PHYSICAL REVIEW E

For editorial and subscription correspondence,
please see inside front cover
(ISSN: 1539-3755)

PERIODICALS
Postmaster send address changes to:
American Institute of Physics
Suite 1NO1
2 Huntington Quadrangle
Melville, NY 11747-4502

THIRD SERIES, VOLUME 69, NUMBER 6 *CONTENTS* **JUNE 2004**

PART 2: CHAOS, HYDRODYNAMICS, PLASMAS, AND RELATED TOPICS

RAPID COMMUNICATIONS

General methods of statistical physics

Eigenvalue density of correlated complex random Wishart matrices *(4 pages)* . . . . . 065101(R)
Steven H. Simon and Aris L. Moustakas

Coevolution of dynamical states and interactions in dynamic networks *(4 pages)* . . . . . 065102(R)
Martín G. Zimmermann, Víctor M. Eguíluz, and Maxi San Miguel

Universal behavior of the coefficients of the continuous equation in competitive growth models *(4 pages)* . . . . 065103(R)
D. Muraca, L. A. Braunstein, and R. C. Buceta

Extreme fluctuations in small-world networks with relaxational dynamics *(4 pages)* . . . . . 065104(R)
H. Guclu and G. Korniss

Percolation transition in a two-dimensional system of Ni granular ferromagnets *(4 pages)* . . . . . 065105(R)
Yakov M. Strelniker, Richard Berkovits, Aviad Frydman, and Shlomo Havlin

Chaos and pattern formation

Coexistence of stable particle and hole solutions for fixed parameter values in a simple reaction diffusion system *(4 pages)* . . . . . 065201(R)
Yumino Hayase, Orazio Descalzi, and Helmut R. Brand

Fluid dynamics

Bifurcation of conical magnetic field *(4 pages)* . . . . . 065301(R)
Vladimir Shtern

Plasma physics

Collective modes of quasi-two-dimensional Yukawa liquids *(4 pages)* . . . . . 065401(R)
Z. Donkó, P. Hartmann, and G. J. Kalman

Alfvén limit in fast ignition *(4 pages)* . . . . . 065402(R)
J. R. Davies

Copyright 2004 by The American Physical Society

(Continued)

1539-3755(200406)69:6:2;1-I

PHYSICAL REVIEW E THIRD SERIES, VOLUME 69, NUMBER 6 JUNE 2004

Classical physics, including nonlinear media and photonic materials

Boosted propagation of femtosecond filaments in air by double-pulse combination *(4 pages)* . . . . . 065601(R)
Luc Bergé

Computational physics

Least-squares finite-element lattice Boltzmann method *(4 pages)* . . . . . 065701(R)
Yusong Li, Eugene J. LeBoeuf, and P. K. Basu

Lattice kinetic simulations in three-dimensional magnetohydrodynamics *(4 pages)* . . . . . 065702(R)
G. Breyiannis and D. Valougeorgis

ARTICLES

General methods of statistical physics

Violation of the Widom scaling law for effective crossover exponents *(5 pages)* 066101
S. Lübeck

Dynamics and asymptotical behavior of spreading processes in a closed system *(5 pages)* 066102
Shi-Jie Xiong

Dynamic scaling of fronts in the quantum *XX* chain *(5 pages)* 066103
V. Hunyadi, Z. Rácz, and L. Sasvári

Temporal series analysis approach to spectra of complex networks *(7 pages)* 066104
Huijie Yang, Fangcui Zhao, Longyu Qi, and Beilai Hu

Behavior of susceptible-infected-susceptible epidemics on heterogeneous networks with saturation *(6 pages)* . . 066105
Jaewook Joo and Joel L. Lebowitz

Scale-free networks of earthquakes and aftershocks *(8 pages)* 066106
Marco Baiesi and Maya Paczuski

Phase transitions of the Ashkin-Teller model including antiferromagnetic interactions on a type of diamond hierarchical lattice *(6 pages)* 066107
Jian-Xin Le and Z. R. Yang

