

PHYSICAL REVIEW E

For editorial and subscription correspondence,
please see inside front cover
(ISSN: 1063-651X)

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

THIRD SERIES, VOLUME 64, NUMBER 3
PARTS 1 AND 2

CONTENTS

SEPTEMBER 2001

The Table of Contents is a total listing of Parts 1 and 2.

PART 1

RAPID COMMUNICATIONS

Biological physics

- External noise synchronizes forced oscillators (*4 pages*) 030901(R)
K. Pakdaman and Denis Mestivier
Generic noise-enhanced coding in neuronal arrays (*4 pages*) 030902(R)
N. G. Stocks and R. Mannella

REGULAR ARTICLES

Statistical physics of soft matter

- Stochastic resonant memory storage device (*5 pages*) 031101
M. F. Carusela, R. P. J. Perazzo, and L. Romanelli
Stochastic processes with finite correlation time: Modeling and application to the generalized Langevin equation (*9 pages*) 031102
T. Srokowski
Self-organized network of fractal-shaped components coupled through statistical interaction (*12 pages*) 031103
Ryuichi Ugajin
Thermodynamic properties of a polydisperse system (*6 pages*) 031104
Christian Tutschka and Gerhard Kahl
Connecting the vulcanization transition to percolation (*7 pages*) 031105
Weiqun Peng, Paul M. Goldbart, and Alan J. McKane
Experimental observation of stochastic resonance in a linear electronic array (*4 pages*) 031106
A. C. H. Rowe and P. Etchegoin
Criticality of natural absorbing states (*5 pages*) 031107
Adam Lipowski and Michel Droz
Classical diffusion in channels with a spatially varying cross-section (*7 pages*) 031108
V. I. Yudson and P. Reineker

Equilibrium and linear transport properties of fluids

- Analytical estimate of percolation for multicomponent fluid mixtures (*18 pages*) 031201
Tetsuo Kaneko
Dynamics of inherent structure in supercooled liquids near kinetic glass transition (*6 pages*) 031202
C. Y. Liao and S.-H. Chen



Bulk and shear viscosities in lattice Boltzmann equations (<i>11 pages</i>)	031203
Paul J. Dellar	
Simple model for a two-component gas flow in the presence of macroscopic scatterers (<i>6 pages</i>)	031204
A. I. Chervanyov	
Active control of oscillatory thermocapillary convection (<i>7 pages</i>)	031205
Junichiro Shiomi, Gustav Amberg, and Henrik Alfredsson	
Granular materials	
Correlation between bulk stresses and interparticle contact forces in fine powders (<i>9 pages</i>)	031301
M. A. S. Quintanilla, A. Castellanos, and J. M. Valverde	
Scaling relations for granular flow in quasi-two-dimensional rotating cylinders (<i>13 pages</i>)	031302
Ashish V. Orpe and D. V. Khakhar	
Velocity distributions and correlations in homogeneously heated granular media (<i>10 pages</i>)	031303
Sung Joon Moon, M. D. Shattuck, and J. B. Swift	
Bifurcations of a driven granular system under gravity (<i>14 pages</i>)	031304
Masaharu Isobe	
Continuum saltation model for sand dunes (<i>10 pages</i>)	031305
Gerd Sauer mann, Klaus Kroy, and Hans J. Herrmann	
Precollisional velocity correlations in a hard-disk fluid with dissipative collisions (<i>10 pages</i>)	031306
R. Soto, J. Piasecki, and M. Mareschal	
Stick-slip fluctuations in granular drag (<i>9 pages</i>)	031307
I. Albert, P. Tegzes, R. Albert, J. G. Sample, A. -L. Barabási, T. Vicsek, B. Kahng, and P. Schiffer	
Colloidal dispersions, suspensions, and aggregates	
Scaling laws in magneto-optical properties of aggregated ferrofluids (<i>6 pages</i>)	031401
R. Botet, K. N. Trohidou, J. A. Blackman, and D. Kechrakos	
Phase transition kinetics in colloid-polymer mixtures at triple coexistence: Kinetic maps from free-energy landscapes (<i>9 pages</i>)	031402
F. Renth, W. C. K. Poon, and R. M. L. Evans	
Classification of ordering kinetics in three-phase systems (<i>13 pages</i>)	031403
R. M. L. Evans, W. C. K. Poon, and F. Renth	
Structured and complex fluids	
Field-induced structure transformation in electrorheological solids (<i>5 pages</i>)	031501
C. K. Lo and K. W. Yu	
Jamming creep of a frictional interface (<i>4 pages</i>)	031502
L. Bureau, T. Baumberger, and C. Caroli	
Apparent nonergodic behavior of supercooled liquids above the glass transition temperature (<i>7 pages</i>)	031503
A. Patkowski, H. Gläser, T. Kanaya, and E. W. Fischer	
Temporal fractal model for the anomalous dielectric relaxation of inhomogeneous media with chaotic structure (<i>11 pages</i>)	031504
V. V. Novikov and V. P. Privalko	
Viscoelasticity near the gel point: A molecular dynamics study (<i>5 pages</i>)	031505
Daniel Vernon, Michael Plischke, and Béla Joós	
Amorphous thin film growth: Effects of density inhomogeneities (<i>11 pages</i>)	031506
Martin Raible, Stefan J. Linz, and Peter Hänggi	
Modes of counterion density fluctuations and counterion-mediated attractions between like-charged fluid membranes (<i>9 pages</i>)	031507
Bae-Yeun Ha	

