACHOMATIS

JOURNAL OF MEDICAL MICROBIOLOGY 61(6), 793-799 (2012)

209. FILINOV, VS; IVANOV, YB; BONITZ, M; LEVASHOV, PR; FORTOV, VE.
QUANTUM SIMULATIONS OF STRONGLY COUPLED QUARK-GLUON PLASMA
PHYSICS OF ATOMIC NUCLEI 75(6), 693-697 (2012)
210. ASHITKOV, SI; INOGAMOV, NA; ZHAKHOVSKII, VV; EMIROV, YN; AGRANAT, MB; OLEINIK, II;
ANISIMOV, SI; FORTOV, VE.
FORMATION OF NANOCAVITIES IN THE SURFACE LAYER OF AN ALUMINUM TARGET IRRADIATED BY
A FEMTOSECOND LASER PULSE
JETP LETTERS 95(4), 176-181 (2012)
211. FILINOV, VS; BONITZ, M; FEHSKE, H; FORTOV, VE; LEVASHOV, PR.
PROTON CRYSTALLIZATION IN A DENSE HYDROGEN PLASMA
CONTRIBUTIONS TO PLASMA PHYSICS 52(3), 224-228 (2012)
212. HOLST, B; REDMER, R; GRYAZNOV, VK; FORTOV, VE; IOSILEVSKIY, IL.
HYDROGEN AND DEUTERIUM IN SHOCK WAVE EXPERIMENTS, AB INITIO SIMULATIONS AND
CHEMICAL PICTURE MODELING
EUROPEAN PHYSICAL JOURNAL D 66(4), - (2012)
213. KUCHEROV, YN; OSIPOV, YS; MAKSIMOV, BK; FORTOV, VE.
MAIN AREAS OF IMPROVING THE ENERGY COMPLEX PAPER DISCUSSION
HERALD OF THE RUSSIAN ACADEMY OF SCIENCES 82(2), 99-101 (2012)
214. LISIN, EA; VAULINA, OS; PETROV, OF; FORTOV, VE.
DUST-PARTICLE CHARGE IN WEAKLY IONIZED GAS-DISCHARGE PLASMA
EPL 97(5), - (2012)
215. SAVIN, SF; D'YACHKOV, LG; MYASNIKOV, MI; PETROV, OF; FORTOV, VE.
THE FORMATION OF COULOMB CLUSTERS IN A MAGNETIC TRAP
PHYSICA SCRIPTA 85(3), - (2012)
216. FILINOV, VS; IVANOV, YB; BONITZ, M; FORTOV, VE; LEVASHOV, PR.
COLOR PATH-INTEGRAL MONTE CARLO SIMULATIONS OF QUARK-GLUON PLASMA
PHYSICS LETTERS A 376(12-13), 1096-1101 (2012)
217. FILINOV, VS; BONITZ, M; IVANOV, YB; LEVASHOV, PR; FORTOV, VE.
QUANTUM MONTE CARLO SIMULATIONS OF STRONGLY COUPLED QUARK-GLUON PLASMA
CONTRIBUTIONS TO PLASMA PHYSICS 52(2), 135-139 (2012)
218. KHRAPAK, SA; TOLIAS, P; RATYNSKAIA, S; CHAUDHURI, M; ZOBIN, A; USACHEV, A; RAU, C;
THOMA, MH; PETROV, OF; FORTOV, VE; MORFILL, GE.
GRAIN CHARGING IN AN INTERMEDIATELY COLLISIONAL PLASMA
EPL 97(3), - (2012)
219. SINKEVICH, OA; DEPUTATIVA, LV; FILINOV, VS; FORTOV, VE; NAUMKIN, VN; VLADIMIROV, VI;
MESHAKIN, VI; RYKOV, VA.
THE CORONA DISCHARGE IN NUCLEAR EXCITED PLASMA AS A WAY OF OBTAINING ORDERED DUST
PARTICLE STRUCTURES
HIGH TEMPERATURE 50(1), 1-14 (2012)
220. KHRAPAK, AG; FORTOV, VE; APFELBAUM, EM.
DIELECTRIC CATASTROPHE AND INSULATOR-CONDUCTOR TRANSITION
EPL 97(1), - (2012)
221. RUBTSOV, NM; SEPLYARSKII, BS; CHERNYSH, VI; TSVETKOV, GI; GORDOPOLOV, YA; FORTOV, VE.
FORMATION OF LIQUID AND SOLID DUSTY CRYSTALS IN GAS-PHASE COMBUSTION REACTIONS
EPL 97(1), - (2012)
222. ASHITKOV, SI; AGRANAT, MB; KANEL, GI; FORTOV, VE.
APPROACHING THE ULTIMATE SHEAR AND TENSILE STRENGTH OF ALUMINUM IN EXPERIMENTS
WITH FEMTOSECOND PULSE LASER
SHOCK COMPRESSION OF CONDENSED MATTER - 2011, PTS 1 AND 2 1426, - (2012)

223. FORTOV, VE; SHARKOV, BY; STOCKER, H.
EUROPEAN FACILITY FOR ANTIPROTON AND ION RESEARCH (FAIR): THE NEW INTERNATIONAL CENTER FOR FUNDAMENTAL PHYSICS AND ITS RESEARCH PROGRAM
PHYSICS-USPEKHI 55(6), 582-602 (2012)
224. DIDENKO, AN; RASHCHIKOV, VI; FORTOV, VE.
TERAHERTZ EMISSION FROM TARGET UNDER THE ACTION OF POWERFUL LASER PULSES
PROBLEMS OF ATOMIC SCIENCE AND TECHNOLOGY (3), 179-182 (2012)
225. SKOBELEV, IY; FAENOV, AY; PIKUZ, TA; FORTOV, VE.
SPECTRA OF HOLLOW IONS IN AN ULTRADENSE LASER PLASMA
PHYSICS-USPEKHI 55(1), 47-71 (2012)
226. INOGAMOV, NA; KHOKHLOV, VA; PETROV, YV; ANISIMOV, SI; ZHAKHOVSKY, VV; DEMASKE, BJ; OLEYNIK, II; WHITE, CT; ASHITKOV, SI; KHISHCHENKO, KV; AGRANAT, MB; FORTOV, VE.
ULTRASHORT ELASTIC AND PLASTIC SHOCK WAVES IN ALUMINUM
SHOCK COMPRESSION OF CONDENSED MATTER - 2011, PTS 1 AND 2 1426, - (2012)
227. KOLESNIKOV, SA; DUDIN, SV; LAVROV, VV; NIKOLAEV, DN; MINTSEV, VB; SHILKIN, NS; TERNOVOI, VY; UTKIN, AV; YAKUSHEV, VV; YURIEV, DS; FORTOV, VE; GOLUBEV, AA; KANTSYREV, AV; SHESTOV, LM; SMIRNOV, GN; TURTIKOV, VI; SHARKOV, BY; BURTSEV, VV; ZAVIALOV, NV; KARTANOV, SA; MIKHAILOV, AL; RUDNEV, AV; TATSENKO, MV; ZHERNOKLETOV, MV.
SHOCKWAVE AND DETONATION STUDIES AT ITEP-TWAC PROTON RADIOGRAPHY FACILITY
SHOCK COMPRESSION OF CONDENSED MATTER - 2011, PTS 1 AND 2 1426, - (2012)
228. PIKUZ, TA; FAENOV, AY; SKOBELEV, IY; FORTOV, VE; BOLDAREV, AS; GASILOV, VA; CHEN, LM; ZHANG, L; YAN, WC; YUAN, DW; MAO, JY; WANG, ZH; COLGAN, J; ABDALLAH, J; FUKUDA, Y; HAYASHI, Y; PIROZHKOVA, A; KAWASE, K; SHIMOMURA, T; KIRIYAMA, H; KATO, Y; BULANOV, SV; KANDO, M.
THE SPECTRA OF THE MULTICHARGED ARGON HOLLOW IONS: OBSERVATION, MODELING AND USING FOR DIAGNOSTICS OF THE EARLY STAGE OF THE HEATING OF CLUSTERS BY A SUPER HIGH CONTRAST FEMTOSECOND LASER PULSES
LASER-DRIVEN RELATIVISTIC PLASMAS APPLIED TO SCIENCE, ENERGY, INDUSTRY, AND MEDICINE 1465, 181-201 (2012)
229. ISHINO, M; FAENOV, A; TANAKA, M; HASEGAWA, N; NISHIKINO, M; TAMOTSU, S; PIKUZ, T; INOGAMOV, N; ZHAKHOVSKY, V; SKOBELEV, I; FORTOV, V; KHOHLOV, V; SHEPELEV, V; OHBA, T; KAIHORI, T; OCHI, Y; IMAZONO, T; KAWACHI, T.
INTERACTION OF SOFT X-RAY LASER PULSE RADIATION WITH ALUMINUM SURFACE: NANO-METER SIZE SURFACE MODIFICATION
LASER-DRIVEN RELATIVISTIC PLASMAS APPLIED TO SCIENCE, ENERGY, INDUSTRY, AND MEDICINE 1465, 236-240 (2012)
230. GRYAZNOV, VK; IOSILEVSKIY, IL; FORTOV, VE.
EQUATION OF STATE OF SHOCK COMPRESSED GASES AT MEGABAR PRESSURE RANGE
SHOCK COMPRESSION OF CONDENSED MATTER - 2011, PTS 1 AND 2 1426, - (2012)
231. NIKOLAEV, DN; TERNOVOI, VY; PYALLING, AA; KVITOV, SV; FORTOV, VE.
TEMPERATURE MEASUREMENTS AND HYDROGEN TRANSFORMATION UNDER DYNAMIC COMPRESSION UP TO 150 GPA.
SHOCK COMPRESSION OF CONDENSED MATTER - 2011, PTS 1 AND 2 1426, - (2012)
232. SAVIN, SF; D'YACHKOV, LG; MYASNIKOV, MI; PETROV, OF; VASILIEV, MM; FORTOV, VE; KALERI, AY; BORISENKO, AI; MORFILL, GE.
COULOMB ENSEMBLE OF CHARGED DIAMAGNETIC MACROPARTICLES IN AN INHOMOGENEOUS MAGNETIC FIELD UNDER MICROGRAVITY CONDITIONS
JETP LETTERS 94(7), 508-512 (2011)
233. SCHWABE, M; JIANG, K; ZHDANOV, S; HAGL, T; HUBER, P; IVLEV, AV; LIPAEV, AM; MOLOTKOV, VI; NAUMKIN, VN; SUTTERLIN, KR; THOMAS, HM; FORTOV, VE; MORFILL, GE; SKVORTSOV, A; VOLKOV, S.
DIRECT MEASUREMENT OF THE SPEED OF SOUND IN A COMPLEX PLASMA UNDER MICROGRAVITY CONDITIONS

EPL 96(5), - (2011)

234. EMELIANOV, AV; EREMIN, AV; PETRUSHEVICH, YV; SIVKOVA, EE; STAROSTIN, AN; TARAN, MD; FORTOV, VE.

QUANTUM EFFECTS IN THE KINETICS OF THE INITIATION OF DETONATION CONDENSATION WAVES
JETP LETTERS 94(7), 530-534 (2011)

235. VAULINA, OS; VASILIEVA, EV; PETROV, OF; FORTOV, VE.

EQUILIBRIUM STRUCTURAL PROPERTIES OF TWO-DIMENSIONAL NONIDEAL SYSTEMS
EPL 96(6), - (2011)

236. FILIPPOV, AV; STAROSTIN, AN; TKACHENKO, IM; FORTOV, VE.

DUST ACOUSTIC WAVES IN COMPLEX PLASMAS AT ELEVATED PRESSURE
PHYSICS LETTERS A 376(1), 31-38 (2011)

237. TAHIR, NA; STOHLKER, T; SHUTOV, A; LOMONOSOV, IV; FORTOV, VE; FRENCH, M; NETTELMANN, N; REDMER, R; PIRIZ, AR; DEUTSCH, C.

LABORATORY PLANETARY PHYSICS USING INTENSE HEAVY ION BEAMS AT THE FACILITY FOR ANTI-PROTONS AND ION RESEARCH AT DARMSTADT: THE HEDGEHOB COLLABORATION
ASTROPHYSICS AND SPACE SCIENCE 336(1), 61-65 (2011)

238. ANNARATONE, BM; IVLEV, AV; FORTOV, VE; KHRAPAK, AG; KHRAPAK, SA; MOLOTKOV, VI; MORFILL, GE.

COMPLEX PLASMAS WITH RODLIKE PARTICLES
IEEE TRANSACTIONS ON PLASMA SCIENCE 39(11), 2732-2733 (2011)

239. KRETSCHMER, M; KONOPKA, U; ZHDANOV, SK; THOMAS, HM; MORFILL, GE; FORTOV, VE; MOLOTKOV, VI; LIPAIEV, AM; PETROV, OF.

PARTICLES INSIDE THE VOID OF A COMPLEX PLASMA
IEEE TRANSACTIONS ON PLASMA SCIENCE 39(11), 2758-2759 (2011)

240. ANDREEV, NE; BARANOV, VE; CROS, B; FORTOV, VE; KUZNETSOV, SV; MAYNARD, G; MORA, P.

ELECTRON BUNCH COMPRESSION AND ACCELERATION IN THE LASER WAKEFIELD
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT 653(1), 66-71 (2011)

241. FAENOV, AY; SKOBELEV, IY; PIKUZ, TA; FORTOV, VE; BOLDAREV, AS; GASILOV, VA; CHEN, LM; ZHANG, L; YAN, WC; YUAN, DW; MAO, JY; WANG, ZH; COLGAN, J; ABDALLAH, J.

DIAGNOSTICS OF THE EARLY STAGE OF THE HEATING OF CLUSTERS BY A FEMTOSECOND LASER PULSE FROM THE SPECTRA OF HOLLOW IONS
JETP LETTERS 94(3), 171-176 (2011)

242. VASILYAK, LM; POLYAKOV, DN; FORTOV, VE; SHUMOVA, VV.

PARAMETERS OF THE POSITIVE COLUMN OF GLOW DISCHARGE WITH DUST PARTICLES
HIGH TEMPERATURE 49(5), 623-628 (2011)

243. IVANOV, AS; KRUGLOV, VS; PAL, AF; RYABINKIN, AN; SEROV, AO; SHAITURA, DS; STAROSTIN, AN; GAVRIKOV, AV; PETROV, OF; FORTOV, VE.

SYNTHESIS AND CHARACTERIZATION OF MACROCOMPOSITES BASED ON NICKEL-COATED QUASI-CRYSTALLINE AL-CU-FE POWDER
TECHNICAL PHYSICS LETTERS 37(10), 917-920 (2011)

244. DIDENKO, AN; RASHCHIKOV, VI; FORTOV, VE.

MECHANISM OF GENERATION OF HIGH-INTENSITY TERAHERTZ RADIATION UNDER THE ACTION OF HIGH-POWER LASER PULSED ON A TARGET
TECHNICAL PHYSICS 56(10), 1535-1538 (2011)

245. SKOBELEV, IY; FAENOV, AY; PIKUZ, TA; PIKUZ, SA; FORTOV, VE; FUKUDA, Y; HAYASHI, Y;

PIROZHKOVA, A; KAWASE, K; KOTAKI, H; SHIMOMURA, T; KIRIYAMA, H; KATO, Y; KANDO, M.
EFFECTS OF THE SELF-ABSORPTION OF X-RAY SPECTRAL LINES IN THE PRESENCE OF THE LASER-CLUSTER INTERACTION

JETP LETTERS 94(4), 270-276 (2011)

246. FILINOV, VS; IVANOV, YB; BONITZ, M; LEVASHOV, PR; FORTOV, VE.
QUANTUM SIMULATIONS OF STRONGLY COUPLED QUARK-GLUON PLASMA
PHYSICS OF ATOMIC NUCLEI 74(9), 1364-1374 (2011)

247. KHISHCHENKO, KV; CHARAKHCH'YAN, AA; FORTOV, VE; FROLOVA, AA; MILYAVSKIY, VV;
SHURSHALOV, LV.
HYDRODYNAMIC SIMULATION OF CONVERGING SHOCK WAVES IN POROUS CONICAL SAMPLES
ENCLOSED WITHIN SOLID TARGETS
JOURNAL OF APPLIED PHYSICS 110(5), - (2011)

248. KULISH, MI; MINTSEV, VB; DUDIN, SV; USHNURTSEV, AE; FORTOV, VE.
MEASUREMENT OF THE TEMPERATURE OF THE COPPER PLASMA GENERATED IN THE PROCESS OF
RELEASE OF A SHOCK-COMPRESSED TARGET
JETP LETTERS 94(2), 101-105 (2011)

249. POLYAKOV, DN; SHUMOVA, VV; VASILYAK, LM; FORTOV, VE.
STUDY OF GLOW DISCHARGE POSITIVE COLUMN WITH CLOUD OF DISPERSE PARTICLES
PHYSICS LETTERS A 375(37), 3300-3305 (2011)

250. STARIKOV, SV; STEGAILOV, VV; NORMAN, GE; FORTOV, VE; ISHINO, M; TANAKA, M; HASEGAWA,
N; NISHIKINO, M; OHBA, T; KAIHORI, T; OCHI, E; IMAZONO, T; KAVACHI, T; TAMOTSU, S; PIKUZ, TA;
SKOBELEV, IY; FAENOV, AY.
LASER ABLATION OF GOLD: EXPERIMENT AND ATOMISTIC SIMULATION
JETP LETTERS 93(11), 642-647 (2011)

251. VAULINA, OS; VASILIEVA, EV; PETROV, OF; FORTOV, VE.
CONDITIONS FOR FORMATION OF DUSTY PLASMA STRUCTURES IN THE NEAR-ELECTRODE LAYER OF
AN RF-DISCHARGE
PHYSICA SCRIPTA 84(2), - (2011)

252. INOGAMOV, NA; ANISIMOV, SI; PETROV, YV; KHOKHLOV, VA; ZHAKHOVSKI, VV; FAENOV, AY;
PIKUZ, TA; FORTOV, VE; SKOBELEV, IY; KATO, Y; SHEPELEV, VV; FUKUDA, Y; TANAKA, M; ISHINO, M;
NISHIKINO, M; KANDO, M; KAWACHI, T; KISHIMOTO, M; NAGASONO, M; TANO, K; ISHIKAWA, T;
OHASHI, N; YABASHI, M; TOGASHI, T; SENDA, Y.
ABLATION OF INSULATORS UNDER THE ACTION OF SHORT PULSES OF X-RAY PLASMA LASERS AND
FREE-ELECTRON LASERS
JOURNAL OF OPTICAL TECHNOLOGY 78(8), 473-480 (2011)

253. FORTOV, VE; FEDOROV, MP; ELISTRATOV, VV.
SCIENTIFIC AND TECHNOLOGICAL PROBLEMS OF THE HYDROPOWER INDUSTRY AFTER THE
ACCIDENT AT THE SAYANO-SHUSHENSKAYA HYDROPOWER PLANT
HERALD OF THE RUSSIAN ACADEMY OF SCIENCES 81(4), 333-340 (2011)

254. VASILYAK, LM; FORTOV, VE; MORFILL, GE; IVLEV, AV; PUSTYLNIN, MY; POLYAKOV, DN;
THOMAS, HM; VETCHININ, SP.
INCREASE OF KINETIC ENERGY OF DUSTY CLUSTER PARTICLES DUE TO PARAMETRIC INSTABILITY
CAUSED BY NANOSECOND ELECTRIC PULSES
CONTRIBUTIONS TO PLASMA PHYSICS 51(6), 529-532 (2011)

255. OVCHINNIKOV, AV; KOSTENKO, OF; CHEFONOV, OV; ROSMEJ, ON; ANDREEV, NE; AGRANAT, MB;
DUAN, JL; LIU, J; FORTOV, VE.
CHARACTERISTIC X-RAYS GENERATION UNDER THE ACTION OF FEMTOSECOND LASER PULSES ON
NANO-STRUCTURED TARGETS
LASER AND PARTICLE BEAMS 29(2), 249-254 (2011)

256. IL'KAEV, RI; FORTOV, VE.
THE APPLICATION OF LASERS TO STUDY EXTREME STATES OF MATTER
HERALD OF THE RUSSIAN ACADEMY OF SCIENCES 81(3), 218-222 (2011)

257. FORTOV, VE; GAVRIKOV, AV; PETROV, OF; SIDOROV, VS; VASILIEV, MN; VORONA, NA.
SUPERHIGH DUST CHARGING BY HIGH-VOLTAGE ELECTRON BEAM
EPL 94(5), - (2011)
258. INOGAMOV, NA; FAENOV, AY; ZHAKHOVSKY, VV; PIKUZ, TA; SKOBELEV, IY; PETROV, YV;
KHOKHLOV, VA; SHEPELEV, VV; ANISIMOV, SI; FORTOV, VE; FUKUDA, Y; KANDO, M; KAWACHI, T;
NAGASONO, M; OHASHI, H; YABASHI, M; TONO, K; SENDA, Y; TOGASHI, T; ISHIKAWA, T.
TWO-TEMPERATURE WARM DENSE MATTER PRODUCED BY ULTRASHORT EXTREME VACUUM
ULTRAVIOLET-FREE ELECTRON LASER (EUV-FEL) PULSE
CONTRIBUTIONS TO PLASMA PHYSICS 51(5), 419-426 (2011)
259. KHRAPAK, SA; KLUMOV, BA; HUBER, P; MOLOTKOV, VI; LIPAEV, AM; NAUMKIN, VN; THOMAS,
HM; IVLEV, AV; MORFILL, GE; PETROV, OF; FORTOV, VE; MALENTSCHENKO, Y; VOLKOV, S.
FREEZING AND MELTING OF 3D COMPLEX PLASMA STRUCTURES UNDER MICROGRAVITY
CONDITIONS DRIVEN BY NEUTRAL GAS PRESSURE MANIPULATION
PHYSICAL REVIEW LETTERS 106(20), - (2011)
260. FILINOV, VS; BONITZ, M; IVANOV, YB; SKOKOV, VV; LEVASHOV, PR; FORTOV, VE.
QUANTUM COLOR DYNAMIC SIMULATIONS OF THE STRONGLY COUPLED QUARK-GLUON PLASMA
CONTRIBUTIONS TO PLASMA PHYSICS 51(4), 322-327 (2011)
261. HEIDEMANN, RJ; COUEDEL, L; ZHDANOV, SK; SUTTERLING, KR; SCHWABE, M; THOMAS, HM;
IVLEV, AV; HAGL, T; MORFILL, GE; FORTOV, VE; MOLOTKOV, VI; PETROV, OF; LIPAEV, AI; TOKAREV,
V; REITER, T; VINOGRADOV, P.
COMPREHENSIVE EXPERIMENTAL STUDY OF HEARTBEAT OSCILLATIONS OBSERVED UNDER
MICROGRAVITY CONDITIONS IN THE PK-3 PLUS LABORATORY ON BOARD THE INTERNATIONAL
SPACE STATION
PHYSICS OF PLASMAS 18(5), - (2011)
262. INOGAMOV, NA; ZHAKHOVSKY, VV; ASHITKOV, SI; KHOKHLOV, VA; SHEPELEV, VV; KOMAROV,
PS; OVCHINNIKOV, AV; SITNIKOV, DS; PETROV, YV; AGRANAT, MB; ANISIMOV, SI; FORTOV, VE.
LASER ACOUSTIC PROBING OF TWO-TEMPERATURE ZONE CREATED BY FEMTOSECOND PULSE
CONTRIBUTIONS TO PLASMA PHYSICS 51(4), 367-374 (2011)
263. INOGAMOV, NA; FAENOV, AY; ZHAKHOVSKII, VV; SKOBELEV, IY; KHOKHLOV, VA; KATO, Y;
TANAKA, M; PIKUZ, TA; KISHIMOTO, M; ISHINO, M; NISHIKINO, M; FUKUDA, Y; BULANOV, SV;
KAWACHI, T; PETROV, YV; ANISIMOV, SI; FORTOV, VE.
INTERACTION OF SHORT LASER PULSES IN WAVELENGTH RANGE FROM INFRARED TO X-RAY WITH
METALS, SEMICONDUCTORS, AND DIELECTRICS
CONTRIBUTIONS TO PLASMA PHYSICS 51(4), 361-366 (2011)
264. TAHIR, NA; SCHMIDT, R; SHUTOV, A; LOMONOSOV, IV; GRYAZNOV, V; PIRIZ, AR; DEUTSCH, C;
FORTOV, VE.
THE LARGE HADRON COLLIDER AND THE SUPER PROTON SYNCHROTRON AT CERN AS TOOLS TO
GENERATE WARM DENSE MATTER AND NON-IDEAL PLASMAS
CONTRIBUTIONS TO PLASMA PHYSICS 51(4), 299-308 (2011)
265. TAHIR, NA; SHUTOV, A; LOMONOSOV, IV; PIRIZ, AR; REDMER, R; STOHLKER, T; GEISSEL, H;
DEUTSCH, C; FORTOV, VE.
HIGH ENERGY DENSITY PHYSICS STUDIES AT THE FACILITY FOR ANTIPROTONS AND ION RESEARCH:
THE HEDGEHOB COLLABORATION
CONTRIBUTIONS TO PLASMA PHYSICS 51(4), 309-321 (2011)
266. FILIPPOV, AV; BABICHEV, VN; FORTOV, VE; GAVRIKOV, AV; PAL', AF; PETROV, OF; STAROSTIN,
AN; SARKAROV, NE.
BIPOLAR CHARGING OF DUST PARTICLES UNDER ULTRAVIOLET RADIATION
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 112(5), 884-895 (2011)
267. GOLYSHEV, AA; SHAKHRAI, DV; KIM, VV; MOLODETS, AM; FORTOV, VE.
HIGH-TEMPERATURE RESISTIVITY OF SHOCKED LIQUID SODIUM AT PRESSURES UP TO 230 GPA
PHYSICAL REVIEW B 83(9), - (2011)

268. ANTIPOV, SN; VASIL'EV, MM; MAIOROV, SA; PETROV, OF; FORTOV, VE.
DUSTY PLASMA STRUCTURES IN HE-KR DC GLOW DISCHARGE
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 112(3), 482-493 (2011)
269. DIDENKO, AN; RASHCHIKOV, VI; FORTOV, VE.
ON POSSIBILITY OF HIGH-POWER TERAHERTZ EMISSION FROM TARGET UNDER THE ACTION OF
POWERFUL LASER PULSES
TECHNICAL PHYSICS LETTERS 37(3), 256-258 (2011)
270. CHARAKHCH'YAN, AA; KHISHCHENKO, KV; FORTOV, VE; FROLOVA, AA; MILYAVSKIY, VV;
SHURSHALOV, LV.
SHOCK COMPRESSION OF SOME POROUS MEDIA IN CONICAL TARGETS: NUMERICAL STUDY
SHOCK WAVES 21(1), 35-42 (2011)
271. ANDREEV, NE; KUZNETSOV, SV; CROS, B; FORTOV, VE; MAYNARD, G; MORA, P.
LASER WAKEFIELD ACCELERATION OF SUPERSHORT ELECTRON BUNCHES IN GUIDING STRUCTURES
PLASMA PHYSICS AND CONTROLLED FUSION 53(1), - (2011)
272. ERMOLAEVA, SA; VARFOLOMEEV, AF; CHERNUKHA, MY; YUROV, DS; VASILIEV, MM;
KAMINSKAYA, AA; MOISENOVICH, MM; ROMANOVA, JM; MURASHEV, AN; SELEZNEVA, II; SHIMIZU, T;
SYSOLYATINA, EV; SHAGINYAN, IA; PETROV, OF; MAYEVSKY, EI; FORTOV, VE; MORFILL, GE;
NARODITSKY, BS; GINTSBURG, AL.
BACTERICIDAL EFFECTS OF NON-THERMAL ARGON PLASMA IN VITRO, IN BIOFILMS AND IN THE
ANIMAL MODEL OF INFECTED WOUNDS
JOURNAL OF MEDICAL MICROBIOLOGY 60(1), 75-83 (2011)
273. VASILIEV, MM; D'YACHKOV, LG; ANTIPOV, SN; HUIJINK, R; PETROV, OF; FORTOV, VE.
DYNAMICS OF DUST STRUCTURES IN A DC DISCHARGE UNDER ACTION OF AXIAL MAGNETIC FIELD
EPL 93(1), - (2011)
274. ISHINO, M; FAENOV, AY; TANAKA, M; HASEGAWA, N; NISHIKINO, M; TAMOTSU, S; PIKUZ, TA;
INOAMOV, NA; ZHAKHOVSKY, VV; SKOBELEV, IY; FORTOV, VE; KHOHLOV, VA; SHEPELEV, VV;
OHBA, T; KAIHORI, T; OCHI, Y; IMAZONO, T; KAWACHI, T.
NANOSCALE SURFACE MODIFICATIONS AND FORMATION OF CONICAL STRUCTURES AT ALUMINUM
SURFACE INDUCED BY SINGLE SHOT EXPOSURE OF SOFT X-RAY LASER PULSE
JOURNAL OF APPLIED PHYSICS 109(1), - (2011)
275. SHAKHRAI, DV; GOLYSHEV, AA; KIM, VV; MOLODETS, AM; FORTOV, VE.
VOLUME DEPENDENCE OF ALH₃ BAND GAP AT HIGH PRESSURES
HIGH PRESSURE RESEARCH 31(2), 283-286 (2011)
276. JOYCE, G; RATH, C; HUBER, P; THOMAS, H; MORFILL, GE; MOLOTKOV, V; FORTOV, V.
STRUCTURAL PROPERTIES OF 3D COMPLEX PLASMAS UNDER MICROGRAVITY CONDITIONS (VOL 92,
15003, 2010)
EPL 93(2), - (2011)
277. KHRAPAK, SA; KLUMOV, BA; HUBER, P; MOLOTKOV, VI; LIPAEV, AM; NAUMKIN, VN; THOMAS,
HM; IVLEV, AV; MORFILL, GE; PETROV, OF; FORTOV, VE; MALENTSCHENKO, Y; VOLKOV, S.
FREEZING AND MELTING OF 3D COMPLEX PLASMA STRUCTURES DRIVEN BY NEUTRAL GAS
PRESSURE MANIPULATION IN PK-3 PLUS EXPERIMENT
DUSTY/COMPLEX PLASMAS: BASIC AND INTERDISCIPLINARY RESEARCH: SIXTH INTERNATIONAL
CONFERENCE ON THE PHYSICS OF DUSTY PLASMAS 1397, - (2011)
278. FORTOV, VE; MOLOTKOV, VI; NEFEDOV, AP; PETROV, OF.
LIQUID- AND CRYSTAL-LIKE STRUCTURES IN STRONGLY COUPLED DUSTY PLASMAS
HIGH TEMPERATURE MATERIAL PROCESSES 15(2), 129-136 (2011)
279. INOGAMOV, NA; ANISIMOV, SI; ZHAKHOVSKY, VV; FAENOV, AY; PETROV, YV; KHOKHLOV, VA;
FORTOV, VE; AGRANAT, MB; ASHITKOV, SI; KOMAROV, PS; SKOBELEV, IY; KATO, Y; PIKUZ, TA;
SHEPELEV, VV; FUKUDA, Y; TANAKA, M; KISHIMOTO, M; ISHINO, M; NISHIKINO, M; KANDO, M;
KAWACHI, T; NAGASONO, M; OHASHI, H; YABASHI, M; TONO, K; SENDA, Y; TOGASHI, T; ISHIKAWA, T.

ABLATION BY SHORT OPTICAL AND X-RAY LASER PULSES
FUNDAMENTALS OF LASER-ASSISTED MICRO- AND NANOTECHNOLOGIES 2010 7996, - (2011)

280. FORTOV, V.
EXTREME STATES OF MATTER ON EARTH AND IN THE COSMOS INTRODUCTION
EXTREME STATES OF MATTER: ON EARTH AND IN THE COSMOS , 1-6 (2011)

281. FORTOV, V.
MATTER UNDER EXTREME CONDITIONS: CLASSIFICATION OF STATES
EXTREME STATES OF MATTER: ON EARTH AND IN THE COSMOS , 7-24 (2011)

282. FORTOV, V.
HIGH ENERGY DENSITIES IN LABORATORIES
EXTREME STATES OF MATTER: ON EARTH AND IN THE COSMOS , 25-74 (2011)

283. FORTOV, V.
EXTREME STATES OF MATTER ON EARTH AND IN THE COSMOS CONCLUSION
EXTREME STATES OF MATTER: ON EARTH AND IN THE COSMOS , 331-332 (2011)

284. FORTOV, V.
EXTREME STATES OF MATTER ON EARTH AND IN THE COSMOS PREFACE
EXTREME STATES OF MATTER: ON EARTH AND IN THE COSMOS , VII-X (2011)

285. FORTOV, V.
HIGH-POWER LASERS IN HIGH-ENERGY-DENSITY PHYSICS
EXTREME STATES OF MATTER: ON EARTH AND IN THE COSMOS , 75-96 (2011)

286. FORTOV, V.
RELATIVISTIC CHARGED PARTICLE BEAMS
EXTREME STATES OF MATTER: ON EARTH AND IN THE COSMOS , 97-142 (2011)

287. FORTOV, V.
TECHNICAL APPLICATIONS OF THE PHYSICS OF HIGH ENERGY DENSITIES
EXTREME STATES OF MATTER: ON EARTH AND IN THE COSMOS , 143-184 (2011)

288. FORTOV, V.
ASTROPHYSICAL ASPECTS OF HIGH ENERGY DENSITIES
EXTREME STATES OF MATTER: ON EARTH AND IN THE COSMOS , 185-330 (2011)

289. MILYAVSKII, VV; FORTOV, VE; FROLOVA, AA; KHISHCHENKO, KV; CHARAKHCH'YAN, AA;
SHURSHALOV, LV.
ON THE MECHANISM OF PRESSURE INCREASE WITH INCREASING POROSITY OF THE MEDIA
COMPRESSED IN CONICAL AND CYLINDRICAL TARGETS
COMPUTATIONAL MATHEMATICS AND MATHEMATICAL PHYSICS 50(12), 2082-2094 (2010)

290. SUTTERLIN, KR; WYSOCKI, A; RATH, C; IVLEV, AV; THOMAS, HM; KHRAPAK, S; ZHDANOV, S;
RUBIN-ZUZIC, M; GOEDHEER, WJ; FORTOV, VE; LIPAEV, AM; MOLOTKOV, VI; PETROV, OF; MORFILL,
GE; LOWEN, H.
NON-EQUILIBRIUM PHASE TRANSITIONS IN COMPLEX PLASMA
PLASMA PHYSICS AND CONTROLLED FUSION 52(12), - (2010)

291. FORTOV, VE; PETROV, OF.
CRYSTAL AND LIQUID STRUCTURES IN STRONGLY NONIDEAL DUSTY PLASMAS UNDER
LABORATORY AND MICROGRAVITY CONDITIONS
HIGH TEMPERATURE 48(6), 943-956 (2010)

292. EMEL'YANOV, AV; EREMIN, AV; MAKEICH, AA; FORTOV, VE.
FORMATION OF DETONATION WAVE UPON CONDENSATION OF SUPERSATURATED CARBON VAPOR
HIGH TEMPERATURE 48(6), 823-829 (2010)

293. VASIL'EV, MN; VORONA, NA; GAVRIKOV, AV; PETROV, OF; SIDOROV, VS; FORTOV, VE.
ANOMALOUSLY HIGH CHARGING OF DISPERSED PARTICLES BY 25-KEV ELECTRON BEAM

TECHNICAL PHYSICS LETTERS 36(12), 1143-1145 (2010)

294. DEPUTATOVA, LV; VLADIMIROV, VI; FILINOV, VS; FORTOV, VE; BUDNIK, AP; DYACHENKO, PP; RYKOV, VA; RYKOV, KV.

SELF-ORGANIZATION OF DUST GRAINS IN PROTON BEAM PLASMA

PLASMA PHYSICS REPORTS 36(13), 1167-1172 (2010)

295. VAULINA, OS; KOSS, XG; KHRUSTALYOV, YV; PETROV, OF; FORTOV, VE.

THERMODYNAMIC AND TRANSPORT PROPERTIES OF NONIDEAL SYSTEMS WITH ISOTROPIC PAIR POTENTIALS

PHYSICAL REVIEW E 82(5), - (2010)

296. POLYAKOV, DN; SHUMOVA, VV; VASILYAK, LM; FORTOV, VE.

INFLUENCE OF DUST PARTICLES ON GLOW DISCHARGE

PHYSICA SCRIPTA 82(5), - (2010)

297. FORTOV, VE; SINKEVICH, OA; DEPUTATOVA, LV; FILINOV, VS; NAUMKIN, VN; VLADIMIROV, VI; MESHAKIN, VI; RYKOV, VA.

CORONA DISCHARGE IN A NUCLEAR EXCITED DUSTY PLASMA

DOKLADY PHYSICS 55(11), 541-544 (2010)

298. IVANOV, MF; KIVERIN, AD; LIBERMAN, MA; FORTOV, VE.

THE FLAME-ACCELERATION MECHANISM AND TRANSITION TO DETONATION OF A HYDROGEN-OXYGEN MIXTURE IN A CHANNEL

DOKLADY PHYSICS 55(10), 480-484 (2010)

299. INOGAMOV, NA; ASHITKOV, SI; ZHAKHOVSKY, VV; SHEPELEV, VV; KHOKHLOV, VA; KOMAROV, PS; AGRANAT, MB; ANISIMOV, SI; FORTOV, VE.

ACOUSTIC PROBING OF TWO-TEMPERATURE RELAXATION INITIATED BY ACTION OF ULTRASHORT LASER PULSE

APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING 101(1), 1-5 (2010)

300. INOGAMOV, NA; ZHAKHOVSKY, VV; FAENOV, AY; KHOKHLOV, VA; SHEPELEV, VV; SKOBELEV, IY; KATO, Y; TANAKA, M; PIKUZ, TA; KISHIMOTO, M; ISHINO, M; NISHIKINO, M; FUKUDA, Y; BULANOV, SV; KAWACHI, T; PETROV, YV; ANISIMOV, SI; FORTOV, VE.

SPALLATIVE ABLATION OF DIELECTRICS BY X-RAY LASER

APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING 101(1), 87-96 (2010)

301. ASHITKOV, SI; AGRANAT, MB; KANEL', GI; KOMAROV, PS; FORTOV, VE.

BEHAVIOR OF ALUMINUM NEAR AN ULTIMATE THEORETICAL STRENGTH IN EXPERIMENTS WITH FEMTOSECOND LASER PULSES

JETP LETTERS 92(8), 516-520 (2010)

302. KLUMOV, B; JOYCE, G; RATH, C; HUBER, P; THOMAS, H; MORFILL, GE; MOLOTKOV, V; FORTOV, V.

STRUCTURAL PROPERTIES OF 3D COMPLEX PLASMAS UNDER MICROGRAVITY CONDITIONS

EPL 92(1), - (2010)

303. MOCHALOV, MA; IL'KAEV, RI; FORTOV, VE; MIKHAILOV, AL; MAKAROV, YM; ARININ, VA; GRISHECHKIN, SK; BLIKOV, AO; OGORODNIKOV, VA; RYZHKOV, AV; GRYAZNOV, VK.

MEASUREMENT OF THE COMPRESSIBILITY OF A DEUTERIUM PLASMA AT A PRESSURE OF 1800 GPA

JETP LETTERS 92(5), 300-304 (2010)

304. GORBACHENKO, VI; DOVZHENKO, AY; MERZHANOV, AG; RUMANOV, EN; FORTOV, VE; YACHMENEVA, OE.

PROPAGATION LIMITS FOR A SLOW WAVE OF OPTICAL BREAKDOWN IN A FIBER LIGHT GUIDE

DOKLADY PHYSICS 55(8), 384-387 (2010)

305. TAHIR, NA; STOHLKER, T; SHUTOV, A; LOMONOSOV, IV; FORTOV, VE; FRENCH, M; NETTELMANN, N; REDMER, R; PIRIZ, AR; DEUTSCH, C; ZHAO, Y; ZHANG, P; XU, H; XIAO, G; ZHAN, W.

ULTRAHIGH COMPRESSION OF WATER USING INTENSE HEAVY ION BEAMS: LABORATORY PLANETARY PHYSICS

NEW JOURNAL OF PHYSICS 12, - (2010)

306. WYSOCKI, A; RATH, C; IVLEV, AV; SUTTERLIN, KR; THOMAS, HM; KHRAPAK, S; ZHDANOV, S; FORTOV, VE; LIPAEV, AM; MOLOTKOV, VI; PETROV, OF; LOWEN, H; MORFILL, GE.