Conformal field theory of the Flory model of polymer melting *(17 pages)* 066108
Jesper Lykke Jacobsen and Jané Kondev

Postcollapse dynamics of self-gravitating Brownian particles and bacterial populations *(15 pages)* 066109
Clément Sire and Pierre-Henri Chavanis

Effect of adaptive cruise control systems on traffic flow *(8 pages)* 066110
L. C. Davis

Numerical study of domain coarsening in anisotropic stripe patterns *(8 pages)* 066111
Denis Boyer

Regularly alternating spin-$\frac{1}{2}$ anisotropic *XY* chains: The ground-state and thermodynamic properties *(13 pages)* 066112
Oleg Derzhko, Johannes Richter, Taras Krokhmalskii, and Oles' Zaburannyi

Return times of random walk on generalized random graphs *(7 pages)* 066113
Naoki Masuda and Norio Konno

(Continued)

PHYSICAL REVIEW E **THIRD SERIES, VOLUME 69, NUMBER 6** **JUNE 2004**

Ising model on the edge-dual of random networks *(10 pages)* 066114
A. Ramezanpour

Phase transitions in periodically driven macroscopic systems *(6 pages)* 066115
Sreedhar B. Dutta

Role of clustering and gridlike ordering in epidemic spreading *(14 pages)* 066116
Thomas Petermann and Paolo De Los Rios

Quiescent string dominance parameter F and classification of one-dimensional cellular automata *(11 pages)* 066117
Sunao Sakai, Megumi Kanno, and Yukari Saito

Boundary and impurity effects on the entanglement of Heisenberg chains *(7 pages)* 066118
Xiaoguang Wang

Effective temperature in nonequilibrium steady states of Langevin systems with a tilted periodic potential *(6 pages)* 066119
Kumiko Hayashi and Shin-ichi Sasa

Resonance overlap, secular effects, and nonintegrability: An approach from ensemble theory *(10 pages)* 066120
Chun-Biu Li, Dean J. Driebe, and Tomio Petrosky

Measure of predictability *(13 pages)* 066121
Weiguang Yao, Christopher Essex, Pei Yu, and Matt Davison

Evolutionary minority game: The roles of response time and mutation threshold *(4 pages)* 066122
Shahar Hod and Ehud Nakar

Melting of polydisperse hard disks *(7 pages)* 066123
Sander Pronk and Daan Frenkel

Hard disks in narrow channels *(7 pages)* 066124
Ch. Forster, D. Mukamel, and H. A. Posch

Stability of vacuum in coupled directed percolation processes *(6 pages)* 066125
Sungchul Kwon and Hyunggyu Park

Statistical mechanics and thermodynamic limit of self-gravitating fermions in D dimensions *(14 pages)* 066126
Pierre-Henri Chavanis

Reinforcing the resilience of complex networks *(7 pages)* 066127
Luciano da Fontoura Costa

Totally asymmetric exclusion process on chains with a double-chain section in the middle: Computer simulations and a simple theory *(13 pages)* 066128
Jordan Brankov, Nina Pesheva, and Nadezhda Bunzarova

Anisotropic limit of the bond-percolation model and conformal invariance in curved geometries *(10 pages)* 066129
Youjin Deng and Henk W. J. Blöte

Dynamics of rumor spreading in complex networks *(7 pages)* 066130
Yamir Moreno, Maziar Nekovee, and Amalio F. Pacheco

Random matrix ensembles from nonextensive entropy *(7 pages)* 066131
Fabricio Toscano, Raúl O. Vallejos, and Constantino Tsallis

(Continued)

PHYSICAL REVIEW E **THIRD SERIES, VOLUME 69, NUMBER 6** **JUNE 2004**

Experiment, theory, and simulation of the evacuation of a room without visibility *(10 pages)* 066132
Motonari Isobe, Dirk Helbing, and Takashi Nagatani

Fast algorithm for detecting community structure in networks *(5 pages)* 066133
M. E. J. Newman