Films, interfaces, and crystal growth

Dissipation in dynamics of a moving contact line (7 pages)	031601
Ramin Golestanian and Elie Raphaël	
Film rupture in the diffuse interface model coupled to hydrodynamics (14 pages)	031602
Uwe Thiele, Manuel G. Velarde, Kai Neuffer, and Yves Pomeau	
Dynamics of capillary spreading along hydrophilic microstrips (8 pages)	031603
Anton A. Darhuber, Sandra M. Troian, and Walter W. Reisner	
Porous silicon formation and electropolishing (10 pages)	031604
Markus Rauscher and Herbert Spohn	
Nonsingular self-preserving regimes of coagulation-condensation process (8 pages)	031605
A. A. Lushnikov and M. Kulmala	
Reconstructed rough growing interfaces: Ridge-line trapping of domain walls (8 pages)	031606
Chen-Shan Chin and Marcel den Nijs	

Liquid crystals

Dielectric and elastic properties of liquid crystals (9 pages)	031701
A. V. Zakharov and Ronald Y. Dong	
Pretransitional optical activity of short-pitched chiral nematic liquid crystals (5 pages)	031702
Carlos Hunte and Upindranath Singh	
Dynamics of side-chain liquid-crystalline polymers: A dielectric spectroscopy investigation (9 pages)	031703
M. Mierzwa, G. Floudas, and A. Wewerka	
Polarized infrared spectroscopic study on the orientation of the molecules in the smectic-C phase of a ferroelectric liquid crystal with a naphthalene ring: Alternative theory for the analysis of polarization-angle-dependent intensity changes (10 pages)	031704
J. G. Zhao, T. Yoshihara, H. W. Siesler, and Y. Ozaki	
Dynamics of dissipative ordered fluids (10 pages)	031705
André M. Sonnet and Epifanio G. Virga	
Biaxial model of the surface anchoring of bent-core smectic liquid crystals (6 pages)	031706
Joseph E. MacLennan, Noel A. Clark, and David M. Walba	
Separate measurements of the flexoelectric and surface polarization in a model nematic liquid crystal <i>p</i> -methoxybenzylidene- <i>p'</i> -butylaniline: Validity of the quadrupolar approach (7 pages)	031707
Lev M. Blinov, Mikhail I. Barnik, Hiroshi Ohoka, Masanori Ozaki, and Katsumi Yoshino	
Surface freezing in <i>n</i> -alkane solutions: The relation to bulk phases (12 pages)	031708
E. Sloutskin, E. B. Sirota, H. Kraack, B. M. Ocko, and M. Deutsch	
Uniform and nonuniform textures of a nematic liquid crystal in contact with an inhomogeneous substrate (9 pages)	031709
S. Kondrat and A. Poniewierski	
Disclination loop behavior near the nematic-isotropic transition (7 pages)	031710
N. V. Priezjev and Robert A. Pelcovits	
Stokes drag of spherical particles in a nematic environment at low Ericksen numbers (9 pages)	031711
Holger Stark and Dieter Venzki	

