

CONTENTS - *Continued*

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 63, NUMBER 4

APRIL 2001

Conditional statistics of temperature fluctuations in turbulent convection (<i>4 pages</i>) Emily S. C. Ching and K. L. Chau	047303
---	--------

Plasma physics

Method to measure the electric field vector in an argon glow discharge using laser polarization spectroscopy (<i>4 pages</i>) V. P. Gavrilenko, H. J. Kim, T. Ikutake, J. B. Kim, M. D. Bowden, and K. Muraoka	047401
Population densities of hydrogenlike ions in a non-Maxwellian plasma (<i>4 pages</i>) J. M. A. Ashbourn	047402

Classical physics, including nonlinear media

Frustrated total reflection: The double-prism revisited (<i>3 pages</i>) A. Haibel, G. Nimtz, and A. A. Stahlhofen	047601
---	--------

COMMENTS

Comment on “Electromagnetic convective cells in a nonuniform dusty plasma” (<i>3 pages</i>) P. K. Shukla, L. Stenflo, O. A. Pokhotelov, and O. G. Onishchenko	048401
--	--------

ERRATA

Erratum: Strong-property-fluctuation theory for homogenization of bianisotropic composites: Formulation [Phys. Rev. E 62 , 6052 (2000)] (<i>1 page</i>) Tom G. Mackay, Akhlesh Lakhtakia, and Werner S. Weiglhofer	049901(E)
Erratum: Cavity solitons in semiconductor microresonators: Existence, stability, and dynamical properties [Phys. Rev. E 62 , 8726 (2000)] (<i>1 page</i>) ‘ T. Maggipinto, M. Brambilla, G. K. Harkness, and W. J. Firth	049902(E)
Erratum: Radiation by weakly nonlinear shallow-water solitons due to higher-order dispersion [Phys. Rev. E 58 , 5070 (1998)] (<i>1 page</i>) V. I. Karpman	049903(E)
Erratum: Implicit, partially linearized, electromagnetic particle simulation of plasma drift-wave turbulence [Phys. Rev. E 56 , 2151 (1997)](<i>1 page</i>) Bruce I. Cohen and Andris M. Dimits	049904(E)

Selected Abstracts From Other Physical Review Journals	i
--	---

Cumulative Author Index	ii
-----------------------------------	----

CONTENTS - *Continued*

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 63, NUMBER 4

APRIL 2001

Surface shape resonances and surface plasmon polariton excitations in bottle-shaped metallic gratings (10 pages)	046608
Diana C. Skigin and Ricardo A. Depine	
Enhancement of sum frequency generation near the photonic band gap edge under the quasiphase matching conditions (11 pages)	046609
A. V. Balakin, V. A. Bushuev, B. I. Mantsyzov, I. A. Ozheredov, E. V. Petrov, A. P. Shkurinov, P. Masselin, and G. Mouret	
Selective reflection spectroscopy of a resonant vapor at the interface with a metallic layer (7 pages)	046610
M. Chevrollier, M. Oriá, J. G. de Souza, D. Bloch, M. Fichet, and M. Ducloy	
Driven kinks in discrete chains: Phonon damping (5 pages)	046611
C. Cattuto, G. Costantini, T. Guidi, and F. Marchesoni	
Two-dimensional Green's function and local density of states in photonic crystals consisting of a finite number of cylinders of infinite length (4 pages)	046612
A. A. Asatryan, K. Busch, R. C. McPhedran, L. C. Botten, C. Martijn de Sterke, and N. A. Nicorovici	
Static and dynamic transport of light close to the Anderson localization transition (12 pages)	046613
J. Gómez Rivas, R. Sprik, A. Lagendijk, L. D. Noordam, and C. W. Rella	

Computational physics

Negative phase time for scattering at quantum wells: A microwave analogy experiment (5 pages)	046701
R.-M. Vetter, A. Haibel, and G. Nimtz	
Quantum lattice-gas model for computational fluid dynamics (18 pages)	046702
Jeffrey Yezep	

BRIEF REPORTS

General methods of statistical physics

Gap function in the finite Bak-Sneppen model (3 pages)	047101
K. Tabelow	
Universality of S-matrix correlations for deterministic plus random Hamiltonians (4 pages)	047102
N. Mae and S. Iida	
Critical transition in the constrained traveling salesman problem (3 pages)	047103
M. Andreucut and M. K. Ali	