Driven diffusive systems: How steady states depend on dynamics *(10 pages)* 066134
Wooseop Kwak, D. P. Landau, and B. Schmittmann

Percolation on a multifractal *(6 pages)* 066135
G. Corso, J. E. Freitas, L. S. Lucena, and R. F. Soares

Generalized determinant solution of the discrete-time totally asymmetric exclusion process and zero-range process *(9 pages)* 066136
J. G. Brankov, V. B. Priezzhev, and R. V. Shelest

Cooperating attackers in neural cryptography *(4 pages)* 066137
Lanir N. Shacham, Einat Klein, Rachel Mislovaty, Ido Kanter, and Wolfgang Kinzel

Estimating mutual information *(16 pages)* 066138
Alexander Kraskov, Harald Stögbauer, and Peter Grassberger

First-order phase transition of fixed connectivity surfaces *(6 pages)* 066139
Hiroshi Koibuchi, Nobuyuki Kusano, Atsusi Nidaira, Komei Suzuki, and Mitsuru Yamada

Absorbing state phase transitions with quenched disorder *(16 pages)* 066140
Jef Hooyberghs, Ferenc Iglói, and Carlo Vanderzande

Derivation of amplitude equations for nonlinear oscillators subject to arbitrary forcing *(6 pages)* 066141
Catalina Mayol, Raúl Toral, and Claudio R. Mirasso

Chaos and pattern formation

Influence of branch points in the complex plane on the transmission through double quantum dots *(14 pages)* 066201
I. Rotter and A. F. Sadreev

Optical patterns with different wavelengths *(11 pages)* 066202
G. Kozyreff and M. Tlidi

Continuous control of chaos based on the stability criterion *(9 pages)* 066203
Hong Jie Yu, Yan Zhu Liu, and Jian Hua Peng

Semiclassical approximations based on complex trajectories *(14 pages)* 066204
A. D. Ribeiro, M. A. M. de Aguiar, and M. Baranger

Eigenmodes and symmetry selection mechanisms in circular large-aperture vertical-cavity surface-emitting lasers *(14 pages)* 066205
I. V. Babushkin, N. A. Loiko, and T. Ackemann

Pattern formation in diffusive-advective coupled map lattices *(12 pages)* 066206
Pedro G. Lind, João Corte-Real, and Jason A. C. Gallas

Role of complexing agents in the appearance of Turing patterns *(10 pages)* 066207
Damián E. Strier and Silvina Ponce Dawson

Three-body dynamics in a (1+1)-dimensional relativistic self-gravitating system *(16 pages)* 066208
J. J. Malecki and R. B. Mann

(Continued)

PHYSICAL REVIEW E **THIRD SERIES, VOLUME 69, NUMBER 6** **JUNE 2004**

Consequences of nonlocal connections in networks of chaotic maps under threshold activated coupling *(6 pages)* 066209
Sudeshna Sinha

Onset of synchronization in systems of globally coupled chaotic maps *(13 pages)* 066210
Seung-Jong Baek and Edward Ott

Experimental control of coherence of a chaotic oscillator *(5 pages)* 066211
S. Boccaletti, E. Allaria, and R. Meucci

Average patterns and coherent phenomena in wide aperture lasers *(11 pages)* 066212
G. D'Alessandro, F. Papoff, E. Louvergneaux, and P. Glorieux

Dislocation dynamics in an anisotropic stripe pattern *(6 pages)* 066213
Carina Kamaga, Fatima Ibrahim, and Michael Dennin

Controllability of flow turbulence *(12 pages)* 066214
Shuguang Guan, G. W. Wei, and C.-H. Lai

Spatial patterns of desynchronization bursts in networks *(11 pages)* 066215
Juan G. Restrepo, Edward Ott, and Brian R. Hunt

Classical intermittency and the quantum Anderson transition *(4 pages)* 066216
Antonio M. García-García