Polymers

- Ideal trefoil knot (*5 pages*) 031801
P. Pieranski and S. Przybyl

Biological physics

- Phase diagram of force-induced DNA unzipping in exactly solvable models (*12 pages*) 031901
D. Marenduzzo, A. Trovato, and A. Maritan
- Delayed luminescence of biological systems arising from correlated many-soliton states (*9 pages*) 031902
Larissa Brizhik, Agata Scordino, Antonio Triglia, and Francesco Musumeci
- Measure representation and multifractal analysis of complete genomes (*9 pages*) 031903
Zu-Guo Yu, Vo Anh, and Ka-Sing Lau
- Fluctuation-induced memory retrieval in a pulsed neural network storing sparse patterns with hierarchical correlations (*8 pages*) 031904
Takashi Kanamaru and Yoichi Okabe
- Coherence resonance with multiple peaks in a coupled FitzHugh-Nagumo model (*6 pages*) 031905
Yo Horikawa
- Noise breaking the twofold symmetry of photosynthetic reaction centers: Electron transfer (*10 pages*) 031906
Richard Pinčák and Michal Pudlak
- Statistical mechanics of learning with soft margin classifiers (*13 pages*) 031907
Sebastian Risau-Gusman and Mirta B. Gordon
- Theoretical analysis of array-enhanced stochastic resonance in the diffusively coupled FitzHugh-Nagumo equation (*10 pages*) 031908
Takashi Kanamaru, Takehiko Horita, and Yoichi Okabe

BRIEF REPORTS

Statistical physics of soft matter

- Random energy model in nonextensive statistical mechanics (*3 pages*) 032101
D. B. Saakian and E. E. Vogel

Equilibrium and linear transport properties of fluids

- Inherent-structure dynamics and diffusion in liquids (*4 pages*) 032201
T. Keyes and J. Chowdhary
- Collective dynamics in liquid lead. II. Mode contributions to time correlation functions (*4 pages*) 032202
Taras Bryk and Ihor Mryglod

Colloidal dispersions, suspensions, and aggregates

- Nonlinear effects in the stability of highly charged colloidal suspensions (*4 pages*) 032401
A. Fernández-Nieves, A. Fernández-Barbero, and F. J. de las Nieves

Biological physics

- Blowout bifurcation with non-normal parameters in population dynamics (*4 pages*) 032901
Bernard Cazelles

PART 2

RAPID COMMUNICATIONS

General methods of statistical physics

Extremal properties of random trees (<i>4 pages</i>)	035101(R)
E. Ben-Naim, P. L. Krapivsky, and Satya N. Majumdar	
Noise-enhanced stability of periodically driven metastable states (<i>4 pages</i>)	035102(R)
N. V. Agudov and B. Spagnolo	
Universal relations in the finite-size correction terms of two-dimensional Ising models (<i>4 pages</i>)	035103(R)
Yutaka Okabe and Naoki Kawashima	
World Wide Web scaling exponent from Simon's 1955 model (<i>4 pages</i>)	035104(R)
Stefan Bornholdt and Holger Ebel	
Growing dynamics of Internet providers (<i>4 pages</i>)	035105(R)
Andrea Capocci, Guido Caldarelli, Riccardo Marchetti, and Luciano Pietronero	
Quantifying and interpreting collective behavior in financial markets (<i>4 pages</i>)	035106(R)
Parameswaran Gopikrishnan, Bernd Rosenow, Vasiliki Plerou, and H. Eugene Stanley	