KINETICS OF FLUID DEMIXING IN COMPLEX PLASMAS: ROLE OF TWO-SCALE INTERACTIONS
PHYSICAL REVIEW LETTERS 105(4), - (2010)

307. EMELIANOV, AV; EREMIN, AV; FORTOV, VE.

FORMATION OF A DETONATION WAVE IN THE THERMAL DECOMPOSITION OF ACETYLENE
JETP LETTERS 92(2), 97-101 (2010)

308. FILIPPOV, AV; STAROSTIN, AN; TKACHENKO, IM; FORTOV, VE; BALLESTER, D; CONDE, L.

DUST ACOUSTIC WAVES IN A NONEQUILIBRIUM DUSTY PLASMA
JETP LETTERS 91(11), 558-565 (2010)

309. GAVRIKOV, AV; GORANSKAYA, DN; IVANOV, AS; PETROV, OF; TIMIRKHAHOV, RA; VORONA, NA; FORTOV, VE.

INVESTIGATION OF NON-NEWTONIAN BEHAVIOR OF DUSTY PLASMA LIQUID
JOURNAL OF PLASMA PHYSICS 76, 579-592 (2010)

310. VAULINA, OS; LISIN, EA; GAVRIKOV, AV; PETROV, OF; FORTOV, VE.

ANALYSIS OF THE INTERACTION BETWEEN PARTICLES IN NON-IDEAL QUASI-EQUILIBRIUM
EXTENDED SYSTEMS
JOURNAL OF PLASMA PHYSICS 76, 593-602 (2010)

311. AGRANAT, MB; ANISIMOV, SI; ASHITKOV, SI; ZHAKHOVSKII, VV; INOGAMOV, NA; KOMAROV, PS; OVCHINNIKOV, AV; FORTOV, VE; KHOKHLOV, VA; SHEPELEV, VV.

STRENGTH PROPERTIES OF AN ALUMINUM MELT AT EXTREMELY HIGH TENSION RATES UNDER THE
ACTION OF FEMTOSECOND LASER PULSES
JETP LETTERS 91(9), 471-477 (2010)

312. DRAKON, AV; EREMIN, AV; KULIKOV, SV; FORTOV, VE.

THE NATURE OF NONEQUILIBRIUM PHENOMENA IN THE SHOCK-WAVE FRONT
DOKLADY PHYSICS 55(5), 207-210 (2010)

313. LIU, B; GOREE, J; FORTOV, VE; LIPAEV, AM; MOLOTKOV, VI; PETROV, OF; MORFILL, GE; THOMAS, HM; IVLEV, AV.

DUSTY PLASMA DIAGNOSTICS METHODS FOR CHARGE, ELECTRON TEMPERATURE, AND ION DENSITY
PHYSICS OF PLASMAS 17(5), - (2010)

314. ANDREEV, NE; CASSOU, K; WOJDA, F; GENOUD, G; BURZA, M; LUNDH, O; PERSSON, A; CROS, B; FORTOV, VE; WAHLSTROM, CG.

ANALYSIS OF LASER WAKEFIELD DYNAMICS IN CAPILLARY TUBES
NEW JOURNAL OF PHYSICS 12, - (2010)

315. ZHDANOV, SK; SCHWABE, M; HEIDEMANN, R; SUTTERLIN, R; THOMAS, HM; RUBIN-ZUZIC, M; ROTHERMEL, H; HAGL, T; IVLEV, AV; MORFILL, GE; MOLOTKOV, VI; LIPAEV, AM; PETROV, OF; FORTOV, VE; REITER, T.

AUTO-OSCILLATIONS IN COMPLEX PLASMAS
NEW JOURNAL OF PHYSICS 12, - (2010)

316. VAULINA, OS; LISIN, EA; GAVRIKOV, AV; PETROV, OF; FORTOV, VE.

ANALYSIS OF PAIR INTERPARTICLE INTERACTION IN NONIDEAL DISSIPATIVE SYSTEMS
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 110(4), 662-674 (2010)

317. IVLEV, AV; BRANDT, PC; MORFILL, GE; RATH, C; THOMAS, HM; JOYCE, G; FORTOV, VE; LIPAEV, AM; MOLOTKOV, VI; PETROV, OF.

ELECTRORHEOLOGICAL COMPLEX PLASMAS
IEEE TRANSACTIONS ON PLASMA SCIENCE 38(4), 733-740 (2010)

318. THOMA, MH; MITIC, S; USACHEV, A; ANNARATONE, BM; FINK, MA; FORTOV, VE; HOFNER, H;

IVLEV, AV; KLUMOV, BA; KONOPKA, U; KRETSCHMER, M; MORFILL, GE; PETROV, OF; SUTTERLIN, R;

- ZHDANOV, S; ZOBIN, AV.
RECENT COMPLEX PLASMA EXPERIMENTS IN A DC DISCHARGE
IEEE TRANSACTIONS ON PLASMA SCIENCE 38(4), 857-860 (2010)
319. SUTTERLIN, KR; THOMAS, HM; IVLEV, AV; MORFILL, GE; FORTOV, VE; LIPAEV, AM; MOLOTKOV, VI; PETROV, OF; WYSOCKI, A; LOWEN, H.
LANE FORMATION IN DRIVEN BINARY COMPLEX PLASMAS ON THE INTERNATIONAL SPACE STATION
IEEE TRANSACTIONS ON PLASMA SCIENCE 38(4), 861-868 (2010)
320. GOLUBEV, AA; DEMIDOV, VS; DEMIDOVA, EV; DUDIN, SV; KANTSYREV, AV; KOLESNIKOV, SA; MINTSEV, VB; SMIRNOV, GN; TURTIKOV, VI; UTKIN, AV; FORTOV, VE; SHARKOV, BY.
DIAGNOSTICS OF FAST PROCESSES BY CHARGED PARTICLE BEAMS AT TWAC-ITEP ACCELERATOR-ACCUMULATOR FACILITY
TECHNICAL PHYSICS LETTERS 36(2), 177-180 (2010)
321. DUDIN, SV; ZHITLUKHIN, AM; KOZLOV, AV; LEONTEV, AA; MINTSEV, VB; USHNURTSEV, AE; FORTOV, VE; CHERKOVETS, VE; SHURUPOV, AV; SHURUPOVA, NP.
MAGNETOCUMULATIVE GENERATOR AS THE POWER SUPPLY FOR PULSED PLASMA ACCELERATOR
HIGH TEMPERATURE 48(1), 1-6 (2010)
322. GAVRIKOV, AV; DOROKHOV, VG; IVANOV, AS; PAL', AF; PETROV, OF; RYABINKIN, AN; SAVCHENKO, VI; SEROV, AO; SKRYLEVA, EA; STAROSTIN, AN; FORTOV, VE; SHUL'GA, YM.
HYDRATION OF TRINITROTOLUENE IN THE PRESENCE OF A DISPERSE COMPOSITE MATERIAL (PD + AL)/SiO₂ OBTAINED WITH THE USE OF DUSTY PLASMAS
DOKLADY PHYSICS 55(2), 55-57 (2010)
323. VAULINA, OS; KHRUSTALYOV, YV; PETROV, OF; FORTOV, VE.
ENERGY DENSITY, HEAT CAPACITY AND DIFFUSION CONSTANT IN NON-IDEAL YUKAWA SYSTEMS
EPL 89(3), - (2010)
324. FORTOV, VE; LOMONOSOV, IV.
SHOCK WAVES AND EQUATIONS OF STATE OF MATTER
SHOCK WAVES 20(1), 53-71 (2010)
325. OSSIPYAN, YA; SIDOROV, NS; PALNICHENKO, AV; VYASELEV, OM; KARTSOVNIK, MV; OPEL, M; AVDONIN, VV; SHAKHRAI, DV; FORTOV, VE.
SUPERCONDUCTIVITY OF CALCIUM C₆₀ INTERCALATION COMPOUND SYNTHESIZED BY SHOCK-WAVE PRESSURE
FULLERENES NANOTUBES AND CARBON NANOSTRUCTURES 18(4-6), 376-380 (2010)
326. KOLESNIKOV, SA; GOLUBEV, AA; DEMIDOV, VS; DUDIN, SV; KANTSYREV, AV; MINTSEV, VB; SMIRNOV, GN; TURTIKOV, VI; UTKIN, AV; SHARKOV, BY; FORTOV, VE.
APPLICATION OF CHARGED PARTICLE BEAMS OF TWAC-ITEP ACCELERATOR FOR DIAGNOSTICS OF HIGH DYNAMIC PRESSURE PROCESSES
HIGH PRESSURE RESEARCH 30(1), 83-87 (2010)
327. MOCHALOV, MA; ZHERNOKLETOV, MV; IL'KAEV, RI; MIKHAILOV, AL; FORTOV, VE; GRYAZNOV, VK; IOSILEVSKIY, IL; MEZHEVOV, AB; KOVALEV, AE; KIRSHANOV, SI; GRIGOR'EVA, YA; NOVIKOV, MG; SHUIKIN, AN.
MEASUREMENT OF DENSITY, TEMPERATURE, AND ELECTRICAL CONDUCTIVITY OF A SHOCK-COMPRESSED NONIDEAL NITROGEN PLASMA IN THE MEGABAR PRESSURE RANGE
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 110(1), 67-80 (2010)
328. ZHDANOV, S; HEIDEMANN, R; THOMA, MH; SUTTERLIN, R; THOMAS, HM; HOFNER, H; TARANTIK, K; MORFILL, GE; USACHEV, AD; PETROV, OF; FORTOV, VE.
DISSIPATIVE DARK SOLITONS IN A DC COMPLEX PLASMA
EPL 89(2), - (2010)
329. ZAPOROZHETS, YB; MINTSEV, V; GRYAZNOV, V; FORTOV, VE; REINHOLZ, H; ROPKE, G.
THE INVESTIGATION OF S- AND P-POLARIZED REFLECTIVITIES OF NONIDEAL PLASMA
CONTRIBUTIONS TO PLASMA PHYSICS 50(1), 60-63 (2010)

330. GRYAZNOV, VK; IOSILEVSKIY, IL; FORTOV, VE.
EQUATION OF STATE OF SHOCK COMPRESSED HYDROGEN
CONTRIBUTIONS TO PLASMA PHYSICS 50(1), 77-81 (2010)
331. KLUMOV, B; HUBER, P; VLADIMIROV, S; THOMAS, H; IVLEV, A; MORFILL, G; FORTOV, V; LIPAEV, A; MOLOTKOV, V.
STRUCTURAL PROPERTIES OF 3D COMPLEX PLASMAS: EXPERIMENTS VERSUS SIMULATIONS
PLASMA PHYSICS AND CONTROLLED FUSION 51(12), - (2009)
332. SUKHININ, GI; FEDOSEEV, AV; ANTIPOV, SN; PETROV, OF; FORTOV, VE.
INFLUENCE OF DUST PARTICLES CONCENTRATION ON PLASMA PARAMETERS IN DC DISCHARGE
CONTRIBUTIONS TO PLASMA PHYSICS 49(10), 781-785 (2009)
333. SAVIN, SF; D'YACHKOV, LG; VASIL'EV, MM; PETROV, OF; FORTOV, VE.
FORMATION OF COULOMB CLUSTERS FROM CHARGED DIAMAGNETIC MICROPARTICLES IN
INHOMOGENEOUS MAGNETIC FIELD
TECHNICAL PHYSICS LETTERS 35(12), 1144-1148 (2009)
334. SAVIN, SF; D'YACHKOV, LG; VASILIEV, MM; PETROV, OF; FORTOV, VE.
CLUSTERS OF CHARGED DIAMAGNETIC PARTICLES LEVITATING IN NONUNIFORM MAGNETIC FIELD
EPL 88(6), - (2009)
335. BUDNIK, AP; DEPUTATOVA, LV; FORTOV, VE; KOSAREV, VA; RYKOV, VA; VLADIMIROV, VI.
SIMULATION OF KINETIC PROCESSES IN THE NUCLEAR-EXCITED HELIUM NON-IDEAL DUSTY PLASMA
CONTRIBUTIONS TO PLASMA PHYSICS 49(10), 765-768 (2009)
336. STERLETSKII, AN; DOLGOBORODOV, AY; KOLBANEV, IV; MAKHOV, MN; LOMAEVA, SF;
BORUNOVA, AB; FORTOV, VE.
STRUCTURE OF MECHANICALLY ACTIVATED HIGH-ENERGY AL PLUS POLYTETRAFLUOROETHYLENE
NANOCOMPOSITES
COLLOID JOURNAL 71(6), 852-860 (2009)
337. PUSTYLNİK, MY; IVLEV, AV; THOMAS, HM; MORFILL, GE; VASILYAK, LM; VETCHININ, SR;
POLYAKOV, DN; FORTOV, VE.
EFFECT OF HIGH-VOLTAGE NANOSECOND PULSES ON COMPLEX PLASMAS
PHYSICS OF PLASMAS 16(11), - (2009)
338. INOGAMOV, NA; FAENOV, AY; KHOKHLOV, VA; ZHAKHOVSKII, VV; PETROV, YV; SKOBELEV, IY;
NISHIHARA, K; KATO, Y; TANAKA, M; PIKUZ, TA; KISHIMOTO, M; ISHINO, M; NISHIKINO, M; FUKUDA,
Y; BULANOV, SV; KAWACHI, T; ARTISIMOV, SI; FORTOV, VE.
SPALLATIVE ABLATION OF METALS AND DIELECTRICS
CONTRIBUTIONS TO PLASMA PHYSICS 49(7-8), 455-466 (2009)
339. FILINOV, VS; BONITZ, M; IVANOV, YB; SKOKOV, VV; LEVASHOV, PR; FORTOV, VE.
EQUATION OF STATE OF STRONGLY COUPLED QUARK-GLUON PLASMA - PATH INTEGRAL MONTE
CARLO RESULTS
CONTRIBUTIONS TO PLASMA PHYSICS 49(7-8), 536-543 (2009)
340. FILIPPOV, AV; PAL', AF; STAROSTIN, AN; GAVRIKOV, AV; FORTOV, VE; PETROV, OF; VASIL'EV, MN.
CHARGING DUST PARTICLES IN PLASMAS WITH TWO-TEMPERATURE DISTRIBUTIONS OF ELECTRONS
AND WITH COLD IONS
PHYSICS OF PLASMAS 16(9), - (2009)
341. KONYUKHOV, AV; LIKHACHEV, AP; FORTOV, VE; KHISHCHENKO, KV; ANISIMOV, SI; OPARIN, AM;
LOMONOSOV, IV.
ON THE NEUTRAL STABILITY OF A SHOCK WAVE IN REAL MEDIA
JETP LETTERS 90(1), 18-24 (2009)
342. KONYUKHOV, AV; LIKHACHEV, AP; FORTOV, VE; ANISIMOV, SI; OPARIN, AM.
STABILITY AND AMBIGUOUS REPRESENTATION OF SHOCK WAVE DISCONTINUITY IN
THERMODYNAMICALLY NONIDEAL MEDIA

JETP LETTERS 90(1), 25-31 (2009)

343. SEURIG, R; MORFILL, G; FORTOV, V; HOFMANN, P.
COMPLEX PLASMA RESEARCH ON ISS PKE-NEFEDOV, PK-3 PLUS, PK-4, AND IMPACT LABORATORY
ACTA ASTRONAUTICA 65(5-6), 651-656 (2009)

344. TAHIR, NA; PIRIZ, AR; WOUCHEK, G; SHUTOV, A; LOMONOSOV, IV; DEUTSCH, C; HOFFMANN, DHH;
FORTOV, VE.
HIGH ENERGY DENSITY PHYSICS AND LABORATORY PLANETARY SCIENCE USING INTENSE HEAVY
ION BEAMS AT FAIR FACILITY AT DARMSTADT: THE HEDGEHOB COLLABORATION
ASTROPHYSICS AND SPACE SCIENCE 322(1-4), 179-188 (2009)

345. LIU, B; GOREE, J; FORTOV, VE; LIPAEV, AM; MOLOTKOV, VI; PETROV, OF; MORFILL, GE; THOMAS,
HM; ROTHERMEL, H; IVLEV, AV.
TRANSVERSE OSCILLATIONS IN A SINGLE-LAYER DUSTY PLASMA UNDER MICROGRAVITY
PHYSICS OF PLASMAS 16(8), - (2009)

346. TAHIR, NA; SCHMIDT, R; BRUGGER, M; ASSMANN, R; SHUTOV, A; LOMONOSOV, IV; GRYAZNOV, V;
PIRIZ, AR; UDREA, S; HOFFMANN, DHH; FORTOV, VE; DEUTSCH, C.
GENERATION OF WARM DENSE MATTER AND STRONGLY COUPLED PLASMAS USING THE HIGH
RADIATION ON MATERIALS FACILITY AT THE CERN SUPER PROTON SYNCHROTRON
PHYSICS OF PLASMAS 16(8), - (2009)

347. HOFFMANN, DHH; FORTOV, VE; KUSTER, M; MINTSEV, V; SHARKOV, BY; TAHIR, NA; UDREA, S;
VARENTSOV, D; WEYRICH, K.
HIGH ENERGY DENSITY PHYSICS GENERATED BY INTENSE HEAVY ION BEAMS
ASTROPHYSICS AND SPACE SCIENCE 322(1-4), 167-177 (2009)

348. VAULINA, OS; LISIN, EA; GAVRIKOV, AV; PETROV, OF; FORTOV, VE.
DETERMINATION OF PAIR INTERACTION FORCES BETWEEN PARTICLES IN NONIDEAL DISSIPATIVE
SYSTEMS
PHYSICAL REVIEW LETTERS 103(3), - (2009)

349. TAHIR, NA; LOMONOSOV, IV; SHUTOV, A; FORTOV, VE; GEISSEL, M; PIRIZ, AR; DEUTSCH, C;
HOFFMANN, DHH.
REVIEW OF HIGH ENERGY DENSITY PHYSICS: THE HEDGEHOB COLLABORATION
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS
SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT 606(1-2), 128-133 (2009)

350. TAHIR, NA; PIRIZ, AR; WOUCHEK, G; SHUTOV, A; LOMONOSOV, IV; FORTOV, VE; DEUTSCH, C;
HOFFMANN, DHH.
LABORATORY PLANETARY SCIENCE STUDIES USING INTENSE HEAVY ION BEAMS AT FAIR: THE
HEDGEHOB COLLABORATION
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS
SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT 606(1-2), 177-185 (2009)

351. TAHIR, NA; SCHMIDT, R; BRUGGER, M; ASSMANN, R; SHUTOV, A; LOMONOSOV, IV; FORTOV, VE;
PIRIZ, AR; DEUTSCH, C; HOFFMANN, DHH.
INTERACTION OF SUPER PROTON SYNCHROTRON BEAM WITH SOLID COPPER TARGET: SIMULATIONS
OF FUTURE EXPERIMENTS AT HIRADMAT FACILITY AT CERN
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS
SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT 606(1-2), 186-192 (2009)

352. TAHIR, NA; SPILLER, P; SHUTOV, A; LOMONOSOV, IV; PIRIZ, AR; REDMER, R; HOFFMANN, DHH;
FORTOV, VE; DEUTSCH, C; BOCK, RM.
PROPOSED HIGH ENERGY DENSITY PHYSICS RESEARCH USING INTENSE PARTICLE BEAMS AT FAIR:
THE HEDGEHOB COLLABORATION
IEEE TRANSACTIONS ON PLASMA SCIENCE 37(7), 1267-1275 (2009)

353. PETUKHOV, VA; NABOKO, IM; FORTOV, VE.
EXPLOSION HAZARD OF HYDROGEN-AIR MIXTURES IN THE LARGE VOLUMES

INTERNATIONAL JOURNAL OF HYDROGEN ENERGY 34(14), 5924-5931 (2009)

354. FORTOV, VE.

EXTREME STATES OF MATTER ON EARTH AND IN SPACE
PHYSICS-USPEKHI 52(6), 615-647 (2009)

355. SUKHININ, G; FEDOSEEV, A; ANTIPOV, S; PETROV, O; FORTOV, V.

TRAPPED IONS AND THE SHIELDING OF DUST PARTICLES IN LOW-DENSITY NON-EQUILIBRIUM
PLASMA OF GLOW DISCHARGE
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL 42(21), - (2009)

356. ZAPOROZHETS, Y; MINTSEV, V; GRYAZNOV, V; FORTOV, V; REINHOLZ, H; ROPKE, G.
INTERACTION OF EXPLOSIVELY DRIVEN DENSE PLASMAS WITH A LOW-INTENSITY LASER
RADIATION

JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL 42(21), - (2009)

357. STAROSTIN, AN; ROERICH, VC; GRYAZNOV, VK; FORTOV, VE; IOSILEVSKIY, IL.

THE INFLUENCE OF ELECTRON DEGENERACY ON THE CONTRIBUTION OF BOUND STATES TO THE
NON-IDEAL HYDROGEN PLASMA EOS

JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL 42(21), - (2009)

358. FILINOV, VS; BONITZ, M; FEHSKE, H; LEVASHOV, PR; FORTOV, VE.

STRUCTURES OF QUANTUM 2D ELECTRON-HOLE PLASMAS

JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL 42(21), - (2009)

359. FILINOV, VS; LEVASHOV, PR; BOTAN, AV; BONITZ, M; FORTOV, VE.

THERMODYNAMIC PROPERTIES AND ELECTRICAL CONDUCTIVITY OF STRONGLY CORRELATED
PLASMA MEDIA

JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL 42(21), - (2009)

360. KOMAROV, PS; ASHITKOV, SI; OVCHINNIKOV, AV; SITNIKOV, DS; VEYSMAN, ME; LEVASHOV, PR;
POVARNITSYN, ME; AGRANAT, MB; ANDREEV, NE; KHISHCHENKO, KV; FORTOV, VE.

EXPERIMENTAL AND THEORETICAL STUDY OF AL PLASMA UNDER FEMTOSECOND LASER PULSES
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL 42(21), - (2009)

361. MERZHIEVSKY, LA; BESPALOV, EV; EFREMOV, VP; LUKIANCHIKOV, LA; PRUUEL, ER; TEN, KA;
TITOV, VM; TOLOCHKO, BP; FORTOV, VE; SHARAFUTDINOV, MR.

SYNCHROTRON RADIATION AS A TOOL TO CONSTRUCT THE SHOCK ADIABATS OF AEROGEL
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS
SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT 603(1-2), 164-166 (2009)

362. MOLODETS, AM; SHAKHRAY, DV; KHRAPAK, AG; FORTOV, VE.

METALLIZATION OF ALUMINUM HYDRIDE ALH₃ AT HIGH MULTIPLE-SHOCK PRESSURES
PHYSICAL REVIEW B 79(17), - (2009)

363. SUTTERLIN, KR; WYSOCKI, A; IVLEV, AV; RATH, C; THOMAS, HM; RUBIN-ZUZIC, M; GOEDHEER,
WJ; FORTOV, VE; LIPAEV, AM; MOLOTKOV, VI; PETROV, OF; MORFILL, GE; LOWEN, H.

DYNAMICS OF LANE FORMATION IN DRIVEN BINARY COMPLEX PLASMAS (VOL 102, 085003, 2009)
PHYSICAL REVIEW LETTERS 102(14), - (2009)

364. TAHIR, NA; SCHMIDT, R; SHUTOV, A; LOMONOSOV, IV; PIRIZ, AR; HOFFMANN, DHH; DEUTSCH, C;
FORTOV, VE.

LARGE HADRON COLLIDER AT CERN: BEAMS GENERATING HIGH-ENERGY-DENSITY MATTER
PHYSICAL REVIEW E 79(4), - (2009)

365. EMELIANOV, A; EREMIN, A; FORTOV, V; JANDER, H; MAKEICH, A; WAGNER, HG.

DETONATION WAVE DRIVEN BY CONDENSATION OF SUPERSATURATED CARBON VAPOR
PHYSICAL REVIEW E 79(3), - (2009)

366. SUKHININ, GI; FEDOSEEV, AV; ANTIPOV, SN; PETROV, OF; FORTOV, VE.

EFFECT OF TRAPPED IONS AND NONEQUILIBRIUM ELECTRON-ENERGY DISTRIBUTION FUNCTION ON
DUST-PARTICLE CHARGING IN GAS DISCHARGES

PHYSICAL REVIEW E 79(3), - (2009)

367. AGRANAT, MB; ASHITKOV, SI; ANISIMOV, SI; OVCHINNIKOV, AV; SHVARTSBURG, AB; SITNIKOV, DS; FORTOV, VE.

FORMATION OF ABSORBING HETEROGENEOUS PLASMA LAYER BY FEMTOSECOND LASER-INDUCED MELTING AND ABLATION OF SILICON

APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING 94(4), 879-887 (2009)

368. SUTTERLIN, KR; WYSOCKI, A; IVLEV, AV; RATH, C; THOMAS, HM; RUBIN-ZUZIC, M; GOEDHEER, WJ; FORTOV, VE; LIPAEV, AM; MOLOTKOV, VI; PETROV, OF; MORFILL, GE; LOWEN, H.

DYNAMICS OF LANE FORMATION IN DRIVEN BINARY COMPLEX PLASMAS

PHYSICAL REVIEW LETTERS 102(8), - (2009)

369. JIANG, K; NOSENKO, V; LI, YF; SCHWABE, M; KONOPKA, U; IVLEV, AV; FORTOV, VE; MOLOTKOV, VI; LIPAEV, AM; PETROV, OF; TURIN, MV; THOMAS, HM; MORFILL, GE.

MACH CONES IN A THREE-DIMENSIONAL COMPLEX PLASMA

EPL 85(4), - (2009)

370. USACHEV, AD; ZOBININ, AV; PETROV, OF; FORTOV, VE; ANNARATONE, BM; THOMA, MH; HOFNER, H; KRETSCHMER, M; FINK, M; MORFILL, GE.

FORMATION OF A BOUNDARY-FREE DUST CLUSTER IN A LOW-PRESSURE GAS-DISCHARGE PLASMA

PHYSICAL REVIEW LETTERS 102(4), - (2009)

371. D'YACHKOV, LG; PETROV, OF; FORTOV, VE.

DUSTY PLASMA STRUCTURES IN MAGNETIC DC DISCHARGES

CONTRIBUTIONS TO PLASMA PHYSICS 49(3), 134-147 (2009)

372. FORTOV, VE; MAKAROV, AA.

AVENUES FOR THE INNOVATIVE DEVELOPMENT OF ENERGETICS IN THE WORLD AND IN RUSSIA

PHYSICS-USPEKHI 52(12), 1249-1265 (2009)

373. FAENOV, AY; INOGAMOV, NA; ZHAKHOVSKII, VV; KHOKHLOV, VA; PETROV, YV; FORTOV, VE; ANISIMOV, SI; NISHIHARA, K; TANAKA, M; PIKUZ, TA; KISHIMOTO, M; ISHINO, M; NISHIKINO, M;

NAKAMURA, T; FUKUDA, Y; BULANOV, SV; KATO, Y; KAWACHI, T.

LOW THRESHOLD SPALLATIVE ABLATION OF LARGE BANDGAP LIF DIELECTRICS INDUCED BY PICOSECOND SOFT X-RAY LASER PULSES

2009 LASERS & ELECTRO-OPTICS & THE PACIFIC RIM CONFERENCE ON LASERS AND ELECTRO-OPTICS, VOLS 1 AND 2 , 474-474 (2009)

374. LIKHACHEV, AP; KONYUKHOV, AV; FORTOV, VE; OPARIN, AM; ANISIMOV, SI.

STABILITY AND AMBIGUOUS REPRESENTATION OF SHOCK WAVE DISCONTINUITY IN MEDIA WITH ARBITRARY THERMODYNAMIC PROPERTIES

SHOCK COMPRESSION OF CONDENSED MATTER - 2009, PTS 1 AND 2 1195, 37-+ (2009)

375. NIKOLAEV, DN; TERNOVOI, VY; PYALLING, AA; KVITOV, SV; FORTOV, VE.

INVESTIGATION OF NEAR CRITICAL POINT STATES OF LITHIUM, SODIUM AND ALUMINIUM BY PULSE HEATING DURING LAUNCHING

SHOCK COMPRESSION OF CONDENSED MATTER - 2009, PTS 1 AND 2 1195, 923-926 (2009)

376. EFREMOV, VP; DEMIDOV, BA; MESCHERYAKOV, AN; POTAPENKO, AI; FORTOV, VE.

RELAXATION DYNAMICS OF POROUS MATTER UNDER INTENSE PULSED IRRADIATION

SHOCK WAVES, VOL 2, PROCEEDINGS , 1073-+ (2009)

377. SULTANOV, VG; KIM, VV; LOMONOSOV, IV; SHUTOV, AV; FORTOV, VE.

NUMERICAL MODELING OF DEEP IMPACT EXPERIMENT

INTERNATIONAL JOURNAL OF IMPACT ENGINEERING 35(12), 1816-1820 (2008)

378. FORTOV, VE; PETROV, OF; VAULINA, OS.

DUSTY-PLASMA LIQUID IN THE STATISTICAL THEORY OF THE LIQUID STATE

PHYSICAL REVIEW LETTERS 101(19), - (2008)

379. MOLODETS, AM; LOBACH, AS; ZHUKOV, AN; SHULGA, YM; FORTOV, VE.

STABILITY OF CRYSTALLINE STRUCTURE AND MOLECULES OF HYDROFULLERENE C(60)H(36) UNDER HIGH SHOCK PRESSURES

DOKLADY PHYSICS 53(11), 562-565 (2008)

380. VAULINA, OS; ADAMOVICH, KG; PETROV, OF; FORTOV, VE.

ANALYSIS OF MASS TRANSFER IN DISSIPATIVE NONIDEAL SYSTEMS: EXPERIMENTS ON DUSTY PLASMAS

JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 107(2), 313-323 (2008)

381. FILINOV, VS; FEHSKE, H; BONITZ, M; FORTOV, VE; LEVASHOV, P.

ORDERED STRUCTURE FORMATION IN 2D MASS ASYMMETRIC ELECTRON-HOLE PLASMAS
PHYSICS LETTERS A 372(31), 5208-5214 (2008)

382. FILINOV, VS; SCHUBERT, G; LEVASHOV, P; BONITZ, M; FEHSKE, H; FORTOV, VE; FILINOV, AV.
CENTER-OF-MASS TOMOGRAPHIC APPROACH TO QUANTUM DYNAMICS

PHYSICS LETTERS A 372(30), 5064-5070 (2008)

383. TAHIR, NA; SCHMIDT, R; BRUGGER, M; ASSMANN, R; SHUTOV, AV; LOMONOSOV, IV; PIRIZ, AR;
HOFFMANN, DHH; DEUTSCH, C; FORTOV, VE.

THE CERN SUPER PROTON SYNCHROTRON AS A TOOL TO STUDY HIGH ENERGY DENSITY PHYSICS
NEW JOURNAL OF PHYSICS 10, - (2008)

384. INOGAMOV, NA; ZHAKHOVSKII, VV; ASHITKOV, SI; PETROV, YV; AGRANAT, MB; ANISIMOV, SI;
NISHIHARA, K; FORTOV, VE.

NANOSPALLATION INDUCED BY AN ULTRASHORT LASER PULSE

JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 107(1), 1-19 (2008)

385. EMELIANOV, AV; EREMIN, AV; MAKEICH, AA; FORTOV, VE.

FORMATION OF A DETONATION-LIKE CONDENSATION WAVE

JETP LETTERS 87(9), 470-473 (2008)

386. VEYSMAN, ME; AGRANAT, MB; ANDREEV, NE; ASHITKOV, SI; FORTOV, VE; KHISHCHENKO, KV;
KOSTENKO, OF; LEVASHOV, PR; OVCHINNIKOV, AV; SITNIKOV, DS.

FEMTOSECOND OPTICAL DIAGNOSTICS AND HYDRODYNAMIC SIMULATION OF AG PLASMA CREATED
BY LASER IRRADIATION OF A SOLID TARGET

JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS 41(12), - (2008)

387. VAULINA, OS; ADAMOVICH, XG; PETROV, OF; FORTOV, VE.

EVOLUTION OF THE MASS-TRANSFER PROCESSES IN NONIDEAL DISSIPATIVE SYSTEMS. I. NUMERICAL
SIMULATION

PHYSICAL REVIEW E 77(6), - (2008)

388. VAULINA, OS; ADAMOVICH, XG; PETROV, OF; FORTOV, VE.

EVOLUTION OF THE MASS-TRANSFER PROCESSES IN NONIDEAL DISSIPATIVE SYSTEMS II:
EXPERIMENTS IN DUSTY PLASMA

PHYSICAL REVIEW E 77(6), - (2008)

389. GOSTINTSEV, YA; SHATSKIKH, YV; SHULENIN, YV; FORTOV, VE.

THE EVOLUTION OF FREE TURBULENT SPHERICAL GAS FLAMES AND THE GENERALIZED
KOLMOGOROV-OBUKHOV LAWS

RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY B 2(3), 437-441 (2008)

390. KHRAPAK, AG; FORTOV, VE.

ENERGY SPECTRUM OF ONE-PARTICLE EXCITATIONS IN LIQUID DIELECTRICS UNDER HIGH
PRESSURES AND TEMPERATURES

JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 106(5), 910-917 (2008)

391. SOSIKOV, VA; UTKIN, AV; FORTOV, VE.

CAVITATION IN WATER UNDER TENSION NEAR THE FREEZING POINT

JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 106(5), 905-909 (2008)

392. ANTIPOV, SN; ASINOVSKII, EI; KIRILLIN, AV; MAIOROV, SA; MARKOVETS, VV; PETROV, OF;

- FORTOV, VE.
CHARGE AND STRUCTURES OF DUST PARTICLES IN A GAS DISCHARGE AT CRYOGENIC TEMPERATURES
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 106(4), 830-837 (2008)
393. ZOBININ, AV; USACHEV, AD; PETROV, OF; FORTOV, VE.
ION CURRENT ON A SMALL SPHERICAL ATTRACTIVE PROBE IN A WEAKLY IONIZED PLASMA WITH ION-NEUTRAL COLLISIONS (KINETIC APPROACH)
PHYSICS OF PLASMAS 15(4), - (2008)
394. BATYAEV, VF; BUTKO, MA; PAVLOV, KV; TITARENKO, AY; TITARENKO, YE; TIKHONOV, RS; FLORYA, SN; SHARKOV, BY; SOBOLEVSKII, NM; FORTOV, VE; PONOMAREV-STEPNOI, NN.
ANALYSIS OF THE MAIN NUCLEAR-PHYSICAL CHARACTERISTICS OF THE INTERACTION OF PROTON BEAMS WITH HEAVY METAL TARGETS
ATOMIC ENERGY 104(4), 319-329 (2008)
395. THOMAS, HM; MORFILL, GE; FORTOV, VE; IVLEV, AV; MOLOTKOV, VI; LIPAIEV, AM; HAGL, T; ROTHERMEL, H; KHRAPAK, SA; SUEETTERLIN, RK; RUBIN-ZUZIC, M; PETROV, OF; TOKAREV, VI; KRIKALEV, SK.
COMPLEX PLASMA LABORATORY PK-3 PLUS ON THE INTERNATIONAL SPACE STATION
NEW JOURNAL OF PHYSICS 10, - (2008)
396. SCHWABE, M; ZHDANOV, SK; THOMAS, HM; IVLEV, AV; RUBIN-ZUZIC, M; MORFILL, GE; MOLOTKOV, VI; LIPAIEV, AM; FORTOV, VE; REITER, T.
NONLINEAR WAVES EXTERNALLY EXCITED IN A COMPLEX PLASMA UNDER MICROGRAVITY CONDITIONS
NEW JOURNAL OF PHYSICS 10, - (2008)
397. IVLEV, AV; MORFILL, GE; THOMAS, HM; RATH, C; JOYCE, G; HUBER, P; KOMPANEETS, R; FORTOV, VE; LIPAIEV, AM; MOLOTKOV, VI; REITER, T; TURIN, M; VINOGRADOV, P.
FIRST OBSERVATION OF ELECTORHEOLOGICAL PLASMAS
PHYSICAL REVIEW LETTERS 100(9), - (2008)
398. COLGAN, J; ABDALLAH, J; FAENOV, AY; PIKUZ, TA; SKOBELEV, IY; FORTOV, VE; FUKUDA, Y; AKAHANE, Y; AOYAMA, M; INOUE, N; YAMAKAWA, K.
THE ROLE OF HOLLOW ATOMS IN THE SPECTRA OF AN ULTRASHORT-PULSE-LASER-DRIVEN AR CLUSTER TARGET
LASER AND PARTICLE BEAMS 26(1), 83-93 (2008)
399. VOROB'EV, VS; PETROV, OF; FORTOV, VE.
SELF-CONSISTENT ELECTRIC FIELD INSIDE ORDERED DUST STRUCTURES
PHYSICAL REVIEW E 77(3), - (2008)
400. VAULINA, OS; PETROV, OF; GAVRIKOV, AV; ADAMOVICH, XG; FORTOV, VE.
EXPERIMENTAL STUDY OF TRANSPORT OF MACROPARTICLES IN PLASMA RF-DISCHARGE
PHYSICS LETTERS A 372(7), 1096-1100 (2008)
401. FORTOV, VE; HOFFMANN, DHH; SHARKOV, BY.
INTENSE ION BEAMS FOR GENERATING EXTREME STATES OF MATTER
PHYSICS-USPEKHI 51(2), 109-131 (2008)
402. FORTOV, VE.
ENCYCLOPEDIA OF LOW-TEMPERATURE PLASMA
HIGH TEMPERATURE 46(1), 1-2 (2008)
403. VARENTSOV, D; FERTMAN, AD; TURTIKOV, VI; ULRICH, A; WIESER, J; FORTOV, VE; GOLUBEV, AA; HOFFMANN, DHH; HUG, A; KULISH, M; MINTSEV, V; NI, PA; NIKOLAEV, D; SHARKOV, BY; SHILKIN, N; TERNOVOI, VY; UDREA, S.
TRANSVERSE OPTICAL DIAGNOSTICS FOR INTENSE FOCUSED HEAVY ION BEAMS
CONTRIBUTIONS TO PLASMA PHYSICS 48(8), 586-594 (2008)