Resonance tongues and patterns in periodically forced reaction-diffusion systems *(10 pages)* 066217
Anna L. Lin, Aric Hagberg, Ehud Meron, and Harry L. Swinney

Crash test for the Copenhagen problem *(6 pages)* 066218
Jan Nagler

Fluid dynamics

Liquid flow induced by ion evaporation in an electrified meniscus *(10 pages)* 066301
F. J. Higuera

Three-dimensional simulation of square jets in cross-flow *(20 pages)* 066302
Amalendu Sau, Tony W. H. Sheu, Robert R. Hwang, and W. C. Yang

Dynamics of laser-induced electroconvection pulses *(10 pages)* 066303
N. C. Giebink, E. R. Johnson, S. R. Saucedo, E. W. Miles, K. K. Vardanyan, D. R. Spiegel, and C. C. Allen

Experimental demonstration of thermoacoustic energy conversion in a resonator *(6 pages)* 066304
Tetsushi Biwa, Yusuke Tashiro, Uichiro Mizutani, Motoki Kozuka, and Taichi Yazaki

Chaotic flow and efficient mixing in a microchannel with a polymer solution *(8 pages)* 066305
Teodor Burghelea, Enrico Segre, Israel Bar-Joseph, Alex Groisman, and Victor Steinberg

Double Rosensweig instability in a ferrofluid sandwich structure *(8 pages)* 066306
Dirk Rannacher and Andreas Engel

Macroscopic permeability of three-dimensional fracture networks with power-law size distribution *(13 pages)* 066307
V. V. Mourzenko, J.-F. Thovert, and P. M. Adler

Band gaps in the propagation and scattering of surface water waves over cylindrical steps *(4 pages)* 066308
Liang-Shan Chen, Chao-Hsien Kuo, Zhen Ye, and Xin Sun

(Continued)

PHYSICAL REVIEW E **THIRD SERIES, VOLUME 69, NUMBER 6** **JUNE 2004**

Nonlinear flows in nearly incompressible hydrodynamic fluids *(5 pages)* 066309
S. Dastgeer and G. P. Zank

Sedimentation dynamics of spherical particles in confined geometries *(9 pages)* 066310
E. Kuusela, J. M. Lahtinen, and T. Ala-Nissila

Hexagonal pattern instabilities in rotating Rayleigh-Bénard convection of a non-Boussinesq fluid: Experimental results *(6 pages)* 066311
Alessio Guarino and Valerie Vidal

Time-dependent gap Hele-Shaw cell with a ferrofluid: Evidence for an interfacial singularity inhibition by a magnetic field *(5 pages)* 066312
José A. Miranda and Rafael M. Oliveira

Cascade time scales for energy and helicity in homogeneous isotropic turbulence *(7 pages)* 066313
Susan Kurien, Mark A. Taylor, and Takeshi Matsumoto

Swift-Hohenberg model for magnetoconvection *(14 pages)* 066314
S. M. Cox, P. C. Matthews, and S. L. Pollicott

Sign-symmetry of temperature structure functions *(7 pages)* 066315
Konstantinos G. Aivalis, Susan Kurien, Jörg Schumacher, and Katepalli R. Sreenivasan

Intermittency exponent of the turbulent energy cascade *(6 pages)* 066316
Jochen Cleve, Martin Greiner, Bruce R. Pearson, and Katepalli R. Sreenivasan

Stable sonoluminescence within a water hammer tube *(8 pages)* 066317
Avik Chakravarty, Theo Georghiou, Tacye E. Phillipson, and Alan J. Walton

Crossing the elliptic region in a hyperbolic system with change-of-type behavior arising in flow between two parallel plates *(5 pages)* 066318
L. Talon, J. Martin, N. Rakotomalala, D. Salin, and Y. C. Yortsos

Spatially modulated thermal convection of viscoelastic fluids *(19 pages)* 066319
Séliatou Kayodé and Roger E. Khayat