Chaos and pattern formation

Spiral wave dynamics under feedback derived from a confined circular domain (<i>4 pages</i>)	035201(R)
On-Uma Kheowan, Chi-Keung Chan, Vladimir S. Zykov, Orapin Rangsiman, and Stefan C. Müller	
Divergence measure between chaotic attractors (<i>4 pages</i>)	035202(R)
L. Diambra	

Nonlinear hydrodynamics and turbulence

Intermittency of a passive tracer in the inverse energy cascade (<i>4 pages</i>)	035301(R)
Marie-Caroline Jullien, Patrizia Castiglione, and Patrick Tabeling	
Prior mapping for nonlinear flows in random environments (<i>4 pages</i>)	035302(R)
Daniel M. Tartakovsky and Alberto Guadagnini	

Plasma physics

Results on the energy-relaxation rates of dense two-temperature aluminum, carbon, and silicon plasmas close to liquid-metal conditions (<i>4 pages</i>)	035401(R)
M. W. C. Dharma-wardana	
Oscillations in a chain of rod-shaped colloidal particles in a plasma (<i>4 pages</i>)	035402(R)
S. V. Vladimirov and E. N. Tsoy	

Classical physics, including nonlinear media and photonic materials

Inverse scattering for the diffusion equation with general boundary conditions (<i>4 pages</i>)	035601(R)
Vadim A. Markel and John C. Schotland	
On-ramp simulations and solitary waves of a car-following model (<i>4 pages</i>)	035602(R)
Peter Berg and Andrew Woods	

REGULAR ARTICLES

General methods of statistical physics

Kinetic roughening in slow combustion of paper (<i>12 pages</i>)	036101
M. Myllys, J. Maunuksela, M. Alava, T. Ala-Nissila, J. Merikoski, and J. Timonen	
Dynamics of supercooled water in configuration space (<i>10 pages</i>)	036102
E. La Nave, A. Scala, F. W. Starr, H. E. Stanley, and F. Sciortino	
Exact tagged particle correlations in the random average process (<i>9 pages</i>)	036103
R. Rajesh and Satya N. Majumdar	
Higher-order moments at the critical point of the Ziff-Gulari-Barshad model (<i>3 pages</i>)	036104
Vanessa S. Leite, Gilberto L. Hoenicke, and Wagner Figueiredo	
Fractal and chaotic behavior of circular cellular automata (<i>4 pages</i>)	036105
Xia Sun, Daimu Wang, and Ziqin Wu	
Topological properties of citation and metabolic networks (<i>5 pages</i>)	036106
Sven Bilke and Carsten Peterson	
Exact time-dependent correlation functions for the symmetric exclusion process with open boundary (<i>10 pages</i>)	036107
J. E. Santos and G. M. Schütz	
Stochastic exclusion processes with extended hopping (<i>7 pages</i>)	036108
Ding-wei Huang	
Monte Carlo study of the three-dimensional Coulomb frustrated Ising ferromagnet (<i>9 pages</i>)	036109
M. Grousson, G. Tarjus, and P. Viot	
Dynamic finite-size scaling of the normalized height distribution in kinetic surface roughening (<i>11 pages</i>)	036110
Y. Shim and D. P. Landau	
Universal magnetic fluctuations with a field-induced length scale (<i>6 pages</i>)	036111
B. Portelli, P. C. W. Holdsworth, M. Sellitto, and S. T. Bramwell	
Ground state nonuniversality in the random-field Ising model (<i>4 pages</i>)	036112
P. M. Duxbury and J. H. Meinke	
Necessary conditions for density classification by cellular automata (<i>4 pages</i>)	036113
Mathieu S. Capcarrère and Moshe Sipper	
Crossover and self-averaging in the two-dimensional site-diluted Ising model: Application of probability- changing cluster algorithm (<i>6 pages</i>)	036114
Yusuke Tomita and Yutaka Okabe	
Cluster expansions in dilute systems: Applications to satisfiability problems and spin glasses (<i>10 pages</i>)	036115
Guilhem Semerjian and Leticia F. Cugliandolo	
Derivation of Poisson and Nernst-Planck equations in a bath and channel from a molecular model (<i>14 pages</i>)	036116
Z. Schuss, B. Nadler, and R. S. Eisenberg	
Correlation functions, free energies, and magnetizations in the two-dimensional random-field Ising model (<i>10 pages</i>)	036117
S. L. A. de Queiroz and R. B. Stinchcombe	
Critical behavior of a lattice prey-predator model (<i>6 pages</i>)	036118
Tibor Antal, Michel Droz, Adam Lipowski, and Géza Ódor	
Dynamical aspects of an adiabatic piston (<i>4 pages</i>)	036119
Toyonori Munakata and Hideki Ogawa	
Softening of first-order transition in three-dimensions by quenched disorder (<i>4 pages</i>)	036120
Christophe Chatelain, Bertrand Berche, Wolfhard Janke, and Pierre Emmanuel Berche	
Image restoration using the <i>Q</i> -Ising spin glass (<i>18 pages</i>)	036121
Jun-ichi Inoue and Domenico M. Carlucci	