404. KRAUZ, VI; LEVASHOVA, MG; KARAKIN, MA; KROKHIN, ON; LISITSA, VS; MOKEEV, AN; MYALTON, VV; NIKULIN, VY; OGINOV, AV; SMIRNOV, VP; FORTOV, VE.
INFLUENCE OF THE RADIATION OF THE PLASMA-FOCUS CURRENT SHEATH ON THE IMPLOSION DYNAMICS OF CONDENSED TARGETS
PLASMA PHYSICS REPORTS 34(1), 43-51 (2008)
405. GOSTINTSEV, YA; FORTOV, VE.
THE KOLMOGOROV-OBUKHOV LAWS AND EVOLUTION OF A TURBULENT SPHERICAL FLAME (VOL 415, PG 214, 2007)
DOKLADY PHYSICAL CHEMISTRY 418, 13-13 (2008)
406. GAVRIKOV, AV; FORTOV, VE; PETROV, OF; BABICHEV, VN; FILIPPOV, AV; PAL, AF; STAROSTIN, AN.
STUDY OF PHOTOEMISSIVE DUSTY PLASMA
MULTIFACETS OF DUSTY PLASMA 1041, 211-+ (2008)
407. GAVRIKOV, AV; IVANOV, AS; PAL, AF; PETROV, OF; RYABINKIN, AN; SEROV, AO; SHULGA, YM; STAROSTIN, AN; FORTOV, VE.
DUSTY PLASMA TECHNOLOGY OF DCM WITH NANOSTRUCTURE SURFACE LAYER PRODUCTION
MULTIFACETS OF DUSTY PLASMA 1041, 237-+ (2008)
408. GAVRIKOV, AV; FORTOV, VE; PETROV, OF; VORONA, NA; VASILIEV, MN.
EXPERIMENTAL STUDYING OF DUST PARTICLES CHARGING BY ELECTRON BEAM
MULTIFACETS OF DUSTY PLASMA 1041, 337-+ (2008)
409. KHISHCHENKO, KV; VEYSMAN, ME; ANDREEV, NE; FORTOV, VE; LEVASHOV, PR; POVARNITSYN, ME.
MODELING OF OPTICAL, TRANSPORT, AND THERMODYNAMIC PROPERTIES OF AL METAL IRRADIATED BY INTENSE FEMTOSECOND LASER PULSES
HIGH-POWER LASER ABLATION VII, PTS 1-2 7005, - (2008)
410. KHISHCHENKO, KV; ZHERNOKLETOV, MV; FORTOV, VE; KIRSHANOV, SI; KOVALEV, AE; LOMONOSOV, IV; MOCHALOV, MA; SHUIKIN, AN.
ISENTROPIC EXPANSION OF SHOCK-COMPRESSED ZINC AT HIGH PRESSURES AND TEMPERATURES
HIGH TEMPERATURES-HIGH PRESSURES 37(4), 291-298 (2008)
411. KONYUKHOV, AV; LIKHACHEV, AP; FORTOV, VE; OPARIN, AM.
ON STABILITY AND AMBIGUOUS REPRESENTATION OF SHOCK WAVE DISCONTINUITY: NUMERICAL ANALYSIS ON THE BASIS OF MODEL EQUATION OF STATE
MATHEMATICAL METHODS, COMPUTATIONAL TECHNIQUES, NON-LINEAR SYSTEMS, INTELLIGENT SYSTEMS , 376-+ (2008)
412. THOMAS, HM; MORFILL, GE; IVLEV, AV; HAGL, T; ROTHERMEL, H; KHRAPAK, A; SUETTERLIN, KR; RUBIN-ZUZIC, M; SCHWABE, M; ZHDANOV, SK; RAETH, C; FORTOV, VE; MOLOTKOV, VI; LIPAIEV, AM; PETROV, OF; TOKAREV, VI; MALENCHENKO, YI; TURIN, MV; VINOGRADOV, PV; YURCHIKHIN, FN; KRIKALEV, SK; REITER, T.
NEW DIRECTIONS OF RESEARCH IN COMPLEX PLASMAS ON THE INTERNATIONAL SPACE STATION
MULTIFACETS OF DUSTY PLASMA 1041, 41-44 (2008)
413. VAULINA, OS; ADAMOVICH, XG; PETROV, OF; FORTOV, VE.
TRANSPORT PROPERTIES OF THE DUST COMPONENTS IN WEAKLY IONIZED PLASMA
MULTIFACETS OF DUSTY PLASMA 1041, 123-126 (2008)
414. SUKHININ, GI; FEDOSEEV, AV; ANTIPOV, SN; PETROV, OF; FORTOV, VE.
THE INFLUENCE OF TRAPPED IONS AND NON-EQUILIBRIUM EDF ON DUST PARTICLE CHARGING
MULTIFACETS OF DUSTY PLASMA 1041, 149-+ (2008)
415. ADAMOVICH, XG; VAULINA, OS; KHRUSTALEV, YV; NEKHAEVSKY, YY; PETROV, OF; FORTOV, VE.
ANALYSIS OF PHASE TRANSITIONS IN QUASI-TWO-DIMENSIONAL DUSTY SYSTEMS IN RF-DISCHARGE PLASMA
MULTIFACETS OF DUSTY PLASMA 1041, 151-152 (2008)

416. ANTIPOV, SN; ASINOVSKII, EI; KIRILLIN, AV; MALOROV, SA; MARKOVETS, VV; PETROV, OF; FORTOV, VE.
EVOLUTION OF DUST STRUCTURES FROM ROOM TO CRYOGENIC TEMPERATURES
MULTIFACETS OF DUSTY PLASMA 1041, 157-+ (2008)
417. VASILIEV, MM; D'YACHKOV, LG; ANTIPOV, SN; PETROV, OF; FORTOV, VE.
DYNAMIC OF THE DUST STRUCTURES UNDER MAGNETIC FIELD EFFECT IN DC GLOW DISCHARGES
MULTIFACETS OF DUSTY PLASMA 1041, 193-194 (2008)
418. POPOVA, DV; MAIOROV, SA; ANTIPOV, SN; PETROV, OF; FORTOV, VE.
DUSTY PLASMA STRUCTURES IN GAS MIXTURES
MULTIFACETS OF DUSTY PLASMA 1041, 279-+ (2008)
419. FORTOV, VE; GAVRIKOV, AV; GORANSKAYA, DN; IVANOV, AS; PETROV, OF; TIMIRKHANOV, RA.
VISCOPLASTIC DEFORMATION OF CRYSTAL-LIKE DUSTY PLASMA STRUCTURES
MULTIFACETS OF DUSTY PLASMA 1041, 331-332 (2008)
420. USACHEV, A; HOFNER, H; THOMA, M; FINK, M; ZOBIN, A; KRETSCHMER, M; PETROV, O; MORFILL, G; FORTOV, V.
STRUCTURAL AND DYNAMICAL PROPERTIES OF MICROROD DUSTY PLASMA IN A UNIFORM DC DISCHARGE UNDER MICROGRAVITY
MULTIFACETS OF DUSTY PLASMA 1041, 335-+ (2008)
421. DOLGOBORODOV, AY; STRELETSKII, AN; MAKHOV, MN; KOLBANEV, IV; FORTOV, VE.
EXPLOSIVE COMPOSITIONS BASED ON THE MECHANOACTIVATED METAL-OXIDIZER MIXTURES
RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY B 1(6), 606-611 (2007)
422. KHISHCHENKO, KV; CHARAKHCH'YAN, AA; MILYAVSKII, VV; FORTOV, VE; FROLOVA, AA; SHURSHALOV, LV.
MECHANISM OF AMPLIFICATION OF CONVERGENT SHOCK WAVES IN POROUS MEDIA
RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY B 1(6), 612-622 (2007)
423. FORTOV, VE; ILKAEV, RI; ARININ, VA; BURTZEV, VV; GOLUBEV, VA; IOSILEVSKIY, IL; KHRUSTALEV, VV; MIKHAILOV, AL; MOCHALOV, MA; TERNOVOI, VY; ZHERNOKLETOV, MV.
PHASE TRANSITION IN A STRONGLY NONIDEAL DEUTERIUM PLASMA GENERATED BY QUASI-ISENTROPICAL COMPRESSION AT MEGABAR PRESSURES
PHYSICAL REVIEW LETTERS 99(18), - (2007)
424. SEURIG, R; MORFILL, G; FORTOV, V; HOFMANN, P.
COMPLEX PLASMA RESEARCH ON ISS PAST, PRESENT, AND FUTURE FACILITIES
ACTA ASTRONAUTICA 61(10), 940-953 (2007)
425. VORONA, NA; GAVRIKOV, AV; IVANOV, AS; PETROV, OF; FORTOV, VE; SHAKHOVA, IA.
VISCOSITY OF A DUSTY PLASMA LIQUID
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 105(4), 824-830 (2007)
426. ZIBOROV, VS; EFREMOV, VP; FORTOV, VE.
IONIZATION EFFECT IN THE FRONT OF A WEAK SHOCK WAVE PROPAGATING IN AN INERT GAS DILUTED BY A SMALL AMOUNT OF MO(CO)(6)
JETP LETTERS 86(3), 184-188 (2007)
427. VASIL'EV, MM; D'YACHKOV, LG; ANTIPOV, SN; PETROV, OF; FORTOV, VE.
DUSTY PLASMA STRUCTURES IN MAGNETIC FIELDS IN A DC DISCHARGE
JETP LETTERS 86(6), 358-363 (2007)
428. ANNIBALDI, SV; IVLEV, AV; KONOPKA, U; RATYNSKAIA, S; THOMAS, HM; MORFILL, GE; LIPAEV, AM; MOLOTKOV, VI; PETROV, OF; FORTOV, VE.
DUST-ACOUSTIC DISPERSION RELATION IN THREE-DIMENSIONAL COMPLEX PLASMAS UNDER MICROGRAVITY
NEW JOURNAL OF PHYSICS 9, - (2007)
429. FILIPPOV, AV; VASILEV, MN; GAVRIKOV, AV; PAL, AF; PETROV, OF; STAROSTIN, AN; FORTOV, VE.

ULTRAHIGH CHARGING OF DUST PARTICLES IN A NONEQUILIBRIUM PLASMA
JETP LETTERS 86(1), 14-19 (2007)

430. ANTIPOV, SN; ASINOVSKII, EI; FORTOV, VE; KIRILLIN, AV; MARKOVETS, VV; PETROV, OF;
PLATONOV, VI.
DUST STRUCTURES IN CRYOGENIC GAS DISCHARGES
PHYSICS OF PLASMAS 14(9), - (2007)

431. TSYTOVICH, VN; MORFILL, GE; FORTOV, VE; GUSEIN-ZADE, NG; KLUMOV, BA; VLADIMIROV, SV.
FROM PLASMA CRYSTALS AND HELICAL STRUCTURES TOWARDS INORGANIC LIVING MATTER
NEW JOURNAL OF PHYSICS 9, - (2007)

432. KHRAPAK, SA; MORFILL, GE; FORTOV, VE; D'YACHKOV, LG; KHRAPAK, AG; PETROV, OF.
ATTRACTION OF POSITIVELY CHARGED PARTICLES IN HIGHLY COLLISIONAL PLASMAS
PHYSICAL REVIEW LETTERS 99(5), - (2007)

433. GOSTINTSEV, YA; FORTOV, VE.
THE KOLMOGOROV-OBUKHOV LAWS AND EVOLUTION OF A TURBULENT SPHERICAL FLAME
DOKLADY PHYSICAL CHEMISTRY 415, 214-217 (2007)

434. HOFFMANN, DHH; BLAZEVIC, A; ROSMEJ, ON; SPILLER, P; TAHIR, NA; WEYRICH, K; DAFNI, T;
KUSTER, M; NI, P; ROTH, M; UDREA, S; VARENTSOV, D; JACOBY, J; KAIN, V; SCHMIDT, R; ZIOUTAS, K;
MINTSEV, V; FORTOV, VE; SHARKOV, BY.
PARTICLE ACCELERATOR PHYSICS AND TECHNOLOGY FOR HIGH ENERGY DENSITY PHYSICS
RESEARCH
EUROPEAN PHYSICAL JOURNAL D 44(2), 293-300 (2007)

435. KANEL', GI; FORTOV, VE; RAZORENOV, SV.
SHOCK WAVES IN CONDENSED-STATE PHYSICS
PHYSICS-USPEKHI 50(8), 771-791 (2007)

436. EFREMOV, V; DEMIDOV, B; MESCHERYAKOV, A; POTAPENKO, A; FORTOV, V.
PHYSICAL MODELING OF POROUS MEDIA BEHAVIOR IN TARGETS FOR INERTIAL FUSION
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS
SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT 577(1-2), 324-326 (2007)

437. TAHIR, NA; SPILLER, P; SHUTOV, A; LOMONOSOV, IV; GRYAZNOV, V; PIRIZ, AR; WOUCHUK, G;
DEUTSCH, C; FORTOV, VE; HOFFMANN, DHH; SCHMIDT, R.
HEDGEHOB: HIGH-ENERGY DENSITY MATTER GENERATED BY HEAVY ION BEAMS AT THE FUTURE
FACILITY FOR ANTIPROTONS AND ION RESEARCH
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS
SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT 577(1-2), 238-249 (2007)

438. UDREA, S; TERNOVOI, V; SHILKIN, N; FERTMAN, A; FORTOV, VE; HOFFMANN, DHH; HUG, A;
KULISH, MI; MINTSEV, V; NI, P; NIKOLAEV, D; TAHIR, NA; TURTIKOV, V; VARENTSOV, D; YURIEV, D.
MEASUREMENTS OF ELECTRICAL RESISTIVITY OF HEAVY ION BEAM PRODUCED HIGH ENERGY
DENSITY MATTER: LATEST RESULTS FOR LEAD AND TUNGSTEN
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS
SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT 577(1-2), 257-261 (2007)

439. VARENTSOV, D; TERNOVOI, VY; KULISH, M; FERNENGEL, D; FERTMAN, A; HUG, A; MENZEL, J; NI,
P; NIKOLAEV, DN; SHILKIN, N; TURTIKOV, V; UDREA, S; FORTOV, VE; GOLUBEV, AA; GRYAZNOV, VK;
HOFFMANN, DHH; KIM, V; LOMONOSOV, IV; MINTSEV, V; SHARKOV, BY; SHUTOV, A; SPILLER, P;
TAHIR, NA; WAHL, H.
HIGH-ENERGY-DENSITY PHYSICS EXPERIMENTS WITH INTENSE HEAVY ION BEAMS
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS
SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT 577(1-2), 262-266 (2007)

440. LIPAEV, AM; KHRAPAK, SA; MOLOTKOV, VI; MORFILL, GE; FORTOV, VE; IVLEV, AV; THOMAS, HM;
KHRAPAK, AG; NAUMKIN, VN; IVANOV, AI; TRETSCHEV, SE; PADALKA, GI.
VOID CLOSURE IN COMPLEX PLASMAS UNDER MICROGRAVITY CONDITIONS

PHYSICAL REVIEW LETTERS 98(26), - (2007)

441. ADAMS, JR; SHILKIN, NS; FORTOV, VE; GRYAZNOV, VK; MINTSEV, VB; REDMER, R; REINHOLZ, H; ROPKE, G.

COULOMB CONTRIBUTION TO THE DIRECT CURRENT ELECTRICAL CONDUCTIVITY OF DENSE PARTIALLY IONIZED PLASMAS
PHYSICS OF PLASMAS 14(6), - (2007)

442. MOLODETS, AM; SHAKHRAY, DV; GOLYSHEV, AA; FORTOV, VE.

ELECTROPHYSICAL AND THERMODYNAMIC PROPERTIES OF SHOCK COMPRESSED INCOMMENSURATE PHASE SC-II
PHYSICAL REVIEW B 75(22), - (2007)

443. BUGROV, AE; BURDONSKII, IN; GAVRILOV, VV; GOL'TSOV, AY; GRABOVSKII, EV; EFREMOV, VP; ZHUZHUKALO, EV; ZURIN, MV; KOVAL'SKII, NG; KONDRASHOV, VN; OLEINIK, GM; POTAPENKO, AI; SAMOKHIN, AA; SMIRNOV, VP; FORTOV, VE; FROLOV, IN.

EXPERIMENTAL AND THEORETICAL STUDIES OF THE PHYSICAL PROCESSES OCCURRING IN THIN PLANE TARGETS IRRADIATED BY INTENSE X-RAY PULSES
PLASMA PHYSICS REPORTS 33(6), 444-454 (2007)

444. AGRANAT, MB; ANISIMOV, SI; ASHITKOV, SI; ZHAKHOVSKII, VV; INOGAMOV, NA; NISHIHARA, K; PETROV, YV; FORTOV, VE; KHOKHOV, VA.

DYNAMICS OF PLUME AND CRATER FORMATION AFTER ACTION OF FERNTOSECOND LASER PULSE
APPLIED SURFACE SCIENCE 253(15), 6276-6282 (2007)

445. THOMA, MH; FINK, MA; HOFNER, H; KRETSCHMER, M; KHRAPAK, SA; RATYNSKAIA, SV; YAROSHENKO, VV; MORFILL, GE; PETROV, OF; USACHEV, AD; ZOBININ, AV; FORTOV, VE.

PK-4: COMPLEX PLASMAS IN SPACE - THE NEXT GENERATION
IEEE TRANSACTIONS ON PLASMA SCIENCE 35(2), 255-259 (2007)

446. KONYUKHOV, AV; LIKHACHEV, AP; FORTOV, VE; OPARIN, AM; ANISIMOV, SI.

INTERACTION BETWEEN A COMPOSITE COMPRESSION WAVE AND A VORTEX IN A THERMODYNAMICALLY NONIDEAL MEDIUM
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 104(4), 670-673 (2007)

447. FORTOV, VE; GAVRIKOV, AV; PETROV, OF; SHAKHOVA, IA; VOROB'EV, VS.

INVESTIGATION OF THE INTERACTION POTENTIAL AND THERMODYNAMIC FUNCTIONS OF DUSTY PLASMA BY MEASURED CORRELATION FUNCTIONS
PHYSICS OF PLASMAS 14(4), - (2007)

448. FORTOV, VE.

INTENSE SHOCK WAVES AND EXTREME STATES OF MATTER
PHYSICS-USPEKHI 50(4), 333-353 (2007)

449. VAULINA, OS; PETROV, OF; GAVRIKOV, AV; FORTOV, VE.

DETERMINATION OF THE PAIRWISE INTERACTION POTENTIAL BETWEEN DUST GRAINS IN PLASMA
PLASMA PHYSICS REPORTS 33(4), 278-288 (2007)

450. VOROB'EV, VS; PETROV, OF; FORTOV, VE.

ORDERED DUST STRUCTURES IN GLOW DISCHARGE PLASMAS
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 104(4), 661-669 (2007)

451. KHISHCHENKO, KV; MILYAVSKIY, VV; UTKIN, AV; YAKUSHEV, VV; ZHUK, AZ; FORTOV, VE.

EQUATION OF STATE AND PHYSICAL-CHEMICAL TRANSFORMATIONS OF C-60 FULLERITE AT HIGH PRESSURES AND TEMPERATURES
DIAMOND AND RELATED MATERIALS 16(4-7), 1204-1207 (2007)

452. AGRANAT, MB; ANDREEV, NE; ASHITKOV, SI; VEISMAN, ME; LEVASHOV, PR; OVCHINNIKOV, AV; SITNIKOV, DS; FORTOV, VE; KHISHCHENKO, KV.

DETERMINATION OF THE TRANSPORT AND OPTICAL PROPERTIES OF A NONIDEAL SOLID-DENSITY PLASMA PRODUCED BY FEMTOSECOND LASER PULSES

JETP LETTERS 85(6), 271-276 (2007)

453. FILINOV, VS; FEHSKE, H; BONITZ, M; FORTOV, VE; LEVASHOV, P.
CORRELATION EFFECTS IN PARTIALLY IONIZED MASS ASYMMETRIC ELECTRON-HOLE PLASMAS
PHYSICAL REVIEW E 75(3), - (2007)

454. FORTOV, VE; MAKAROV, AA; MITROVA, TA.
GLOBAL ENERGY SECURITY: PROBLEMS AND SOLUTIONS
HERALD OF THE RUSSIAN ACADEMY OF SCIENCES 77(1), 7-14 (2007)

455. FORTOV, VE; VAULINA, OS; PETROV, OF; VASILIEV, MN; GAVRIKOV, AV; SHAKOVA, IA; VORONA, NA; KHRUSTALYOV, YV; MANOHIN, AA; CHERNYSHEV, AV.
EXPERIMENTAL STUDY OF THE HEAT TRANSPORT PROCESSES IN DUSTY PLASMA FLUID
PHYSICAL REVIEW E 75(2), - (2007)

456. FILINOV, V; BONITZ, M; FORTOV, V; FEHSKE, H; LEVASHOV, P.
COULOMB CRYSTAL AND QUANTUM MELTING IN ELECTRON-HOLE PLASMAS OF SEMICONDUCTORS UNDER HIGH PRESSURE
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS 244(1), 474-479 (2007)

457. TAHIR, NA; PIRIZ, AR; SHUTOV, A; LOMONOSOV, IV; GRYAZNOV, V; WOUCHEK, G; DEUTSCH, C; SPILLER, P; FORTOV, VE; HOFFMANN, DHH; SCHMIDT, R.
SURVEY OF THEORETICAL WORK FOR THE PROPOSED HEDGEHOB EXPERIMENTAL SCHEMES: HIHEX AND LAPLAS
CONTRIBUTIONS TO PLASMA PHYSICS 47(4-5), 223-233 (2007)

458. MOLODETS, AM; AVDONIN, VV; ZHUKOV, AN; KIM, VV; OSIP'YAN, AY; SIDOROV, NS; SHULGA, JM; FORTOV, VE.
ELECTROCONDUCTIVITY AND PRESSURE-TEMPERATURE STATES OF STEP SHOCKED C-60 FULLERITE
HIGH PRESSURE RESEARCH 27(2), 279-290 (2007)

459. FORTOV, VE.
DUSTY PLASMAS: BASIC SCIENCE AND APPLICATIONS
HIGH TEMPERATURE MATERIAL PROCESSES 11(1), 1-20 (2007)

460. AVDONIN, VV; POSTNOV, VI; KAGAN, KL; SHAKHRAI, DV; FORTOV, VE; SHESTAKOV, AF; NIKOLAEV, RK; SIDOROV, NS; KVEDER, VV; OSIP'YAN, YA.
CONDUCTIVITY OF C-60 FULLERENE CRYSTALS UNDER MULTI-STEP DYNAMIC COMPRESSION UP TO 300 KBAR
HYDROGEN MATERIALS SCIENCE AND CHEMISTRY OF CARBON NANOMATERIALS , 37-+ (2007)

461. MILYAVSKIY, VV; KHISHCHENKO, KV; UTKIN, AV; VALIANO, GE; YAKUSHEV, VV; ZHERNOKLETOV, MV; FORTOV, VE.
SHOCK COMPRESSION AND EQUATION OF STATE OF C-60 FULLERITE
SHOCK COMPRESSION OF CONDENSED MATTER - 2007, PTS 1 AND 2 955, 75-+ (2007)

462. SOKOLOV, SN; MILYAVSKIY, VV; KHISHCHENKO, KV; BORODINA, TI; FORTOV, VE.
PHASE TRANSITIONS OF C-70 FULLERITE UNDER STEP-LIKE SHOCK COMPRESSION
SHOCK COMPRESSION OF CONDENSED MATTER - 2007, PTS 1 AND 2 955, 197-200 (2007)

463. SULTANOV, VG; KIM, VV; LOMONOSOV, IV; SHUTOV, AV; FORTOV, VE.
NUMERICAL MODELLING OF DEEP IMPACT EXPERIMENT
SHOCK COMPRESSION OF CONDENSED MATTER - 2007, PTS 1 AND 2 955, 1413-1416 (2007)

464. CHIRKO, AS; EFRERNOV, P; FORTOV, VE; GOLUB, VV; ZIBAROV, AV.
MODELING OF BLASTS AND FIRES ACCIDENTS IN TUNNELS
UNDERGROUND SPACE - THE 4TH DIMENSION OF METROPOLISES, VOLS 1-3 , 1783-1785 (2007)

465. FORTOV, VE; KIM, VV; LOMONOSOV, IV; MATVEICHEV, AV; OSTRUK, AV.
NUMERICAL MODELING OF HYPERVELOCITY IMPACTS
INTERNATIONAL JOURNAL OF IMPACT ENGINEERING 33(1-12), 244-253 (2006)

466. LEVASHOV, PR; FILINOV, VS; BONITZ, M; FORTOV, VE.
PATH INTEGRAL MONTE CARLO CALCULATIONS OF DENSE HYDROGEN AND HELIUM
THERMODYNAMICS
JOURNAL OF PLASMA PHYSICS 72, 813-816 (2006)
467. FORTOV, VE; LEBEDEV, EF; LUZGANOV, SN; KOZLOV, AV; MEDIN, SA; PARSHIKOV, AN;
POLISTCHOOK, VP; SHURUPOV, AV.
RAILGUN EXPERIMENT AND COMPUTER SIMULATION OF HYPERVELOCITY IMPACT OF LEXAN
PROJECTILE ON ALUMINUM TARGET
INTERNATIONAL JOURNAL OF IMPACT ENGINEERING 33(1-12), 254-263 (2006)
468. VAULINA, OS; DRANGEVSKI, IE; ADAMOVICH, XG; PETROV, OF; FORTOV, VE.
TWO-STAGE MELTING IN QUASI-TWO-DIMENSIONAL DISSIPATIVE YUKAWA SYSTEMS
PHYSICAL REVIEW LETTERS 97(19), - (2006)
469. VINOGRADOV, VP; KARAKIN, MA; KRAUZ, VI; MOKEEV, AN; MYALTON, VV; SMIRNOV, VP;
FORTOV, VE; KHAUTIEV, EY.
DYNAMICS OF A HIGH-TEMPERATURE PINCH IN THE PRESENCE OF DUST
PLASMA PHYSICS REPORTS 32(8), 642-655 (2006)
470. FORTOV, VE; FRIDMAN, AM; RYKOV, VA; VLADIMIROV, VI; DEPUTATOVA, LV; D'YACHENKO, PP;
RYKOV, KV.
SPATIOTEMPORAL EVOLUTION OF VORTEX DUST STRUCTURES IN A TRACK PLASMA
PLASMA PHYSICS REPORTS 32(7), 588-592 (2006)
471. AGRANAT, MB; ANISIMOV, SI; ASHITKOV, SI; OVCHINNIKOV, AV; KONDRATENKO, PS; SITNIKOV,
DS; FORTOV, VE.
ON THE MECHANISM OF THE ABSORPTION OF FEMTOSECOND LASER PULSES IN THE MELTING AND
ABLATION OF SI AND GAAS
JETP LETTERS 83(11), 501-504 (2006)
472. TAHIR, NA; SHUTOV, A; LOMONOSOV, IV; GRYAZNOV, V; DEUTSCH, C; FORTOV, VE; HOFFMANN,
DHH; NI, P; PIRIZ, AR; UDREA, S; VARENTSOV, D; WOUCHEK, G.
STUDIES OF THERMOPHYSICAL PROPERTIES OF HIGH-ENERGY-DENSITY STATES IN MATTER USING
INTENSE HEAVY ION BEAMS AT THE FUTURE FAIR ACCELERATOR FACILITIES: THE HEDGEHOB
COLLABORATION
JOURNAL DE PHYSIQUE IV 133, 1059-1064 (2006)
473. UDREA, S; SHILKIN, N; VARENTSOV, D; TAHIR, NA; BOCK, R; CONSTANTIN, C; DEWALD, E;
FORTOV, VE; HOFFMANN, DHH; JACOBY, J; KULISH, M; LOMONOSOV, I; MINTSEV, V; NI, P; NIKOLAEV,
D; SHUTOV, A.
ELECTRICAL RESISTIVITY OF HIGH ENERGY DENSITY MATTER GENERATED BY HIGH INTENSITY
HEAVY ION BEAMS
JOURNAL DE PHYSIQUE IV 133, 1089-1091 (2006)
474. TAHIR, NA; SHUTOV, A; LOMONOSOV, IV; GRYAZNOV, V; PIRIZ, AR; HOFFMANN, DHH; FORTO, VE;
KAIN, V; SCHMIDT, R.
POTENTIAL OF CERN LARGE HADRON COLLIDER TO STUDY HIGH-ENERGY-DENSITY STATES IN
MATTER
JOURNAL DE PHYSIQUE IV 133, 1085-1088 (2006)
475. TAHIR, NA; SHUTOV, A; LOMONOSOV, IV; PIRIZ, AR; WOUCHEK, G; DEUTSCH, C; HOFFMANN, DHH;
FORTOV, VE.
NUMERICAL SIMULATIONS AND THEORETICAL ANALYSIS OF HIGH ENERGY DENSITY EXPERIMENTS
AT THE NEXT GENERATION OF ION BEAM FACILITIES AT DARMSTADT: THE HEDGEHOB
COLLABORATION
HIGH ENERGY DENSITY PHYSICS 2(1-2), 21-34 (2006)
476. FORTOV, VE; FAVORSKII, ON.
KEY PROBLEMS OF RUSSIAN POWER ENGINEERING
HERALD OF THE RUSSIAN ACADEMY OF SCIENCES 76(3), 218-227 (2006)

477. ZAPOROZHETS, Y; MINTSEV, V; GRYAZNOV, V; FORTOV, V; REINHOLZ, H; RAITZA, T; ROPKE, G.
REFLECTIVITY OF NONIDEAL PLASMAS
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 39(17), 4329-4333 (2006)
478. MINTSEV, VB; FORTOV, VE.
DENSE PLASMA PROPERTIES FROM SHOCK WAVE EXPERIMENTS
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 39(17), 4319-4327 (2006)
479. SHILKIN, NS; YURIEV, DS; DUDIN, SV; MINTSEV, VB; FORTOV, VE.
MEASUREMENTS OF STATIC ELECTRICAL CONDUCTIVITY OF A DENSE PLASMA IN A MAGNETIC FIELD
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 39(17), 4341-4346 (2006)
480. FILINOV, VS; BONITZ, M; FORTOV, VE; EBELING, W; FEHSKE, H; KREMP, D; KRAEFT, WD;
BEZKROVNIY, V; LEVASHOV, P.
MONTE CARLO SIMULATIONS OF DENSE QUANTUM PLASMAS
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 39(17), 4421-4429 (2006)
481. LEVASHOV, PR; FILINOV, VS; BONITZ, M; FORTOV, VE.
PATH INTEGRAL MONTE CARLO CALCULATIONS OF HELIUM AND HYDROGEN-HELIUM PLASMA THERMODYNAMICS AND OF THE DEUTERIUM SHOCK HUGONIOT
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 39(17), 4447-4452 (2006)
482. GRYAZNOV, VK; AYUKOV, SV; BATURIN, VA; IOSILEVSKIY, IL; STAROSTIN, AN; FORTOV, VE.
SOLAR PLASMA: CALCULATION OF THERMODYNAMIC FUNCTIONS AND EQUATION OF STATE
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 39(17), 4459-4464 (2006)
483. FORTOV, VE; RYKOV, VA; BUDNIK, AP; FILINOV, VS; DEPUTATOVA, LV; RYKOV, KV; VLADIMIROV, VI; MOLOTKOV, VI; ZRODNIKOV, AV; DYACHENKO, PP.
DUST CRYSTALS IN PLASMA CREATED BY A PROTON BEAM
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 39(17), 4533-4537 (2006)
484. BONITZ, M; FILINOV, VS; FORTOV, VE; LEVASHOV, PR; FEHSKE, H.
HOLE CRYSTALLIZATION IN SEMICONDUCTORS
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 39(17), 4717-4721 (2006)
485. UDREA, S; SHILKIN, N; FORTOV, VE; HOFFMANN, DHH; JACOBY, J; KULISH, MI; MINTSEV, V; NI, P; NIKOLAEV, D; TAHIR, NA; VARENTSOV, D.
ELECTRICAL RESISTIVITY MEASUREMENTS OF HEAVY ION BEAM GENERATED HIGH ENERGY DENSITY ALUMINIUM
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 39(17), 4743-4747 (2006)
486. WEYRICH, K; WAHL, H; HOFFMANN, DHH; GOLUBEV, AA; KANTSYREV, AV; SHARKOV, BY; KULISH, M; DUDIN, S; MINTSEV, VB; FORTOV, VE; GRYAZNOV, V.
SHOCKWAVE-DRIVEN, NON-IDEAL PLASMAS FOR INTERACTION EXPERIMENTS WITH HEAVY-ION BEAMS
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 39(17), 4749-4754 (2006)
487. FORTOV, VE; GOLDEN, KI; NORMAN, GE.
STRONGLY COUPLED COULOMB SYSTEMS - PREFACE
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 39(17), - (2006)
488. TAHIR, NA; SPILLER, P; UDREA, S; CORTAZAR, OD; DEUTSCH, C; FORTOV, VE; GRYAZNOV, V; HOFFMANN, DHH; LOMONOSOV, IV; NI, P; PIRIZ, AR; SHUTOV, A; TEMPORAL, M; VARENTSOV, D.
STUDIES OF EQUATION OF STATE PROPERTIES OF HIGH-ENERGY DENSITY MATTER USING INTENSE HEAVY ION BEAMS AT THE FUTURE FAIR FACILITY: THE HEDGEHOB COLLABORATION
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS 245(1), 85-93 (2006)
489. FORTOV, VE; VAULINA, OS; PETROV, OF; SHAKHOVA, IA; GAVRIKOV, AV; KHRUSTALEV, YV.
HEAT TRANSFER IN DUST STRUCTURES IN AN RF DISCHARGE PLASMA

PLASMA PHYSICS REPORTS 32(4), 323-331 (2006)

490. FORTOV, VE; RYKOV, VA; BUDNIK, AP; FILINOV, VS; DEPUTATOVA, LV; RYKOV, KV; VLADIMIROV, VI; MOLOTKOV, VI; ZRODNIKOV, AV; DYACHENKO, PP.

EXPERIMENTAL AND THEORETICAL INVESTIGATIONS OF DUST CRYSTALS IN PLASMA CREATED BY PROTON BEAM

PHYSICS LETTERS A 351(4-5), 296-301 (2006)

491. DIANOV, EM; FORTOV, VE; BUFETOV, IA; EFREMOV, VP; RAKITIN, AE; MELKUMOV, MA; KULISH, MI; FROLOV, AA.

HIGH-SPEED PHOTOGRAPHY, SPECTRA, AND TEMPERATURE OF OPTICAL DISCHARGE IN SILICA-BASED FIBERS

IEEE PHOTONICS TECHNOLOGY LETTERS 18(5-8), 752-754 (2006)

492. TSYTOVICH, VN; VLADIMIROV, SV; VAULINA, OS; PETROV, OF; FORTOV, VE.

THEORY OF DUST SELF-ORGANIZED CONVECTION IN CYLINDRICAL DISCHARGES. I. THE MODEL AND STATIONARY NONLINEAR DUST STRUCTURES

PHYSICS OF PLASMAS 13(3), - (2006)

493. TSYTOVICH, VN; VLADIMIROV, SV; VAULINA, OS; PETROV, OF; FORTOV, VE.

THEORY OF DUST SELF-ORGANIZED CONVECTION IN CYLINDRICAL DISCHARGES. II. DUST CONVECTIVE STRUCTURES

PHYSICS OF PLASMAS 13(3), - (2006)

494. IVLEV, AV; THOMAS, HM; MORFILL, GE; MOLOTKOV, VI; LIPAEV, AM; FORTOV, VE; HAGL, T; ROTHERMEL, H; KRIKALEV, S.

COALESCENCE OF COMPLEX PLASMA CLOUDS

NEW JOURNAL OF PHYSICS 8, - (2006)

495. FILIPPOV, AV; BABICHEV, VN; DYATKO, NA; PAL', AF; STAROSTIN, AN; TARAN, MD; FORTOV, VE. FORMATION OF PLASMA DUST STRUCTURES AT ATMOSPHERIC PRESSURE

JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 102(2), 342-354 (2006)

496. AGRANAT, MB; ANDREEV, NE; ASHITKOV, SI; OVCHINNIKOV, AV; SITNIKOV, DS; FORTOV, VE; SHEVEL'KO, AP.

GENERATION OF CHARACTERISTIC X RAYS BY A TERAWATT FEMTOSECOND CHROMIUM-FORSTERITE LASER

JETP LETTERS 83(2), 72-74 (2006)

497. DIANOV, EM; FORTOV, VE; BUFETOV, IA; EFREMOV, VP; FROLOV, AA; SCHELEV, MY; LOZOVOI, VI. DETONATION-LIKE MODE OF THE DESTRUCTION OF OPTICAL FIBERS UNDER INTENSE LASER RADIATION

JETP LETTERS 83(2), 75-78 (2006)

498. KHRAPAK, SA; MORFILL, GE; IVLEV, AV; THOMAS, HM; BEYSENS, DA; ZAPPOLI, B; FORTOV, VE; LIPAEV, AM; MOLOTKOV, VI.

CRITICAL POINT IN COMPLEX PLASMAS

PHYSICAL REVIEW LETTERS 96(1), - (2006)

499. GUR'EV, DL; GORDOPOLOV, YA; BATSANOV, SS; MERZHANOV, AG; FORTOV, VE.

SOLID-STATE DETONATION IN THE ZINC-SULFUR SYSTEM

APPLIED PHYSICS LETTERS 88(2), - (2006)

500. THOMA, MH; HOFNER, H; KRETSCHMER, M; RATYNSKAIA, S; MORFILL, GE; USACHEV, A; ZOBININ, A; PETROV, O; FORTOV, V.

PARABOLIC FLIGHT EXPERIMENTS WITH PK-4

MICROGRAVITY SCIENCE AND TECHNOLOGY 18(3-4), 47-50 (2006)

501. HOFFMANN, DHH; BLAZEVIC, A; ROSMEJ, ON; SPILLER, P; TAHIR, NA; WEYRICH, K; DAFNI, T; KUSTER, M; ROTH, M; UDREA, S; VARENTSOV, D; JACOBY, J; ZIOUTAS, K; MINTSEV, V; FORTOV, VE; SHARKOV, BY; MARON, Y.

FRONTIERS OF DENSE PLASMA PHYSICS WITH INTENSE ION AND LASER BEAMS AND ACCELERATOR TECHNOLOGY

PHYSICA SCRIPTA T123, 1-7 (2006)

502. KRAUZ, VI; KARAKIN, MA; KHAUTIEV, EY; MOKEEV, AN; MYALTON, VV; SMIRNOV, VP; VINOGRADOV, VP; FORTOV, VE; NIKULIN, VY; OGINOV, AV; VOLOBUEV, L; KUBES, P.
RECENT RESULTS OF THE FILIPPOV-TYPE PF EXPERIMENTS AT KURCHATOV INSTITUTE
PLASMA 2005 812, 43-+ (2006)

503. RAZORENOV, SV; KANEL, GI; SAVINYKH, AS; FORTOV, VE.
LARGE TENSIONS AND STRENGTH OF IRON IN DIFFERENT STRUCTURE STATES
SHOCK COMPRESSION OF CONDENSED MATTER - 2005, PTS 1 AND 2 845, 650-653 (2006)

504. FROLOV, AA; BUFETOV, IA; EFREMOV, VP; SCHELEV, MY; LOZOVY, VI; FORTOV, VE; DIANOV, EM.
OPTICAL DISCHARGE IN SILICA-BASED FIBERS: HIGH-SPEED PROPAGATION UNDER KW-RANGE LASER RADIATION
RELIABILITY OF OPTICAL FIBER COMPONENTS, DEVICES, SYSTEMS, AND NETWORKS III 6193, - (2006)

505. FORTOV, VE.
INTENSE SHOCK WAVES AND NONIDEAL PLASMA PHYSICS
SHOCK COMPRESSION OF CONDENSED MATTER - 2005, PTS 1 AND 2 845, 3-17 (2006)

506. LOMONOSOV, IV; FORTOV, VE; KIM, VV; MATVEICHEV, AV; OSTRIK, AV.
INFLUENCE OF EQUATION OF STATE ON RESULTS OF HYPERVELOCITY IMPACT MODELING
SHOCK COMPRESSION OF CONDENSED MATTER - 2005, PTS 1 AND 2 845, 103-106 (2006)

507. AVDONIN, VV; POSTNOV, VI; KAGAN, KL; SHAKHRAI, DV; SHESTAKOV, AF; NIKOLAEV, RK; SIDOROV, NS; KVEDER, VV; OSIP'YAN, YA; FORTOV, VE.
CONDUCTIVITY OF C-60 FULLERENE CRYSTALS UNDER MULTI-STEP DYNAMIC COMPRESSION UP TO 300 KBAR
SHOCK COMPRESSION OF CONDENSED MATTER - 2005, PTS 1 AND 2 845, 189-191 (2006)

508. BEZRUCHKO, GS; RAZORENOV, SV; KANEL, GI; FORTOV, VE.
INFLUENCE OF TEMPERATURE UPON THE ALPHA ->OMEGA TRANSITION IN TITANIUM
SHOCK COMPRESSION OF CONDENSED MATTER - 2005, PTS 1 AND 2 845, 192-195 (2006)

509. KIM, VV; FORTOV, VE; LOMONOSOV, IV; MATVEICHEV, AV; OSTRIK, AV.
3D COMPUTER MODELING OF HIGH-VELOCITY IMPACT PHENOMENA
SHOCK COMPRESSION OF CONDENSED MATTER - 2005, PTS 1 AND 2 845, 327-330 (2006)

510. UTKIN, AV; SOSIKOV, VA; FORTOV, VE.
TENSION OF ETHYL ALCOHOL AND HEXADECANE BY SHOCK WAVES
SHOCK COMPRESSION OF CONDENSED MATTER - 2005, PTS 1 AND 2 845, 896-899 (2006)

511. TERNOVOI, VY; KVITOV, SV; NIKOLAEV, AN; PYALLING, AA; FILIMONOV, AS; FORTOV, VE.
EXPERIMENTAL STUDY OF TRANSITION OF JUPITER AND SATURN ATMOSPHERE TO CONDUCTING STATE
SHOCK COMPRESSION OF CONDENSED MATTER - 2005, PTS 1 AND 2 845, 1492-1495 (2006)

512. BONITZ, M; FILINOV, VS; FORTOV, VE; LEVASHOV, PR; FEHSKE, H.
CRYSTALLIZATION IN TWO-COMPONENT COULOMB SYSTEMS
PHYSICAL REVIEW LETTERS 95(23), - (2005)

513. FORTOV, V; MORFILL, G; PETROV, O; THOMA, M; USACHEV, A; HOEFNER, H; ZOBIN, A; KRETSCHMER, M; RATYNSKAIA, S; FINK, M; TARANTIK, K; GERASIMOV, Y; ESENKOV, V.
THE PROJECT 'PLASMAKRISTALL-4' (PK-4) - A NEW STAGE IN INVESTIGATIONS OF DUSTY PLASMAS UNDER MICROGRAVITY CONDITIONS: FIRST RESULTS AND FUTURE PLANS
PLASMA PHYSICS AND CONTROLLED FUSION 47, B537-B549 (2005)

514. FORTOV, VE; IVLEV, AV; KHRAPAK, SA; KHRAPAK, AG; MORFILL, GE.
COMPLEX (DUSTY) PLASMAS: CURRENT STATUS, OPEN ISSUES, PERSPECTIVES

PHYSICS REPORTS-REVIEW SECTION OF PHYSICS LETTERS 421(1-2), 1-103 (2005)

515. FORTOV, VE; VAULINA, OS; PETROV, OF.

DUSTY PLASMA LIQUID: STRUCTURE AND TRANSFER PHENOMENA
PLASMA PHYSICS AND CONTROLLED FUSION 47, B551-B563 (2005)

516. MILYAVSKIY, VV; UTKIN, AV; ZHUK, AZ; YAKUSHEV, VV; FORTOV, VE.

SHOCK COMPRESSIBILITY AND SHOCK-INDUCED PHASE TRANSITIONS OF C-60 FULLERITE
DIAMOND AND RELATED MATERIALS 14(11-12), 1920-1923 (2005)

517. ROSMEJ, ON; BLAZEVIC, A; KOROSTIY, S; BOCK, R; HOFFMANN, DHH; PIKUZ, SA; EFREMOV, VP;
FORTOV, VE; FERTMAN, A; MUTIN, T; PIKUZ, TA; FAENOV, AY.