Plasma physics

Electrostatic modes in collisional complex plasmas under microgravity conditions *(7 pages)* 066401
V. V. Yaroshenko, B. M. Annaratone, S. A. Khrapak, H. M. Thomas, G. E. Morfill, V. E. Fortov, A. M. Lipaev, V. I. Molotkov, O. F. Petrov, A. I. Ivanov, and M. V. Turin

Description of strongly coupled Yukawa fluids using the variational modified hypernetted chain approach *(23 pages)* 066402
G. Faussurier

Kinetic theory of Jeans instability *(6 pages)* 066403
S. A. Trigger, A. I. Ershkovich, G. J. F. van Heijst, and P. P. J. M. Schram

Preplasma conditions for operation of 10-Hz subjoule femtosecond-laser-pumped nickel-like x-ray lasers *(7 pages)* 066404
Riccardo Tommasini, Klaus Eidmann, Tetsuya Kawachi, and Ernst E. Fill

Collisional-radiative study of lithium plasmas *(16 pages)* 066405
S. D. Loch, C. J. Fontes, J. Colgan, M. S. Pindzola, C. P. Ballance, D. C. Griffin, M. G. O'Mullane, and H. P. Summers

(Continued)

PHYSICAL REVIEW E **THIRD SERIES, VOLUME 69, NUMBER 6** **JUNE 2004**

Propagation characteristics and guiding of a high-power microwave in plasma waveguide *(5 pages)* 066406
H. Ito, C. Rajyaguru, N. Yugami, Y. Nishida, and T. Hosoya

Inverse bremsstrahlung and temperature relaxation in moderately coupled two-temperature plasmas *(8 pages)* 066407
G. Hazak and N. Argaman

Optical-field-ionization effects on the propagation of an ultraintense laser pulse in high-Z gas jets *(5 pages)* . . 066408
A. Zhidkov, J. Koga, T. Esirkepov, T. Hosokai, M. Uesaka, and T. Tajima

Resonance acceleration of electrons in combined strong magnetic fields and intense laser fields *(7 pages)* 066409
Hong Liu, X. T. He, and S. G. Chen

Laser self-focusing in the presence of quasistatic axial direct current *(7 pages)* 066410
Hai Lin, Li-Ming Chen, Ru-Xin Li, and Zhizhan Xu

Dusty plasmas in a constant electric field: Role of the electron drag force *(5 pages)* 066411
S. A. Khrapak and G. E. Morfill

Internal versus external conductivity of a dense plasma: Many-particle theory and simulations *(8 pages)* 066412
H. Reinholz, I. Morozov, G. Röpke, and Th. Millat

Pump side scattering in ultrapowerful backward Raman amplifiers *(5 pages)* 066413
A. A. Solodov, V. M. Malkin, and N. J. Fisch

K_α fluorescence measurement of relativistic electron transport in the context of fast ignition *(7 pages)* 066414
R. B. Stephens, R. A. Snavely, Y. Aglitskiy, F. Amiranoff, C. Andersen, D. Batani, S. D. Baton, T. Cowan, R. R. Freeman, T. Hall, S. P. Hatchett, J. M. Hill, M. H. Key, J. A. King, J. A. Koch, M. Koenig, A. J. MacKinnon, K. L. Lancaster, E. Martinolli, P. Norreys, E. Perelli-Cippo, M. Rabec Le Gloahec, C. Rousseaux, J. J. Santos, and F. Scianitti

Ultrashort laser pulses and electromagnetic pulse generation in air and on dielectric surfaces *(18 pages)* 066415
P. Sprangle, J. R. Peñano, B. Hafizi, and C. A. Kapetanakos

Physics of beams

Nonlocal effects in high-energy charged-particle beams *(7 pages)* 066501
Pontus Johannisson, Dan Anderson, Mietek Lisak, Mattias Marklund, Renato Fedele, and Arkadi Kim

Mechanisms for phase distortion in a traveling wave tube *(16 pages)* 066502
John G. Wöhlbier and John H. Booske

Model for nonlinear behavior in the self-amplified spontaneous-emission free-electron laser *(7 pages)* 066503
S. Krinsky