Freezing in random graph ferromagnets (<i>4 pages</i>)	036122
Pontus Svenson	
Short-time critical dynamics of the two-dimensional random-bond Ising model (<i>7 pages</i>)	036123
H. J. Luo, L. Schülke, and B. Zheng	
Generalized contact process with n absorbing states (<i>10 pages</i>)	036124
Jef Hooyberghs, Enrico Carlon, and Carlo Vanderzande	
Possible physical meaning of the Tsallis entropy parameter (<i>7 pages</i>)	036125
L. S. F. Olavo	
Exact results of a generalized Wu model with two- and four-spin interactions (<i>6 pages</i>)	036126
Silvia Lacková and Michal Jašćur	
Normal scaling in globally conserved interface-controlled coarsening of fractal clusters (<i>6 pages</i>)	036127
Avner Peleg, Massimo Conti, and Baruch Meerson	
Observations of transient high temperature vortical microstructures in solids during adiabatic shear banding (<i>6 pages</i>)	036128
P. R. Guduru, G. Ravichandran, and A. J. Rosakis	
Chaos and pattern formation	
On-off convection: Noise-induced intermittency near the convection threshold (<i>6 pages</i>)	036201
Hirokazu Fujisaka, Katsuya Ouchi, and Hidenori Ohara	
Periodic metastable structures in the discrete φ^4 model (<i>9 pages</i>)	036202
S. V. Dmitriev, H. Jimbo, K. Abe, and T. Shigenari	
Two-dimensional oscillatory patterns in semiconductors with point contacts (<i>4 pages</i>)	036203
L. L. Bonilla and R. Escobedo	
Motion of wave fronts in semiconductor superlattices (<i>9 pages</i>)	036204
A. Carpio, L. L. Bonilla, and G. Dell'Acqua	
Complex Ginzburg-Landau equation in the presence of walls and corners (<i>10 pages</i>)	036205
V́ctor M. Eguíluz, Emilio Hernández-García, and Oreste Piro	
Periodic chaotic billiards: Quantum-classical correspondence in energy space (<i>18 pages</i>)	036206
G. A. Luna-Acosta, J. A. Méndez-Bermúdez, and F. M. Izrailev	
Entangling power of quantized chaotic systems (<i>10 pages</i>)	036207
Arul Lakshminarayan	
Imperfect homoclinic bifurcations (<i>8 pages</i>)	036208
Paul Glendinning, Jan Abshagen, and Tom Mullin	
Unveiling the topological structure of chaotic flows from data (<i>9 pages</i>)	036209
Denisse Sciamarella and G. B. Mindlin	
Role of transient processes for reconstruction of model equations from time series (<i>7 pages</i>)	036210
Boris P. Bezruchko, Taras V. Dikanov, and Dmitry A. Smirnov	
Parametric correlations of the energy levels of ray-splitting billiards (<i>5 pages</i>)	036211
N. Savytsky, A. Kohler, Sz. Bauch, R. Blümel, and L. Sirko	
Bifurcations in annular electroconvection with an imposed shear (<i>16 pages</i>)	036212
Zahir A. Daya, Vatche B. Deyirmenjian, and Stephen W. Morris	
Dynamics of quantum systems (<i>12 pages</i>)	036213
I. Rotter	
Long-wavelength instabilities of three-dimensional patterns (<i>25 pages</i>)	036214
T. K. Callahan and E. Knobloch	
Diffusion of particles bouncing on a one-dimensional periodically corrugated floor (<i>16 pages</i>)	036215
Takahisa Harayama and Pierre Gaspard	
Blowout bifurcation and stability of marginal synchronization of chaos (<i>7 pages</i>)	036216
A. Krawiecki and S. Matyjańskiewicz	