Chaos and pattern formation

Power-law correlations in the southern-oscillation-index fluctuations characterizing El Niño (4 pages)	047201
M. Ausloos and K. Ivanova	
Chaotic versus random ionization (3 pages)	047202
A. López-Castillo and César R. de Oliveira	
Quantum breaking time scaling in superdiffusive dynamics (4 pages)	047203
A. Iomin and George M. Zaslavsky	

Nonlinear hydrodynamics and turbulence

Stochastic dynamics from the fractional Fokker-Planck-Kolmogorov equation: Large-scale behavior of the turbulent transport coefficient (4 pages)	047301
Alexander V. Milovanov	
Regular and anomalous scaling of a randomly advected passive scalar (4 pages)	047302
Xiao-Hong Wang	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 63, NUMBER 4

APRIL 2001

Vortex solitons: Mass, energy, and angular momentum bunching in relativistic electron-positron plasmas (7 pages)	046403
T. Tatsuno, V. I. Berezhiani, and S. M. Mahajan	
Relaxation of the electron energy distribution function in the afterglow of a N ₂ microwave discharge including space-charge field effects (13 pages)	046404
V. Guerra, P. A. Sá, and J. Loureiro	
Nonadiabatic phenomena during magnetic trap confinement and their influence on maximum x-ray energy from electron-cyclotron-resonance-heated plasmas (7 pages)	046405
K. S. Serebrennikov, C. Gaudin, J.-M. Buzzi, J. Bruneteau, and C. Rouille	
Effect of nonadiabaticity of dust charge variation on dust acoustic waves: Generation of dust acoustic shock waves (9 pages)	046406
M. R. Gupta, Susmita Sarkar, Samiran Ghosh, M. Debnath, and Manoranjan Khan	
Dielectronic recombination in plasmas. II. Initial excited states (8 pages)	046407
Gaber Omar and Yukap Hahn	
Magnetic field energy dissipation due to particle trapping in a force-free configuration of collisionless pair plasmas (9 pages)	046408
J. I. Sakai, D. Sugiyama, T. Haruki, N. Bobrova, and S. Bulanov	
Analysis of broadband x-ray spectra of highly charged krypton from a microcalorimeter detector of an electron-beam ion trap (10 pages)	046409
I. Kink, J. M. Laming, E. Takács, J. V. Porto, J. D. Gillaspy, E. Silver, H. Schnopper, S. R. Bandler, M. Barbera, N. Brickhouse, S. Murray, N. Madden, D. Landis, J. Beeman, and E. E. Haller	
Use of low-density foams as pressure amplifiers in equation-of-state experiments with laser-driven shock waves (11 pages)	046410
Dimitri Batani, Antonio Balducci, Wigen Nazarov, Thorsten Löwer, Tom Hall, Michel Koenig, Bernard Faral, Alessandra Benuzzi, and Mauro Temporal	
Physics of beams	
Alternative approach to the numerical synthesis of the dense-ion-beam focusing systems (6 pages)	046501
V. B. Yurchenko and L. V. Yurchenko	
Simulation of laser wakefield acceleration of an ultrashort electron bunch (8 pages)	046502
A. J. W. Reitsma, V. V. Goloviznin, L. P. J. Kamp, and T. J. Schep	
Classical physics, including nonlinear media	
Self-oscillations in ring Toda chains with negative friction (8 pages)	046601
W. Ebeling, P. S. Landa, and V. G. Ushakov	
Higher-order transverse modes of ultrashort isodiffracting pulses (9 pages)	046602
Simin Feng and Herbert G. Winful	
Reflection-induced spectral changes of the pulsed radiation emitted by a point source (14 pages)	046603
S. H. Wiersma, T. D. Visser, and A. T. de Hoop	
Superluminal transmission of information through an electromagnetic metamaterial (13 pages)	046604
Richard W. Ziolkowski	
Nonlinear Schrödinger equations with mean terms in nonresonant multidimensional quadratic materials (15 pages)	046605
Mark J. Ablowitz, Gino Biondini, and Steve Blair	
Solitonic structures in a nonlinear model with interparticle anharmonic interaction (10 pages)	046606
Maximo A. Agüero and Mauricio J. Paulin	
Multistable collision cycles of Manakov spatial solitons (4 pages)	046607
Ken Steiglitz	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 63, NUMBER 4