One-dimensional ordering of ultra-low-density ion beams in a storage ring *(8 pages)* 066504
H. Okamoto, K. Okabe, Y. Yuri, D. Möhl, and A. M. Sessler

Classical physics, including nonlinear media and photonic materials

Trapping and steering on lattice strings: Virtual slow waves and directional and nonpropagating excitations *(6 pages)* 066601
Georg Essl

Exact analytic expressions for electromagnetic propagation and optical nonlinear generation in finite one-dimensional periodic multilayers *(8 pages)* 066602
Matteo Cherchi

(Continued)

PHYSICAL REVIEW E **THIRD SERIES, VOLUME 69, NUMBER 6** **JUNE 2004**

Description of readout processes during strong beam coupling *(10 pages)* 066603
B. Sturman and D. M. Giel

Inverse scattering transform for the derivative nonlinear Schrödinger equation with nonvanishing boundary conditions *(8 pages)* 066604
Xiang-Jun Chen and Wa Kun Lam

Energy spectrum evolution of a diffuse field in an elastic body caused by weak nonlinearity *(9 pages)* 066605
Alexei Akolzin and Richard L. Weaver

Localized and stationary light wave modes in dispersive media *(10 pages)* 066606
Miguel A. Porras and Paolo Di Trapani

Properties of one-dimensional photonic crystals containing single-negative materials *(5 pages)* 066607
Haitao Jiang, Hong Chen, Hongqiang Li, Yewen Zhang, Jian Zi, and Shiyao Zhu

Noisy spectra, long correlations, and intermittency in wave turbulence *(6 pages)* 066608
Yuri V. Lvov and Sergey Nazarenko

Splitting and tuning characteristics of the point defect modes in two-dimensional phononic crystals *(4 pages)* 066609
Fugen Wu, Zhengyou Liu, and Youyan Liu

Symmetric and asymmetric solitons in linearly coupled Bragg gratings *(9 pages)* 066610
William C. K. Mak, Boris A. Malomed, and Pak L. Chu

Soliton solution of continuum magnetization equation in a conducting ferromagnet with a spin-polarized current *(4 pages)* 066611
Zai-Dong Li, J.-Q. Liang, Lu Li, and W.-M Liu

Guiding optical flows by photonic crystal slabs made of dielectric cylinders *(6 pages)* 066612
Liang-Shan Chen, Chao-Hsien Kuo, and Zhen Ye

Band structure and omnidirectional photonic band gap in lamellar structures with left-handed materials *(10 pages)* 066613
D. Bria, B. Djafari-Rouhani, A. Akjouj, L. Dobrzynski, J. P. Vigneron, E. H. El Boudouti, and A. Nougaoui

Stable vortex solitons supported by competing quadratic and cubic nonlinearities *(11 pages)* 066614
D. Mihalache, D. Mazilu, B. A. Malomed, and F. Lederer

Propagation inhibition and localization of electromagnetic waves in two-dimensional random dielectric systems *(6 pages)* 066615
Bikash C. Gupta, Chao-Hsien Kuo, and Zhen Ye

Quantum effects in the evolution of vortices in the electromagnetic field *(6 pages)* 066616
Tomasz Radożycki

Lateral shift of the transmitted light beam through a left-handed slab *(6 pages)* 066617
Xi Chen and Chun-Fang Li

One-dimensional bright discrete solitons in media with saturable nonlinearity *(7 pages)* 066618
Milutin Stepić, Detlef Kip, Ljupčo Hadžievski, and Aleksandra Maluckov

Diffraction in crystalline colloidal-array photonic crystals *(14 pages)* 066619
Sanford A. Asher, Jesse M. Weissman, Alexander Tikhonov, Rob D. Coalson, and Rasu Kesavamoorthy

(Continued)