Field-dependent collision frequency of the two-dimensional driven random Lorentz gas (3 pages)	036217
Christoph Dellago, Henk v. Beijeren, Debabrata Panja, and J. R. Dorfman	
Structure and variability of spinning reaction waves in three-dimensional excitable media (4 pages)	036218
Tatyana P. Ivleva and Alexander G. Merzhanov	
Mechanism of synchronization in a random dynamical system (8 pages)	036219
Dong-Uk Hwang, Inbo Kim, Sunghwan Rim, Chil-Min Kim, and Young-Jai Park	
Entropy production and wave packet dynamics in the Fock space of closed chaotic many-body systems (14 pages)	036220
V. V. Flambaum and F. M. Izrailev	
Theory and applications of ray chaos to underwater acoustics (20 pages)	036221
I. P. Smirnov, A. L. Virovlyansky, and G. M. Zaslavsky	
Distribution of nearest distances between nodal points for the Berry function in two dimensions (11 pages)	036222
Alexander I. Saichev, Karl-Fredrik Berggren, and Almas F. Sadreev	
Multistability in dynamical systems induced by weak periodic perturbations (4 pages)	036223
V. N. Chizhevsky	
Dynamics of coupling functions in globally coupled maps: Size, periodicity, and stability of clusters (9 pages)	036224
M. G. Cosenza and A. Parravano	
Eigenstate structure in graphs and disordered lattices (5 pages)	036225
L. Kaplan	

Nonlinear hydrodynamics and turbulence

Inertial range determination for aerothermal turbulence using fractionally differenced processes and wavelets (12 pages)	036301
W. Constantine, D. B. Percival, and P. G. Reinhall	
Intermittency and coherent structures in the two-dimensional inverse energy cascade: Comparing numerical and laboratory experiments (7 pages)	036302
T. Dubos, A. Babiano, J. Paret, and P. Tabeling	
Non-Newtonian effects in the peristaltic flow of a Maxwell fluid (5 pages)	036303
David Tsiklauri and Igor Beresnev	
Large-scale velocity structures in turbulent thermal convection (13 pages)	036304
X.-L. Qiu and P. Tong	
Slow inviscid flows of a compressible fluid in spatially inhomogeneous systems (7 pages)	036305
V. P. Ruban	
Kinematics of small scale anisotropy in turbulence (4 pages)	036306
Alan R. Kerstein	
Influence of the thermoelectric effect on the Rayleigh-Bénard instability inside a magnetic field (10 pages)	036307
N. Kurenkova, E. Zienicke, and A. Thess	

Plasma physics

Dust-acoustic modes in self-gravitating plasmas with dust size distributions (6 pages)	036401
Victoria V. Yaroshenko, Gerald Jacobs, and Frank Verheest	
Spatiotemporal dynamics of charged species in the afterglow of plasmas containing negative ions (12 pages)	036402
I. D. Kaganovich, B. N. Ramamurthi, and Demetre J. Economou	
He metastable density in a double layer formed by a diameter discontinuity in a positive column (7 pages)	036403
James M. Williamson and Biswa N. Ganguly	