APRIL 2001

Experimental investigation of a regime of Wigner ergodicity in microwave rough billiards (4 pages)	046208
Y. Hlushchuk, L. Sirko, U. Kuhl, M. Barth, and H.-J. Stöckmann	
Multiple Perron-Frobenius operators (6 pages)	046209
Yu. Dabaghian	
Complex periodic orbits, renormalization, and scaling for quasiperiodic golden-mean transition to chaos (10 pages)	046210
Nikolai Yu. Ivankov and Sergey P. Kuznetsov	
Synchronization as adjustment of information rates: Detection from bivariate time series (6 pages)	046211
Milan Paluš, Vladimír Komárek, Zbyněk Hrnčíř, and Katalin Štěrbová	
Controlling spatiotemporal chaos via phase space compression (6 pages)	046212
Xu Zhang and Ke Shen	
Parameter-adaptive identical synchronization disclosing Lorenz chaotic masking (5 pages)	046213
A. d'Anjou, C. Sarasola, F. J. Torrealdea, R. Orduna, and M. Graña	
Slow switching in globally coupled oscillators: Robustness and occurrence through delayed coupling (10 pages)	046214
Hiroshi Kori and Yoshiki Kuramoto	
Chaotic neural control (15 pages)	046215
A. Potapov and M. K. Ali	
Nonlinear hydrodynamics and turbulence	
Effects of lateral boundaries on traveling-wave dynamics in binary fluid convection (12 pages)	046301
C. M. Aegerter and C. M. Surko	
Measurement of liquid surface properties by laser-induced surface deformation spectroscopy (6 pages)	046302
K. Sakai, D. Mizuno, and K. Takagi	
Temperature fluctuations in a convection cell with rough upper and lower surfaces (7 pages)	046303
Y.-B. Du and P. Tong	
Enhancement in the dynamic response of a viscoelastic fluid flowing through a longitudinally vibrating tube (4 pages)	046304
David Tsiklauri and Igor Beresnev	
Strange behavior of a passive scalar in a linear velocity field (7 pages)	046305
Tov Elperin, Nathan Kleeorin, Igor Rogachevskii, and Dmitry Sokoloff	
Discreteness and quairesonances in weak turbulence of capillary waves (4 pages)	046306
Colm Connaughton, Sergey Nazarenko, and Andrei Pushkarev	
Evolution of turbulent spots in a parallel shear flow (9 pages)	046307
Jörg Schumacher and Bruno Eckhardt	
Spatially correlated temperature fluctuations in turbulent convection (6 pages)	046308
Sheng-Qi Zhou and Ke-Qing Xia	
Coalescence of liquid drops by surface tension (5 pages)	046309
A. Menchaca-Rocha, A. Martínez-Dávalos, R. Núñez, S. Popinet, and S. Zaleski	
Chaoslike behavior in nonchaotic systems at finite computation precision (8 pages)	046310
Pengliang Shi, Daihai He, Wei Kang, Wujiu Fu, and Gang Hu	
Rarefaction shock wave: Formation under short pulse laser ablation of solids (5 pages)	046311
Nadezhda M. Bulgakova, Igor M. Bourakov, and Natalia A. Bulgakova	
Plasma physics	
Energy loss of a charged particle in a magnetized quantum plasma (10 pages)	046401
M. Steinberg and J. Ortner	
Effect of an internal rotating current on low-frequency inductively coupled plasmas (9 pages)	046402
E. L. Tsakadze, K. N. Ostrikov, S. Xu, I. R. Jones, R. Storer, M. Y. Yu, and S. Lee	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 63, NUMBER 4

APRIL 2001

Modeling of locally self-similar processes using multifractional Brownian motion of Riemann-Liouville type (7 pages)	046104
S. V. Muniandy and S. C. Lim	
Information theory based on nonadditive information content (7 pages)	046105
Takuya Yamano	
Phase transitions of hard disks in external periodic potentials: A Monte Carlo study (10 pages)	046106
W. Strepp, S. Sengupta, and P. Nielaba	
Anomalous behavior of the contact process with aging (5 pages)	046107
S. N. Dorogovtsev and J. F. F. Mendes	
Kinetic roughening with anisotropic growth rules (10 pages)	046108
Raffaele Caffero	
Phase transition of a quasi-one-dimensional system (5 pages)	046109
Su-Long Nyeo and I-Ching Yang	
Friction in a solid lubricant film (19 pages)	046110
O. M. Braun and M. Peyrard	
Exact density profiles for the fully asymmetric exclusion process with discrete-time dynamics on semi-infinite chains (6 pages)	046111
Jordan Brankov and Nina Pesheva	
Scaling in steady-state aggregation with injection (4 pages)	046112
J. Camacho	
Rigidity transition in two-dimensional random fiber networks (10 pages)	046113
M. Latva-Kokko, J. Mäkinen, and J. Timonen	
Application of the quantum spin glass theory to image restoration (10 pages)	046114
Jun-ichi Inoue	
Kinetics of domain growth in systems with local barriers (11 pages)	046115
Kumela Tafa, Sanjay Puri, and Deepak Kumar	
Nature of phase transitions in a probabilistic cellular automaton with two absorbing states (9 pages)	046116
Franco Bagnoli, Nino Boccara, and Raúl Rechtman	
Diffusion-limited aggregation as a Markovian process: Site-sticking conditions (15 pages)	046117
Boaz Kol and Amnon Aharony	
Fractional Fokker-Planck equation, solution, and application (17 pages)	046118
E. Barkai	