PHYSICAL REVIEW E THIRD SERIES, VOLUME 69, NUMBER 6 JUNE 2004

Computational physics

Generalized $1/k$-ensemble algorithm *(7 pages)* 066701
Faming Liang

Absorbing boundaries in time-dependent problems with discretized energy continua *(12 pages)* 066702
M. G. Makris

Extremal optimization at the phase transition of the three-coloring problem *(8 pages)* 066703
Stefan Boettcher and Allon G. Percus

BRIEF REPORTS

General methods of statistical physics

Nonlinear stochastic resonance with subthreshold rectangular pulses *(4 pages)* 067101
Jesús Casado-Pascual, José Gómez-Ordóñez, and Manuel Morillo

Scale-free networks with tunable degree-distribution exponents *(4 pages)* 067102
H. Y. Lee, H. Y. Chan, and P. M. Hui

Error-correcting codes on scale-free networks *(4 pages)* 067103
Jung-Hoon Kim and Young-Jo Ko

Particle-cluster aggregation on a small-world network *(4 pages)* 067104
Sheng-You Huang, Xian-Wu Zou, Zhi-Gang Shao, Zhi-Jie Tan, and Zhun-Zhi Jin

Factors that predict better synchronizability on complex networks *(4 pages)* 067105
H. Hong, Beom Jun Kim, M. Y. Choi, and Hyunggyu Park

Evolutionary dynamics and the phase structure of the minority game *(4 pages)* 067106
Baosheng Yuan and Kan Chen

Directed fixed energy sandpile model *(4 pages)* 067107
R. Karmakar and S. S. Manna

Dynamics of stock prices *(4 pages)* 067108
Rosario Bartiromo

Ising model in scale-free networks: A Monte Carlo simulation *(4 pages)* 067109
Carlos P. Herrero

Chaos and pattern formation

Synchronization-based estimation of all parameters of chaotic systems from time series *(4 pages)* 067201
Debin Huang

Morphological evolution in the electrodeposition of the Pb-Sn binary system *(4 pages)* 067202
Bin Sun, Xian-Wu Zou, and Zhun-Zhi Jin

Control of on-off intermittency by slow parametric modulation *(4 pages)* 067203
Rider Jaimes Reategui and Alexander N. Pisarchik

Plasma physics

Dust acoustic shock waves *(3 pages)* 067401
B. Eliasson and P. K. Shukla

(Continued)

PHYSICAL REVIEW E **THIRD SERIES, VOLUME 69, NUMBER 6** **JUNE 2004**

Streamer branching rationalized by conformal mapping techniques *(4 pages)* 067402
Bernard Meulenbroek, Andrea Rocco, and Ute Ebert

Resolving an anomaly between measured spectral linewidths of $n=3$ transitions in N II and O III spectra *(3 pages)* 067403
R. C. Elton, J. Ghosh, H. R. Griem, and E. J. Iglesias

Classical physics, including nonlinear media and photonic materials

Guided elastic waves along a rod defect of a two-dimensional phononic crystal *(4 pages)* 067601
A. Khelif, M. Wilm, V. Laude, S. Ballandras, and B. Djafari-Rouhani

Solutions for solitons in nonlinear optically induced lattices *(4 pages)* 067602
H. J. Shin

ERRATA

Erratum: Combining atomistic and continuum simulations of contact-line motion [Phys. Rev. E **59**, 2475 (1999)] *(1 page)* . . . . . 069901(E)
Nicolas G. Hadjiconstantinou

Publisher's Note: Domain of attraction for stabilized orbits in time delayed feedback controlled Duffing systems [Phys. Rev. E **69**, 056209 (2004)] *(1 page)* . . . . . 069902(E)
Kohei Yamasue and Takashi Hikihara

Publisher's Note: Quantum morphogenesis: A variation on Thom's catastrophe theory [Phys. Rev. E **67**, 051926 (2003)] *(1 page)* . . . . . 069903(E)
Diederik Aerts, Marek Czachor, Liane Gabora, Maciej Kuna, Andrzej Posiewnik, Jarosław Pykacz, and Monika Syty

Cumulative Author Index i