CHARGE STATE AND STOPPING DYNAMICS OF FAST HEAVY IONS IN DENSE MATTER
PHYSICAL REVIEW A 72(5), - (2005)

518. FORTOV, VE.

PLASMA-DUST CRYSTALS AND LIQUIDS ON THE EARTH AND IN OUTER SPACE
HERALD OF THE RUSSIAN ACADEMY OF SCIENCES 75(6), 587-601 (2005)

519. KONOPKA, U; MOKLER, F; IVLEV, AV; KRETSCHMER, M; MORFILL, GE; THOMAS, HM; ROTHERMEL,
H; FORTOV, VE; LIPAEV, AM; MOLOTKOV, VI; NEFEDOV, AP; BATURIN, YM; BUDARIN, Y; IVANOV, AI;
ROTH, M.

CHARGE-INDUCED GELATION OF MICROPARTICLES
NEW JOURNAL OF PHYSICS 7, - (2005)

520. YAROSHENKO, V; RATYNSKAIA, S; KHRAPAK, S; THOMA, MH; KRETSCHMER, M; HOFNER, H;
MORFILL, GE; ZOBININ, A; USACHEV, A; PETROV, O; FORTOV, V.

DETERMINATION OF THE ION-DRAG FORCE IN A COMPLEX PLASMA
PHYSICS OF PLASMAS 12(9), - (2005)

521. GONCHAR, AA; MESYATS, GA; FURSENKO, AA; SADOVNICHII, VA; RUMYANTSEV, AY; IVANOV,
VV; SVERDLOV, ED; CHERNYI, GG; ALDOSHIN, SM; DOBRETSOV, NL; TERESHCHENKO, GF;

CHUBAR'YAN, AO; RAZUMOV, VF; CHERESHNEV, VA; PLATE, NA; NIGMATULIN, RI; ROMANENKO, GA;
FORTOV, VE; SOBOLEV, VN; GEORGIEV, GP; SPIRIN, AS; SOBOLEV, A; ROGOV, SM; NEKIPELOV, AD;
STRAKHOV, VN; GRIGORYAN, SS; OSIPOV, YS; KULIPANOV, GN.

ADDRESSES OF THE PARTICIPANTS IN THE RAS GENERAL MEETING
HERALD OF THE RUSSIAN ACADEMY OF SCIENCES 75(5), 476-507 (2005)

522. GOLUB, VV; AKSENOV, VS; BAKLANOV, DI; VOLODIN, VV; GOLOVASTOV, SV; GUBIN, SA;
EFREMOV, VP; SAVEL'EV, AS; FORTOV, VE; SHAROV, YL.

EFFECT OF MAGNETIC FIELD ON THE DETONATION INITIATION BY SPARK DISCHARGE IN HYDROGEN-
AIR MIXTURE
DOKLADY PHYSICS 50(9), 431-433 (2005)

523. MAKSIMOV, EG; MAGNITSKAYA, MV; FORTOV, VE.

NON-SIMPLE BEHAVIOR OF SIMPLE METALS AT HIGH PRESSURE
PHYSICS-USPEKHI 48(8), 761-780 (2005)

524. FILINOV, VS; LEVASHOV, PR; BONITZ, M; FORTOV, VE.

CALCULATION OF THE SHOCK HUGONIOT OF DEUTERIUM AT PRESSURES ABOVE 1 MBAR BY THE
PATH-INTEGRAL MONTE CARLO METHOD
PLASMA PHYSICS REPORTS 31(8), 700-704 (2005)

525. TAHIR, NA; DEUTSCH, C; FORTOV, VE; GRYAZNOV, V; HOFFMANN, DHH; KULISH, M; LOMONOSOV,
IV; MINTSEV, V; NI, P; NIKOLAEV, D; PIRIZ, AR; SHILKIN, N; SPILLER, P; SHUTOV, A; TEMPORAL, M;
TERNOVOI, V; UDREA, S; VARENTOV, D.

PROPOSAL FOR THE STUDY OF THERMOPHYSICAL PROPERTIES OF HIGH-ENERGY-DENSITY MATTER
USING CURRENT AND FUTURE HEAVY-ION ACCELERATOR FACILITIES AT GSI DARMSTADT
PHYSICAL REVIEW LETTERS 95(3), - (2005)

526. EKIMOV, EA; IVANOV, AS; PAL', AF; RYABINKIN, AN; SEROV, AO; STAROSTIN, AN; FORTOV, VE;

SADYKOV, RA; MEL'NIK, NN; PRESH, A.
BEHAVIOR OF THE SYSTEM OF DIAMOND PARTICLES WITH NANOMETER NICKEL COATING AT HIGH PRESSURES AND TEMPERATURES IN THE SINTERING PROCESS
DOKLADY PHYSICS 50(7), 351-354 (2005)

527. KHRAPAK, SA; RATYNSKAIA, SV; ZOBNIN, AV; USACHEV, AD; YAROSHENKO, VV; THOMA, MH; KRETSCHMER, M; HOFNER, H; MORFILL, GE; PETROV, OF; FORTOV, VE.
PARTICLE CHARGE IN THE BULK OF GAS DISCHARGES
PHYSICAL REVIEW E 72(1), - (2005)

528. KLUMOV, BA; KIM, VV; LOMONOSOV, IV; SULTANOV, VG; SHUTOV, AV; FORTOV, VE.
DEEP IMPACT EXPERIMENT: POSSIBLE OBSERVABLE EFFECTS
PHYSICS-USPEKHI 48(7), 733-742 (2005)

529. FORTOV, VE; RYKOV, VA; FILINOV, VS; VLADIMIROV, VI; DEPUTATOVA, LV; PETROV, OF; MOLOTKOV, VI; BUDNIK, AP; D'YACHENKO, PP; RYKOV, KV; KHUDYAKOV, AV.
VORTEX DUST STRUCTURES IN THE TRACK PLASMA OF A PROTON BEAM
PLASMA PHYSICS REPORTS 31(7), 570-576 (2005)

530. TAHIR, NA; ADONIN, A; DEUTSCH, C; FORTOV, VE; GRANDJOUAN, N; GEIL, B; GRAYAZNOV, V; HOFFMANN, DHH; KULISH, M; LOMONOSOV, IV; MINTSEV, V; NI, P; NIKOLAEV, D; PIRIZ, AR; SHILKIN, N; SPILLER, P; SHUTOV, A; TEMPORAL, M; TERNOVOI, V; UDREA, S; VARENTSOV, D.
STUDIES OF HEAVY ION-INDUCED HIGH-ENERGY DENSITY STATES IN MATTER AT THE GSI DARMSTADT SIS-18 AND FUTURE FAIR FACILITY
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT 544(1-2), 16-26 (2005)

531. KRETSCHMER, M; KHRAPAK, SA; ZHDANOV, SK; THOMAS, HM; MORFILL, GE; FORTOV, VE; LIPAIEV, AM; MOLOTKOV, VI; IVANOV, AI; TURIN, MV.
FORCE FIELD INSIDE THE VOID IN COMPLEX PLASMAS UNDER MICROGRAVITY CONDITIONS
PHYSICAL REVIEW E 71(5), - (2005)

532. EROKHIN, GA; ZHAROVTSSEV, VV; SINYAEV, SV; FORTOV, VE; KHOREV, IE; KHRISTENKO, YF.
LIGHT-GAS ACCELERATORS AND PHYSICAL SIMULATION OF HIGH-SPEED COLLISIONS OF SOLIDS WITH COSMIC VELOCITIES UNDER LABORATORY CONDITIONS
DOKLADY PHYSICS 50(5), 274-277 (2005)

533. FORTOV, VE; MINTSEV, VB.
SHOCK COMPRESSION OF NONIDEAL PLASMAS AT MEGABARS
PLASMA PHYSICS AND CONTROLLED FUSION 47, A65-A72 (2005)

534. TAHIR, NA; GODDARD, B; KAIN, V; SCHMIDT, R; SHUTOV, A; LOMONOSOV, IV; PIRIZ, AR; TEMPORAL, M; HOFFMANN, DHH; FORTOV, VE.
IMPACT OF 7-TEV/C LARGE HADRON COLLIDER PROTON BEAM ON A COPPER TARGET
JOURNAL OF APPLIED PHYSICS 97(8), - (2005)

535. TAHIR, NA; KAIN, V; SCHMIDT, R; SHUTOV, A; LOMONOSOV, IV; GRYZAZNOV, V; PIRIZ, AR; TEMPORAL, M; HOFFMANN, DHH; FORTOV, VE.
THE CERN LARGE HADRON COLLIDER AS A TOOL TO STUDY HIGH-ENERGY DENSITY MATTER
PHYSICAL REVIEW LETTERS 94(13), - (2005)

536. GAVRIKOV, A; SHAKHOVA, I; IVANOV, A; PETROV, O; VORONA, N; FORTOV, V.
EXPERIMENTAL STUDY OF LAMINAR FLOW IN DUSTY PLASMA LIQUID
PHYSICS LETTERS A 336(4-5), 378-383 (2005)

537. KHISHCHENKO, KV; FORTOV, VE; LOMONOSOV, IV.
MULTIPHASE EQUATION OF STATE FOR CARBON OVER WIDE RANGE OF TEMPERATURES AND PRESSURES
INTERNATIONAL JOURNAL OF THERMOPHYSICS 26(2), 479-491 (2005)

538. THOMAS, HM; MORFILL, GE; IVLEV, AV; NEFEDOV, AP; FORTOV, VE; ROTHERMEL, H; RUBIN-

- ZUZIC, M; LIPAEV, AM; MOLOTKOV, VI; PETROV, OF.
PKE-NEFEDOV - COMPLEX PLASMA RESEARCH ON THE INTERNATIONAL SPACE STATION
MICROGRAVITY SCIENCE AND TECHNOLOGY 16(1-4), 317-321 (2005)
539. FORTOV, VE; PETROV, OF; MOLOTKOV, VI; POUSTYLNİK, MY; TORCHINSKY, VM; NAUMKIN, VN;
KHRAPAK, AG.
SHOCK WAVE FORMATION IN A DC GLOW DISCHARGE DUSTY PLASMA
PHYSICAL REVIEW E 71(3), - (2005)
540. PETROV, OF; VAULINA, OS; FORTOV, VE; MOLOTKOV, VI; LIPAEV, AM; CHERNYSHEV, AV;
GAVRIKOV, AV; SHAKHOVA, IN; MORFILL, GE; THOMAS, H; KHRAPAK, SA; SEMENOV, YP; IVANOV, AI;
KALERI, AY; KRIKALEV, S; ZALETIN, SV; GIDZENKO, Y.
TRANSPORT OF MICROPARTICLES IN WEAKLY IONIZED GAS-DISCHARGE PLASMAS UNDER
MICROGRAVITY
MICROGRAVITY SCIENCE AND TECHNOLOGY 16(1-4), 311-316 (2005)
541. KOROBENKO, VN; RAKHEL, AD; SAVVATIMSKI, AI; FORTOV, VE.
MEASUREMENT OF THE ELECTRICAL RESISTIVITY OF HOT ALUMINUM PASSING FROM THE LIQUID TO
GASEOUS STATE AT SUPERCRITICAL PRESSURE(VOL 71, ART NO 014208, 2005)
PHYSICAL REVIEW B 71(9), - (2005)
542. EROKHIN, GA; KANEL, GI; TOLKACHEV, VF; FORTOV, VE; KHOREV, IE.
NUMERICAL ANALYSIS OF THE IMPACT RESISTANCE OF TARGETS AND SIMPLE CONSTRUCTIONS
DOKLADY PHYSICS 50(2), 100-105 (2005)
543. BUTLITSKY, MA; FORTOV, VE; MANYKIN, EA; ZELENER, BB; ZELENER, BV.
THERMODYNAMICS OF NONIDEAL RYDBERG PLASMA CREATED WITH A DYE LASER
LASER PHYSICS 15(2), 256-261 (2005)
544. KUHLEBRODT, S; REDMER, R; REINHOLZ, H; ROPKE, G; HOLST, B; MINTSEV, VB; GRYAZNOV, VK;
SHILKIN, NS; FORTOV, VE.
ELECTRICAL CONDUCTIVITY OF NOBLE GASES AT HIGH PRESSURES
CONTRIBUTIONS TO PLASMA PHYSICS 45(1), 61-69 (2005)
545. TAHIR, NA; DEUTSCH, C; FORTOV, VE; GRYAZNOV, V; HOFFMANN, DHH; LOMONOSOV, IV; PIRIZ,
AR; SHUTOV, A; SPILLER, P; TEMPORAL, M; UDREA, S; VARENTSOV, D.
STUDIES OF STRONGLY COUPLED PLASMAS USING INTENSE HEAVY ION BEAMS AT THE FUTURE FAIR
FACILITY: THE HEDGEHOB COLLABORATION
CONTRIBUTIONS TO PLASMA PHYSICS 45(3-4), 229-235 (2005)
546. FILINOV, VS; LEVASHOV, PR; BONITZ, M; FORTOV, VE.
THERMODYNAMICS OF HYDROGEN AND HYDROGEN-HELIUM PLASMAS: PATH INTEGRAL MONTE
CARLO CALCULATIONS AND CHEMICAL PICTURE
CONTRIBUTIONS TO PLASMA PHYSICS 45(3-4), 258-265 (2005)
547. VAULINA, OS; PETROV, OF; FORTOV, VE.
SIMULATIONS OF MASS-TRANSPORT PROCESSES ON SHORT OBSERVATION TIME SCALES IN
NONIDEAL DISSIPATIVE SYSTEMS
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 100(5), 1018-1028 (2005)
548. VASILYAK, LM; VETCHININ, SP; POLYAKOV, DN; FORTOV, VE.
FORMATION OF COMPLEX STRUCTURES IN DUSTY PLASMAS UNDER TEMPERATURE GRADIENTS
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 100(5), 1029-1034 (2005)
549. FORTOV, VE; VAULINA, OS; PETROV, OF; SHAKHOVA, IA; GAVRIKOV, AV; KHRUSTALYOV, YV.
EXPERIMENTAL STUDY OF HEAT TRANSFER PROCESSES FOR MACROPARTICLES IN A DUSTY PLASMA
JETP LETTERS 82(8), 492-497 (2005)
550. DOLGOBORODOV, AY; MAKHOV, MN; KOLBANEV, IV; STRELETSKII, AN; FORTOV, VE.
DETONATION IN AN ALUMINUM-TEFLON MIXTURE
JETP LETTERS 81(7), 311-314 (2005)

551. EFREMOV, VP; PIKUZ, SA; FAENOV, AY; ROSMEJ, O; SKOBELEV, IY; SHUTOV, AV; HOFFMANN, DHH; FORTOV, VE.
STUDY OF THE ENERGY RELEASE REGION OF A HEAVY-ION FLUX IN NANOMATERIALS BY X-RAY SPECTROSCOPY OF MULTICHARGED IONS
JETP LETTERS 81(8), 378-382 (2005)
552. OSSIPYAN, YA; AVDONIN, BV; KAGAN, KL; NIKOLAEV, RK; POSTNOV, VI; SIDOROV, NS; SHAKHRAI, DV; SHESTAKOV, AF; KVEDER, VV; FORTOV, VE.
NONMONOTONIC VARIATION OF THE ELECTRICAL CONDUCTIVITY OF C-60 FULLERENE CRYSTALS DYNAMICALLY COMPRESSED TO 300 KBAR AS EVIDENCE OF ANOMALOUSLY STRONG REDUCTION OF THE ENERGY BARRIER OF C-60 POLYMERIZATION AT HIGH PRESSURES
JETP LETTERS 81(9), 471-474 (2005)
553. KOROBENKO, VN; RAKHEL, AD; SAVVATIMSKI, AI; FORTOV, VE.
MEASUREMENT OF THE ELECTRICAL RESISTIVITY OF HOT ALUMINUM PASSING FROM THE LIQUID TO GASEOUS STATE AT SUPERCRITICAL PRESSURE
PHYSICAL REVIEW B 71(1), - (2005)
554. PETROV, OF; FORTOV, VE; VAULINA, OS; CHERNYSHEV, AV; ANTIPOV, SN; GAVRIKOV, AV; SHAKHOVA, IA.
EXPERIMENTAL STUDY OF DUSTY PLASMA KINETICS
PHYSICA SCRIPTA T116, 97-100 (2005)
555. GORBACHEV, KV; KOROVIN, SD; MESYATS, GA; NESTEROV, EV; POLEVIN, SD; STROGANOV, VA; SUKHOV, MY; CHERNYKH, EV; FORTOV, VE.
HIGH-POWER MICROWAVE PULSES GENERATED BY A RESONANCE RELATIVISTIC BACKWARD WAVE OSCILLATOR WITH A POWER SUPPLY SYSTEM BASED ON EXPLOSIVE MAGNETOCUMULATIVE GENERATORS
TECHNICAL PHYSICS LETTERS 31(9), 775-778 (2005)
556. CHARAKHCHYAN, AA; KHISHCHENKO, KV; MILYAVSKIY, VV; FORTOV, VE; FROLOVA, AA; LOMONOSOV, IV; SHURSHALOV, LV.
NUMERICAL STUDY OF CONVERGING SHOCK WAVES IN POROUS MEDIA
TECHNICAL PHYSICS 50(8), 976-986 (2005)
557. FORTOV, VE.
INTENSE SHOCK WAVES AND EXTREME STATES OF PLASMA
PHYSICA SCRIPTA T116, 7-9 (2005)
558. VASILYAK, LM; VASIL'EV, MN; VETCHININ, SP; POLYAKOV, DN; FORTOV, VE.
VAPOR PHASE DEPOSITION OF COATINGS ONTO DUST PARTICLES IN COMBINED PLASMA
TECHNICAL PHYSICS LETTERS 31(10), 827-829 (2005)
559. FILINOV, VS; PETROV, OF; FORTOV, VE; MOLOTKOV, VI; KHAKHAEV, AD; PODRJADCHIKOV, SF.
COULOMB INSTABILITY OF DUSTY PARTICLE SYSTEM IN GAS-DISCHARGE PLASMA
CONTRIBUTIONS TO PLASMA PHYSICS 45(3-4), 176-184 (2005)
560. FORTOV, VE; VAULINA, OS; PETROV, OF; CHERNYSHEV, AV; ANTIPOV, SN; GAVRIKOV, AV; SHAKHOVA, IA.
TRANSPORT PROCESSES IN DUSTY PLASMA FLUID
CONTRIBUTIONS TO PLASMA PHYSICS 45(3-4), 204-212 (2005)
561. ANTIPOV, SN; ASINOVSKII, EI; FORTOV, VE; KIRILLIN, AV; MARKOVETS, VV; PETROV, OF.
DUSTY PLASMA STRUCTURES IN CRYOGENIC DC DISCHARGES
NEW VISTAS IN DUSTY PLASMAS 799, 125-128 (2005)
562. FEHSKE, H; FILINOV, V; BONITZ, M; FORTOV, V; LEVASHOV, P.
EXCITON FORMATION AND DISSOCIATION IN MASS-ASYMMETRIC ELECTRON-HOLE PLASMAS
KINETIC THEORY OF NONIDEAL PLASMAS 11, 139-146 (2005)
563. FINK, MA; KRETSCHMER, M; FORTOV, V; HOFNER, H; KONOPKA, U; MORFILL, GE; PETROV, O;

- RATYNSKAIA, S; USACHEV, A; ZOBIN, A.
COOPERATIVE PHENOMENA IN LAMINAR FLUIDS: OBSERVATION OF STREAMLINES
NEW VISTAS IN DUSTY PLASMAS 799, 295-298 (2005)
564. GAVRIKOV, A; IVANOV, A; SHAKHOVA, I; VORONA, N; PETROV, O; FORTOV, V.
ANALYSIS OF APPLICABILITY OF NAVIER-STOKES EQUATION FOR DUSTY PLASMA LIQUID VISCOSITY
INVESTIGATION
NEW VISTAS IN DUSTY PLASMAS 799, 418-421 (2005)
565. KRETSCHMER, A; HOFNER, H; THOMA, M; FINK, M; RATYNSKAIA, S; MORFILL, G; TARANTIK, K;
FORTOV, V; PETROV, O; USACHEV, A; ZOBIN, A; GERASIMOV, Y.
'PK-4'- LASER-DRIVEN SHEAR FLOW IN A DC DISCHARGE COMPLEX PLASMA
NEW VISTAS IN DUSTY PLASMAS 799, 235-238 (2005)
566. SHAKHOVA, I; GAVRIKOV, A; VAULINA, O; KHRUSTALYOV, Y; STATSENKO, K; PETROV, O;
FORTOV, V.
EXPERIMENTAL STUDY OF HEAT TRANSFER FOR MACROPARTICLES IN DUSTY PLASMA
NEW VISTAS IN DUSTY PLASMAS 799, 422-425 (2005)
567. VLADIMIROV, SV; TSYTOVICH, VN; MORFILL, GE; VAULINA, OS; PETROV, OF; FORTOV, VE.
PHYSICS AND THEORY OF DUST CONVECTION IN A COMPLEX PLASMA
NEW VISTAS IN DUSTY PLASMAS 799, 117-120 (2005)
568. STATSENKO, K; IVANOV, A; SHAKHOVA, I; GAVRIKOV, A; KHRUSTALYEV, Y; PETROV, O; FORTOV,
V.
THE MEASUREMENT OF KINETIC TEMPERATURE OF DUSTY COMPONENT OF COMPLEX PLASMA IN RF-
DISCHARGE
NEW VISTAS IN DUSTY PLASMAS 799, 438-441 (2005)
569. KHRAPAK, SA; RATYNSKAIA, SV; THOMA, MH; ZOBIN, AV; USACHEV, AD; YAROSHENKO, VV;
KRETSCHMER, M; HOFNER, H; MORFILL, GE; PETROV, OF; FORTOV, VE.
GRAIN CHARGE IN THE BULK OF GAS DISCHARGES
NEW VISTAS IN DUSTY PLASMAS 799, 177-180 (2005)
570. YAROSHENKO, V; RATYNSKAIA, S; KHRAPAK, SA; THOMA, MH; KRETSCHMER, M; HOFNER, H;
MORFILL, GE; ZOBIN, A; USACHEV, A; PETROV, O; FORTOV, V.
EXPERIMENTAL DETERMINATION OF THE ION DRAG FORCE IN A COMPLEX PLASMA
NEW VISTAS IN DUSTY PLASMAS 799, 243-246 (2005)
571. TORCHINSKY, VM; NAUMKIN, VN; MOLOTKOV, VI; FORTOV, VE; PETROV, OF; KHRAPAK, AG;
POUSTYLNİK, MY.
DUST WAVES EXCITED IN A DC GLOW DISCHARGE PLASMA
NEW VISTAS IN DUSTY PLASMAS 799, 363-366 (2005)
572. FILINOV, VS; PETROV, OF; FORTOV, VE; MOLOTKOV, VI; KHAKHAEV, AD; PODRJADCHIKOV, SF.
INSTABILITY OF DUSTY PARTICLE SYSTEM IN GAS-DISCHARGE PLASMA
NEW VISTAS IN DUSTY PLASMAS 799, 399-402 (2005)
573. IVANOV, A; GAVRIKOV, A; SHAKHOVA, I; VORONA, N; PETROV, O; FORTOV, V.
VISCOPLASTIC DUSTY PLASMA FLOW
NEW VISTAS IN DUSTY PLASMAS 799, 415-417 (2005)
574. FORTOV, VE; DEPUTATOVA, LV; FILINOV, VS; KRUTOV, DV; MOLOTKOV, VI; PETROV, OF; RYKOV,
KV; RYKOV, VA; VLADIMIROV, VI.
DUSTY PLASMA IN A PROTON BEAM
NEW VISTAS IN DUSTY PLASMAS 799, 426-429 (2005)
575. VAULINA, O; SHAKHOVA, I; GAVRIKOV, A; KHRUSTALEV, Y; PETROV, O; FORTOV, V.
EXPERIMENTAL INVESTIGATION OF THE HEAT TRANSFER IN DUSTY PLASMA FLUID
NEW VISTAS IN DUSTY PLASMAS 799, 430-433 (2005)
576. TAHIR, NA; UDREA, S; DEUTSCH, C; FORTOV, VE; GRANDJOUAN, G; GRYAZNOV, V; HOFFMANN,

DHH; HULSMANN, P; KIRK, M; LOMONOSOV, IV; PIRIZ, AR; SHUTOV, A; SPILLER, P; TEMPORAL, M; VARENTSOV, D.

TARGET HEATING IN HIGH-ENERGY-DENSITY MATTER EXPERIMENTS AT THE PROPOSED GSI FAIR FACILITY: NON-LINEAR BUNCH ROTATION IN SIS 100 AND OPTIMIZATION OF SPOT SIZE AND PULSE LENGTH

LASER AND PARTICLE BEAMS 22(4), 485-493 (2004)

577. FORTOV, VE; VAULINA, OS; PETROV, OF; MOLOTKOV, VI; LIPAEV, AM; MORFILL, GE; THOMAS, H; KHRAPAK, SA; SEMENOV, YP; IVANOV, AI.

DYNAMICS AND STRUCTURAL PROPERTIES OF DUSTY PLASMA LIQUID IN MICROGRAVITY: EXPERIMENTS ONBOARD THE INTERNATIONAL SPACE STATION

PLASMA PHYSICS AND CONTROLLED FUSION 46, B359-B366 (2004)

578. AL'TSHULER, LV; KRUPNIKOV, KK; FORTOV, VE; FUNTIKOV, AI.

ORIGINS OF MEGABAR PRESSURE PHYSICS

HERALD OF THE RUSSIAN ACADEMY OF SCIENCES 74(6), 613-623 (2004)

579. MOLOTKOV, VI; PETROV, OF; PUSTYL'NIK, MY; TORCHINSKII, VM; FORTOV, VE; KHRAPAK, AG. DUSTY PLASMA OF A DC GLOW DISCHARGE: METHODS OF INVESTIGATION AND CHARACTERISTIC FEATURES OF BEHAVIOR

HIGH TEMPERATURE 42(6), 827-841 (2004)

580. BEZKROVNIY, V; FILINOV, VS; KREMP, D; BONITZ, M; SCHLANGES, M; KRAEFT, WD; LEVASHOV, PR; FORTOV, VE.

MONTE CARLO RESULTS FOR THE HYDROGEN HUGONIOT

PHYSICAL REVIEW E 70(5), - (2004)

581. FORTOV, VE; PETROV, OF; USACHEV, AD; ZOBIN, AV.

MICRON-SIZED PARTICLE-CHARGE MEASUREMENTS IN AN INDUCTIVE RF GAS-DISCHARGE PLASMA USING GRAVITY-DRIVEN PROBE GRAINS

PHYSICAL REVIEW E 70(4), - (2004)

582. DENISOV, OB; ORLOV, NY; FORTOV, VE; KULISH, MI; GRYAZNOV, VK; MINSTEV, VB.

INVESTIGATION OF THE MECHANISMS FOR STARK BROADENING AND SHIFT OF THE SPECTRAL LINES IN A NONIDEAL PLASMA

PLASMA PHYSICS REPORTS 30(10), 878-881 (2004)

583. PUSTYL'NIK, MY; TORCHINSKII, VM; MOLOTKOV, V; KHRAPAK, AG; CHERNYSHEV, AV; PETROV, OF; FORTOV, VE; OKUBO, M; YOSHINO, K.

EXCITATION OF DUST-ACOUSTIC WAVES IN A DC GLOW-DISCHARGE DUSTY PLASMA BY MEANS OF PULSED GASDYNAMIC STIMULATION

HIGH TEMPERATURE 42(5), 659-666 (2004)

584. RATYNSKAIA, S; KHRAPAK, S; ZOBIN, A; THOMA, MH; KRETSCHMER, M; USACHEV, A; YAROSHENKO, V; QUINN, RA; MORFILL, GE; PETROV, O; FORTOV, V.

EXPERIMENTAL DETERMINATION OF DUST-PARTICLE CHARGE IN A DISCHARGE PLASMA AT ELEVATED PRESSURES

PHYSICAL REVIEW LETTERS 93(8), - (2004)

585. VAULINA, OS; PETROV, OF; FORTOV, VE; CHERNYSHEV, AV; GAVRIKOV, AV; SHAKHOVA, OA.

THREE-PARTICLE CORRELATIONS IN NONIDEAL DUSTY PLASMA

PHYSICAL REVIEW LETTERS 93(3), - (2004)

586. GOSTINTSEV, YA; FORTOV, VE; SHATSKIKH, YV.

SELF-SIMILAR PROPAGATION LAW AND FRACTAL STRUCTURE OF THE SURFACE OF A FREE EXPANDING TURBULENT SPHERICAL FLAME

DOKLADY PHYSICAL CHEMISTRY 397, 141-144 (2004)

587. RAKHEL, AD; KOROBENKO, VN; SAVVATIMSKI, AI; FORTOV, VE.

ELECTRICAL CONDUCTIVITY OF TUNGSTEN IN A CONTINUOUS TRANSITION FROM CONDENSED TO GASEOUS STATE

INTERNATIONAL JOURNAL OF THERMOPHYSICS 25(4), 1203-1214 (2004)

588. OSIP'YAN, YA; FORTOV, VE; ALFEROV, ZI; SUBBOTIN, VI; PARMON, VN; PLATE, NA; PONOMAREV-STEPNOI, NN; SHORIN, VI; NEFEDOV, OM; LAVEROV, NP; MESYATS, GA; OSIPOV, YS.

BASIC SCIENCE AND BUSINESS: FACE TO FACE - A DISCUSSION IN THE RAS PRESIDUM
HERALD OF THE RUSSIAN ACADEMY OF SCIENCES 74(4), 387-393 (2004)

589. VAULINA, OS; VLADIMIROV, SV; PETROV, OF; FORTOV, VE.

PHASE STATE AND TRANSPORT OF NON-YUKAWA INTERACTING MACROPARTICLES (COMPLEX PLASMA)

PHYSICS OF PLASMAS 11(6), 3234-3237 (2004)

590. YAROSHENKO, VV; ANNARATONE, BM; KHRAPAK, SA; THOMAS, HM; MORFILL, GE; FORTOV, VE; LIPAEV, AM; MOLOTKOV, VI; PETROV, OF; IVANOV, AI; TURIN, MV.

ELECTROSTATIC MODES IN COLLISIONAL COMPLEX PLASMAS UNDER MICROGRAVITY CONDITIONS
PHYSICAL REVIEW E 69(6), - (2004)

591. AGRANAT, MB; ASHITKOV, SI; IVANOV, AA; KONYASHCHENKO, AV; OVCHINNIKOV, AV; FORTOV, VE.

TERAWATT FEMTOSECOND CR : FORSTENTE LASER SYSTEM
QUANTUM ELECTRONICS 34(6), 506-508 (2004)

592. FORTOV, VE; KHRAPAK, AG; KHRAPAK, SA; MOLOTKOV, VI; PETROV, OF.

DUSTY PLASMAS

PHYSICS-USPEKHI 47(5), 447-492 (2004)

593. KANEL, GI; RAZORENOV, SV; FORTOV, VE.

SHOCK-WAVE COMPRESSION AND TENSION OF SOLIDS AT ELEVATED TEMPERATURES:
SUPERHEATED CRYSTAL STATES, PRE-MELTING, AND ANOMALOUS GROWTH OF THE YIELD
STRENGTH

JOURNAL OF PHYSICS-CONDENSED MATTER 16(14), S1007-S1016 (2004)

594. RATYNSKAIA, S; KRETSCHMER, M; KHRAPAK, S; QUINN, RA; THOMA, MH; MORFILL, GE; ZOBIN, A; USACHEV, A; PETROV, O; FORTOV, V.

DUST MODE IN COLLISIONALLY DOMINATED COMPLEX PLASMAS WITH PARTICLE DRIFT
IEEE TRANSACTIONS ON PLASMA SCIENCE 32(2), 613-616 (2004)

595. IVANOV, AS; MITIN, VS; PAL, AF; RYABINKIN, AN; SEROV, AO; SKRYLEVA, EA; STAROSTIN, AN; FORTOV, VE; SHULGA, YM.

PRODUCTION OF DISPERSE COMPOSITE MATERIALS IN A DUSTY PLASMA
DOKLADY PHYSICS 49(3), 163-166 (2004)

596. MAKAROV, AA; FORTOV, VE.

TRENDS IN THE DEVELOPMENT OF WORLD POWER ENGINEERING AND RUSSIA'S ENERGY STRATEGY
HERALD OF THE RUSSIAN ACADEMY OF SCIENCES 74(2), 131-143 (2004)

597. USACHEV, A; ZOBIN, A; PETROV, O; FORTOV, V; THOMA, M; KRETSCHMER, M; RATYNSKAIA, S; QUINN, R; HOEFNER, H; MORFILL, G.

THE PROJECT "PLASMAKRISTALL-4" (PK-4) - A DUSTY PLASMA EXPERIMENT IN A COMBINED DC/RF(I)
DISCHARGE PLASMA UNDER MICROGRAVITY CONDITIONS
CZECHOSLOVAK JOURNAL OF PHYSICS 54, C639-C647 (2004)

598. FILINOV, V; THOMAS, P; BONITZ, M; FORTOV, V; VARGA, I; MEIER, T.

WIGNER APPROACH TO QUANTUM DYNAMICS SIMULATIONS OF THE INTERACTING CARRIERS IN
DISORDERED SYSTEMS

PHYSICA STATUS SOLIDI B-BASIC RESEARCH 241(1), 40-46 (2004)

599. FILINOV, VS; BONITZ, M; FORTOV, VE; EBELING, W; LEVASHOV, P; SCHLANGES, M.

THERMODYNAMIC PROPERTIES AND PLASMA PHASE TRANSITION IN DENSE HYDROGEN
CONTRIBUTIONS TO PLASMA PHYSICS 44(5-6), 388-394 (2004)

600. AZATYAN, VV; NABOKO, IM; PETUKHOV, VA; GUSEV, PA; MERZHANOV, AG; RUBTSOV, NM;

- SOLNTSEV, OI; FORTOV, VE; TSVETKOV, GI.
CHEMICAL INHIBITION OF THE EXPLOSION OF HYDROGEN-AIR MIXTURES UNDER CUMULATION
UPON INTENSE INITIATION OF COMBUSTION
DOKLADY PHYSICAL CHEMISTRY 394, 1-3 (2004)
601. VAULINA, OS; PETROV, OF; FORTOV, VE.
ANALYSIS OF PAIR CORRELATION FUNCTIONS FOR MACROSCOPIC PARTICLES IN DUSTY PLASMAS:
NUMERICAL SIMULATION AND EXPERIMENT
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 98(3), 515-526 (2004)
602. BONITZ, M; ZELENER, BB; ZELENER, BV; MANYKIN, EA; FILINOV, VS; FORTOV, VE.
THERMODYNAMICS AND CORRELATION FUNCTIONS OF AN ULTRACOLD NONIDEAL RYDBERG
PLASMA
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 98(4), 719-727 (2004)
603. KONYUKHOV, AV; LIKHACHEV, AP; OPARIN, AM; ANISIMOV, SI; FORTOV, VE.
NUMERICAL MODELING OF SHOCK-WAVE INSTABILITY IN THERMODYNAMICALLY NONIDEAL MEDIA
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 98(4), 811-819 (2004)
604. AYUKOV, SV; BATURIN, VA; GRYAZNOV, VK; IOSILEVSKII, IL; STAROSTIN, AN; FORTOV, VE.
ANALYSIS OF THE PRESENCE OF SMALL ADMIXTURES OF HEAVY ELEMENTS IN THE SOLAR PLASMA
BY USING THE SAHA-S EQUATION OF STATE
JETP LETTERS 80(3), 141-144 (2004)
605. MOLODETS, AM; FORTOV, VE.
PHASE TRANSITIONS IN URANIUM DIOXIDE AT HIGH PRESSURES AND TEMPERATURES
JETP LETTERS 80(3), 172-175 (2004)
606. BABICHEV, VN; PAL', AF; STAROSTIN, AN; FILIPPOV, AV; FORTOV, VE.
STABLE DUST STRUCTURES IN NON-SELF-SUSTAINED GAS DISCHARGE UNDER ATMOSPHERIC
PRESSURE
JETP LETTERS 80(4), 241-245 (2004)
607. RAZORENOV, SV; KANEL, GI; FORTOV, VE.
IRON AT HIGH NEGATIVE PRESSURES
JETP LETTERS 80(5), 348-350 (2004)
608. GRISHECHKIN, SK; GRUZDEV, SK; GRYAZNOV, VK; ZHERNOKLETOV, MV; IL'KAEV, RI;
IOSILEVSKII, IL; KASHINTSEVA, GN; KIRSHANOV, SI; MANACHKIN, SF; MINTSEV, VB; MIKHAILOV, AL;
MEZHEVOV, AB; MOCHALOV, MA; FORTOV, VE; KHRUSTALEV, VV; SHUIKIN, AN; YUKHIMCHUK, AA.
EXPERIMENTAL MEASUREMENTS OF THE COMPRESSIBILITY, TEMPERATURE, AND LIGHT
ABSORPTION IN DENSE SHOCK-COMPRESSED GASEOUS DEUTERIUM
JETP LETTERS 80(6), 398-404 (2004)
609. TERNOVOI, VY; KVITOV, SV; PYALLING, AA; FILIMONOV, AS; FORTOV, VE.
EXPERIMENTAL DETERMINATION OF THE CONDITIONS FOR THE TRANSITION OF JUPITER'S
ATMOSPHERE TO THE CONDUCTING STATE
JETP LETTERS 79(1), 6-9 (2004)
610. FORTOV, VE; MOLODETS, AM; POSTNOV, VI; SHAKHRAI, DV; KAGAN, KL; MAKSIMOV, EG;
IVANOV, AV; MAGNITSKAYA, MV.
ELECTROPHYSICAL PROPERTIES OF CALCIUM AT HIGH PRESSURES AND TEMPERATURES
JETP LETTERS 79(7), 346-351 (2004)
611. FORTOV, VE; PETROV, OF; MOLOTKOV, VI; POUSTYLNIIK, MY; TORCHINSKY, VM; KHRAPAK, AG;
CHERNYSHEV, AV.
LARGE-AMPLITUDE DUST WAVES EXCITED BY THE GAS-DYNAMIC IMPACT IN A DC GLOW
DISCHARGE PLASMA
PHYSICAL REVIEW E 69(1), - (2004)
612. VAULINA, OS; PETROV, OF; FORTOV, VE; MORFILL, GE; THOMAS, HM; SEMENOV, YP; IVANOV, AI;

- KRIKALEV, SK; GIDZENKO, YP.
ANALYSIS OF DUST VORTEX DYNAMICS IN GAS DISCHARGE PLASMA
PHYSICA SCRIPTA T107, 224-228 (2004)
613. FORTOV, VE.
OVERVIEW OF ORDERED DUST STRUCTURES IN DUSTY PLASMAS
PHYSICA SCRIPTA T107, 90-97 (2004)
614. CHARAKHCH'YAN, AA; LOMONOSOV, IV; MILYAVSKII, VV; FORTOV, VE; FROLOVA, AA;
KHISHCHENKO, KV; SHURSHALOV, LV.
CONVERGING SHOCK WAVES IN POROUS MEDIA
TECHNICAL PHYSICS LETTERS 30(1), 33-35 (2004)
615. FORTOV, VE; MINTSEV, VB; TERNOVOI, VY; GRYAZNOV, VK; IOSILEVSKII, IL; MOCHALOV, MA;
ZHERNOKLETOV, MV.
CONDUCTIVITY OF NONIDEAL PLASMA
HIGH TEMPERATURE MATERIAL PROCESSES 8(3), 447-459 (2004)
616. GAVRIKOV, AV; SHAKHOVA, IA; VAULINA, OS; PETROV, OF; FORTOV, VE.
STUDY OF DIFFUSION COEFFICIENT AND PHASE TRANSITIONS IN STRUCTURES FORMED BY DUST
PARTICLES IN RF-DISCHARGE
PHYSICA SCRIPTA T107, 83-85 (2004)
617. FILINOV, V; BONITZ, M; FORTOV, V; LEVASHOV, P.
QUANTUM GENERALIZATION OF MOLECULAR DYNAMICS METHOD. WIGNER APPROACH
COMPUTATIONAL SCIENCE AND ITS APPLICATIONS - ICCSA 2004, PT 2 3044, 402-411 (2004)
618. GINZBURG, VL; ALEKSANDROV, EB; KAPITSA, SP; VOROB'EV, AI; KUDRYAVTSEV, VN; MESYATS,
GA; CHELYSHEV, EP; FORTOV, VE; BRAGINSKII, VB; SHILO, NA; MEDVEDEV, VI; NEKIPELOV, AD;
PLATE, NA.
THE FLOURISH OF PSEUDOSCIENCE IS THE EFFECT OF A CRISIS IN PUBLIC CONSCIOUSNESS -
DISCUSSION AT THE RAS PRESIDUM
HERALD OF THE RUSSIAN ACADEMY OF SCIENCES 74(1), 14-24 (2004)
619. GRYAZNOV, VK; AYUKOV, SV; BATURIN, VA; IOSILEVSKIY, IL; STAROSTIN, AN; FORTOV, VE.
SAHA-S MODEL: EQUATION OF STATE AND THERMODYNAMIC FUNCTIONS OF SOLAR PLASMA
EQUATION-OF-STATE AND PHASE-TRANSITION ISSUES IN MODELS OF ORDINARY ASTROPHYSICAL
MATTER 731, 147-161 (2004)
620. IL'KAEV, RI; FORTOV, VE; BULANNIKOV, AS; BURTSEV, VV; GOLUBEV, VA; GOLUBKOV, AN;
DAVYDOV, NB; ZHERNOKLETOV, MV; KIRSCHANOV, SI; MANACHKIN, SF; MEDVEDEV, AB;
MIKHAYLOV, AL; MOCHALOV, MA; ORLOV, VD; KHRUSTALEV, VV; YAROSHENKO, VV.
QUASI-ISENTROPIC COMPRESSIBILITY OF GASEOUS DEUTERIUM IN PRESSURE RANGE UP TO 300 GPa
SHOCK COMPRESSION OF CONDENSED MATTER - 2003, PTS 1 AND 2, PROCEEDINGS 706, 73-76 (2004)
621. KOLESNIKOV, SA; UTKIN, AV; ANANIN, AV; PERSHIN, SV; FORTOV, VE.
REACTION ZONE OF STEADY-STATE DETONATION WAVES IN DINITRODIAZAPENTANE AND RDX
SHOCK COMPRESSION OF CONDENSED MATTER - 2003, PTS 1 AND 2, PROCEEDINGS 706, 851-854 (2004)
622. UTKIN, AV; SOSIKOV, VA; BOGACH, AA; FORTOV, VE.
TENSION OF LIQUIDS BY SHOCK WAVES
SHOCK COMPRESSION OF CONDENSED MATTER - 2003, PTS 1 AND 2, PROCEEDINGS 706, 765-768 (2004)
623. LEVASHOV, PR; KHISHCHENKO, KV; LOMONOSOV, IV; FORTOV, VE.
DATABASE ON SHOCK-WAVE EXPERIMENTS AND EQUATIONS OF STATE AVAILABLE VIA INTERNET
SHOCK COMPRESSION OF CONDENSED MATTER - 2003, PTS 1 AND 2, PROCEEDINGS 706, 87-90 (2004)
624. LOMONOSOV, IV; FORTOV, VE; KHISHCHENKO, KV; LEVASHOV, PR.
THEORETICAL INVESTIGATION OF SHOCK WAVE STABILITY IN METALS
SHOCK COMPRESSION OF CONDENSED MATTER - 2003, PTS 1 AND 2, PROCEEDINGS 706, 91-94 (2004)
625. MILYAVSKIY, VV; UTKIN, AV; ZARETSKY, EB; ZHUK, AZ; YAKUSHEV, VV; FORTOV, VE.