Chaos and pattern formation

Application of renormalization to the dynamics of a particle in an infinite square-well potential driven by an external field (6 pages)	046201
C. Chandre	
Pattern selection in extended periodically forced systems: A continuum coupled map approach (27 pages) . . .	046202
Shankar C. Venkataramani and Edward Ott	
Periodic orbits and topological entropy of delayed maps (6 pages)	046203
E. Ferretti Manffa, H. Kantz, and W. Just	
Restricted feedback control of one-dimensional maps (9 pages)	046204
Kevin Hall and David J. Christini	
Noise-induced Brownian motion of spiral waves (12 pages)	046205
S. Alonso and F. Sagués	
Chaos in small-world networks (4 pages)	046206
Xin-She Yang	
Parametric evolution for a deformed cavity (12 pages)	046207
Doron Cohen, Alex Barnett, and Eric J. Heller	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 63, NUMBER 4

APRIL 2001

PART 2

RAPID COMMUNICATIONS

General methods of statistical physics

Dynamics of efficiency: A simple model (4 pages)	045101(R)
Satya N. Majumdar and P. L. Krapivsky	
Fast Monte Carlo algorithm for supercooled soft spheres (4 pages)	045102(R)
Tomás S. Grigera and Giorgio Parisi	

Chaos and pattern formation

Finite size scaling of domain chaos (4 pages)	045201(R)
M. C. Cross, M. Louie, and D. Meiron	
Attractor bifurcation and on-off intermittency (4 pages)	045202(R)
Won-Ho Kye and Dmitri Topaj	
Spectral correlations: Understanding oscillatory contributions (4 pages)	045203(R)
B. Mehlig and M. Wilkinson	

Nonlinear hydrodynamics and turbulence

Flow pattern dynamics in convecting liquid helium (4 pages)	045301(R)
R. G. Matley, W. Y. T. Wong, M. S. Thurlow, P. G. J. Lucas, M. J. Lees, O. J. Griffiths, and A. L. Woodcraft	
Scaling laws in two-dimensional turbulent convection (4 pages)	045302(R)
D. Biskamp, K. Hallatschek, and E. Schwarz	
Observation of the $\frac{1}{2}$ power law in Rayleigh-Bénard convection (4 pages)	045303(R)
P.-E. Roche, B. Castaing, B. Chabaud, and B. Hébral	
Critical wavelength for river meandering (4 pages)	045304(R)
Boyd F. Edwards and Duane H. Smith	
Bridge from diffusion-limited aggregation to the Saffman-Taylor problem (4 pages)	045305(R)
Vladislav A. Bogoyavlenskiy	

Plasma physics

Dynamics of the charging and motion of a macroparticle in a plasma flow (3 pages)	045401(R)
S. V. Vladimirov, S. A. Maiorov, and N. F. Cramer	

Classical physics, including nonlinear media

Type of inversion problem in physics: An inverse emissivity problem (4 pages)	045601(R)
Tao Wen, Denming Ming, Xianxi Dai, Jixin Dai, and William E. Evenson	

REGULAR ARTICLES

General methods of statistical physics

Renormalization-group theoretical reduction (18 pages)	046101
K. Nozaki and Y. Oono	
Pseudospectral approach to inverse problems in interface dynamics (12 pages)	046102
Achille Giacometti and Maurice Rossi	
Yang-Lee circle theorem for an ideal pseudospin-1/2 Bose gas in an external magnetic field (6 pages)	046103
Xian Zhi Wang	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 63, NUMBER 4