Absolute extreme ultraviolet yield from femtosecond-laser-excited Xe clusters (<i>8 pages</i>)	036404
S. Ter-Avetisyan, M. Schnürer, H. Stiel, U. Vogt, W. Radloff, W. Karpov, W. Sandner, and P. V. Nickles	
Probability density function model equation for particle charging in a homogeneous dusty plasma (<i>8 pages</i>)	036405
R. V. R. Pandya and F. Mashayek	
Observations of the vacuum ultraviolet and x-ray brightness profiles of Fe, Ni, and Ge in magnetically confined fusion plasmas (<i>13 pages</i>)	036406
M. J. May, M. Finkenthal, H. W. Moos, K. B. Fournier, W. H. Goldstein, M. Mattioli, D. Pacella, G. Mazzitelli, M. Leigheb, and L. Gabellieri	
Physics of beams	
Photon acceleration based on plasma (<i>6 pages</i>)	036501
Peiyong Ji	
Effect of electron-beam momentum spread on cyclotron resonance maser operation at two resonant frequencies (<i>9 pages</i>)	036502
G. J. Hunter, B. W. J. McNeil, and G. R. M. Robb	
Classical physics, including nonlinear media and photonic materials	
Dissipative Toda-Rayleigh lattice and its oscillatory modes (<i>14 pages</i>)	036601
V. A. Makarov, E. del Río, W. Ebeling, and M. G. Velarde	
Theoretical and experimental study of two discrete coupled Nagumo chains (<i>13 pages</i>)	036602
V. I. Nekorkin, V. B. Kazantsev, S. Morfu, J. M. Bilbault, and P. Marquié	
Helical harmonics for static fields (<i>6 pages</i>)	036603
P. L. Overfelt	
Optical tunneling of single-cycle terahertz bandwidth pulses (<i>5 pages</i>)	036604
M. T. Reiten, D. Grischkowsky, and R. A. Cheville	
Random multiple scattering of ultrasound. I. Coherent and ballistic waves (<i>7 pages</i>)	036605
Arnaud Derode, Arnaud Tourin, and Mathias Fink	
Random multiple scattering of ultrasound. II. Is time reversal a self-averaging process? (<i>13 pages</i>)	036606
Arnaud Derode, Arnaud Tourin, and Mathias Fink	
Spectral dependence of polarized radiation due to spatial correlations (<i>5 pages</i>)	036607
Krishna Bhuvalka and Pankaj Jain	
Probability amplitude description of the dynamics of charged particles in a magnetic field in the macrodomain (<i>10 pages</i>)	036608
Ram K. Varma	
Penetration of dynamic localized states in dc-driven Josephson junction ladders by discrete jumps (<i>5 pages</i>)	036609
M. V. Fistul and J. B. Page	
Effects of spatial inhomogeneities on the dynamics of cavity solitons in quadratically nonlinear media (<i>8 pages</i>)	036610
S. Fedorov, D. Michaelis, U. Peschel, C. Etrich, D. V. Skryabin, N. Rosanov, and F. Lederer	
Wave propagation in one-dimensional optical quasiperiodic systems (<i>7 pages</i>)	036611
J. M. Hollingworth, A. Vourdas, and N. Backhouse	
Reflection and refraction of a transient temperature field at a plane interface using Cagniard–de Hoop approach (<i>7 pages</i>)	036612
Margarita L. Shendeleva	
Temporal development of photorefractive solitons up to telecommunication wavelengths in strontium-barium niobate waveguides (<i>5 pages</i>)	036613
M. Wesner, C. Herden, R. Pankrath, D. Kip, and P. Moretti	