- HUGONIOT OF C-60 FULLERITE
SHOCK COMPRESSION OF CONDENSED MATTER - 2003, PTS 1 AND 2, PROCEEDINGS 706, 667-670 (2004)
626. ZHERNOKLETOV, MV; IL'KAEV, RI; KIRSCHANOV, SI; LEBEDEVA, TS; MIKHAYLOV, AL;
MOCHALOV, MA; SHUIKIN, AN; FORTOV, VE.
EXPERIMENTAL MEASUREMENT OF COMPRESSIBILITY AND TEMPERATURE IN SHOCK-COMPRESSED
LIQUID XENON IN PRESSURE RANGE UP TO 350 GPA.
SHOCK COMPRESSION OF CONDENSED MATTER - 2003, PTS 1 AND 2, PROCEEDINGS 706, 129-132 (2004)
627. BEZRUKOV, MY; GORBACHEV, KV; KOROVIN, SD; MESYATS, GA; NESTEROV, EV; PETROV, VY;
PLAKSINA, SD; POLEVIN, SD; ROSCHUPKIN, SA; STROGANOV, VA; SUKHOV, MY; CHERNYKH, EV;
FORTOV, VE.
HPM GENERATION BY USE OF RESONANT RELATIVISTIC BWO DRIVEN BY COMPACT INDUCTIVE
ENERGY STORAGE
14TH INTERNATIONAL CRIMEAN CONFERENCE: MICROWAVE & TELECOMMUNICATION
TECHNOLOGY, CONFERENCE PROCEEDINGS , 577-578 (2004)
628. FORTOV, VE; LOMONOSOV, IV.
EQUATIONS OF STATE OF MATTER AT EXTREME CONDITIONS
PARALLEL COMPUTATIONAL FLUID DYNAMICS: ADVANCED NUMERICAL METHODS SOFTWARE AND
APPLICATIONS , 537-542 (2004)
629. FILINOV, VS; LEVASHOV, PR; BONITZ, M; FORTOV, VE; EBELING, W.
ON PHASE TRANSITION IN STRONGLY COUPLED HYDROGEN PLASMA
SHOCK COMPRESSION OF CONDENSED MATTER - 2003, PTS 1 AND 2, PROCEEDINGS 706, 53-56 (2004)
630. FORTOV, VE; GRYAZNOV, VK; IL'KAEV, RI; MIKHAYLOV, AL; MINTSEV, VB; MOCHALOV, MA;
PYALLING, AA; TERNOVOI, VY; ZHERNOKLETOV, MV.
PRESSURE IONIZATION OF CONDENSED MATTER UNDER INTENSE SHOCK WAVES AT MEGABARS
SHOCK COMPRESSION OF CONDENSED MATTER - 2003, PTS 1 AND 2, PROCEEDINGS 706, 135-140 (2004)
631. BORODINA, TI; FORTOV, VE; MILYAVSKIY, VV; ZHARKOV, AS; ZHUK, AZ.
SHOCK WAVE SYNTHESIS OF CARBYNE FROM GRAPHITE: NEW RESULTS
SHOCK COMPRESSION OF CONDENSED MATTER - 2003, PTS 1 AND 2, PROCEEDINGS 706, 1082-1085 (2004)
632. FORTOV, V.
NONIDEAL PLASMAS UNDER EXTREME CONDITIONS GENERATED BY SHOCK WAVES
PLASMA PHYSICS AND CONTROLLED FUSION 45, A1-A16 (2003)
633. RYKOV, VA; KHUDYAKOV, AV; FILINOV, VS; VLADIMIROV, VI; DEPUTATOVA, LV; KRUTOV, DV;
FORTOV, VE.
DYNAMIC VORTEX DUST STRUCTURES IN A NUCLEAR-TRACK PLASMA
NEW JOURNAL OF PHYSICS 5, - (2003)
634. BORISKOV, GV; BYKOV, AI; IL'KAEV, RI; SELEMIR, VD; SIMAKOV, GV; TRUNIN, RF; URLIN, VD;
FORTOV, VE; SHUIKIN, AN.
SHOCK-WAVE COMPRESSION OF SOLID DEUTERIUM AT A PRESSURE OF 120 GPA
DOKLADY PHYSICS 48(10), 553-555 (2003)
635. VARENTSOV, D; TAHIR, NA; LOMONOSOV, IV; HOFFMANN, DHH; WIESER, J; FORTOV, VE.
ENERGY LOSS DYNAMICS OF AN INTENSE URANIUM BEAM INTERACTING WITH SOLID NEON FOR
EQUATION-OF-STATE STUDIES
EUROPHYSICS LETTERS 64(1), 57-63 (2003)
636. REINHOLZ, H; ZAPOROGHETS, Y; MINTSEV, V; FORTOV, V; MOROZOV, I; ROPKE, G.
FREQUENCY-DEPENDENT REFLECTIVITY OF SHOCK-COMPRESSED XENON PLASMAS
PHYSICAL REVIEW E 68(3), - (2003)
637. ANDREEV, NE; VEISMAN, ME; EFREMOV, VP; FORTOV, VE.
THE GENERATION OF A DENSE HOT PLASMA BY INTENSE SUBPICOSECOND LASER PULSES
HIGH TEMPERATURE 41(5), 594-608 (2003)

638. FORTOV, VE; FILIMONOV, AS; GRYAZNOV, VK; NIKOLAEV, DN; TERNOVOI, VY; KEELER, RN.
THE GENERATION OF A NON-IDEAL PLASMA BY SHOCK COMPRESSION OF HIGH-POROSITY SIO₂-
AEROGEL
MODERN PHYSICS LETTERS A 18(26), 1835-1840 (2003)
639. NEFEDOV, AP; VAULINA, OS; PETROV, OF; MOLOTKOV, V; TORCHINSKII, VM; FORTOV, VE;
CHERNYSHEV, AV; LIPAEV, AM; IVANOV, AI; KALERI, AY; SEMENOV, YP; ZALETIN, SV.
THE DYNAMICS OF MACROPARTICLES IN A DIRECT CURRENT GLOW DISCHARGE PLASMA UNDER
MICRO-GRAVITY CONDITIONS
NEW JOURNAL OF PHYSICS 5, - (2003)
640. VAULINA, OS; PETROV, OF; FORTOV, VE; CHERNYSHEV, AV; GAVRIKOV, AV; SHAKHOVA, IA;
SEMENOV, YP.
EXPERIMENTAL STUDIES OF THE DYNAMICS OF DUST GRAINS IN GAS-DISCHARGE PLASMAS
PLASMA PHYSICS REPORTS 29(8), 642-656 (2003)
641. FORTOV, VE; NEFEDOV, AP; VAULINA, OS; PETROV, OF; DRANZHEVSKI, IE; LIPAEV, AM;
SEMENOV, YP.
DYNAMICS OF DUST GRAINS IN AN ELECTRON-DUST PLASMA INDUCED BY SOLAR RADIATION
UNDER MICROGRAVITY CONDITIONS
NEW JOURNAL OF PHYSICS 5, - (2003)
642. VAULINA, OS; SAMARIAN, AA; PETROV, OF; JAMES, BW; FORTOV, VE.
SELF-EXCITED MOTIONS IN DUSTY PLASMAS WITH GRADIENT OF CHARGE OF MACROPARTICLES
NEW JOURNAL OF PHYSICS 5, - (2003)
643. TSYTOVICH, VN; NEFEDOV, AP; FORTOV, VE; PETROV, OF; MORFILL, GE.
EFFECTS OF ULTRAVIOLET RADIATION ON DUSTY PLASMA STRUCTURES AT MICROGRAVITY
PHYSICS OF PLASMAS 10(7), 2633-2642 (2003)
644. KRASYUK, IK; PASHININ, PP; SEMENOV, AY; FORTOV, VE.
INVESTIGATION OF THERMOPHYSICAL AND MECHANICAL PROPERTIES OF MATTER UNDER
EXTREMAL CONDITIONS
QUANTUM ELECTRONICS 33(7), 593-608 (2003)
645. FORTOV, VE.
ACADEMICIAN A.P. ALEKSANDROV: MILESTONES ALONG A GREAT PATH
HERALD OF THE RUSSIAN ACADEMY OF SCIENCES 73(4), 447-449 (2003)
646. LOMONOSOV, IV; FORTOV, VE; FROLOVA, AA; KHISHCHENKO, KV; CHARAKHCH'YAN, AA;
SHURSHALOV, LV.
THE SIMULATION OF TRANSFORMATION OF GRAPHITE TO DIAMOND UNDER CONDITIONS OF
DYNAMIC COMPRESSION IN A CONIC TARGET
HIGH TEMPERATURE 41(4), 447-458 (2003)
647. FORTOV, VE; VAULINA, OS; PETROV, OF; MOLOTKOV, VI; LIPAEV, AM; TORCHINSKY, VM;
THOMAS, HM; MORFILL, GE; KHRAPAK, SA; SEMENOV, YP; IVANOV, AI; KRIKALEV, SK; KALERY, AY;
ZALETIN, SV; GIDZENKO, YP.
TRANSPORT OF MICROPARTICLES IN WEAKLY IONIZED GAS-DISCHARGE PLASMAS UNDER
MICROGRAVITY CONDITIONS
PHYSICAL REVIEW LETTERS 90(24), - (2003)
648. BONITZ, M; SEMKAT, D; FILINOV, A; GOLUBNYCHYI, V; KREMP, D; GERICKE, DO; MURILLO, MS;
FILINOV, V; FORTOV, V; HOYER, W; KOCH, SW.
THEORY AND SIMULATION OF STRONG CORRELATIONS IN QUANTUM COULOMB SYSTEMS
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 36(22), 5921-5930 (2003)
649. REINHOLZ, H; ROPKE, G; MOROZOV, I; MINTSEV, V; ZAPAROGHETS, Y; FORTOV, V; WIERLING, A.
DENSITY PROFILE IN SHOCK WAVE FRONTS OF PARTIALLY IONIZED XENON PLASMAS
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 36(22), 5991-5997 (2003)

650. FILINOV, VS; THOMAS, P; VARGA, I; MEIER, T; BONITZ, M; FORTOV, VE; KOCH, SW.
ELECTRONIC TRANSPORT IN A ONE-DIMENSIONAL RANDOM ARRAY OF SCATTERERS
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 36(22), 5905-5911 (2003)
651. FILINOV, VS; BONITZ, M; LEVASHOV, P; FORTOV, VE; EBELING, W; SCHLANGES, M; KOCH, SW.
PLASMA PHASE TRANSITION IN DENSE HYDROGEN AND ELECTRON-HOLE PLASMAS
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 36(22), 6069-6076 (2003)
652. TAHIR, NA; PIRIZ, AR; SHUTOV, A; VARENTSOV, D; UDREA, S; HOFFMANN, DHH; JURANEK, H;
REDMER, R; PORTUGUES, RF; LOMONOSOV, I; FORTOV, VE.
THE CREATION OF STRONGLY COUPLED PLASMAS USING AN INTENSE HEAVY ION BEAM: LOW-
ENTROPY COMPRESSION OF HYDROGEN AND THE PROBLEM OF HYDROGEN METALLIZATION
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL 36(22), 6129-6135 (2003)
653. FILINOV, VS; HOYER, W; BONITZ, M; KIRA, M; FORTOV, VE; KOCH, SW.
SPONTANEOUS EMISSION OF SEMICONDUCTORS IN THE WIGNER APPROACH
JOURNAL OF OPTICS B-QUANTUM AND SEMICLASSICAL OPTICS 5(3), S299-S305 (2003)
654. FORTOV, VE; USACHEV, AD; ZOBIN, AV; MOLOTKOV, VI; PETROV, OF.
DUST-ACOUSTIC WAVE INSTABILITY AT THE DIFFUSE EDGE OF RADIO FREQUENCY INDUCTIVE LOW-
PRESSURE GAS DISCHARGE PLASMA
PHYSICS OF PLASMAS 10(5), 1199-1208 (2003)
655. TAHIR, NA; JURANEK, H; SHUTOV, A; REDMER, R; PIRIZ, AR; TEMPORAL, M; VARENTSOV, D;
UDREA, S; HOFFMANN, DHH; DEUTSCH, C; LOMONOSOV, I; FORTOV, VE.
INFLUENCE OF THE EQUATION OF STATE ON THE COMPRESSION AND HEATING OF HYDROGEN
PHYSICAL REVIEW B 67(18), - (2003)
656. BOL'SHOV, LA; SARKISOV, AA; FORTOV, VE; OSIPOV, YS; MAVRINA, TV.
MARINE NUCLEAR POWER ENGINEERING - RUSSIA'S NATIONAL ACHIEVEMENT
HERALD OF THE RUSSIAN ACADEMY OF SCIENCES 73(3), 259-260 (2003)
657. NEFEDOV, AP; MORFILL, GE; FORTOV, VE; THOMAS, HM; ROTHERMEL, H; HAGL, T; IVLEV, AV;
ZUZIC, M; KLUMOV, BA; LIPAEV, AM; MOLOTKOV, VI; PETROV, OF; GIDZENKO, YP; KRIKALEV, SK;
SHEPHERD, W; IVANOV, AI; ROTH, M; BINNENBRUCK, H; GOREE, JA; SEMENOV, YP.
PKE-NEFEDOV: PLASMA CRYSTAL EXPERIMENTS ON THE INTERNATIONAL SPACE STATION
NEW JOURNAL OF PHYSICS 5, - (2003)
658. MIKIKIAN, M; BOUFENDI, L; BOUCHOULE, A; THOMAS, HM; MORFILL, GE; NEFEDOV, AP; FORTOV,
VE.
FORMATION AND BEHAVIOUR OF DUST PARTICLE CLOUDS IN A RADIO-FREQUENCY DISCHARGE:
RESULTS IN THE LABORATORY AND UNDER MICROGRAVITY CONDITIONS
NEW JOURNAL OF PHYSICS 5, - (2003)
659. SAMSONOV, D; MORFILL, G; THOMAS, H; HAGL, T; ROTHERMEL, H; FORTOV, V; LIPAEV, A;
MOLOTKOV, V; NEFEDOV, A; PETROV, O; IVANOV, A; KRIKALEV, S.
KINETIC MEASUREMENTS OF SHOCK WAVE PROPAGATION IN A THREE-DIMENSIONAL COMPLEX
(DUSTY) PLASMA
PHYSICAL REVIEW E 67(3), - (2003)
660. BATANI, D; VOVCHENKO, VI; KANEL, GI; KILPIO, AV; KRASYUK, IK; LOMONOSOV, IV; PASHININ,
PP; SEMENOV, AY; FORTOV, VE; SHASHKOV, EV.
MECHANICAL PROPERTIES OF A MATERIAL AT ULTRAHIGH STRAIN RATES INDUCED BY A LASER
SHOCK WAVE
DOKLADY PHYSICS 48(3), 123-125 (2003)
661. RADCHENKO, AV; FORTOV, VE; KHOREV, IE.
PHYSICAL FEATURES OF HIGH-VELOCITY INTERACTION OF ELONGATED TECHNOGENIC FRAGMENTS
WITH CONSTRUCTIONS
DOKLADY PHYSICS 48(3), 126-130 (2003)

6628. KHOREV, IE; YAKUSHEV, VK; ZELEPUGIN, SA; SIDOROV, VN; FORTOV, VE.
LAUNCHING AND IMPACT OF A GROUP OF HIGH-VELOCITY BODIES
DOKLADY PHYSICS 48(3), 146-150 (2003)
6639. IVLEV, AV; KRETSCHMER, M; ZUZIC, M; MORFILL, GE; ROTHERMEL, H; THOMAS, HM; FORTOV, VE; MOLOTKOV, VI; NEFEDOV, AP; LIPAEV, AM; PETROV, OF; BATURIN, YM; IVANOV, AI; GOREE, J.
DECHARGING OF COMPLEX PLASMAS: FIRST KINETIC OBSERVATIONS
PHYSICAL REVIEW LETTERS 90(5), - (2003)
664. TAHIR, NA; SHUTOV, A; VARENTSOV, D; SPILLER, P; UDREA, S; HOFFMANN, DHH; LOMONOSOV, IV; WIESER, J; KIRK, M; PIRIZ, AR; FORTOV, VE; BOCK, R.
INFLUENCE OF THE EQUATION OF STATE OF MATTER AND ION BEAM CHARACTERISTICS ON TARGET HEATING AND COMPRESSION
PHYSICAL REVIEW SPECIAL TOPICS-ACCELERATORS AND BEAMS 6(2), - (2003)
665. KHRAPAK, S; SAMSONOV, D; MORFILL, G; THOMAS, H; YAROSHENKO, V; ROTHERMEL, H; HAGL, T; FORTOV, V; NEFEDOV, A; MOLOTKOV, V; PETROV, O; LIPAEV, A; IVANOV, A; BATURIN, Y.
COMPRESSIONAL WAVES IN COMPLEX (DUSTY) PLASMAS UNDER MICROGRAVITY CONDITIONS
PHYSICS OF PLASMAS 10(1), 1-4 (2003)
666. MINTSEV, VB; SHILKIN, NS; ZAPOROGHETS, YB; DUDIN, SV; GRYAZNOV, VK; FORTOV, VE.
MEASUREMENTS OF HALL, DC AND HF CONDUCTIVITY OF NONIDEAL PLASMA
CONTRIBUTIONS TO PLASMA PHYSICS 43(5-6), 326-329 (2003)
667. TAHIR, NA; DEUTSCH, C; FORTOV, VE; GRYAZNOV, VC; HOFFMANN, DHH; JURANEK, H; LOMONOSOV, IV; PIRIZ, AR; REDMER, R; SHUTOV, A; SPILLER, P; TEMPORAL, M; UDREA, S; VARENTSOV, D.
INTENSE HEAVY ION BEAMS AS A TOOL TO INDUCE HIGH-ENERGY-DENSITY STATES IN MATTER
CONTRIBUTIONS TO PLASMA PHYSICS 43(5-6), 373-376 (2003)
668. FORTOV, VE; TERNOVOI, VY; ZHERNOKLETOV, MV; MOCHALOV, MA; MIKHAILOV, AL; FILIMONOV, AS; PYALLING, AA; MINTSEV, VB; GRYAZNOV, VK; IOSILEVSKII, IL.
PRESSURE-PRODUCED IONIZATION OF NONIDEAL PLASMA IN A MEGABAR RANGE OF DYNAMIC PRESSURES
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 97(2), 259-278 (2003)
669. SHILKIN, NS; DUDIN, SV; GRYAZNOV, VK; MINTSEV, VB; FORTOV, VE.
MEASUREMENTS OF THE ELECTRON CONCENTRATION AND CONDUCTIVITY OF A PARTIALLY IONIZED INERT GAS PLASMA
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 97(5), 922-931 (2003)
670. VASILYAK, LM; VETCHININ, SP; ZIMNUKHOV, VS; POLYAKOV, DN; FORTOV, VE.
DUST PARTICLES IN A THERMOPHORETIC TRAP IN A PLASMA
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 96(3), 436-439 (2003)
671. VASILYAK, LM; VASIL'EV, MN; VETCHININ, SP; POLYAKOV, DN; FORTOV, VE.
THE ACTION OF AN ELECTRON BEAM ON DUST STRUCTURES IN A PLASMA
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 96(3), 440-443 (2003)
672. TRIGGER, SA; EBELING, W; FILINOV, VS; FORTOV, VE; BONITZ, M.
INTERNAL ENERGY OF HIGH-DENSITY HYDROGEN: ANALYTIC APPROXIMATIONS COMPARED WITH PATH INTEGRAL MONTE CARLO CALCULATIONS
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 96(3), 465-479 (2003)
673. FILIPPOV, AV; FORTOV, VE; PAL', AF; STAROSTIN, AN.
MECHANISM OF DIFFUSION OF POSITIVELY CHARGED DUST PARTICLES IN A PHOTOEMISSION CELL UNDER MICROGRAVITY CONDITIONS
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 96(4), 684-694 (2003)
674. FORTOV, VE; VAULINA, OS; PETROV, OF; MOLOTKOV, VI; CHERNYSHEV, AV; LIPAEV, AM; MORFILL, G; THOMAS, H; ROTERMELL, H; KHRAPAK, SA; SEMENOV, YP; IVANOV, AI; KRIKALEV, SK;

- GIDZENKO, YP.
DYNAMICS OF MACROPARTICLES IN A DUSTY PLASMA UNDER MICROGRAVITY CONDITIONS (FIRST EXPERIMENTS ON BOARD THE ISS)
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 96(4), 704-718 (2003)
675. VAULINA, OS; SAMARIAN, AA; JAMES, B; PETROV, OF; FORTOV, VE.
ANALYSIS OF MACROPARTICLE CHARGING IN THE NEAR-ELECTRODE LAYER OF A HIGH-FREQUENCY CAPACITIVE DISCHARGE
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 96(6), 1037-1044 (2003)
676. SHILKIN, NS; DUDIN, SV; GRYAZNOV, VK; MINTSEV, VB; FORTOV, VE.
HALL EFFECT IN NONIDEAL ARGON AND XENON PLASMAS
JETP LETTERS 77(9), 486-489 (2003)
677. RAZORENOV, SV; KANEL', GI; FORTOV, VE.
SUBMICROSECOND STRENGTH OF ALUMINUM AND AN ALUMINUM-MAGNESIUM ALLOY AMG6M AT NORMAL AND ENHANCED TEMPERATURES
PHYSICS OF METALS AND METALLOGRAPHY 95(1), 86-91 (2003)
678. NEFEDOV, AP; VAULINA, OS; PETROV, OF; FORTOV, VE; DRANZHEVSKII, IE; LIPAEV, AM.
DYNAMICS OF DUST GRAINS IN A TWO-COMPONENT DUSTY PLASMA INDUCED BY SOLAR RADIATION UNDER MICROGRAVITY CONDITIONS
PLASMA PHYSICS REPORTS 29(1), 31-41 (2003)
679. LOMONOSOV, IV; FORTOV, VE; FROLOVA, AA; KHISHCHENKO, KV; CHARAKHCHYAN, AA; SHURSHALOV, LV.
NUMERICAL STUDY OF SHOCK COMPRESSION OF GRAPHITE AND ITS CONVERSION TO DIAMOND IN CONICAL TARGETS
TECHNICAL PHYSICS 48(6), 727-735 (2003)
680. FILINOV, V; BONITZ, M; LEVASHOV, P; FORTOV, V; EBELING, W; SCHLANGES, M.
PLASMA PHASE TRANSITION IN HYDROGEN AND ELECTRON-HOLE PLASMAS
CONTRIBUTIONS TO PLASMA PHYSICS 43(5-6), 290-294 (2003)
681. SOKOLOWSKI-TINTEN, K; TEMNOV, VV; ZHOU, P; VON DER LINDE, D; ASHITKOV, S; AGRANAT, MB; FORTOV, VE.
ULTRAFAST LASER-INDUCED STRUCTURAL CHANGES IN ANISOTROPIC SOLIDS
ULTRAFAST PHENOMENA XIII 71, 499-501 (2003)
682. MORFILL, GE; ANNARATONE, BM; BRYANT, P; IVLEV, AV; THOMAS, HM; ZUZIC, M; FORTOV, VE.
A REVIEW OF LIQUID AND CRYSTALLINE PLASMAS - NEW PHYSICAL STATES OF MATTER?
PLASMA PHYSICS AND CONTROLLED FUSION 44, B263-B277 (2002)
683. KOROBENKO, VN; RAKHEL, AD; SAVVATIMSKIY, AI; FORTOV, VE.
MEASUREMENT OF THE ELECTRIC CONDUCTIVITY OF TUNGSTEN IN A CONTINUOUS LIQUID-TO-GAS TRANSITION
PLASMA PHYSICS REPORTS 28(12), 1008-1016 (2002)
684. FORTOV, VE; SOLOMONOV, YS; GOLUB, VV; BAZHENOVA, TV; BORMOTOVA, TA; VOLODIN, VV; EFREMOV, VP; MAKEICH, AA; SHCHERBAK, SB.
SHOCK-WAVE EGRESS FROM A NOZZLE INTO A BOUNDED SPACE
DOKLADY PHYSICS 47(12), 856-858 (2002)
685. FORTOV, VE; MOLOTKOV, VI; NEFEDOV, AP; POUSTYLNİK, MY; TORCHINSKY, VM.
COMMENT ON "DEPENDENCE OF THE DUST-PARTICLE CHARGE ON ITS SIZE IN A GLOW-DISCHARGE PLASMA" - REPLY
PHYSICAL REVIEW LETTERS 89(22), - (2002)
686. FORTOV, VE; YAKUSHEV, VV; KAGAN, KL; LOMONOSOV, IV; MAKSIMOV, EG; MAGNITSKAYA, MV; POSTNOV, VI; YAKUSHEVA, TI.
LITHIUM AT HIGH DYNAMIC PRESSURE

JOURNAL OF PHYSICS-CONDENSED MATTER 14(44), 10809-10816 (2002)

687. ANNARATONE, BM; KHRAPAK, SA; BRYANT, P; MORFILL, GE; ROTHERMEL, H; THOMAS, HM; ZUZIC, M; FORTOV, VE; MOLOTKOV, VI; NEFEDOV, AP; KRIKALEV, S; SEMENOV, YP.

COMPLEX-PLASMA BOUNDARIES

PHYSICAL REVIEW E 66(5), - (2002)

688. TAHIR, NA; SHUTOV, A; VARENTSOV, D; HOFFMANN, DHH; SPILLER, P; LOMONOSOV, I; WIESER, J; JACOBY, J; FORTOV, VE.

HIGH-ENERGY-DENSITY MATTER RESEARCH AT GSI DARMSTADT USING INTENSE HEAVY ION BEAMS LASER AND PARTICLE BEAMS 20(3), 393-397 (2002)

689. HOFFMANN, DHH; FORTOV, VE; LOMONOSOV, IV; MINTSEV, V; TAHIR, NA; VARENTSOV, D; WIESER, J.

UNIQUE CAPABILITIES OF AN INTENSE HEAVY ION BEAM AS A TOOL FOR EQUATION-OF-STATE STUDIES

PHYSICS OF PLASMAS 9(9), 3651-3654 (2002)

690. VAULINA, OS; VLADIMIROV, SV; PETROV, OF; FORTOV, VE.

CRITERIA OF PHASE TRANSITIONS IN A COMPLEX PLASMA

PHYSICAL REVIEW LETTERS 88(24), - (2002)

691. FORTOV, VE; BATANI, D; KILPIO, AV; KRASYUK, IK; LOMONOSOV, IV; PASHININ, PP; SHASHKOV, EV; SEMENOV, AY; VOVCHENKO, VI.

THE SPALL STRENGTH LIMIT OF MATTER AT ULTRAHIGH STRAIN RATES INDUCED BY LASER SHOCK WAVES

LASER AND PARTICLE BEAMS 20(2), 317-320 (2002)

692. BONITZ, M; LEVASHOV, PR; MULENKO, IA; OLENIKOVA, EN; FILINOV, VS; FORTOV, VE; KHOMKIN, AL.

SUPPRESSION OF THE DISSOCIATIVE PHASE TRANSITION IN PLASMA MIXTURES OF MOLECULAR AND NOBLE GASES

PLASMA PHYSICS REPORTS 28(6), 484-488 (2002)

693. RYKOV, VA; KHUDYAKOV, AV; FILINOV, VS; VLADIMIROV, VI; DEPUTATOVA, LV; KRUTOV, DV; NEFEDOV, AP; FORTOV, VE.

DUST GRAIN CHARGES IN A NUCLEAR-TRACK PLASMA AND THE FORMATION OF DYNAMIC VORTEX DUST STRUCTURES

PLASMA PHYSICS REPORTS 28(6), 524-533 (2002)

694. FORTOV, VE; VLADIMIROV, VI; DEPUTATOVA, LV; NEFEDOV, AP; RYKOV, VA; KHUDYAKOV, AV. REMOVAL OF DUST PARTICLES FROM TECHNOLOGICAL PLANTS

DOKLADY PHYSICS 47(5), 367-369 (2002)

6953. VASILYAK, LM; VETCHININ, SP; KADIEVA, PG; POLYAKOV, DN; FORTOV, VE; KHOTINA, A. EFFECT OF PULSED NANOSECOND IONISATION ON THE CHARACTERISTICS OF AN ELECTRIC-

DISCHARGE CO₂ LASER

QUANTUM ELECTRONICS 32(5), 447-448 (2002)

696. FILINOV, V; THOMAS, P; VARGA, I; MEIER, T; BONITZ, M; FORTOV, V; KOCH, SW.

INTERACTING ELECTRONS IN A ONE-DIMENSIONAL RANDOM ARRAY OF SCATTERERS: A QUANTUM DYNAMICS AND MONTE CARLO STUDY

PHYSICAL REVIEW B 65(16), - (2002)

697. VAULINA, OS; NEFEDOV, AP; PETROV, OF; FORTOV, VE.

DIFFUSION IN MICROGRAVITY OF MACROPARTICLES IN A DUSTY PLASMA UNDER SOLAR RADIATION

PHYSICAL REVIEW LETTERS 88(3), - (2002)

698. FORTOV, VE; VASILYAK, LM; VETCHININ, SP; ZIMNUKHOV, VS; NEFEDOV, AP; POLYAKOV, DN.

PLASMA-DUST STRUCTURES AT CRYOGENIC TEMPERATURES

DOKLADY PHYSICS 47(1), 21-24 (2002)

699. TERNOVOI, VY; FILIMONOV, AS; KVITOV, SV; PYALLING, AA; NIKOLAEV, DN; GORDON, YE; FORTOV, VE.
DETERMINATION OF LIQUID-VAPOUR PHASE BOUNDARIES BY A DYNAMIC EXPERIMENTAL METHOD
HIGH TEMPERATURES-HIGH PRESSURES 34(1), 73-79 (2002)
700. KHISHCHENKO, KV; FORTOV, VE; LOMONOSOV, IV.
THERMODYNAMIC PROPERTIES AND PHYSICAL-CHEMICAL TRANSFORMATIONS OF POLYMER
MATERIALS AT HIGH TEMPERATURES AND PRESSURES
INTERNATIONAL JOURNAL OF THERMOPHYSICS 23(1), 211-219 (2002)
701. ZOBININ, AV; USACHEV, AD; PETROV, OF; FORTOV, VE.
DUST-ACOUSTIC INSTABILITY IN AN INDUCTIVE GAS-DISCHARGE PLASMA
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 95(3), 429-439 (2002)
702. NEFEDOV, AP; VAULINA, OS; PETROV, OF; MOLOTKOV, VI; TORCHINSKII, VM; FORTOV, VE;
CHERNYSHEV, AV; LIPAEV, AM; IVANOV, AI; KALERI, AY; SEMENOV, YP; ZALETIN, SV.
THE DYNAMICS OF MACROPARTICLES IN A DIRECT CURRENT GLOW DISCHARGE PLASMA UNDER
MICROGRAVITATION CONDITIONS
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 95(4), 673-681 (2002)
703. VASILYAK, LM; VETCHININ, SP; POLYAKOV, DN; FORTOV, VE.
COOPERATIVE FORMATION OF DUST STRUCTURES IN PLASMA
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 94(3), 521-524 (2002)
704. BELOV, SI; BORISKOV, GV; BYKOV, AI; IL'KAEV, RI; LUK'YANOV, NB; MATVEEV, AY;
MIKHAILOVA, OL; SELEMIR, VD; SIMAKOV, GV; TRUNIN, RF; TRUSOV, IP; URLIN, VD; FORTOV, VE;
SHUIKIN, AN.
SHOCK COMPRESSION OF SOLID DEUTERIUM
JETP LETTERS 76(7), 433-435 (2002)
705. ASHITKOV, SI; AGRANAT, MB; KONDRATENKO, PS; ANISIMOV, SI; FORTOV, VE; TEMNOV, VV;
SOKOLOWSKI-TINTEN, K; RETHFELD, B; ZHOU, P; VON DER LINDE, D.
ULTRAFAST LASER-INDUCED PHASE TRANSITIONS IN TELLURIUM
JETP LETTERS 76(7), 461-464 (2002)
706. ASHITKOV, SI; AGRANAT, MB; KONDRATENKO, PS; ANISIMOV, SI; FORTOV, VE; TEMNOV, VV;
SOKOLOWSKI-TINTEN, K; ZHOU, P; VON DER LINDE, D.
ULTRAFAST STRUCTURAL TRANSFORMATIONS IN GRAPHITE
JETP LETTERS 75(2), 87-90 (2002)
707. VOROB'EV, VS; MALYSHENKO, SP; TKACHENKO, SI; FORTOV, VE.
WHAT INITIATES THE EXPLOSION OF A CURRENT-CARRYING CONDUCTOR?
JETP LETTERS 75(8), 373-377 (2002)
708. OSIP'YAN, YA; FORTOV, VE; KAGAN, KL; KVEDER, VV; KULAKOV, VI; KUR'YANCHIK, AN;
NIKOLAEV, RK; POSTNOV, VI; SIDOROV, NS.
CONDUCTIVITY OF C-60 FULLERENE CRYSTALS UNDER DYNAMIC COMPRESSION UP TO 200 KBAR
JETP LETTERS 75(11), 563-565 (2002)
709. PAL', AF; SIVOKHIN, DV; STAROSTIN, AN; FILIPPOV, AV; FORTOV, VE.
POTENTIAL OF A DUST GRAIN IN A NITROGEN PLASMA WITH A CONDENSED DISPERSE PHASE AT
ROOM AND CRYOGENIC TEMPERATURES
PLASMA PHYSICS REPORTS 28(1), 28-39 (2002)
710. FORTOV, VE.
STRUCTURE AND DYNAMICS OF STRONGLY NON-IDEAL DUSTY PLASMAS
DUSTY PLASMAS IN THE NEW MILLENNIUM 649, 3-12 (2002)
711. FORTOV, VE; MOLOTKOV, VI; EFREMOV, VP; NEFEDOV, AP; POUSTYLNİK, MY; TORCHINSKY, VM.
DUSTY PLASMA STRUCTURES UNDER THE EXTERNAL INFLUENCES
DUSTY PLASMAS IN THE NEW MILLENNIUM 649, 390-393 (2002)

712. FORTOV, VE; KARAKIN, MA; KHAUTIEV, EY; KRAUZ, VI; MEDOVSHCHIKOV, SF; MOKEEV, AN; MYALTON, VV; NEDOSEEV, SL; SMIRNOV, VP; VINOGRADOV, VP.
STUDY OF THE PLASMA FOCUS AS A DRIVER FOR THE MAGNETIC COMPRESSION OF LINERS
DENSE Z-PINCHES 651, 37-42 (2002)
713. KHISHCHENKO, KV; FORTOV, VE; LOMONSOV, IV; PAVLOVSKII, MN; SIMAKOV, GV;
ZHERNOKLETOV, MV.
SHOCK COMPRESSION, ADIABATIC EXPANSION AND MULTI-PHASE EQUATION OF STATE OF CARBON
SHOCK COMPRESSION OF CONDENSED MATTER-2001, PTS 1 AND 2, PROCEEDINGS 620, 759-762 (2002)
714. LEVASHOV, PR; FILINOV, VS; FORTOV, VE; BONITZ, M.
THERMODYNAMIC PROPERTIES OF NONIDEAL STRONGLY DEGENERATE HYDROGEN PLASMA
SHOCK COMPRESSION OF CONDENSED MATTER-2001, PTS 1 AND 2, PROCEEDINGS 620, 119-122 (2002)
715. LEVASHOV, PR; FORTOV, VE; KHISHCHENKO, KV; LOMONOSOV, IV.
ANALYSIS OF ISOBARIC EXPANSION DATA BASED ON SOFT-SPHERE EQUATION OF STATE FOR LIQUID
METALS
SHOCK COMPRESSION OF CONDENSED MATTER-2001, PTS 1 AND 2, PROCEEDINGS 620, 71-74 (2002)
716. LOMONOSOV, IV; FORTOV, VE; KHISHCHENKO, KV; LEVASHOV, PR.
PHASE DIAGRAMS AND THERMODYNAMIC PROPERTIES OF METALS AT HIGH PRESSURES, HIGH
TEMPERATURES
SHOCK COMPRESSION OF CONDENSED MATTER-2001, PTS 1 AND 2, PROCEEDINGS 620, 111-114 (2002)
717. MIKIKIAN, M; BOUFENDI, L; BOUCHOULE, A; MORFILL, GE; THOMAS, HM; ROTHERMEL, H; HAGL,
T; NEFEDOV, AP; FORTOV, VE; MOLOTKOV, VI; PETROV, O; LIPAEV, A; SEMENOV, YP; IVANOV, AI;
AFANAS'EV, V; HAIGNERE, C; KOZEEV, K.
DUST PARTICLES GROWTH AND BEHAVIOR UNDER MICROGRAVITY CONDITIONS
DUSTY PLASMAS IN THE NEW MILLENNIUM 649, 135-138 (2002)
718. MORFILL, GE; THOMAS, HA; ANNARATONE, BM; IVLEV, AV; QUINN, RA; NEFEDOV, AP; FORTOV,
VE.
COMPLEX PLASMAS UNDER MICROGRAVITY CONDITIONS: FIRST RESULTS FROM PKE-NEFEDOV
DUSTY PLASMAS IN THE NEW MILLENNIUM 649, 91-109 (2002)
719. TERNOVOI, VY; FILIMONOV, AS; PYALLING, AA; MINTSEV, VB; FORTOV, VE.
THERMOPHYSICAL PROPERTIES OF HELIUM UNDER MULTIPLE SHOCK COMPRESSION
SHOCK COMPRESSION OF CONDENSED MATTER-2001, PTS 1 AND 2, PROCEEDINGS 620, 107-110 (2002)
720. UTKIN, AV; KOLESNIKOV, SA; PERSHIN, SV; FORTOV, VE.
REACTION ZONE TRANSFORMATION FOR STEADY-STATE DETONATION OF HIGH EXPLOSIVES UNDER
INITIAL DENSITY INCREASE
SHOCK COMPRESSION OF CONDENSED MATTER-2001, PTS 1 AND 2, PROCEEDINGS 620, 938-941 (2002)
721. VAULINA, OS; NEFEDOV, AP; PETROV, OF; FORTOV, VE.
DYNAMICAL PHENOMENA IN STRONGLY COUPLED DUSTY PLASMA UNDER MICROGRAVITY
CONDITIONS
DUSTY PLASMAS IN THE NEW MILLENNIUM 649, 196-199 (2002)
722. ZHERNOKLETOV, MV; LEBEDEVA, TS; MEDVEDEV, AB; MOCHALOV, MA; SHUYKIN, AN; FORTOV,
VE.
THERMODYNAMIC PARAMETERS AND EQUATION OF STATE OF LOW-DENSITY SiO_2 AEROGEL
SHOCK COMPRESSION OF CONDENSED MATTER-2001, PTS 1 AND 2, PROCEEDINGS 620, 763-766 (2002)
723. ZOBININ, AV; USACHEV, AD; FORTOV, VE.
SPATIAL SEPARATION OF DUST PARTICLES BY THEIR SIZES AT THE DIFFUSE EDGE OF RE INDUCTIVE
DISCHARGE PLASMA
DUSTY PLASMAS IN THE NEW MILLENNIUM 649, 293-296 (2002)
724. FORTOV, VE; YAKUSHEV, VV; KAGAN, KL; LOMONOSOV, IV; POSTNOV, VI; YAKUSHEVA, TI;
KURYANCHIK, AN.