APRIL 2001

Modal analysis of corticothalamic dynamics, electroencephalographic spectra, and evoked potentials (13 pages)	041909
P. A. Robinson, P. N. Loxley, S. C. O'Connor, and C. J. Rennie	
Membrane curvature induced by polymer adsorption (5 pages)	041910
Yong Woon Kim and Wokyung Sung	
Competition model for aperiodic stochastic resonance in a Fitzhugh-Nagumo model of cardiac sensory neurons (6 pages)	041911
G. C. Kember, G. A. Fenton, J. A. Armour, and N. Kalyaniwalla	
Spiral waves in excitable media with negative restitution (4 pages)	041912
C. W. Zemlin and A. V. Panfilov	
Using DNA to construct and power a nanoactuator (5 pages)	041913
Friedrich C. Simmel and Bernard Yurke	
Histogram method to obtain heat capacities in lipid monolayers, curved bilayers, and membranes containing peptides (12 pages)	041914
Vesselka P. Ivanova and Thomas Heimburg	

BRIEF REPORTS

Statistical physics of soft matter

Critical dynamics of the Baxter-Wu model (4 pages)	042101
M. Santos and W. Figueiredo	
Phase transition in an asymmetric generalization of the zero-temperature Glauber model (4 pages)	042102
Mohammad Khorrani and Amir Aghamohammadi	
Relative entropy: Free energy associated with equilibrium fluctuations and nonequilibrium deviations (4 pages)	042103
Hong Qian	

Equilibrium and linear transport properties of fluids

Global equation of state of two-dimensional hard sphere systems (4 pages)	042201
Stefan Luding	

Granular materials

Long-range effects in granular avalanching (4 pages)	042301
Pablo M. Gleiser, Sergio A. Cannas, Francisco A. Tamarit, and B. Zheng	

Liquid crystals

Three-dimensional rotational Langevin dynamics and the Lebwohl-Lasher model (3 pages)	042701
Christophe Goze Bac, Ricardo Paredes V., Carlos Vázquez R., Ernesto Medina D., and Anwar Hasmy	
Experimental evidence for a torus breakdown in a glow discharge plasma (4 pages)	042702
C. Letellier, A. Dinklage, H. El-Naggar, C. Wilke, and G. Bonhomme	

COMMENTS

Comment on "Two-finger selection theory in the Saffman-Taylor problem" (2 pages)	043101
Giovani L. Vasconcelos	
Reply to "Comment on 'Two-finger selection theory in the Saffman-Taylor problem'" (2 pages)	043102
F. X. Magdaleno and J. Casademunt	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 63, NUMBER 4

APRIL 2001

Casimir force in a critical film formed from an electrolytic solution (7 pages)	041605
A. Mukhopadhyay and B. M. Law	

Liquid crystals

Computer simulation of topological defects around a colloidal particle or droplet dispersed in a nematic host (8 pages)	041701
Denis Andrienko, Guido Germano, and Michael P. Allen	
Optical studies of the liquid crystal B2 phase formed by banana-shaped molecules (5 pages)	041702
D. A. Olson, M. Veum, A. Cady, M. V. D'Agostino, P. M. Johnson, H. T. Nguyen, L. C. Chien, and C. C. Huang	
Effect of a rigid nonpolar solute on the splay, bend elastic constants, and on rotational viscosity coefficient of 4,4'-n-octyl-cyanobiphenyl (8 pages)	041703
Sudeshna DasGupta, Pinku Chattopadhyay, and Soumen Kumar Roy	
X-ray reflectivity study of smectic wetting and prewetting at the free surface of isotropic liquid crystals (5 pages)	041704
R. Lucht, P. Marczuk, Ch. Bahr, and G. H. Findenegg	
Optical generation of inversion walls in nematic liquid crystals (7 pages)	041705
I. Jánossy and S. K. Prasad	
Molecular-dynamics study of the nematic-isotropic interface (6 pages)	041706
Nobuhiko Akino, Friederike Schmid, and Michael P. Allen	
Arising of magnetic walls in the vicinities of the Fréedericksz transition (7 pages)	041707
M. Simões, A. J. Palangana, A. A. Arroteia, and P. R. Vilarim	

Polymers

Zippering and collapse of diblock copolymers (11 pages)	041801
Marco Baiesi, Enrico Carlon, Enzo Orlandini, and Attilio L. Stella	
Theory for phase transitions in diblock copolymers: The lamellar case (9 pages)	041802
A. Rebei and J. De Pablo	
Polymer depletion interaction between two parallel repulsive walls (9 pages)	041803
F. Schlesener, A. Hanke, R. Klimpel, and S. Dietrich	