Dispersion relation of guided-mode resonances and Bragg peaks in dielectric diffraction gratings (9 pages)	036614
Sara Nilsen-Hofseth and Víctor Romero-Rochín	
Effective nonlinear optical properties of metal-dielectric composite media with shape distribution (8 pages)	036615
L. Gao, K. W. Yu, Z. Y. Li, and Bambi Hu	
Theoretical analysis of acoustic stop bands in two-dimensional periodic scattering arrays (6 pages)	036616
You-Yu Chen and Zhen Ye	
Bifurcation of gap solitons through catastrophe theory (6 pages)	036617
C. Conti and S. Trillo	
Twisted Gaussian Schell-model solitons (5 pages)	036618
Sergey A. Ponomarenko	
Parametric autoresonance (8 pages)	036619
Evgeniy Khain and Baruch Meerson	
Lorentz-invariant superluminal tunneling (7 pages)	036620
Partha Ghose and M. K. Samal	

Computational physics

Optimization of the time-dependent traveling salesman problem with Monte Carlo methods (8 pages)	036701
Johannes Bentner, Günter Bauer, Gustav M. Obermair, Ingo Morgenstern, and Johannes Schneider	
Supersonic motion of vacancies in a polyethylene crystal (8 pages)	036702
N. K. Balabaev, O. V. Gendelman, and L. I. Manevitch	
Taboo search by successive confinement: Surveying a potential energy surface (9 pages)	036703
Sergei F. Chekmarev	
Multibox strategy for constructing highly accurate bound-state wave functions for three-body systems (6 pages)	036704
Alexei M. Frolov	

BRIEF REPORTS

General methods of statistical physics

Stochastic model related to the Klein-Gordon equation (3 pages)	037101
Alexander V. Plyukhin and Jeremy Schofield	

Chaos and pattern formation

Controlling spatiotemporal chemical chaos using delayed feedback (4 pages)	037201
P. Parmananda and J. L. Hudson	
Delayed coupling of logistic maps (4 pages)	037202
C. Masoller, Hugo L. D. de S. Cavalcante, and J. R. Rios Leite	
How does a periodic rotating wave emerge from high-dimensional chaos in a ring of coupled chaotic oscillators? (4 pages)	037203
Ying Zhang, Gang Hu, and Hilda A. Cerdeira	

Classical physics, including nonlinear media and photonic materials

Superluminal pulse reflection in asymmetric one-dimensional photonic band gaps (4 pages)	037601
Stefano Longhi	

Nonlinear parametric instability in double-well lattices (<i>4 pages</i>)	037602
Jaroslav Riedel, Boris A. Malomed, and Eva Majerníková	

Computational physics

Kink dynamics in a topological ϕ^4 lattice (<i>4 pages</i>)	037701
A. B. Adib and C. A. S. Almeida	

COMMENTS

Nonlinear hydrodynamics and turbulence

Comment on “Mie scattering from a sonoluminescing bubble with high spatial and temporal resolution” [Physical Review E 61 , 5253 (2000)] (<i>2 pages</i>)	038301
K. R. Weninger, P. G. Evans, and S. J. Putterman	

ERRATA

Erratum: Enhancement in the dynamic response of a viscoelastic fluid flowing in a tube [Phys. Rev. E 58 , 6323 (1998)] (<i>1 page</i>)	039901(E)
J. A. del Río, M. López de Haro, and S. Whitaker	
Erratum: Behavior of integrate-and-fire and Hodgkin-Huxley models with correlated inputs [Phys. Rev. E 63 , 051902 (2001)] (<i>1 page</i>)	039902(E)
Jianfeng Feng and Ping Zhang	
Erratum: Calculation of the heat-source function in photophoresis of aggregated spheres [Phys. Rev. E 60 , 2347 (1999)] (<i>1 page</i>)	039903(E)
Yu-lin Xu, B. A. S. Gustafson, F. Giovane, J. Blum, and S. Tehranian	
Erratum: Anticipating chaotic synchronization [Phys. Rev. E 61 , 5115 (2000)] (<i>1 pages</i>)	039904(E)
Henning U. Voss	

Cumulative Author Index	i
--	---