ABNORMAL ELECTRIC CONDUCTIVITY OF LITHIUM AT HIGH DYNAMIC PRESSURE
SHOCK COMPRESSION OF CONDENSED MATTER-2001, PTS 1 AND 2, PROCEEDINGS 620, 237-240 (2002)

725. KHISHCHENKO, KV; TKACHENKO, S; FORTOV, VE; LEVASHOV, PR; LOMONOSOV, IV; VOROB'EV, VS.

PHASE TRANSITIONS IN METAL UNDER FAST SELFHEATING BY HIGH-POWER CURRENT PULSE
DENSE Z-PINCHES 651, 313-316 (2002)

726. VAULINA, OS; PETROV, OF; FORTOV, VE.

TRANSPORT OF MACROPARTICLES IN WEAKLY IONIZED DUSTY PLASMA OF GAS DISCHARGES
DUSTY PLASMAS IN THE NEW MILLENNIUM 649, 247-250 (2002)

727. ZOBININ, AV; USACHEV, AD; FORTOV, VE.

DUST-ACOUSTIC WAVE INSTABILITY AT THE DIFFUSE EDGE OF RF INDUCTIVE LOW-PRESSURE GAS
DISCHARGE PLASMA

DUSTY PLASMAS IN THE NEW MILLENNIUM 649, 289-292 (2002)

728. FORTOV, VE; NEFEDOV, AP; MOLOTKOV, VI; PETROV, OF; POUSTYLNİK, MY; TORCHINSKY, VM;
KHRAPAK, AG.

DUSTY PLASMAS IN A DC GLOW DISCHARGE

DUSTY PLASMAS IN THE NEW MILLENNIUM 649, 394-397 (2002)

729. VAULINA, OS; VLADIMIROV, SV; PETROV, OF; FORTOV, VE.

CRITERIA FOR PHASE-TRANSITIONS IN YUKAWA SYSTEMS (DUSTY PLASMA)

DUSTY PLASMAS IN THE NEW MILLENNIUM 649, 471-474 (2002)

730. POSTNOV, VI; FORTOV, VE; YAKUSHEV, VV; YAKUSHEVA, TI.

ELECTRICAL CONDUCTIVITY INVESTIGATION OF GRAPHITE-DIAMOND TRANSITION UNDER
MULTIPLE SHOCK-WAVE COMPRESSION

SHOCK COMPRESSION OF CONDENSED MATTER-2001, PTS 1 AND 2, PROCEEDINGS 620, 233-236 (2002)

731. UTKIN, AV; KOLESNIKOV, SA; FORTOV, VE.

STRUCTURE OF THE STEADY-STATE DETONATION WAVE IN PRESSED RDX

DOKLADY PHYSICS 46(12), 839-841 (2001)

732. GRYAZNOV, VK; DENISOV, OB; KULISH, MI; MINTSEV, VB; ORLOV, NY; FORTOV, VE.

MECHANISM FOR THE DISAPPEARANCE OF SPECTRAL LINES IN A NONIDEAL PLASMA

PLASMA PHYSICS REPORTS 27(12), 1021-1024 (2001)

733. BONITZ, M; MULENKO, IA; OLEJNIKOVA, EN; FILINOV, VS; FORTOV, VE; KHOMKIN, AL.

PHASE TRANSITION IN SUPERDENSE HYDROGEN AND DEUTERIUM

PLASMA PHYSICS REPORTS 27(12), 1025-1031 (2001)

734. FORTOV, VE; NEFEDOV, AP; MOLOTKOV, VI; POUSTYLNİK, MY; TORCHINSKY, VM.

DEPENDENCE OF THE DUST-PARTICLE CHARGE ON ITS SIZE IN A GLOW-DISCHARGE PLASMA

PHYSICAL REVIEW LETTERS 87(20), - (2001)

735. SAMARIAN, AA; VAULINA, OS; NEFEDOV, AP; FORTOV, VE; JAMES, BW; PETROV, OF.

POSITIVELY CHARGED PARTICLES IN DUSTY PLASMAS

PHYSICAL REVIEW E 64(5), - (2001)

736. FORTOV, VE; BATSANOV, SS; GAVRILKIN, SM; KOPANEVA, LI; KOROBENKO, VN; SAVVATIMSKII,
AI.

FORMATION OF DIAMOND-LIKE BORON NITRIDE BY PULSED HEATING

DOKLADY PHYSICS 46(11), 789-791 (2001)

737. VAULINA, OS; SAMARIAN, AA; NEFEDOV, AP; FORTOV, VE.

SELF-EXCITED MOTION OF DUST PARTICLES IN A INHOMOGENEOUS PLASMA

PHYSICS LETTERS A 289(4-5), 240-244 (2001)

738. MULENKO, IA; OLEJNIKOVA, EN; KHOMKIN, AL; FILINOV, VS; BONITZ, M; FORTOV, VE.

PHASE TRANSITION IN DENSE LOW-TEMPERATURE MOLECULAR GASES

PHYSICS LETTERS A 289(3), 141-146 (2001)

739. FORTOV, VE; VLADIMIROV, VI; DEPUTATOVA, LV; NEFEDOV, AP; RYKOV, VA; KHUDYAKOV, AV.
FORMATION OF DUST VORTICES IN A NUCLEAR-EXCITED PLASMA
DOKLADY PHYSICS 46(10), 697-700 (2001)

740. VOROBYEV, AY; PETROV, VA; TITOV, VE; FORTOV, VE.
FORMATION OF A TWO-PHASE ZONE IN THE COURSE OF RAPID SOLIDIFICATION OF REFRACTORY
OXIDES
DOKLADY PHYSICS 46(9), 651-653 (2001)

741. TKACHENKO, SI; KHISHCHENKO, KV; VOROB'EV, VS; LEVASHOV, PR; LOMONOSOV, IV; FORTOV,
VE.
METASTABLE STATES OF LIQUID METAL UNDER CONDITIONS OF ELECTRIC EXPLOSION
HIGH TEMPERATURE 39(5), 674-687 (2001)

742. VAULINA, OS; NEFEDOV, AP; FORTOV, VE; PETROV, OF.
TRANSPORT CHARACTERISTICS OF MACROPARTICLES IN DUSTY PLASMA INDUCED BY SOLAR
RADIATION UNDER MICROGRAVITY CONDITIONS
COSMIC RESEARCH 39(4), 347-350 (2001)

743. FORTOV, VE; NEFEDOV, AP; VLADIMIROV, VI; DEPUTATOVA, LV; BUDNIK, AP; KHUDYAKOV, AV;
RYKOV, VA.
DUST GRAIN CHARGING IN THE NUCLEAR-INDUCED PLASMA
PHYSICS LETTERS A 284(2-3), 118-123 (2001)

744. FILINOV, VS; BONITZ, M; EBELING, W; FORTOV, VE.
THERMODYNAMICS OF HOT DENSE H-PLASMAS: PATH INTEGRAL MONTE CARLO SIMULATIONS AND
ANALYTICAL APPROXIMATIONS
PLASMA PHYSICS AND CONTROLLED FUSION 43(6), 743-759 (2001)

745. ASINOVSKII, EI; KIRILLIN, AV; MARKOVETS, VV; FORTOV, VE.
CHANGE-OVER OF THE CONDUCTIVITY MECHANISM IN A NONPERFECT HELIUM PLASMA ON
COOLING TO SIMILAR TO 5 K
DOKLADY PHYSICS 46(5), 321-325 (2001)

746. NEFEDOV, AP; PETROV, OF; MOLOTKOV, VI; FORTOV, VE.
FORMATION OF LIQUIDLIKE AND CRYSTALLINE STRUCTURES IN DUSTY PLASMAS
IEEE TRANSACTIONS ON PLASMA SCIENCE 29(2), 210-215 (2001)

747. WINTER, J; FORTOV, VE; NEFEDOV, AP.
RADIOACTIVE DUST LEVITATION AND ITS CONSEQUENCES FOR FUSION DEVICES
JOURNAL OF NUCLEAR MATERIALS 290, 509-512 (2001)

748. FORTOV, VE; NEFEDOV, AP; PETROV, OF.
EXPERIMENTAL STUDY OF THE STRUCTURES OF MACROPARTICLES IN THE DUST PLASMA UNDER
MICROGRAVITY CONDITIONS ONBOARD THE MIR ORBITAL COMPLEX
COSMIC RESEARCH 39(2), 201-209 (2001)

749. MINTSEV, VB; GRYAZNOV, VK; KULISH, MI; FORTOV, VE.
EXPLOSIVELY DRIVEN DENSE PLASMA TARGETS FOR THE ION BEAM EXPERIMENTS
CONTRIBUTIONS TO PLASMA PHYSICS 41(2-3), 119-122 (2001)

750. FILINOV, VS; BONITZ, M; KREMP, D; KRAEFT, WD; EBELING, W; LEVASHOV, PR; FORTOV, VE.
PATH INTEGRAL SIMULATIONS OF THE THERMODYNAMIC PROPERTIES OF QUANTUM DENSE PLASMA
CONTRIBUTIONS TO PLASMA PHYSICS 41(2-3), 135-138 (2001)

751. FORTOV, VE; GRYAZNOV, VK; MINTSEV, VB; TERNOVOI, VY; IOSILEVSKI, IL; ZHERNOKLETOV,
MV; MOCHALOV, MA.
THERMOPHYSICAL PROPERTIES OF SHOCK COMPRESSED ARGON AND XENON
CONTRIBUTIONS TO PLASMA PHYSICS 41(2-3), 215-218 (2001)

752. VLADIMIROV, VI; DEPUTATOVA, LV; NEFEDOV, AP; FORTOV, VE; RYKOV, VA; KHUDYAKOV, AV.
DUST VORTICES, CLOUDS, AND JETS IN NUCLEAR-INDUCED PLASMAS
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 93(2), 313-323 (2001)
753. VAULINA, OS; NEFEDOV, AP; PETROV, OF; SAMARYAN, AA; FORTOV, VE.
SELF-OSCILLATIONS OF MACROPARTICLES IN THE DUST PLASMA OF GLOW DISCHARGE
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 93(6), 1184-1189 (2001)
754. BALABANOV, VV; VASILYAK, LM; VETCHININ, SP; NEFEDOV, AP; POLYAKOV, DN; FORTOV, VE.
THE EFFECT OF THE GAS TEMPERATURE GRADIENT ON DUST STRUCTURES IN A GLOW-DISCHARGE
PLASMA
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 92(1), 86-92 (2001)
755. PAL', AF; SEROV, AO; STAROSTIN, AN; FILIPPOV, AV; FORTOV, VE.
NON-SELF-SUSTAINED DISCHARGE IN NITROGEN WITH A CONDENSED DISPERSED PHASE
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 92(2), 235-245 (2001)
756. SAMARYAN, AA; CHERNYSHEV, AV; PETROV, OF; NEFEDOV, AP; FORTOV, VE.
AN ANALYSIS OF ACOUSTIC OSCILLATIONS IN DUST PLASMA STRUCTURES
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 92(3), 454-461 (2001)
757. VAULINA, OS; NEFEDOV, AP; PETROV, OF; FORTOV, VE.
TRANSPORT PROPERTIES OF MACROPARTICLES IN DUST PLASMA INDUCED BY SOLAR RADIATION
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 92(6), 979-985 (2001)
758. FILINOV, VS; FORTOV, VE; BONITZ, M; LEVASHOV, PR.
PHASE TRANSITION IN STRONGLY DEGENERATE HYDROGEN PLASMA
JETP LETTERS 74(7), 384-387 (2001)
759. FORTOV, VE; YAKUSHEV, VV; KAGAN, KL; LOMONOSOV, IV; POSTNOV, VI; YAKUSHEVA, TI;
KURYANCHIK, AN.
ANOMALOUS RESISTIVITY OF LITHIUM AT HIGH DYNAMIC PRESSURE
JETP LETTERS 74(8), 418-421 (2001)
760. FORTOV, VE; NEFEDOV, AP; PETROV, OF.
FORMATION OF ORDERED STRUCTURES AND COLLECTIVE PHENOMENA IN DUSTY PLASMAS
PHYSICA SCRIPTA T89, 12-15 (2001)
761. VLADIMIROV, VI; DEPUTATOVA, LV; MOLOTKOV, VI; NEFEDOV, AP; RYKOV, VA; FILINOV, VS;
FORTOV, VE; KHUDYAKOV, AV.
ORDERED DUSTY STRUCTURES IN NUCLEAR-TRACK NEON AND ARGON PLASMAS
PLASMA PHYSICS REPORTS 27(1), 36-43 (2001)
762. ORLOV, NY; FORTOV, VE.
COMPARATIVE ANALYSIS OF THE THEORETICAL MODELS OF A HOT DENSE PLASMA AND THE
DENSITY FUNCTIONAL THEORY
PLASMA PHYSICS REPORTS 27(1), 44-55 (2001)
763. FORTOV, VE; MOLOTKOV, VI; NEFEDOV, AP; PETROV, OF.
LIQUID- AND CRYSTALLIKE STRUCTURES IN STRONGLY COUPLED DUSTY PLASMAS
HIGH TEMPERATURE MATERIAL PROCESSES 5(1), 99-105 (2001)
764. PETROV, OF; NEFEDOV, AP; FORTOV, VE.
THERMAL DUSTY PLASMAS: DIAGNOSTICS AND RESULTS OF INVESTIGATIONS
PHYSICA SCRIPTA T89, 25-28 (2001)
765. MINTSEV, VB; USHNURTSEV, AE; FORTOV, VE; LEONTYEV, AA; SHURUPOV, AV; KIUTTU, GF.
MULTI-STAGE FLUX-TRAPPING HELICAL FLUX COMPRESSION GENERATORS
PPPS-2001: PULSED POWER PLASMA SCIENCE 2001, VOLS I AND II, DIGEST OF TECHNICAL PAPERS , 994-
997 (2001)
766. FORTOV, VE; MOLOTKOV, VI; NEFEDOV, AP; PETROV, OF.

LIQUID- AND CRYSTALLIKE STRUCTURES IN STRONGLY COUPLED DUSTY PLASMAS
PROGRESS IN PLASMA PROCESSING OF MATERIALS 2001 , 581-587 (2001)

767. STOWE, S; NEUNER, U; BOCK, R; DORNIK, M; FORTOV, VE; FUNK, UN; GEISSEL, M; GOLUBEV, S;
HOFFMANN, DHH; KULISH, M; MINTSEV, V; ROTH, M; SHARKOV, B; SHUTOV, A; SPILLER, P; STETTER,
M; SUSS, W; TAHIR, NA; TAUSCHWITZ, A; YAKUSHEV, V.
HEAVY-ION-INDUCED HYDRODYNAMIC MOTION IN LEAD TARGETS
LASER AND PARTICLE BEAMS 18(4), 573-581 (2000)

768. UTKIN, AV; PERSHIN, SV; FORTOV, VE.
CHANGE IN STRUCTURE OF A DETONATION WAVE IN 2',2',2'-TRINITROETHYL-4,4,4-
TRINITROBUTYRATE WITH INITIAL DENSITY INCREASE
DOKLADY PHYSICS 45(10), 520-522 (2000)

769. FILINOV, VS; FORTOV, VE; BONITZ, M; KREMP, D.
PAIR DISTRIBUTION FUNCTIONS OF DENSE PARTIALLY IONIZED HYDROGEN
PHYSICS LETTERS A 274(5-6), 228-235 (2000)

770. FORTOV, VE; VLADIMIROV, VI; DEPUTATOVA, LV; MOLOTKOV, VI; NEFEDOV, AP; RYKOV, VA;
FILINOV, VS; KHUDYAKOV, AV.
BEHAVIOUR OF DUST PARTICLES IN THE NUCLEAR INDUCED PLASMA
IZVESTIYA AKADEMII NAUK SERIYA FIZICHESKAYA 64(8), 1534-1538 (2000)

771. DIVAKOV, OG; EREMIN, AV; ZIBOROV, VS; FORTOV, VE.
NONEQUILIBRIUM IGNITION OF OXYGEN-HYDROGEN MIXTURES IN THE FRONT OF A WEAK SHOCK
WAVE
DOKLADY CHEMISTRY 373(4-6), 141-144 (2000)

772. SAMARYAN, AA; VAULINA, OS; NEFEDOV, AP; PETROV, OF; FORTOV, VE.
LEVITATION OF CHARGED MACROPARTICLES IN THE ANODE REGION OF A GLOW DISCHARGE
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 91(1), 106-110 (2000)

773. FORTOV, VE; KHRAPAK, AG; KHRAPAK, SA; MOLOTKOV, VI; NEFEDOV, AP; PETROV, OF;
TORCHINSKY, VM.
MECHANISM OF DUST-ACOUSTIC INSTABILITY IN A DIRECT CURRENT GLOW DISCHARGE PLASMA
PHYSICS OF PLASMAS 7(5), 1374-1380 (2000)

774. ZOBININ, AV; NEFEDOV, AP; SINEL'SHCHIKOV, VA; SINKEVICH, OA; USACHEV, AD; FILINOV, VS;
FORTOV, VE.
ORDERED DUSTY STRUCTURES IN THE PLASMA OF AN RF ELECTRODELESS GAS DISCHARGE
PLASMA PHYSICS REPORTS 26(5), 415-423 (2000)

775. FORTOV, VE; NEFEDOV, AP; SINEL'SHCHIKOV, VA; USACHEV, AD; ZOBININ, AV.
FILAMENTARY DUSTY STRUCTURES IN RF INDUCTIVE DISCHARGE
PHYSICS LETTERS A 267(2-3), 179-183 (2000)

776. GRYAZNOV, V; IOSILEVSKI, I; YAKUB, E; FORTOV, V; HYLAND, GJ; RONCHI, C.
IMPROVED IONIC MODEL OF LIQUID URANIUM DIOXIDE
JOURNAL DE PHYSIQUE IV 10(P5), 363-367 (2000)

777. FILINOV, VS; FORTOV, VE; LEVASHOV, PR; BONITZ, M.
QUANTUM DYNAMICS OF STRONGLY COUPLED PARTICLES IN PHASE SPACE
JOURNAL DE PHYSIQUE IV 10(P5), 145-148 (2000)

778. FORTOV, VE; NEFEDOV, AP; SINEL'SHCHIKOV, VA; ZOBININ, AV; USACHEV, AD.
INDUCTIVELY-COUPLED DUSTY PLASMA
JOURNAL DE PHYSIQUE IV 10(P5), 399-402 (2000)

779. ZHUK, AZ; BORODINA, TI; MILYAVSKII, VV; FORTOV, VE.
SHOCK WAVE SYNTHESIS OF CARBYNE FROM GRAPHITE
DOKLADY AKADEMII NAUK 370(3), 328-331 (2000)

780. VAULINA, OS; NEFEDOV, AP; PETROV, OF; FORTOV, VE.
FORMATION OF ORDERED STRUCTURES OF CHARGED MACROPARTICLES IN A PHOTOEMISSION TRAP
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 91(2), 307-313 (2000)
781. ZOBININ, AV; NEFEDOV, AP; SINEL'SHCHIKOV, VA; FORTOV, VE.
ON THE CHARGE OF DUST PARTICLES IN A LOW-PRESSURE GAS DISCHARGE PLASMA
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 91(3), 483-487 (2000)
782. VAULINA, OS; NEFEDOV, AP; PETROV, OF; FORTOV, VE.
INSTABILITY OF PLASMA-DUST SYSTEMS WITH A MACROPARTICLE CHARGE GRADIENT
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 91(6), 1147-1162 (2000)
783. YAKUSHEV, VV; POSTNOV, VI; FORTOV, VE; YAKYSHEVA, TI.
ELECTRICAL CONDUCTIVITY OF WATER DURING QUASI-ISENTROPIC COMPRESSION TO 130 GPA
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 90(4), 617-622 (2000)
784. SAMARYAN, AA; CHERNYSHEV, AV; NEFEDOV, AP; PETROV, OF; MIKHAILOV, YM; MINTSEV, VB;
FORTOV, VE.
STRUCTURES OF THE PARTICLES OF THE CONDENSED DISPERSED PHASE IN SOLID FUEL
COMBUSTION PRODUCTS PLASMA
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 90(5), 817-822 (2000)
785. NEFEDOV, AP; PETROV, OF; MOLOTKOV, VI; FORTOV, VE.
FORMATION OF LIQUIDLIKE AND CRYSTALLINE STRUCTURES IN DUSTY PLASMAS
JETP LETTERS 72(4), 218-226 (2000)
786. FILINOV, VS; BONITZ, M; FORTOV, VE.
HIGH-DENSITY PHENOMENA IN HYDROGEN PLASMA
JETP LETTERS 72(5), 245-248 (2000)
787. MOLOTKOV, VI; NEFEDOV, AP; PUSTYL'NIK, MY; TORCHINSKY, VM; FORTOV, VE; KHRAPAK, AG;
YOSHINO, K.
LIQUID PLASMA CRYSTAL: COULOMB CRYSTALLIZATION OF CYLINDRICAL MACROSCOPIC GRAINS
IN A GAS-DISCHARGE PLASMA
JETP LETTERS 71(3), 102-105 (2000)
788. MILYAVSKIY, VV; BORODINA, TI; ZHUK, AZ; FORTOV, VE.
SHOCK-WAVE-INDUCED TRANSFORMATION OF GRAPHITE TO CARBYNE
MOLECULAR MATERIALS 13(1-4), 361-366 (2000)
789. NEFEDOV, AP; PETROV, OF; FORTOV, VE.
THE FORMATION OF LIQUID AND CRYSTALLINE STRUCTURES IN AN AEROSOL PLASMA
RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY 74, S136-S148 (2000)
790. DEMIDOV, BA; EFREMOV, VP; IVKIN, MV; IVONIN, IA; PETROV, VA; FORTOV, VE.
EVOLUTION OF THE GLOW OF AN AEROGEL IRRADIATED WITH A HIGH-POWER PULSE ELECTRON
BEAM
TECHNICAL PHYSICS 45(7), 870-877 (2000)
791. FEDOROV, VM; LEBEDEV, EF; OSTASHEV, VE; TARAKANOV, VP; UL'YANOV, AV; FORTOV, VE;
YANKOVSKII, BD.
THE MEASUREMENT AND VERIFICATION OF PARAMETERS OF PULSE ELECTROMAGNETIC RADIATION
GENERATED BY A LARGE-RADIUS RING CURRENT
TECHNICAL PHYSICS 45(6), 753-758 (2000)
792. ORLOV, NY; FORTOV, VE.
"EXTRA" BROADENING OF SPECTRAL LINES IN HOT DENSE PLASMAS
DOKLADY AKADEMII NAUK 370(1), 34-37 (2000)
793. DEPUTATOVA, LV; FORTOV, VE; KHUDYAKOV, AV; MOLOTKOV, VI; NEFEDOV, AP; RYKOV, VA;
VLADIMIROV, VI.
NUCLEAR INDUCED DUSTY PLASMA STRUCTURES

FRONTIERS IN DUSTY PLASMAS , 505-508 (2000)

794. FORTOV, VE; MOLOTKOV, VI; TORCHINSKY, VM.
PLASMA CRYSTALS AND LIQUIDS IN DC GLOW DISCHARGE
FRONTIERS IN DUSTY PLASMAS , 445-448 (2000)

795. LEVASHOV, PR; FORTOV, VE; KHISHCHENKO, KV; LOMONOSOV, IV.
EQUATION OF STATE FOR LIQUID METALS
SHOCK COMPRESSION OF CONDENSED MATTER-1999, PTS 1 AND 2 505, 89-92 (2000)

796. LOMONOSOV, IV; FORTOV, VE; KHISHCHENKO, KV; LEVASHOV, PR.
SHOCK WAVE STABILITY IN METALS
SHOCK COMPRESSION OF CONDENSED MATTER-1999, PTS 1 AND 2 505, 85-88 (2000)

797. MINTSEV, VB; TERNOVOI, VY; GRYAZNOV, VK; PYALLING, AA; FORTOV, VE; IOSILEVSKII, IL.
ELECTRICAL CONDUCTIVITY OF SHOCK COMPRESSED XENON
SHOCK COMPRESSION OF CONDENSED MATTER-1999, PTS 1 AND 2 505, 987-990 (2000)

798. NIKOLAEV, DN; FORTOV, VE; FILIMONOV, AS; KVITOV, SV; TERNOVOI, VY.
SIO₂-AEROGEL PLASMA PROPERTIES IN THE ENERGY RANGE UP TO 65 KJ/G
SHOCK COMPRESSION OF CONDENSED MATTER-1999, PTS 1 AND 2 505, 121-124 (2000)

799. TERNOVOI, VY; FILIMONOV, AS; FORTOV, VE; KVITOV, SV; NIKOLAEV, DN; PYALLING, AA.
LIQUID-VAPOR PHASE BOUNDARIES DETERMINATION BY DYNAMIC EXPERIMENTAL METHOD
SHOCK COMPRESSION OF CONDENSED MATTER-1999, PTS 1 AND 2 505, 189-192 (2000)

800. FORTOV, VE; NEFEDOV, AP; NIKITSKY, VP; IVANOV, AI; LIPAEV, AM.
EXPERIMENTAL STUDIES OF UV-INDUCED DUSTY PLASMAS UNDER MICROGRAVITY
FRONTIERS IN DUSTY PLASMAS , 535-538 (2000)

801. FORTOV, VE; TERNOVOI, VY; KVITOV, SV; MINTSEV, VB; NIKOLAEV, DN; PYALLING, AA;
FILIMONOV, AS.
THERMODYNAMIC PROPERTIES AND ELECTRICAL CONDUCTIVITY OF HYDROGEN AT MULTIPLE
SHOCK COMPRESSION UP TO 150 GPA PRESSURE IONIZATION
SHOCK COMPRESSION OF CONDENSED MATTER-1999, PTS 1 AND 2 505, 49-52 (2000)

802. KHISHCHENKO, KV; FORTOV, VE; LOMONOSOV, IV.
EQUATIONS OF STATE AND PHYSICAL-CHEMICAL TRANSFORMATIONS OF SHOCKED ORGANIC
COMPOUNDS
SHOCK COMPRESSION OF CONDENSED MATTER-1999, PTS 1 AND 2 505, 153-156 (2000)

803. KANEL, GI; FORTOV, VE; KHISHCHENKO, KV; UTKIN, AV; RAZORENOV, SV; LOMONOSOV, IV;
MEHLHORN, T; ASAY, JR; CHHABILDAS, LC.
THIN FOIL ACCELERATION METHOD FOR MEASURING THE UNLOADING ISENTROPES OF SHOCK-
COMPRESSED MATTER
SHOCK COMPRESSION OF CONDENSED MATTER-1999, PTS 1 AND 2 505, 1179-1182 (2000)

804. ANISIMOV, SI; INOGAMOV, NA; OPARIN, AM; RETHFELD, B; YABE, T; OGAWA, M; FORTOV, VE.
PULSED LASER EVAPORATION: EQUATION-OF-STATE EFFECTS
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING 69(6), 617-620 (1999)

805. AGRANAT, MB; ASHITKOV, SI; FORTOV, VE; KIRILLIN, AV; KOSTANOVSKII, AV; ANISIMOV, SI;
KONDRATENKO, PS.
USE OF OPTICAL ANISOTROPY FOR STUDY OF ULTRAFast PHASE TRANSFORMATIONS AT SOLID
SURFACES
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING 69(6), 637-640 (1999)

806. KHOREV, IE; ZELEPUGIN, SA; KONYAEV, AA; SIDOROV, VN; FORTOV, VE.
FAILURE OF TARGETS BY A GROUP OF HIGH-VELOCITY BODIES
DOKLADY AKADEMII NAUK 369(4), 481-485 (1999)

807. KANEL, GI; ASAY, JR; BAUMUNG, K; BLUHM, H; CHHABILDAS, LC; FORTOV, VE; GOEL, B; HOPPE, P;

- MEHLHORN, T; RAZORENOV, SV; RUSCH, D; UTKIN, AV.
APPLICATIONS OF THE ION BEAM TECHNIQUE FOR INVESTIGATIONS OF HYPERVELOCITY IMPACTS
INTERNATIONAL JOURNAL OF IMPACT ENGINEERING 23(1), 421-430 (1999)
808. RADCHENKO, AV; KOBENKO, SV; MARZENYUK, IN; KHOREV, IE; KANEL, GI; FORTOV, VE.
RESEARCH ON FEATURES OF BEHAVIOUR OF ISOTROPIC AND ANISOTROPIC MATERIALS UNDER
IMPACT
INTERNATIONAL JOURNAL OF IMPACT ENGINEERING 23(1), 745-756 (1999)
809. DEMIDOV, BA; EFREMOV, VP; IVKIN, MV; IVONIN, IA; PETROV, VA; FORTOV, VE.
FORMATION OF A SHOCK WAVE IN AEROGEL IRRADIATED WITH A HIGH-CURRENT PULSED
ELECTRON BEAM
TECHNICAL PHYSICS 44(12), 1413-1419 (1999)
810. FORTOV, VE; YAKUSHEV, VV; KAGAN, KL; LOMONOSOV, IV; POSTNOV, VI; YAKUSHEVA, TI.
ANOMALOUS ELECTRIC CONDUCTIVITY OF LITHIUM UNDER QUASI-ISENTROPIC COMPRESSION TO 60
GPA (0.6 MBAR). TRANSITION INTO A MOLECULAR PHASE?
JETP LETTERS 70(9), 628-632 (1999)
811. FORTOV, VE; NEFEDOV, AP; MOLOTKOV, VI; DEPUTATOVA, LV; TORCHINSKY, VM; VLADIMIROV,
VI; ZRODNIKOV, AV; DYACHENKO, PP; RYKOV, VA; KHUDYAKOV, AV.
EXPERIMENTAL INVESTIGATION OF MACROPARTICLES BEHAVIOR IN NUCLEAR-INDUCED PLASMAS
IZVESTIYA AKADEMII NAUK SERIYA FIZICHESKAYA 63(11), 2221-2223 (1999)
812. GRYAZNOV, VK; IOSILEVSKI, IL; SEMENOV, AS; YAKUB, ES; FORTOV, VE; HYLAND, GJ; RONCHI, C.
STUDY OF NON-CONGRUENT PHASE EQUILIBRIUM IN HIGH-TEMPERATURE CHEMICALLY REACTING
NONIDEAL PLASMA
IZVESTIYA AKADEMII NAUK SERIYA FIZICHESKAYA 63(11), 2258-2261 (1999)
813. FORTOV, VE; NEFEDOV, AP; PETROV, OF; SAMARYAN, AA; KHODATAEV, YK; CHERNYSHEV, AV.
EFFECT OF THERMOPHORETIC FORCES ON THE FORMATION OF ORDERED STRUCTURES OF
MACROPARTICLES IN A THERMAL PLASMA
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 89(5), 864-871 (1999)
814. MOLOTKOV, VI; NEFEDOV, AP; TORCHINSKII, VM; FORTOV, VE; KHRAPAK, AG.
DUST ACOUSTIC WAVES IN A DC GLOW-DISCHARGE PLASMA
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 89(3), 477-480 (1999)
815. IVANOV, MF; OPARIN, AM; SULTANOV, VG; FORTOV, VE.
SOME PECULIARITIES OF RAYLEIGH-TAYLOR INSTABILITY IN THREE-DIMENSIONAL DEVELOPMENT
DOKLADY AKADEMII NAUK 367(4), 464-467 (1999)
816. FORTOV, VE; NEFEDOV, AP; VLADIMIROV, VI; DEPUTATOVA, LV; MOLOTKOV, VI; RYKOV, VA;
KUDYAKOV, AV.
DUST PARTICLES IN A NUCLEAR-INDUCED PLASMA
PHYSICS LETTERS A 258(4-6), 305-311 (1999)
817. GOSTINTSEV, YA; ISTRATOV, AG; KIDIN, NI; FORTOV, VE.
AUTOTURBULIZATION OF GAS FLAMES: THEORETICAL TREATMENT
HIGH TEMPERATURE 37(4), 603-607 (1999)
818. FORTOV, VE; TERNOVOI, VY; KVITOV, SV; MINTSEV, VB; NIKOLAEV, DN; PYALLING, AA;
FILIMONOV, AS.
ELECTRICAL CONDUCTIVITY OF NONIDEAL HYDROGEN PLASMA AT MEGABAR DYNAMIC PRESSURES
JETP LETTERS 69(12), 926-931 (1999)
819. FORTOV, VE; VLADIMIROV, VI; DEPUTATOVA, LV; MOLOTKOV, VI; NEFEDOV, AP; RYKOV, VA;
TORCHINSKII, VM; KHUDYAKOV, AV.
DUSTY ORDERED STRUCTURES IN THE NUCLEAR-INDUCED PLASMAS
DOKLADY AKADEMII NAUK 366(2), 184-187 (1999)
820. MINEEV, VN; NABOKO, IM; PARSHIKOV, AN; PETUKHOV, VA; FORTOV, VE; GOSTINTSEV, YA;

- GUSEV, PA.
COMBUSTION AND EXPLOSION IN A CLOSED CONICAL CHAMBER: NUMERICAL EXPERIMENT
HIGH TEMPERATURE 37(3), 432-438 (1999)
821. IVLEV, AV; MORFILL, G; FORTOV, VE.
POTENTIAL OF A DIELECTRIC PARTICLE IN A FLOW OF A COLLISIONLESS PLASMA
PHYSICS OF PLASMAS 6(5), 1415-1420 (1999)
822. IVLEV, AV; FORTOV, VE.
ONE-DIMENSIONAL PLASMA EXPANSION INTO A VACUUM IN THE FIELD OF AN ELECTROMAGNETIC
WAVE
PHYSICS OF PLASMAS 6(5), 1508-1514 (1999)
823. FORTOV, VE; MOLOTKOV, VI; NEFEDOV, AP; PETROV, OF.
LIQUID- AND CRYSTALLIKE STRUCTURES IN STRONGLY COUPLED DUSTY PLASMAS
PHYSICS OF PLASMAS 6(5), 1759-1768 (1999)
824. GAMERA, YV; GOSTINTSEV, YA; KORSUNSKII, BL; FORTOV, VE.
THE STATE DIAGRAM FOR GRAPHITE-DIAMOND-FULLERITE SYSTEM
DOKLADY AKADEMII NAUK 366(3), 354-356 (1999)
825. TERNOVOI, VY; FILIMONOV, AS; FORTOV, VE; KVITOV, SV; NIKOLAEV, DN; PYALLING, AA.
THERMODYNAMIC PROPERTIES AND ELECTRICAL CONDUCTIVITY OF HYDROGEN UNDER MULTIPLE
SHOCK COMPRESSION TO 150 GPA
PHYSICA B 265(1-4), 6-11 (1999)
826. GOSTINTSEV, YA; ISTRATOV, AG; KIDIN, NI; FORTOV, VE.
AUTOTURBULIZATION OF GAS FLAMES: ANALYSIS OF EXPERIMENTAL RESULTS
HIGH TEMPERATURE 37(2), 282-288 (1999)
827. MINEEV, VN; NABOKO, IM; PARSHIKOV, AN; PETUKHOV, VA; FORTOV, VE; GOSTINTSEV, YA;
GUSEV, PA.
COMBUSTION AND EXPLOSION IN A CLOSED CONICAL CHAMBER: PHYSICAL EXPERIMENT
HIGH TEMPERATURE 37(2), 289-294 (1999)
828. BELOTSEKOVSKII, OM; ZAKHAROV, IE; NEFEDOV, AP; FILINOV, VS; FORTOV, VE; SINKEVICH, OA.
EFFECTIVE INTERACTION POTENTIAL AND ORDERED STRUCTURES OF DUST PARTICLES IN A GAS-
DISCHARGE PLASMA
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 88(3), 449-459 (1999)
829. IVLEV, AV; SAMSONOV, D; GOREE, J; MORFILL, G; FORTOV, VE.
ACOUSTIC MODES IN A COLLISIONAL DUSTY PLASMA
PHYSICS OF PLASMAS 6(3), 741-750 (1999)
830. AL'TSHULER, LV; FORTOV, VE; FUNTIKOV, AI; TRUNIN, RF; URLIN, VD.
DEVELOPMENT OF HIGH-PRESSURE DYNAMICAL MEASUREMENT TECHNIQUES IN RUSSIA
USPEKHI FIZICHESKIKH NAUK 169(3), 323-344 (1999)
831. AGRANAT, MB; ASHITKOV, SI; FORTOV, VE; ANISIMOV, SI; DYKHNE, AM; KONDRATENKO, PS.
FORMATION OF PERIODIC SURFACE STRUCTURES BY ULTRASHORT LASER PULSES
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 88(2), 370-376 (1999)
832. MINTSEV, V; GRYAZNOV, V; KULISH, M; FILIMONOV, A; FORTOV, V; SHARKOV, B; GOLUBEV, A;
FERTMAN, A; TURTIKOV, V; VISHNEVSKIY, A; KOZODAEV, A; HOFFMANN, DHH; FUNK, U; STOEW, S;
GEISEL, M; JACOBY, J; GARDES, D; CHABOT, M.
STOPPING POWER OF PROTON BEAM IN A WEAKLY NONIDEAL XENON PLASMA
CONTRIBUTIONS TO PLASMA PHYSICS 39(1-2), 45-48 (1999)
833. JURANEK, H; REDMER, R; ROPKE, G; FORTOV, VE; PYALLING, AA.
A COMPARATIVE STUDY FOR THE EQUATION OF STATE OF DENSE FLUID HYDROGEN
CONTRIBUTIONS TO PLASMA PHYSICS 39(3), 251-261 (1999)

8345. BATANI, D; KOENIG, M; BENUZZI, A; KRASYUK, IK; PASHININ, PP; SEMENOV, AY; LOMONOSOV, IV; FORTOV, VE.
PROBLEMS OF MEASUREMENT OF DENSE PLASMA HEATING IN LASER SHOCK-WAVE COMPRESSION
LASER AND PARTICLE BEAMS 17(2), 265-273 (1999)
835. BATANI, D; KOENIG, M; BENUZZI, A; KRASYUK, IK; PASHININ, PP; SEMENOV, AY; LOMONOSOV, IV; FORTOV, VE.
PROBLEMS IN THE OPTICAL MEASUREMENT OF DENSE PLASMA HEATING IN LASER SHOCK WAVE
COMPRESSION
PLASMA PHYSICS AND CONTROLLED FUSION 41(1), 93-103 (1999)
836. FORTOV, VE; SKVORTSOV, VA.
COMPUTER SIMULATION OF HIGH POWER ION BEAMS INTERACTION WITH MATTER
CONTRIBUTIONS TO PLASMA PHYSICS 39(3), 263-280 (1999)
837. GRYAZNOV, V; IOSILEVSKI, I; FORTOV, VE.
THERMODYNAMIC PROPERTIES OF DENSE PLASMA OF SHOCK-COMPRESSED METALS
CONTRIBUTIONS TO PLASMA PHYSICS 39(1-2), 89-92 (1999)
838. FORTOV, VE; SKVORTSOV, VA.
COMPUTER SIMULATION OF HIGH POWER ION BEAMS INTERACTION WITH MATTER
CONTRIBUTIONS TO PLASMA PHYSICS 39(1-2), 159-164 (1999)
839. FORTOV, VE; NEFEDOV, AP; LAKHNO, VD.
DUSTY MOLECULES IN A MAGNETIC FIELD
PHYSICS LETTERS A 250(1-3), 149-151 (1998)
840. FORTOV, VE; NEFEDOV, AP; VAULINA, OS; LIPAEV, AM; MOLOTKOV, VI; SAMARYAN, AA;
NIKITSKI, VP; IVANOV, AI; SAVIN, SF; KALMYKOV, AV; SOLOV'EV, AY; VINOGRADOV, PV.
DUSTY PLASMA INDUCED BY SOLAR RADIATION UNDER MICROGRAVITATIONAL CONDITIONS: AN
EXPERIMENT ON BOARD THE MIR ORBITING SPACE STATION
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 87(6), 1087-1097 (1998)
841. KUROEDOV, YD; DOROFEEV, GL; GERSHENKROY, VL; KREMLEV, MG; FORTOV, VE.
THE OBSERVATION OF SONIC RANGE VELOCITIES OF NORMAL ZONE PROPAGATION IN HIGH
CURRENT DENSITY SUPERCONDUCTOR
PHYSICA C 310(1-4), 400-402 (1998)
842. MINTSEV, V; GRYAZNOV, V; KULISH, M; FORTOV, V; SHARKOV, B; GOLUBEV, A; FERTMAN, A;
MESCHERYAKOV, N; SUSS, W; HOFFMANN, DHH; STETTER, M; BOCK, R; ROTH, M; STOCKL, C; GARDES,
D.
ON MEASUREMENTS OF STOPPING POWER IN EXPLOSIVELY DRIVEN PLASMA TARGETS
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS
SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT 415(3), 715-719 (1998)
843. GRYAZNOV, VK; FORTOV, VE; ZHERNOKLETOV, MV; SIMAKOV, GV; TRUNIN, RF; TRUSOV, LI;
IOSILEVSKII, IL.
SHOCK COMPRESSION AND THERMODYNAMICS OF HIGHLY NONIDEAL METALLIC PLASMA
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 87(4), 678-690 (1998)
844. KANEL, GI; BAUMUNG, K; BLUHM, H; FORTOV, VE.
POSSIBLE APPLICATIONS OF THE ION BEAMS TECHNIQUE FOR INVESTIGATIONS IN THE FIELD OF
EQUATION OF STATE
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS
SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT 415(3), 509-516 (1998)
845. GRYAZNOV, VK; FORTOV, VE; IOSILEVSKI, IL.
EQUATION OF STATE OF SHOCK COMPRESSED PLASMA OF METALS
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS
SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT 415(3), 581-585 (1998)

846. FORTOV, VE; KHISHCHENKO, KV; LEVASHOV, PR; LOMONOSOV, IV.
WIDE-RANGE MULTI-PHASE EQUATIONS OF STATE FOR METALS
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS
SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT 415(3), 604-608 (1998)
847. GERASIMOV, YV; NEFEDOV, AP; SINEL'SHCHIKOV, VA; FORTOV, VE.
FORMATION OF MACROPARTICLE STRUCTURES IN AN RF INDUCTION DISCHARGE PLASMA
TECHNICAL PHYSICS LETTERS 24(10), 774-776 (1998)
848. DEMIDOV, BA; EFREMOV, VP; IVKIN, MV; IVONIN, IA; PETROV, VA; FORTOV, VE.
DETERMINATION OF THE DYNAMIC CHARACTERISTICS OF AEROGELS IN THE ENERGY-RELEASE
ZONE OF A HIGH-POWER ELECTRON BEAM
TECHNICAL PHYSICS 43(10), 1239-1246 (1998)
849. STOWE, S; BOCK, R; DORNIK, M; SPILLER, P; STETTER, M; FORTOV, VE; MINTSEV, V; KULISH, M;
SHUTOV, A; YAKUSHEV, V; SHARKOV, B; GOLUBEV, S; BRUYNETKIN, B; FUNK, U; GEISSEL, M;
HOFFMANN, DHH; TAHIR, NA.
HIGH DENSITY PLASMA PHYSICS WITH HEAVY-ION BEAMS
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS
SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT 415(1-2), 61-67 (1998)
850. ASINOVSKII, EI; KIRILLIN, AV; KOSTANOVSKII, AV; FORTOV, VE.
MELTING PARAMETERS OF CARBON
HIGH TEMPERATURE 36(5), 716-721 (1998)
851. MILYUTIN, P; FORTOV, VE; NIKOLAEV, N.
SCALING PROPERTIES OF TRANSVERSE FLOW IN BJORKEN'S SCENARIO FOR HEAVY ION COLLISIONS
JETP LETTERS 68(3), 191-197 (1998)
852. FORTOV, VE; GERSHENKROI, VL; DOROFEEV, VL; KUROEDOV, YD.
THE REGISTRATION OF ELECTRODETONATION REGIME OF PROPAGATION OF NORMAL ZONES IN
SUPERCONDUCTORS WITH HIGH CURRENT DENSITY
DOKLADY AKADEMII NAUK 361(5), 623-625 (1998)
853. GAL'BURT, VA; IVANOV, MF; POVARNITSYN, ME; FORTOV, VE; KAMENETS, FF; KOROBOV, II.
EVOLUTION OF PLANETARY ATMOSPHERIC DISTURBANCES INDUCED BY THE FALL OF LARGE
CELESTIAL BODIES
IZVESTIYA AKADEMII NAUK FIZIKA ATMOSFERY I OKEANA 34(4), 537-545 (1998)
854. AGRANAT, MB; ASHITKOV, SI; KIRILLIN, AV; FORTOV, VE; ANISIMOV, SI; GRANOVSKII, AB;
KONDRATENKO, PS.
DYNAMICS OF FIRST- AND SECOND-ORDER PHASE TRANSITIONS IN AMORPHOUS MAGNETOOPTIC
TBFECO FILMS
JETP LETTERS 67(11), 953-958 (1998)
855. AGRANAT, MB; ANISIMOV, SI; ASHITKOV, SI; KIRILLIN, AV; KONDRATENKO, PS; KOSTANOVSKII,
AV; FORTOV, VE.
OPTICAL ANISOTROPY AS A TECHNIQUE FOR STUDYING ULTRAFAST PHASE TRANSFORMATIONS AT
SOLID SURFACES
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 86(6), 1184-1190 (1998)
856. PYALLING, A; GRYAZNOV, V; KVITOV, S; NIKOLAEV, D; TERNOVOI, V; FILIMONOV, A; FORTOV, V;
HOFFMANN, D; STOCKL, C; DORNIK, M.
TIME-RESOLVED OPTICAL SPECTROSCOPY OF LEAD AT NEAR CRITICAL-POINT STATES
INTERNATIONAL JOURNAL OF THERMOPHYSICS 19(3), 993-1001 (1998)
857. LOMONOSOV, IV; FORTOV, VE; FROLOVA, AA; KHISHCHENKO, KV; CHARAKHCH'YAN, AA;
SHURSHALOV, LV.
ON ONE POSSIBLE APPROACH TO PRODUCTION OF SYNTHETIC DIAMONDS
DOKLADY AKADEMII NAUK 360(2), 199-201 (1998)

858. LEBEDEV, M; DYABILIN, K; EIDMANN, K; FORTOV, V; GRABOVSKIJ, E; SMIRNOV, V.
SUPERSONIC HEAT WAVE IN LOW DENSITY FOAMS GENERATED BY SOFT X-RADIATION FROM A Z-PINCH PLASMA
PHYSICS LETTERS A 240(1-2), 73-76 (1998)
859. GOLUBEV, A; BASKO, M; FERTMAN, A; KOZODAEV, A; MESHERYAKOV, N; SHARKOV, B;
VISHNEVSKIY, A; FORTOV, V; KULISH, M; GRYAZNOV, V; MINTSEV, V; GOLUBEV, E; PUKHOV, A;
SMIRNOV, V; FUNK, U; STOEWEL, S; STETTER, M; FLIERL, HP; HOFFMANN, DHH; JACOBY, J; IOSILEVSKI,
I.
DENSE PLASMA DIAGNOSTICS BY FAST PROTON BEAMS
PHYSICAL REVIEW E 57(3), 3363-3367 (1998)
860. GRYAZNOV, VK; NIKOLAEV, DN; TERNOVOI, VY; FORTOV, VE; FILIMONOV, AS; KEELER, N.
GENERATION OF A NONIDEAL PLASMA BY SHOCK COMPRESSION OF A HIGHLY POROUS SIO₂
AEROGEL
CHEMICAL PHYSICS REPORTS 17(1-2), 239-245 (1998)
861. SAVVATIMSKI, AI; FORTOV, VE; CHERET, R.
THERMOPHYSICAL PROPERTIES OF LIQUID METALS AND GRAPHITE, AND DIAMOND PRODUCTION
UNDER FAST HEATING
HIGH TEMPERATURES-HIGH PRESSURES 30(1), 1-18 (1998)
862. KHISHCHENKO, KV; LOMONOSOV, IV; FORTOV, VE.
EQUATIONS OF STATE FOR POLYMETHYLMETHACRYLATE AND POLYTETRAFLUOROETHYLENE IN A
WIDE RANGE OF DENSITIES AND TEMPERATURES
HIGH TEMPERATURES-HIGH PRESSURES 30(3), 373-378 (1998)
863. GOSTINTSEV, YA; GAMERA, YV; PETUKHOV, VA; FORTOV, VE.
ADAPTATION OF THE KINETIC EQUATIONS TO CALCULATING GASDYNAMICS OF REACTING
HYDROGEN-OXYGEN MIXTURES
CHEMICAL PHYSICS REPORTS 17(5), 909-915 (1998)
864. PYALLING, AA; GRYAZNOV, VK; KVITOV, SV; NIKOLAEV, DN; TERNOVOI, VY; FILIMONOV, AS;
FORTOV, VE; DORNIK, M; HOFFMANN, DHH; STOCKL, C.
SPECTRAL SINGULARITIES OF OPTICAL RADIATION OF NEAR-CRITICAL STATES OF LEAD
HIGH TEMPERATURE 36(1), 29-34 (1998)
865. DUDIN, SV; FORTOV, VE; GRYAZNOV, VK; MINTSEV, VB; SHILKIN, NS; USHNURTSEV, AE.
INVESTIGATION OF SHOCK COMPRESSED PLASMA PARAMETERS BY INTERACTION WITH MAGNETIC
FIELD
SHOCK COMPRESSION OF CONDENSED MATTER - 1997 429, 793-795 (1998)
866. FORTOV, VE; GRYAZNOV, VK; IOSILEVSKI, IL; TRUNIN, RF; ZHERNOKLETOV, MV; SIMAKOV, G;
TRUSOV, L.
EQUATION OF STATE OF SHOCK COMPRESSED PLASMA OF METALS
STRONGLY COUPLED COULOMB SYSTEMS , 297-301 (1998)
867. GRYAZNOV, VK; IOSILEVSKI, IL; YAKUB, ES; FORTOV, VE; HYLAND, GJ; RONCHI, C.
IONIC MODEL FOR LIQUID URANIUM DIOXIDE
STRONGLY COUPLED COULOMB SYSTEMS , 147-151 (1998)
868. LEVASHOV, PR; FORTOV, VE; KHISHCHENKO, KV; LOMOV, IN; LOMONOSOV, IV.
SHOCK WAVE DATA BASE
SHOCK COMPRESSION OF CONDENSED MATTER - 1997 429, 47-50 (1998)
869. TERNOVOI, VY; FILIMONOV, AS; FORTOV, VE; LOMONOSOV, IV; NIKOLAEV, DN; PYALLING, AA.
INVESTIGATION OF TIN THERMODYNAMICS IN NEAR CRITICAL POINT REGION.
SHOCK COMPRESSION OF CONDENSED MATTER - 1997 429, 87-90 (1998)
870. KHISHCHENKO, KV; FORTOV, VE; LOMONOSOV, IV.
HIGH-TEMPERATURE, HIGH-PRESSURE EQUATION OF STATE FOR POLYMER MATERIALS

SHOCK COMPRESSION OF CONDENSED MATTER - 1997 429, 103-106 (1998)

871. RAZORENOV, SV; BOGATCH, AA; KANEL, GI; UTKIN, AV; FORTOV, VE; GRADY, DE.
ELASTIC-PLASTIC DEFORMATION AND SPALL FRACTURE OF METALS AT HIGH TEMPERATURES
SHOCK COMPRESSION OF CONDENSED MATTER - 1997 429, 447-450 (1998)

872. FORTOV V; PAKHOMOV, E.
ZIRCONIA CONCRETE FOR THE MOLTEN CORE CATCHER OF THE NPP REACTOR
ANNUAL MEETING ON NUCLEAR TECHNOLOGY '98, PROCEEDINGS , 257-260 (1998)

873. AGRANAT, MB; ANISIMOV, SI; ASHITKOV, SL; FORTOV, VE; KIRILLIN, AV; KONDRATENKO, PS;
KOSTANOVSKII, AV.
STUDY OF LASER-INDUCED ULTRAFAST PHASE TRANSITIONS IN SOLID USING OPTICAL ANISOTROPY
HIGH-POWER LASER ABLATION, PTS 1-2 3343, 299-304 (1998)

874. AGRANAT, MB; ANISIMOV, SI; ASHITKOV, SI; FORTOV, VE; KIRILLIN, AV; KONDRATENKO, PS;
KOSTANOVSKII, AV.
PRODUCTION OF AMORPHOUS GRAPHITE IN PICOSECOND LASER INTERACTION EXPERIMENTS
HIGH-POWER LASER ABLATION, PTS 1-2 3343, 950-953 (1998)

875. NIKOLAEV, DN; FILIMONOV, AS; FORTOV, VE; LOMONOSOV, IV; TERNOVOI, VY.
MECHANICAL PROPERTIES OF PRESHOCKED SAPPHIRE DRIVER
SHOCK COMPRESSION OF CONDENSED MATTER - 1997 429, 509-512 (1998)

876. POSTNOV, VI; NIKOLAEV, DN; TERNOVOI, VJ; FILIMONOV, AS; FORTOV, VE; YAKUSHEV, VV.
THE OPPORTUNITY OF THE USE OF SAPPHIRE AT MULTIPLE SHOCK-WAVE COMPRESSION OF
HYDROGEN
SHOCK COMPRESSION OF CONDENSED MATTER - 1997 429, 769-772 (1998)

877. GRYAZNOV, V; KULISH, M; MINTSEV, V; FORTOV, V; SHARKOV, B; GOLUBEV, A; FERTMAN, A;
MESCHERYAKOV, N; HOFFMANN, DHH; STETTER, M; STOCKL, C; GARDES, D.
ABOUT MEASUREMENTS OF STOPPING POWER BEHIND INTENSE SHOCK WAVES
SHOCK COMPRESSION OF CONDENSED MATTER - 1997 429, 879-881 (1998)

878. FORTOV, V; PAKHOMOV, E.
ZIRCONIA CONCRETE FOR THE MOLTEN CORE CATCHER OF THE NPP REACTOR
ANNUAL MEETING ON NUCLEAR TECHNOLOGY '98, PROCEEDINGS , 257-260 (1998)

879. LIPAEV, AM; MOLOTKOV, VI; NEFEDOV, AP; PETROV, OF; TORCHINSKII, VM; FORTOV, VE;
KHRAPAK, AG; KHRAPAK, SA.
ORDERED STRUCTURES IN A NONIDEAL DUSTY GLOW-DISCHARGE PLASMA
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 85(6), 1110-1118 (1997)

880. FORTOV, VE; KOTOSONOV, AS; POSTNOV, VI; UTKIN, AV; YAKUSHEV, VV.
THE CONDUCTIVITY OF MONOCRYSTAL PYROLITIC GRAPHITE UNDER MULTIPLE SHOCK-WAVE
COMPRESSION
DOKLADY AKADEMII NAUK 357(6), 761-764 (1997)

881. AGRANAT, MB; ASHITKOV, SI; KIRILLIN, AV; KOSTANOVSKII, AV; FORTOV, VE; ANISIMOV, SI;
KONDRATENKO, PS.
FORMATION OF AMORPHOUS CARBON ON MELTING OF MICROCRYSTALLINE GRAPHITE BY
PICOSECOND LASER PULSES
JETP LETTERS 66(10), 699-703 (1997)

882. DEMIDOV, BA; IVKIN, MV; IVONIN, IA; PETROV, VA; EFREMOV, VP; FORTOV, VE; KEELER, N.
DETERMINATION OF THE PROFILE OF ENERGY RELEASE FROM A HIGH-POWER ELECTRON BEAM IN
AN AEROGEL
TECHNICAL PHYSICS 42(11), 1264-1269 (1997)

883. NEFEDOV, AP; PETROV, OF; FORTOV, VE.
QUASICRYSTALLINE STRUCTURES IN A STRONGLY COUPLED DUSTY PLASMA
USPEKHI FIZICHESKIKH NAUK 167(11), 1215-1226 (1997)

884. KOSTIN, VV; FORTOV, VE; KRASYUK, IK; KUNIZHEV, BI; TEMROKOV, AI.
INVESTIGATION OF SHOCK-WAVE AND DESTRUCTION PROCESSES UNDER CONDITIONS OF HIGH-VELOCITY IMPACT AND LASER STIMULATION OF A TARGET OF ORGANIC MATERIAL
HIGH TEMPERATURE 35(6), 949-954 (1997)
885. FORTOV, VE; PETROV, VA.
RESEARCH ON THERMOPHYSICAL PROPERTIES OF SUBSTANCES: A NEED FOR INTEGRATION
VESTNIK ROSSIISKOI AKADEMII NAUK 67(10), 912-914 (1997)
886. ZHAKHOVSKII, VV; MOLOTKOV, VI; NEFEDOV, AP; TORCHINSKII, VM; KHRAPAK, AG; FORTOV, VE.
ANOMALOUS HEATING OF A SYSTEM OF DUST PARTICLES IN A GAS-DISCHARGE PLASMA
JETP LETTERS 66(6), 419-425 (1997)
887. FORTOV, VE; KANEL, GI; UTKIN, AV; VOROBIEV, OY; KESSLER, G; KAROW, HU; BAUMUNG, K; GOEL, B.
HOT DENSE MATTER GENERATED BY HIGH-POWER LIGHT ION BEAMS
IEEE TRANSACTIONS ON PLASMA SCIENCE 25(4), 729-732 (1997)
888. ANDREEV, NE; VEISMAN, ME; KOSTIN, VV; FORTOV, VE.
ENERGY REDISTRIBUTION INFLUENCE ON THE SHOCK WAVES GENERATED BY LASER PULSES
IZVESTIYA AKADEMII NAUK SERIYA FIZICHESKAYA 61(8), 1486-1490 (1997)
889. KONDAUROV, VI; KUTLYAROVA, NV; FORTOV, VE.
DAMAGE AND FAILURE OF INITIALLY POROUS BRITTLE MATERIAL
DOKLADY AKADEMII NAUK 355(3), 342-345 (1997)
890. FORTOV, VE; NEFEDOV, AP; TORCHINSKY, VM; MOLOTKOV, VI; PETROV, OF; SAMARIAN, AA; LIPAEV, AM; KHRAPAK, AG.
CRYSTALLINE STRUCTURES OF STRONGLY COUPLED DUSTY PLASMAS IN DC GLOW DISCHARGE STRATA
PHYSICS LETTERS A 229(5), 317-322 (1997)
891. ANISIMOV, SI; ZHAKHOVSKII, VV; FORTOV, VE.
SHOCK WAVE STRUCTURE IN SIMPLE LIQUIDS
JETP LETTERS 65(9), 755-761 (1997)
892. FORTOV, VE; LOMONOSOV, IV.
THERMODYNAMICS OF EXTREME STATES OF MATTER
PURE AND APPLIED CHEMISTRY 69(4), 893-904 (1997)
893. GOSTINTSEV, YA; ISTRATOV, AG; FORTOV, VE.
ON FRACTAL STRUCTURE OF TURBULENT SPHERICAL FLAME
DOKLADY AKADEMII NAUK 353(1), 55-56 (1997)
894. FORTOV, VE; FILINOV, VS; NEFEDOV, AP; PETROV, OF; SAMARYAN, AA; LIPAEV, AM.
CREATION OF ORDERED STRUCTURES IN A CLASSICAL THERMAL PLASMA CONTAINING MACROPARTICLES: EXPERIMENT AND COMPUTER SIMULATION
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 84(3), 489-496 (1997)
895. FORTOV, VE; NEFEDOV, AP; PETROV, OF; SAMARYAN, AA; CHERNYSHEV, AV.
HIGHLY NONIDEAL CLASSICAL THERMAL PLASMAS: EXPERIMENTAL STUDY OF ORDERED MACROPARTICLE STRUCTURES
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS 84(2), 256-261 (1997)
896. KOSTIN, VV; BORISOV, RB; DEGTYAREV, IV; FORTOV, VE.
EMISSION FROM A PLASMA HEATED BY SHORT LASER PULSES
PLASMA PHYSICS REPORTS 23(2), 102-109 (1997)
897. FORTOV, V; KONDAUROV, V; LOMOV, I.
INVESTIGATION OF THE NUCLEAR EXPLOSION EFFECT ON ASTEROIDS
INTERNATIONAL JOURNAL OF IMPACT ENGINEERING 20(1-5), 265-269 (1997)

898. ZHUK, AZ; BORODINA, TI; FORTOV, VE; LASH, AA; VALIANO, GE.
SHOCK METAMORPHISM OF THE GRAPHITE QUASIMONOCRYSTAL
HIGH PRESSURE RESEARCH 15(4), 245-254 (1997)
899. OSTASHEV, VE; FORTOV, VE.
SUMMARY OF HEDRC-IVTAN RAILGUN INVESTIGATIONS
IEEE TRANSACTIONS ON MAGNETICS 33(1), 589-593 (1997)
900. GOSTINTSEV, YA; GUSEV, PA; BOKHON, YA; MINEEV, VN; NABOKO, IM; PETUKHOV, VA; FORTOV, VE.
SHOCK-WAVE IGNITION OF A HYDROGEN-AIR MIXTURE IN A CONICAL CHAMBER
CHEMICAL PHYSICS REPORTS 16(12), 2171-2187 (1997)
901. FORTOV, VE; KOROBENKO, VN; RAKHEL, AD; SAVVATIMSKI, AI.
DIAMONDS PRODUCED BY ELECTRIC WIRE EXPLOSION
11TH IEEE INTERNATIONAL PULSED POWER CONFERENCE - DIGEST OF TECHNICAL PAPERS, VOLS. 1 & 2, 226-230 (1997)
902. GUSEVA, MB; BABINA, VM; BOUSTIE, M; FORTOV, VE; ROMAIN, JP; ZHUK, AZ; BABAEV, VG; KHVOSTOV, VV.
SYNTHESIS OF CARBYNE FROM AMORPHOUS LINE-CHAIN CARBON AND PYROGRAPHITE.
LASERS IN SYNTHESIS, CHARACTERIZATION, AND PROCESSING OF DIAMOND 3484, 15-20 (1997)
903. FORTOV, VE; IVLEV, AV; KLUMOV, BA.
INTERPRETATION OF THE LIGHTCURVES OBTAINED DURING COMET SHOEMAKER-LEVY 9'S IMPACT
ICARUS 124(2), 645-650 (1996)
9047. BURENIN, AN; GOLOVNINA, VV; ISAKOV, VP; FORTOV, VE.
POSSIBLE USE OF EXPLOSION DRIVEN MHD GENERATORS IN GEOPHYSICAL INVESTIGATIONS
DOKLADY AKADEMII NAUK 351(4), 532-534 (1996)
905. ANDREEV, NE; KOSTIN, VV; FORTOV, VE.
GENERATION OF SHOCK WAVES BY ULTRASHORT POWERFUL LASER PULSES: SPECIAL FEATURES
HIGH TEMPERATURE 34(6), 971-975 (1996)
906. BORODINA, TI; FORTOV, VE; LASH, AA; ZHUK, AZ.
SHOCK-INDUCED TRANSFORMATIONS OF CARBYNE
JOURNAL OF APPLIED PHYSICS 80(7), 3757-3759 (1996)
907. FORTOV, VE; NEFEDOV, AP; PETROV, OF; SAMARIAN, AA; CHERNYSHEV, AV.
PARTICLE ORDERED STRUCTURES IN A STRONGLY COUPLED CLASSICAL THERMAL PLASMA
PHYSICAL REVIEW E 54(3), R2236-R2239 (1996)
908. FORTOV, VE; NEFEDOV, AP; PETROV, OF; SAMARIAN, AA; CHERNYSHEV, AV.
EMISSION PROPERTIES AND STRUCTURAL ORDERING OF STRONGLY COUPLED DUST PARTICLES IN A
THERMAL PLASMA
PHYSICS LETTERS A 219(1-2), 89-94 (1996)
909. KNORRE, DG; SHEVELYUKHA, VS; MESYATS, GA; ALFEROV, ZI; OSIPOV, YS; ZHEREBTSOV, GA;
KOPTYUG, VA; RUMYANTSEV, AY; NEFEDOV, OM; SOBOLEV, VN; FORTOV, VE; ELYAKOV, GB;
VELIKHOV, EP.
STATEMENTS OF THE MEETING PARTICIPANTS
VESTNIK ROSSIISKOI AKADEMII NAUK 66(8), 692-705 (1996)
910. FORTOV, VE; NEFEDOVA, AP; TORCHINSKII, VM; MOLOTKOV, VI; KHRAPAK, AG; PETROV, OF;
VOLYKHIN, KF.
CRYSTALLIZATION OF A DUSTY PLASMA IN THE POSITIVE COLUMN OF A GLOW DISCHARGE
JETP LETTERS 64(2), 92-98 (1996)
911. KHISHCHENKO, KV; LOMONOSOV, IV; FORTOV, VE; SHLENSKII, OF.
THERMODYNAMICAL PROPERTIES OF PLASTICS IN WIDE RANGE OF DENSITIES AND TEMPERATURES
DOKLADY AKADEMII NAUK 349(3), 322-325 (1996)

912. KANEL, GI; RAZORENOV, SV; BOGATCH, A; UTKIN, AV; FORTOV, VE; GRADY, DE.
SPALL FRACTURE PROPERTIES OF ALUMINUM AND MAGNESIUM AT HIGH TEMPERATURES
JOURNAL OF APPLIED PHYSICS 79(11), 8310-8317 (1996)
913. FORTOV, VE; GOEL, B; MUNZ, CD; NI, AL; SHUTOV, AV; VOROBIEV, OY.
NUMERICAL SIMULATIONS OF NONSTATIONARY FRONTS AND INTERFACES BY THE GODUNOV
METHOD IN MOVING GRIDS
NUCLEAR SCIENCE AND ENGINEERING 123(2), 169-189 (1996)
914. IVANOV, MF; GALBURT, VA; FORTOV, VE.
ON A POSSIBLE MECHANISM OF THE FORMATION OF LARGE-SCALE DISTURBANCES IN JUPITER'S
ATMOSPHERE AS A RESULT OF THE FALLING OF FRAGMENTS OF COMET SCHOEMAKER-LEVY 9
JETP LETTERS 63(10), 813-817 (1996)
915. KONDAUROV, VI; LOMOV, IN; FORTOV, VE.
ON NUCLEAR EXPLOSION EFFECT ON ASTEROID
DOKLADY AKADEMII NAUK 348(2), 184-187 (1996)
916. ANDREEV, NE; VEISMAN, ME; KOSTIN, VV; FORTOV, VE.
FORMATION OF A SHOCK WAVE UNDER THE EFFECT OF ULTRASHORT LASER PULSES
HIGH TEMPERATURE 34(3), 373-378 (1996)
917. DYABILIN, KS; LEBEDEV, ME; FORTOV, VE; GRABOVSKII, EV; SMIRNOV, VP; VOROBEV, OY.
AN INVESTIGATION OF THE THERMAL PROPERTIES OF MATERIALS UNDER THE EFFECT OF A
POWERFUL PULSE OF SOFT X-RADIATION OF Z-PINCH PLASMA
HIGH TEMPERATURE 34(3), 473-476 (1996)
918. BUSHMAN, AV; ZHERNOKLETOV, MV; LOMONOSOV, IV; SUTULOV, YN; FORTOV, VE;
KHISHCHENKO, KV.
EXPERIMENTAL STUDY OF PHENYLONE AND POLYSTYRENE UNDER THE SHOCK LOADING
CONDITIONS AND ISENTROPIC EXPANSION. PLASTICS STATE EQUATION UNDER HIGH DENSITIES OF
ENERGY
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 109(5), 1662-1670 (1996)
919. FORTOV, VE; IVANOV, MF; IVLEV, AV; GNEDIN, YN; KLUMOV, BA.
COLLISION OF COMET SHOEMAKER-LEVY 9 WITH JUPITER: WHAT DID WE SEE
USPEKHI FIZICHESKIKH NAUK 166(4), 391-422 (1996)
920. BEREZHNOI, AA; SHEVCHENKO, VV; KLUMOV, BA; FORTOV, VE.
COLLISION OF A COMET WITH JUPITER: DETERMINATION OF FRAGMENT PENETRATION DEPTHS
FROM THE MOLECULAR SPECTRA
JETP LETTERS 63(6), 405-410 (1996)
921. GRABOVSKII, EV; VOROBEV, OY; DYABILIN, KS; LEBEDEV, ME; SMIRNOV, VP; ZAKHAROV, SV;
FORTOV, VE; FROLOV, AA.
THEORETICAL AND EXPERIMENTAL STUDY OF Z-PINCH PLASMA AS SOURCE OF POWER PULSE OF
SOFT X-RAY EMISSION FOR THE SHOCK WAVES GENERATION IN CONDENSED TARGETS
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 109(3), 827-838 (1996)
922. FORTOV, VE; NEFEDOV, AP; PETROV, OF; SAMARIAN, AA; CHERNYSHEV, AV; LIPAEV, AM.
EXPERIMENTAL OBSERVATION OF COULOMB ORDERED STRUCTURE IN SPRAYS OF THERMAL DUSTY
PLASMAS
JETP LETTERS 63(3), 187-192 (1996)
923. BAUMUNG, K; BLUHM, HJ; GOEL, B; HOPPE, P; KAROW, HU; RUSCH, D; FORTOV, VE; KANEL, GI;
RAZORENOV, SV; UTKIN, AV; VOROBEV, OYU.
SHOCK-WAVE PHYSICS EXPERIMENTS WITH HIGH-POWER PROTON BEAMS
LASER AND PARTICLE BEAMS 14(2), 181-209 (1996)
924. FORTOV, VE; DYABILIN, KS; LEBEDEV, ME; SMIRNOV, VP; GRABOVSKII, EV.
SHOCK WAVE EXCITATION BY SOFT X RAYS

LASER AND PARTICLE BEAMS 14(4), 789-792 (1996)

925. ADUSHKIN, VV; GOSTINTSEV, YA; PETUKHOV, VA; FORTOV, VE.
TROTLYL EQUIVALENTS OF EXPLOSIONS OF TURBULENT FUEL-AIR CLOUDS
KHIMICHESKAYA FIZIKA 15(10), 68-81 (1996)

926. ANDREEV, NE; FORTOV, VE; KOSTIN, VV; VEISMAN, ME.
HEATING OF THE SOLID TARGETS BY ULTRASHORT INTENSE LASER PULSES
SUPERINTENSE LASER FIELDS - LASER OPTICS '95 AND ICONO '95 2770, 115-125 (1996)

927. KHISHCHENKO, KV; LOMONOSOV, IV; FORTOV, VE.
EQUATIONS OF STATE FOR ORGANIC COMPOUNDS OVER WIDE RANGE OF DENSITIES AND PRESSURES
SHOCK COMPRESSION OF CONDENSED MATTER - 1995 370, 125-128 (1996)

928. LOMONOSOV, IV; FORTOV, VE.
LOOK INTO LIQUID PHASE OF METAL FROM THE EQUATION OF STATE: IS THERE AN AGREEMENT
BETWEEN SHOCK-WAVE AND ISOBARIC-EXPANSION DATA?
SHOCK COMPRESSION OF CONDENSED MATTER - 1995 370, 51-54 (1996)

929. TERNOVOI, VY; FORTOV, VE; KVITOV, SV; NIKOLAEV, DN.
EXPERIMENTAL STUDY OF LEAD CRITICAL POINT PARAMETERS
SHOCK COMPRESSION OF CONDENSED MATTER - 1995 370, 81-84 (1996)

930. FORTOV, V; LEBEDEV, M; DYABILIN, K; VOROBEV, O; SMIRNOV, V; GRABOVSKIJ, E.
GENERATION OF SHOCK WAVES BY SOFT X-RADIATION FROM Z-PINCH PLASMA
SHOCK COMPRESSION OF CONDENSED MATTER - 1995 370, 1255-1258 (1996)

931. FORTOV, VE; KANEL, GI; UTKIN, AV; VOROBIEV, OY; KESSLER, G; KAROW, HU; BAUMUNG, K;
GOEL, G; LIGHT, V.
HOT DENSE MATTER GENERATED BY HIGH-POWER LIGHT ION BEAMS
ISDEIV - XVIIITH INTERNATIONAL SYMPOSIUM ON DISCHARGES AND ELECTRICAL INSULATION IN
VACUUM, PROCEEDINGS, VOLS I AND II, 620-624 (1996)

932. FORTOV, VE; DYABILIN, K; LEBEDEV, M; VOROBIEV, OY; GRABOVSKIJ, E; SMIRNOV, V; GOEL, B.
EXCITATION OF INTENSE SHOCK WAVES BY SOFT X-RADIATION FROM A Z-PINCH PLASMA
LASER INTERACTION AND RELATED PLASMA PHENOMENA (369), 428-433 (1996)

933. FORTOV, V; KANEL, G; UTKIN, A; VOROBIEV, O; KESSLER, G; KAROW, H; BAUMUNG, K; GOEL, B;
LIGHT, V.
INTENSE SHOCK WAVES IN HOT DENSE MATTER GENERATED BY HIGH-POWER LIGHT ION BEAMS
LASER INTERACTION AND RELATED PLASMA PHENOMENA (369), 1060-1065 (1996)

934. GOEL, B; BAUMANN, K; HOBEL, W; VOROBIEV, OY; SHUTOV, AV; FORTOV, VE.
NUMERICAL ANALYSIS OF FOIL ACCELERATION EXPERIMENTS AT KALIF
SHOCK COMPRESSION OF CONDENSED MATTER - 1995 370, 1247-1250 (1996)

935. ANDREEV, NE; FORTOV, VE; KOSTIN, VV.
SHOCK WAVE GENERATION BY ULTRA-SHORT LASER PULSES
SHOCK COMPRESSION OF CONDENSED MATTER - 1995 370, 1259-1260 (1996)

936. AKOPOV, FA; BORODINA, TI; VALYANO, GE; KRISHCHENKO, LP; MINEEV, VN; ONUFRIEV, SV;
PETUKHOV, VA; FORTOV, VE; CHERNYSHOV, GP; SHEINDLIN, AE.
INTERACTION OF THE METALLIC COMPONENTS OF MELT IN A REACTOR CORE WITH ZIRCONIUM
DIOXIDE CERAMIC
ATOMIC ENERGY 79(6), 857-862 (1995)

937. FORTOV, VE; IVLEV, AV; KLUMOV, BA.
COLLISION OF A COMET WITH JUPITER: LIGHT CURVE FINE STRUCTURE
JETP LETTERS 62(10), 772-779 (1995)

938. KULISH, MI; GRYAZNOV, VK; KVITOV, SV; MINTSEV, VB; NIKOLAEV, DN; TERNOVOI, VY;
FILIMONOV, AS; FORTOV, VE; GOLUBEV, AA; SHARKOV, BY; HOFFMANN, D; STOCKL, K; WETZLER, H.

ABSORPTION COEFFICIENTS OF DENSE ARGON AND XENON PLASMA
HIGH TEMPERATURE 33(6), 966-969 (1995)

939. KONDAUROV, VI; LOMOV, IN; FORTOV, VE.
DEFORMATION, DISINTEGRATION AND VAPORIZATION OF COMET SHOEMAKER-LEVY-9 FRAGMENT
DURING MOTION IN JUPITER ATMOSPHERE
DOKLADY AKADEMII NAUK 344(2), 184-188 (1995)

940. ANDREEV, NE; VEISMAN, ME; KOSTIN, VV; FORTOV, VE.
INTERACTION OF ULTRASHORT LASER-PULSES WITH SOLID TARGETS
PLASMA PHYSICS REPORTS 21(8), 677-684 (1995)

941. BAHAEV, VG; GUSEVA, MB; ZHUK, AZ; LASH, AA; FORTOV, VE.
SHOCK-INDUCED SYNTHESIS OF CRYSTALLINE CARBIN
DOKLADY AKADEMII NAUK 343(2), 176-178 (1995)

942. ZAKHAROV, V; FORTOV, V.
SCIENCE IN RUSSIA IS ALREADY IN A COMA
SCIENCE 268(5211), 693-694 (1995)

943. IVLEV, AV; FORTOV, VE; KLUMOV, BA.
COLLISION OF COMET SHOEMAKER-LEVY-9 WITH JUPITER - INTERPRETATION OF OPTICAL
OBSERVATIONS
JETP LETTERS 61(6), 431-437 (1995)

944. BAUMUNG, K; BLUHM, HJ; HOPPE, P; KAROW, HU; RUSCH, D; STOLTZ, O; SINGER, J; KANEL, GI;
UTKIN, AV; RAZORENOV, SV; FORTOV, VE.
HYPERVELOCITY LAUNCHING AND IMPACT EXPERIMENTS ON THE KARLSRUHE LIGHT ION FACILITY
KALIF
INTERNATIONAL JOURNAL OF IMPACT ENGINEERING 17(1-3), 37-46 (1995)

945. VOROBIEV, OY; LOMOV, IN; SHUTOV, AV; KONDAUROV, VI; NI, AL; FORTOV, VE.
APPLICATION OF SCHEMES ON MOVING GRIDS FOR NUMERICAL SIMULATION OF HYPERVELOCITY
IMPACT PROBLEMS
INTERNATIONAL JOURNAL OF IMPACT ENGINEERING 17(4-6), 891-902 (1995)

946. FORTOV, VE; NOVIKOVA, TP; LEBEDEV, AN; ROMANOV, GS; SKVORTSOV, VA; TETEREV, AV.
HYPERVELOCITY IMPACT FUSION OF HEAVY CLUSTERS
INTERNATIONAL JOURNAL OF IMPACT ENGINEERING 17(1-3), 323-328 (1995)

947. LOMONOSOV, IV; FORTOV, VE; KHISHCHENKO, KV.
MODEL OF WIDE-RANGE EQUATIONS OF POLYMER MATERIALS STATE UNDER HIGH-ENERGY
DENSITIES
KHIMICHESKAYA FIZIKA 14(1), 47-52 (1995)

948. ADUSHKIN, VV; GOSTINTSEV, YA; FORTOV, VE.
ENERGY CHARACTERISTICS OF EXPLOSIONS AND PARAMETERS OF SHOCK-WAVES IN THE AIR
UNDER THE DETONATION OF HYDROGEN-CONTAINING CLOUDS IN OPEN ATMOSPHERE
KHIMICHESKAYA FIZIKA 14(6), 59-102 (1995)

949. GRABOVSKII, EV; VOROBEV, OY; DYABILIN, KS; LEBEDEV, ME; SMIRNOV, VP; FORTOV, VE.
GENERATION OF POWER SHOCK-WAVES VIA SOFT-X-RAY RADIATION OF Z-PINCH PLASMA
KHIMICHESKAYA FIZIKA 14(1), 96-99 (1995)

950. RAZORENOV, SV; UTKIN, AV; KANEL, GI; FORTOV, VE; YARUNICHEV, AS; BAUMUNG, K; KAROW,
HU.
DYNAMIC DEFORMATION AND FRACTURE OF HIGH-PURITY TITANIUM
METALLURGICAL AND MATERIALS APPLICATIONS OF SHOCK-WAVE AND HIGH-STRAIN-RATE
PHENOMENA , 235-242 (1995)

951. IVLEV, AV; FORTOV, VE; KLUMOV, BA.
COLLISION OF THE COMET WITH JUPITER - EXPLOSION IN AN INHOMOGENEOUS ATMOSPHERE

JETP LETTERS 60(7), 491-495 (1994)

952. KAMENETS, FF; PUKHOV, AM; IVANOV, MF; FORTOV, VE.
INDUCTION OF VORTEX STRUCTURES IN THE JOVIAN ATMOSPHERE BY FRAGMENTS OF COMET SHOEMAKER-LEVY-9
JETP LETTERS 60(6), 393-398 (1994)

953. GRABOVSKII, EV; SMIRNOV, VP; VOROBEV, OY; DYABILIN, KS; LEBEDEV, ME; OSTRIK, AV; FORTOV, VE.
EXCITATION OF INTENSE SHOCK-WAVES BY SOFT X-RADIATION FROM A Z-PINCH PLASMA
JETP LETTERS 60(1), 1-4 (1994)

954. KLUMOV, BA; KONDAUROV, VI; KONYUKHOV, AV; MESHCHERYAKOV, MV; UTYUZHNIKOV, SV; FORTOV, VE.
NUMERICAL SIMULATIONS OF THE LONG-LIVING CONSEQUENCES OF A COMET SHOEMAKER-LEVY-9 IMPACT WITH JUPITER
DOKLADY AKADEMII NAUK 337(1), 28-35 (1994)

955. KLUMOV, BA; KONDAUROV, VI; FORTOV, VE; KONYUKHOV, AV; UTYUZHNIKOV, SV; MEDVEDEV, YD; SOKOLSKY, AG.
COLLISION OF A COMET SHOEMAKER-LEVY-9 WITH JUPITER - WHAT SHALL WE SEE
USPEKHI FIZICHESKIKH NAUK 164(6), 617-630 (1994)

956. SHTEINBERG, AS; KNYAZIK, VA; FORTOV, VE.
ON THE POSSIBILITY OF GASLESS DETONATION IN CONDENSE MEDIUM
DOKLADY AKADEMII NAUK 336(1), 71-74 (1994)

957. GRYAZNOV, VK; IVANOV, BA; IVLEV, AB; KLUMOV, BA; UTYUZHNIKOV, SV; FORTOV, VE.
COLLISION OF THE COMET SHOEMAKER-LEVY-9 WITH JUPITER - INTERPRETATION OF OBSERVED DATA
EARTH MOON AND PLANETS 66(1), 99-128 (1994)

958. AZARKEVICH, EI; DIDENKO, AN; ZHERLITSYN, AG; KARPUSHIN, YV; LEONTEV, AA; MELNIKOV, GV; MINTSEV, VB; USHURTSEV, AE; FOMENKO, GP; FORTOV, VE; TSVETKOV, VI; SHNEIDER, VB; YASELSKII, BK.
GENERATION OF AN ELECTRON-BEAM AND PULSES OF MICROWAVE-RADIATION USING THE ENERGY OF CHEMICAL EXPLOSIVES
HIGH TEMPERATURE 32(1), 122-127 (1994)

959. BUSHMAN, AV; LOMONOSOV, IV; FORTOV, VE; KHISHCHENKO, KV.
EQUATIONS OF POLYMER MATERIAL STATES AT HIGH-PRESSURES
KHIMICHESKAYA FIZIKA 13(1), 64-81 (1994)

960. BUSHMAN, AV; LOMONOSOV, IV; FORTOV, VE; KHISHCHENKO, KV.
HIGH-PRESSURE EQUATIONS OF STATES OF SATURATED ORGANIC-COMPOUNDS
KHIMICHESKAYA FIZIKA 13(5), 97-106 (1994)

961. LOMONOSOV, IV; BUSHMAN, AV; FORTOV, VE.
EQUATIONS OF STATE FOR METALS AT HIGH-ENERGY DENSITIES
HIGH-PRESSURE SCIENCE AND TECHNOLOGY - 1993, PTS 1 AND 2 , 117-120 (1994)

962. LOMONOSOV, IV; BUSHMAN, AV; FORTOV, VE; KHISHCHENKO, KV.
CALORIC EQUATIONS OF STATE OF STRUCTURAL-MATERIALS
HIGH-PRESSURE SCIENCE AND TECHNOLOGY - 1993, PTS 1 AND 2 , 133-136 (1994)

963. LOMONOSOV, IV; BUSHMAN, AV; FORTOV, VE.
WIDE-RANGE MULTIPHASE EQUATION OF STATE OF METALS
HIGH-PRESSURE SCIENCE AND TECHNOLOGY - 1993, PTS 1 AND 2 , 121-124 (1994)

964. FORTOV, VE; KOSTIN, VV; VOROBEV, OY.
GENERATION OF EXTREME STATES IN CONDENSED MATTER WITH HIGH-ENERGY PARTICLE BEAMS
HIGH-PRESSURE SCIENCE AND TECHNOLOGY - 1993, PTS 1 AND 2 , 1883-1886 (1994)

965. KESLER, G; KAROW, HU; BAUMUNG, K; FORTOV, VE; KANEL, GI; LICHT, V.
HIGH-POWER LIGHT-ION BEAMS AND INTENSE SHOCK-WAVES
HIGH-PRESSURE SCIENCE AND TECHNOLOGY - 1993, PTS 1 AND 2 , 1887-1890 (1994)
966. KANEL, GI; RAZORENOV, SV; UTKIN, AV; FORTOV, VE; BAUMUNG, K; KAROW, HU; RUSCH, D;
LICHT, V.
SPALL STRENGTH OF MOLYBDENUM SINGLE-CRYSTALS
JOURNAL OF APPLIED PHYSICS 74(12), 7162-7165 (1993)
967. KOSTIN, VV; SKVORTSOV, VA; FORTOV, VE.
MATHEMATICAL SIMULATION OF THE DESTRUCTIVE EFFECT OF ION-BEAMS ON METAL TARGETS
HIGH TEMPERATURE 31(6), 826-831 (1993)
968. BUSHMAN, AV; LOMONOSOV, IV; FORTOV, VE; KHISHCHENKO, KV; ZHERNOKLETOV, MV;
SUTULOV, YN.
SHOCK COMPRESSIBILITY AND EQUATION OF STATE OF A POLYIMIDE
JETP LETTERS 58(8), 620-624 (1993)
969. FORTOV, VE; ROMANOV, GS; TETEREV, AV.
HYDRODYNAMICS OF SHOCK-CLUSTER SYNTHESIS
PISMA V ZHURNAL TEKHNIЧЕСКОИ ФИЗИКИ 19(16), 38-41 (1993)
970. KARPUSHIN, YV; LEONTEV, AA; MINTSEV, VB; USHNURTSEV, AE; FORTOV, VE.
EXPERIMENTS ON THE OPERATION OF COMPACT EXPLOSIVE MAGNETIC GENERATORS WITH
MAGNETIC-FLUX TRAPPING
HIGH TEMPERATURE 31(4), 809-816 (1993)
971. BUSHMAN, AV; VOROBEV, VS; KOROBENKO, VN; RAKHEL, AD; SAVVATIMSKII, AI; FORTOV, VE.
DIAMOND PRODUCTION AS A RESULT OF ELECTRICAL EXPLOSIONS OF GRAPHITE-CONTAINING
SAMPLES
INTERNATIONAL JOURNAL OF THERMOPHYSICS 14(3), 565-572 (1993)
972. AVRORIN, EN; VODOLAGO, BK; SIMONENKO, VA; FORTOV, VE.
HIGH-INTENSITY SHOCK-WAVES AND THE EXTREME STATES OF MATTER
USPEKHI FIZICHESKIKH NAUK 163(5), 1-34 (1993)
973. MINTSEV, VB; USHNURTSEV, AE; FORTOV, VE.
MODELS OF OPERATION OF MAGNETOEXPLOSIVE GENERATORS WITH MAGNETIC-FLUX
CONSTRICTION
HIGH TEMPERATURE 31(3), 565-574 (1993)
974. BUSHMAN, AV; FORTOV, VE; LOMONOSOV, IV.
INVESTIGATIONS OF METALS IN THE LIQUID AND PLASMA STATES BY USE OF SHOCK-WAVES
JOURNAL OF NON-CRYSTALLINE SOLIDS 156, 631-638 (1993)
975. BUSHMAN, AV; ZHERNOKLETOV, MV; LOMONOSOV, IV; SUTULOV, YN; FORTOV, VE;
KHISHCHENKO, KV.
INVESTIGATION OF PLEXIGLAS AND TEFLON UNDER DOUBLE SHOCK LOADING AND IN ISENTROPIC
RELEASE WAVES - POLYMERS EQUATION OF STATE AT HIGH-ENERGY DENSITY
DOKLADY AKADEMII NAUK 329(5), 581-584 (1993)
976. OSTASHEV, VE; LEBEDEV, EF; FORTOV, VE.
LIMITATIONS ON THE PROJECTILE LAUNCH VELOCITY IN MAGNETOPLASMA ACCELERATORS
HIGH TEMPERATURE 31(2), 375-383 (1993)
977. ROMANOV, GS; RUDAK, LV; TETEREV, AV; FORTOV, VE.
HYDRODYNAMIC MODEL OF CLUSTER THERMONUCLEAR SYNTHESIS
KHIMICHESKAYA FIZIKA 12(5), 752-753 (1993)
978. FORTOV, VE; MESYATS, GA; SKVORTSOV, VA.
COMPUTER SIMULATION OF MATERIAL EXPLOSION BY PULSED CURRENTS AND ELECTRICAL FIELDS
DIGEST OF TECHNICAL PAPERS - NINTH IEEE INTERNATIONAL PULSED POWER CONFERENCE, VOLS 1

AND 2 , 166-169 (1993)

979. FORTOV, V; LEBEDEV, M; TERNOVOI, V.

RESIDUAL TEMPERATURE-MEASUREMENT OF THE SHOCKED LEAD BY THE FAST PYROMETER
REVUE GENERALE DE THERMIQUE 31(371), 589-591 (1992)

980. ANDREEV, NE; LESHKEVICH, SL; TIKHONCHUK, VT; FORTOV, VE.

NUMERICAL MODELING OF THE EFFECT OF POWERFUL LASER-RADIATION ON PLASMA
HIGH TEMPERATURE 30(5), 724-729 (1992)

981. BUSHMAN, AV; EFREMOV, VP; KANEL, GI; LOMONOSOV, IV; UTKIN, AV; FORTOV, VE; YUSHKOV, ES.

SHOCK COMPRESSIBILITY AND EQUATION OF ORGANOPLASTIC STATE AT HIGH-ENERGY DENSITY
KHIMICHESKAYA FIZIKA 11(3), 410-414 (1992)

982. KANEL, GI; RASORENOV, SV; FORTOV, VE.

CONSTITUTIVE FACTORS OF A SPALL FRACTURE
PROCEEDINGS OF THE 2ND INTERNATIONAL SYMPOSIUM ON INTENSE DYNAMIC LOADING AND ITS
EFFECTS , 364-367 (1992)

983. SKVORTSOV, VA; FORTOV, VE.

DYNAMICS OF INTERACTION OF DIRECTED ENERGY FLOWS WITH MATTER
INTENSE MICROWAVE AND PARTICLE BEAMS III 1629, 379-390 (1992)

984. FORTOV, VE; KOSTIN, VV; ELIEZER, S.

SPALLATION OF METALS UNDER LASER IRRADIATION
JOURNAL OF APPLIED PHYSICS 70(8), 4524-4531 (1991)

985. KOSTIN, VV; SKVORTSOV, VA; FORTOV, VE.

INITIATION OF FAULT FOCI IN METALS UNDER HIGH-ENERGY IMPULSE IMPLANTATION OF IONS
PISMA V ZHURNAL TEKHNIЧЕСКОИ FIZIKI 17(18), 50-55 (1991)

986. ZARETSKII, EB; KANEL, GI; MOGILEVSKII, PA; FORTOV, VE.

DEVICE FOR INVESTIGATING X-RAY-DIFFRACTION ON SHOCK-COMPRESSED MATERIAL
HIGH TEMPERATURE 29(5), 805-811 (1991)

987. POLISHCHUK, AY; HLOPONIN, VS; FORTOV, VE.

CONDUCTIVITY AND REFLECTIVITY OF A SOLID-STATE DENSITY PLASMA FROM 1000 TO 10(6) K
PHYSICS LETTERS A 157(6-7), 406-410 (1991)

988. KVITOV, SV; BUSHMAN, AV; KULISH, MI; LOMONOSOV, IV; POLISHCHUK, AY; SEMENOV, AY;
TERNOVOI, VY; FILIMONOV, AS; FORTOV, VE.

MEASUREMENTS OF THE OPTICAL-EMISSION OF A DENSE BISMUTH PLASMA DURING ITS ADIABATIC
EXPANSION
JETP LETTERS 53(7), 353-357 (1991)

989. KOSTIN, VV; FORTOV, VE.

STUDY OF DEPENDENCE OF ALUMINUM SCABBING STRENGTH ON DEFORMATION RATE
PISMA V ZHURNAL TEKHNIЧЕСКОИ FIZIKI 17(5), 77-80 (1991)

990. FORTOV, VE.

REACTOR MATERIALS UNDER EXTREME CONDITIONS
VESTNIK AKADEMII NAUK SSSR (11), 134-135 (1991)

991. BUSHMAN, AV; LOMONOSOV, IV; FORTOV, VE.

EXPERIMENTAL THERMODYNAMICS OF MATERIALS UNDER EXTREMUM CONDITIONS
EXPERIMENTAL HEAT TRANSFER, FLUID MECHANICS, AND THERMODYNAMICS , 1554-1561 (1991)

992. VOROBEV, OY; NI, AL; FORTOV, VE.

HIGH-PRESSURE GENERATION IN PLANAR SHOCK-WAVES USING HIGH-ENERGY IONIC BEAMS
PISMA V ZHURNAL TEKHNIЧЕСКОИ FIZIKI 16(22), 80-85 (1990)

993. VOROBEV, OY; DEMIDOV, BA; EFREMOV, VP; RUDAKOV, AI; NI, AL; MOROZOV, PV; FORTOV, VE.
USING HIGH-CURRENT ELECTRON-BEAMS FOR GENERATION OF PLANAR SHOCK-WAVES AND
STRICKER THROWING
PISMA V ZHURNAL TEKHNIЧЕСКОИ ФИЗИКИ 16(22), 85-88 (1990)
994. ZHERLITSYN, AG; ISAKOV, VP; LOPATIN, MV; MELNIKOV, GV; MINTSEV, VB; TIMCHENKO, SA;
FORTOV, VE; TSVETKOV, VI.
GENERATION OF HIGH-VOLTAGE PULSES BY AN EXPLOSIVE MAGNETIC GENERATOR WITH AXIAL
INITIATION
HIGH TEMPERATURE 28(5), 757-763 (1990)
995. GAVRILOV, VE; GAVRILOVA, TV; FORTOV, VE.
RECOMBINATION BREMSSTRAHLUNG RADIATION FROM A DENSE LOW-TEMPERATURE XENON AND
ARGON PLASMA
HIGH TEMPERATURE 28(4), 453-457 (1990)
996. BESPALOV, IM; POLISHCHUK, AY; FORTOV, VE.
METAL CONDUCTIVITY FROM THE ROOM-TEMPERATURE TO 10⁻⁶-K - COMPARISON OF WIDE-RANGE
CALCULATION WITH AN EXPERIMENT
PISMA V ZHURNAL TEKHNIЧЕСКОИ ФИЗИКИ 16(11), 80-83 (1990)
997. NI, AL; FORTOV, VE.
PROPAGATION OF NONLINEAR-WAVES IN A MAXWELLIAN VISCOELASTIC MEDIUM
HIGH TEMPERATURE 28(3), 431-437 (1990)
998. POLISHCHUK, AY; FORTOV, VE.
OPTICAL-PROPERTIES OF A SHOCK-COMPRESSED PLASMA OF INERT-GASES - COMPARISON OF THE
WIDE-RANGE MODEL WITH EXPERIMENT
PISMA V ZHURNAL TEKHNIЧЕСКОИ ФИЗИКИ 16(8), 74-78 (1990)
999. BUSHMAN, AV; LESHKEVICH, SL; MESIATS, GA; SKVORTSOV, VA; FORTOV, VE.
MATHEMATICAL SIMULATION OF THE ELECTRO-EXPLOSION OF CATHODE MICROEDGE
DOKLADY AKADEMII NAUK SSSR 312(6), 1368-1371 (1990)
1000. NI, AL; FORTOV, VE.
THE EQUATIONS OF MOTION OF CONDENSED MEDIA WITH CONTINUALLY KINETIC FRACTURE
PMM JOURNAL OF APPLIED MATHEMATICS AND MECHANICS 54(4), 554-559 (1990)
1001. FORTOV, VE; BESPALOV, VE; KULISH, MI; KUZ, SI.
EXPERIMENTAL-STUDY OF OPTICAL-PROPERTIES OF STRONGLY COUPLED PLASMAS
STRONGLY COUPLED PLASMA PHYSICS / , 571-581 (1990)
1002. PROTASOV, YS; TCHUVASHEV, SN; OSTASHEV, VE; FORTOV, VE.
FORMS OF EXISTENCE OF PLASMA-DYNAMIC DISCHARGES INTO COAXIAL AND RAIL ELECTRODE
SYSTEMS
MEGAGAUSS FIELDS AND PULSED POWER SYSTEMS , 789-794 (1990)
1003. ZHERLITSIN, AG; ISAKOV, VP; LOPATIN, MV; MELNIKOV, GV; MINSTEV, VB; TIMCHENKO, SA;
FORTOV, VE; TSVETKOV, BI.
HIGH-VOLTAGE PULSE GENERATION USING AN EXPLOSIVE MAGNETIC GENERATOR WITH AXIS
INITIATION
MEGAGAUSS FIELDS AND PULSED POWER SYSTEMS , 607-613 (1990)
1004. MINTSEV, VB; ZAPOROGHETS, YB; FORTOV, VE.
LASER-BEAM REFLECTION FROM SHOCK-WAVES IN XENON AND SILICON
CURRENT TOPICS IN SHOCK WAVES 208, 549-555 (1990)
1005. LESHKEVICH, SL; SKVORTSOV, VA; FORTOV, VE.
PULSE DESTRUCTION OF METAL PLATES BY PROTON-BEAMS
PISMA V ZHURNAL TEKHNIЧЕСКОИ ФИЗИКИ 15(22), 39-43 (1989)
1006. POLISHCHUK, AY; FORTOV, VE; KHLOPONIN, VS.

APPROXIMATION OF LOCAL ELECTRON-DENSITY FOR THE COMPUTATION OF PLASMA STOPPING POWER IN EXTREME STATES

PISMA V ZHURNAL TEKHNIЧЕСКОИ ФИЗИКИ 15(19), 68-73 (1989)

1007. GLUSHAK, BL; ZHARKOV, AP; ZHERNOKLETOV, MV; TERNOVOI, VY; FILIMONOV, AS; FORTOV, VE.

EXPERIMENTAL-STUDY OF THE THERMODYNAMICS OF A DENSE METAL PLASMA UNDER HIGH-ENERGY CONDITIONS

ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI ФИЗИКИ 96(4), 1301-1318 (1989)

1008. UTKIN, AV; KANEL, GI; FORTOV, VE.

EMPIRICAL MACROKINETICS OF THE DECOMPOSITION OF A DESENSITIZED HEXOGEN IN SHOCK AND DETONATION-WAVES

COMBUSTION EXPLOSION AND SHOCK WAVES 25(5), 625-632 (1989)

1009. PROTASOV, IS; CHUVASHEV, SN; OSTASHEV, VE; FORTOV, VE.

MECHANISMS AND CRITERIA OF STABILITY LOSS OF PLASMODYNAMIC DISCHARGES WITH CURRENT SHEATH

DOKLADY AKADEMII NAUK SSSR 309(2), 339-343 (1989)

1010. BESPALOV, IM; FORTOV, VE; POLISHCHUK, AY; SEVALNIKOV, AY.

THE WIDE-RANGE METHOD FOR CALCULATION OF TRANSPORT-PROPERTIES AND STOPPING POWER OF PLASMA

PHYSICS OF IONIZED GASES // , 389-399 (1989)

1011. AGEEV, VG; BUSHMAN, AV; KULISH, MI; LEBEDEV, ME; LEONTEV, AA; TERNOVOI, VY; FILIMONOV, AS; FORTOV, VE.

THERMODYNAMICS OF A DENSE LEAD PLASMA NEAR THE HIGH-TEMPERATURE BOILING CURVE

JETP LETTERS 48(11), 659-663 (1988)

1012. BUSHMAN, AV; KRASYUK, IK; KRYUKOV, BP; LANDIN, AA; MININ, VF; PASHININ, PP; PROKHOROV, AM; SEMENOV, AY; TERNOVOI, VY; FORTOV, VE.

CUMULATIVE PHENOMENA UNDER PULSE EFFECT ON CONIC TARGETS

PISMA V ZHURNAL TEKHNIЧЕСКОИ ФИЗИКИ 14(19), 1765-1769 (1988)

1013. KONDRATENKO, MM; LEBEDEV, EF; OSTASHEV, VE; SAFONOV, VI; FORTOV, VE; ULYANOV, AV. EXPERIMENTAL INVESTIGATION OF MAGNETOPLASMA ACCELERATION OF DIELECTRIC PROJECTILES IN A RAIL GUN

HIGH TEMPERATURE 26(1), 139-144 (1988)

1014. BELOVOLOV, MI; VOVCHEENKO, VI; KANEL, GI; KRASYUK, IK; KUZNETSOV, AV; PROKHOROV, AM; PASHININ, PP; RAZORENOV, SV; UTKIN, AV; FORTOV, VE.

USE OF LASER INTERFEROMETRIC MEASUREMENTS OF SPEED IN EXPLOSIVE EXPERIMENTS

ZHURNAL TEKHNIЧЕСКОИ ФИЗИКИ 57(5), 918-924 (1987)

1015. ZAPOROZHETS, YB; MINTSEV, VB; FORTOV, VE.

FORMATION OF A METAL PHASE DURING SILICON COMPRESSION BY SHOCK-WAVES

PISMA V ZHURNAL TEKHNIЧЕСКОИ ФИЗИКИ 13(4), 204-207 (1987)

1016. AGEEV, VG; VOVCHEENKO, VI; KRASYUK, IK; NI, AL; PASHININ, PP; PROKHOROV, AM; SEMENOV, AY; FORTOV, VE.

DYNAMICS OF THIN FOIL BRAKING IN XENON ATMOSPHERE

PISMA V ZHURNAL TEKHNIЧЕСКОИ ФИЗИКИ 13(1), 3-9 (1987)

1017. KANEL, GI; RAZORENOV, SV; FORTOV, VE.

THE SPALL STRENGTH OF METALS IN A WIDE-RANGE OF SHOCK LOADING

DOKLADY AKADEMII NAUK SSSR 294(2), 350-352 (1987)

1018. RAZORENOV, SV; KANEL, GI; OSIPOVA, OR; FORTOV, VE.

MEASUREMENT OF THE VISCOSITY OF COPPER IN SHOCK LOADING

HIGH TEMPERATURE 25(1), 57-61 (1987)

1019. NI, AL; FORTOV, VE.
A DIVERGENT SYSTEM OF NON-STATIONARY EQUATIONS OF MOTION OF VISCOELASTIC MEDIA IN EULER COORDINATES
PMM JOURNAL OF APPLIED MATHEMATICS AND MECHANICS 51(6), 758-761 (1987)
1020. ANISIMOV, SI; KARYAGIN, VP; KUDRYASHOV, VA; OSIPYAN, YA; RYZHOV, YA; SVIRSHCHEVSKII, SB; STRUKOV, AZ; TERTERASHVILI, AV; FORTOV, VE; KHALATNIKOV, IM; SHEINDLIN, AE.
DETECTION OF DUST PARTICLES IN THE COMA OF HALLEYS-COMET BY THE FOTON DETECTOR
JETP LETTERS 44(10), 615-618 (1986)
1021. AKKERMAN, AF; BUSHMAN, AV; DEMIDOV, BA; ZAVGORODNY, SF; IVKIN, MV; NI, AL; PETROV, VA; RUDAKOV, LI; FORTOV, VE.
EFFECT OF THE SIZE OF ENERGY-ABSORPTION ZONE ON CHARACTERISTICS OF SHOCK-WAVES EXCITED BY A RELATIVISTIC ELECTRON-BEAM IN METALLIC TARGETS
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 91(5), 1762-1766 (1986)
1022. BUSHMAN, AV; GLUSHAK, BL; GRYAZNOV, VK; ZHERNOKLETOV, MV; KRASYUK, IK; PASHININ, PP; PROKHOROV, AM; TERNOVOI, VY; FILIMONOV, AS; FORTOV, VE.
SHOCK COMPRESSION AND ADIABATIC DECOMPRESSION OF A DENSE BISMUTH PLASMA AT EXTREME THERMAL-ENERGY DENSITIES
JETP LETTERS 44(8), 480-483 (1986)
1023. NI, AL; SUGAK, SG; FORTOV, VE.
QUASI-ONE-DIMENSIONAL ANALYSIS AND NUMERICAL MODELING OF THE STABILITY OF STEADY SHOCK-WAVES IN MEDIA WITH AN ARBITRARY EQUATION OF STATE
HIGH TEMPERATURE 24(3), 435-440 (1986)
1024. KANEL, GI; RAZORENOV, SV; FORTOV, VE.
TITANIUM BREAKDOWN DESTRUCTION BY SHOCK-WAVES OF DIFFERENT INTENSITY
ZHURNAL TEKHNIЧЕСKOI FIZIKI 56(3), 586-588 (1986)
1025. BUSHMAN, AV; KOROTKOVA, GI; NI, AL; FORTOV, VE.
CALCULATION OF THE CONDITIONS FOR THE GENERATION OF A DENSE METAL PLASMA IN AN IRREGULAR COLLISION OF STRONG SHOCK-WAVES
HIGH TEMPERATURE 23(6), 941-946 (1985)
1026. BAZANOV, OV; BESPALOV, VE; ZHARKOV, AP; RUMYANTSEV, BV; FEDOTOVA, TB; FORTOV, VE; MISONOCHNIKOV, AL.
IRREGULAR REFLECTION OF CONICALLY CONVERGING SHOCK-WAVES IN PLEXIGLAS AND COPPER
HIGH TEMPERATURE 23(5), 781-787 (1985)
1027. GLUZMAN, VD; KANEL, GI; LOSKUTOV, VF; FORTOV, VE; KHOREV, IE.
RESISTANCE TO DEFORMATION AND FRACTURE OF 35KH3NM STEEL UNDER CONDITIONS OF SHOCK LOADING
STRENGTH OF MATERIALS 17(8), 1093-1099 (1985)
1028. ANISIMOV, SI; DEMIDOV, BA; RUDAKOV, LI; SAGDEEV, RZ; FORTOV, VE.
SIMULATION OF DAMAGE TO THE PROTECTIVE SHIELDS OF THE VEGA SPACE-VEHICLES BY MEANS OF INTENSE RELATIVISTIC ELECTRON-BEAMS
JETP LETTERS 41(11), 554-557 (1985)
1029. NI, AL; FORTOV, VE.
THE VELOCITY OF DETONATION IN RELAXING MEDIA
KHIMICHESKAYA FIZIKA 4(1), 137-141 (1985)
1030. AKKERMAN, AF; BUSHMAN, AV; DEMIDOV, BA; IVKIN, MV; NI, AL; PETROV, VA; RUDAKOV, LI; FORTOV, VE.
DYNAMICS OF SHOCK-WAVES EXCITED BY A HIGH-CURRENT RELATIVISTIC ELECTRON-BEAM IN ALUMINUM TARGETS
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 89(3), 852-860 (1985)

1031. FORTOV, VE.
EQUATION OF THE IMPERFECT PLASMA STATE IN THE EXTREMAL PARAMETER DOMAIN
USPEKHI FIZICHESKIKH NAUK 147(1), 192-194 (1985)
1032. RAZORENOV, SV; KANEL, GI; FORTOV, VE.
MEASUREMENT OF THE SHOCK-WAVE WIDTH PROFILE IN COPPER
ZHURNAL TEKHNIЧЕСKOI FIZIKI 55(9), 1816-1818 (1985)
1032. KANEL, GI; RAZORENOV, SV; FORTOV, VE.
SPALLING STRENGTH OF METALS IN A WIDE-RANGE OF LOADING DURATIONS
DOKLADY AKADEMII NAUK SSSR 275(2), 369-371 (1984)
1034. AGUREIKIN, VA; ANISIMOV, SI; BUSHMAN, AV; KANEL, GI; KARYAGIN, VP; KONSTANTINOV, AB;
KRYUKOV, BP; MININ, VF; RAZORENOV, SV; SAGDEEV, RZ; SUGAK, SG; FORTOV, VE.
THERMO-PHYSICAL AND GAS-DYNAMIC STUDIES OF THE METEORITE SHIELD FOR THE VEGA
SPACECRAFT
HIGH TEMPERATURE 22(5), 761-778 (1984)
1035. ANISIMOV, SI; BUSHMAN, AV; KANEL, GI; KONSTANTINOV, AB; SAGDEEV, RZ; SUGAK, SG;
FORTOV, VE.
PHYSICS OF THE DAMAGE FROM HIGH-VELOCITY IMPACT
JETP LETTERS 39(1), 8-12 (1984)
1036. BUSHMAN, AV; KRASYUK, IK; PASHININ, PP; PROKHOROV, AM; TERNOVOI, VY; FORTOV, VE.
DYNAMIC COMPRESSIBILITY AND THERMODYNAMICS OF A DENSE ALUMINUM PLASMA AT
MEGABAR PRESSURES
JETP LETTERS 39(8), 411-413 (1984)
1037. BESPALOV, VE; BUBNOV, MM; VOVCHENKO, VI; DEMIDOV, BA; DIANOV, EM; IVKIN, MV;
KRASYUK, IK; PASHININ, PP; PROKHOROV, AM; NEFEDOV, SM; RUDAKOV, LI; SKLYAROV, SN; FORTOV,
VE.
USE OF FIBER LIGHT-GUIDES IN THE DIAGNOSIS OF POWERFUL SHOCK-WAVES
PISMA V ZHURNAL TEKHNIЧЕСKOI FIZIKI 10(1), 55-60 (1984)
1038. ZAPOROZHETS, YB; MINTSEV, VB; FORTOV, VE; BATOVSII, OM.
REFLECTION OF THE LASER-EMISSION FROM SHOCK-COMPRESSED PLASMA OF THE HIGH-PRESSURE
XENON
PISMA V ZHURNAL TEKHNIЧЕСKOI FIZIKI 10(21), 1339-1343 (1984)
1039. ANISIMOV, SI; PROKHOROV, AM; FORTOV, VE.
THE USE OF POWERFUL LASERS FOR THE STUDY OF MATTER UNDER SUPERHIGH PRESSURES
USPEKHI FIZICHESKIKH NAUK 142(3), 395-434 (1984)
1040. ISAKOV, IM; LIKALTER, AA; LOMAKIN, BN; LOPATIN, AD; FORTOV, VE.
ELECTRIC-CONDUCTIVITY OF ADIABATICALLY COMPRESSED ALKALI-METAL VAPOR
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 87(3), 832-839 (1984)
1041. SUGAK, SG; KANEL, GI; FORTOV, VE; NI, AL; STELMAKH, VG.
NUMERICAL MODELING OF THE ACTION OF AN EXPLOSION ON AN IRON SLAB
COMBUSTION EXPLOSION AND SHOCK WAVES 19(2), 239-246 (1983)
1042. BUSHMAN, AV; FORTOV, VE.
MODELS OF EQUATION OF THE MATTER STATE
USPEKHI FIZICHESKIKH NAUK 140(2), 177-232 (1983)
1043. ALEKSEYEV, VA; FORTOV, VE; YAKUBOV, IT.
PHYSICAL-PROPERTIES OF HIGH-PRESSURE PLASMA
USPEKHI FIZICHESKIKH NAUK 139(2), 193-222 (1983)
1044. KANEL, GI; SUGAK, SG; FORTOV, VE.
MODELS OF SPALL FRACTURE
STRENGTH OF MATERIALS 15(8), 1080-1085 (1983)

1045. ANISIMOV, SI; PROKHOROV, AM; FORTOV, VE.
LASER GENERATION OF STRONG IMPACT WAVES
IZVESTIYA AKADEMII NAUK SSSR SERIYA FIZICHESKAYA 46(6), 1081-1089 (1982)
1046. FORTOV, VE.
DYNAMICAL METHODS IN PLASMA PHYSICS
USPEKHI FIZICHESKIKH NAUK 138(3), 361-412 (1982)
1047. MINTSEV, VB; FORTOV, VE.
EXPLOSION-DRIVEN SHOCK-TUBES (REVIEW)
HIGH TEMPERATURE 20(4), 623-645 (1982)
1048. IVANOV, MF; FORTOV, VE; BORISOV, AA.
NUMERICAL-SIMULATION OF THE DEVELOPMENT OF A DETONATION IN GAS VOLUMES OF FINITE THICKNESS
COMBUSTION EXPLOSION AND SHOCK WAVES 17(3), 332-338 (1981)
1049. ANISIMOV, SI; BESPALOV, VE; VOVCHENKO, VI; DREMIN, AN; DUBOVITSKII, FI; ZHARKOV, AP; IVANOV, MF; KRASYUK, IK; PASHININ, PP; PROKHOROV, AM; TERNOVOI, VY; FORTOV, VE; SHCHUR, LN.
GENERATION OF NEUTRONS AS A RESULT OF EXPLOSIVE INITIATION OF THE DD REACTIONS IN CONICAL TARGETS
JETP LETTERS 31(1), 61-64 (1980)
1050. MINTSEV, VB; FORTOV, VE; GRYAZNOV, VK.
ELECTRIC-CONDUCTIVITY OF A HIGH-TEMPERATURE IMPERFECT PLASMA
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 79(1), 116-124 (1980)
1051. GRYAZNOV, VK; ZHERNOKLETOV, MV; ZUBAREV, VN; IOSILEVSKI, IL; FORTOV, VE.
THERMODYNAMIC PROPERTIES OF AN NONIDEAL ARGON AND XENON PLASMA
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 78(2), 573-& (1980)
1052. ALTSHULER, LV; BUSHMAN, AV; ZHERNOKLETOV, MV; ZUBAREV, VN; LEONTIEV, AA; FORTOV, VE.
RELEASE ISENTROPES AND THE EQUATION OF STATE OF METALS AT HIGH-ENERGY DENSITIES
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 78(2), 741-760 (1980)
1053. GUTSEV, GL; GRYAZNOV, VK; FORTOV, VE.
X ALPHA DISCRETE-VARIATION METHOD OF CALCULATING THE EQUILIBRIUM SEPARATION AND ELECTRON-AFFINITY OF THE CS₂ MOLECULE
HIGH TEMPERATURE 18(4), 569-572 (1980)
1054. PAVLOV, GA; FORTOV, VE; OVCHINNIKOV, AA.
CRITICAL PHENOMENA IN THE MOTION OF LOW-TEMPERATURE PLASMA
DOKLADY AKADEMII NAUK SSSR 251(5), 1085-1087 (1980)
1055. BESPALOV, VE; GRYAZNOV, VK; FORTOV, VE.
RADIATION EMISSION BY A SHOCK-COMPRESSED HIGH-PRESSURE ARGON PLASMA
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 76(1), 140 (1979)
1056. MINTSEV, VB; FORTOV, VE.
ELECTRICAL-CONDUCTIVITY OF XENON UNDER SUPERCRITICAL CONDITIONS
JETP LETTERS 30(7), 375 (1979)
1057. IVANOV, YV; MINTSEV, VB; FORTOV, VE; DREMIN, AN.
ELECTRIC-CONDUCTIVITY OF AN IMPERFECT PLASMA
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 71(7), 216 (1976)
1058. GRYAZNOV, VK; IVANOV, YV; STAROSTIN, AN; FORTOV, VE.
THERMOPHYSICAL PROPERTIES OF SHOCK-COMPRESSED ARGON AND XENON
HIGH TEMPERATURE 14(3), 569 (1976)

1059. FORTOV, VE; LEONTEV, AA; DREMIN, AN; GRYAZNOV, VK.
SHOCK-WAVE PRODUCTION OF AN IMPERFECT PLASMA
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 71(7), 225 (1976)
1060. FORTOV, VE; DREMIN, AN.
SEMIEMPIRICAL EQUATION OF STATE OF TRINITROTOLUENE
DOKLADY AKADEMII NAUK SSSR 222(1), 162 (1975)
1061. BESPALOV, VE; GRYAZNOV, VK; DREMIN, AN; FORTOV, VE.
DYNAMIC COMPRESSION OF A NONIDEAL ARGON PLASMA
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 69(6), 2059 (1975)
1062. BUSHMAN, AV; LOMAKIN, BN; SECHENOV, VA; FORTOV, VE; SHCHEKOTOV, OE;
SHARIPDZHANOV, II.
THERMODYNAMICS OF AN NON-IDEAL CESIUM PLASMA
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 69(5), 1624 (1975)
1063. FORTOV, VE; IVANOV, YV; DREMIN, AN; GRYAZNOV, VK; BESPALOV, VE.
EXPLOSION GENERATOR OF NONIDEAL PLASMA
DOKLADY AKADEMII NAUK SSSR 221(6), 1307 (1975)
1064. FORTOV, VE; DREMIN, AN; LEONTEV, AA.
EVALUATION OF PARAMETERS OF CRITICAL-POINT
HIGH TEMPERATURE 13(5), 984 (1975)
1065. FORTOV, VE; LEONTEV, AA; DREMIN, AN; PERSHIN, SV.
ISENTROPIC EXPANSION OF SHOCK-COMPRESSED LEAD
JETP LETTERS 20(1), 13 (1974)
1066. FORTOV, VE; DREMIN, AN.
DETERMINATION OF TEMPERATURE OF SHOCK-COMPRESSED COPPER FROM MEASUREMENTS OF
PARAMETERS IN UNLOADING WAVE
COMBUSTION EXPLOSION AND SHOCK WAVES 9(5), 651 (1973)
1067. FORTOV, VE.
HYDRODYNAMIC EFFECTS IN A NONIDEAL PLASMA
HIGH TEMPERATURE 10(1), 141 (1972)
1068. LOMAKIN, BN; FORTOV, VE.
EQUATION OF STATE OF NONIDEAL CESIUM PLASMA
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI 63(1), 92 (1972)
1069. FORTOV, VE; KRASNIKO.YG.
CONSTRUCTION OF A THERMODYNAMICALLY COMPLETE EQUATION OF STATE OF A NONIDEAL
PLASMA BY MEANS OF DYNAMIC EXPERIMENTS
SOVIET PHYSICS JETP-USSR 32(5), 897 (1971)