Biological physics

Macroscopic dynamics in separable neural networks (4 pages)	041901
Chen Yong, Wang Yinghai, and Yang Kongqing	
Statistical analysis of the fractal gating motions of the enzyme acetylcholinesterase (6 pages)	041902
T. Y. Shen, Kaihsu Tai, and J. Andrew McCammon	
Dramatic rigidification of a peptide-decorated lamellar phase (5 pages)	041903
N. Tsapis, W. Urbach, and R. Ober	
Influence of an external electric field on cAMP wave patterns in aggregating Dictyostelium discoideum (8 pages)	041904
Jiří Lindner, Hana Ševčíková, and Miloš Marek	
Mutual information in a dilute, asymmetric neural network model (10 pages)	041905
Elliot Greenfield and Harold Lecar	
Motion of phospholipidic vesicles along an inclined plane: Sliding and rolling (7 pages)	041906
Manouk Abkarian, Colette Lartigue, and Annie Viallat	
Periodically forced leaky integrate-and-fire model (5 pages)	041907
K. Pakdaman	
Evolution in a spatially structured population subject to rare epidemics (8 pages)	041908
Joshua E. S. Socolar, Shane Richards, and William G. Wilson	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 63, NUMBER 4

APRIL 2001

Particle-counterion clustering in highly charge-asymmetric complex fluids (5 pages)	041404
A. Fernández-Nieves, A. Fernández-Barbero, and F. J. de las Nieves	
Inhomogeneous model colloid-polymer mixtures: Adsorption at a hard wall (13 pages)	041405
J. M. Brader, M. Dijkstra, and R. Evans	
Structured and complex fluids	
Mode-coupling theory for heteropolymers (14 pages)	041501
E. Pitard and E. I. Shakhnovich	
Dynamic light scattering from lyotropic lamellar phases subjected to a flow field (9 pages)	041502
A. Al Kahwaji, O. Greffier, A. Leon, J. Rouch, and H. Kellay	
Cell dynamics simulations of shear-induced alignment and defect annihilation in stripe patterns formed by block copolymers (9 pages)	041503
S. R. Ren, I. W. Hamley, P. I. C. Teixeira, and P. D. Olmsted	
Performances of holographic gratings monitored by laser-induced phase separation in liquid mixtures (16 pages)	041504
Stéphanie Buil, Emmanuel Hugonnot, and Jean-Pierre Delville	
Two continuous models for the dynamics of sandpile surfaces (6 pages)	041505
Leonid Prigozhin and Boris Zaltzman	
Dynamic phase transitions in confined lubricant fluids under shear (11 pages)	041506
Carlos Drummond and Jacob Israelachvili	
Curvature effects in rapid alloy solidification (8 pages)	041507
Massimo Conti	
Stability of modulated-gravity-induced thermal convection in magnetic fields (9 pages)	041508
B. Q. Li	
Brillouin scattering study of molten zinc chloride (12 pages)	041509
C. Dreyfus, M. J. Lebon, F. Vivicorsi, A. Aouadi, R. M. Pick, and H. Z. Cummins	
Response function of a sphere in a viscoelastic two-fluid medium (12 pages)	041510
Alex J. Levine and T. C. Lubensky	
Realistic calculation of the low- and high-density liquid phase separation in a charged colloidal dispersion (12 pages)	041511
S. K. Lai, W. P. Peng, and G. F. Wang	
Magnetic-field-induced anisotropic curvature elasticity of a vesicle membrane containing magnetic polyions (10 pages)	041512
A. Čebers	
Surface-directed spinodal decomposition in binary fluid mixtures (7 pages)	041513
Sorin Bastea, Sanjay Puri, and Joel L. Lebowitz	
Flow through percolation clusters: NMR velocity mapping and numerical simulation study (8 pages)	041514
Andreas Klemm, Rainer Kimmich, and Markus Weber	
Films, interfaces, and crystal growth	
Kinetic roughening model with opposite Kardar-Parisi-Zhang nonlinearities (4 pages)	041601
T. J. da Silva and J. G. Moreira	
Monte Carlo studies of model Langmuir monolayers (12 pages)	041602
S. B. Opps, B. Yang, C. G. Gray, and D. E. Sullivan	
Epitaxial growth with elastic interaction: Submonolayer island formation (5 pages)	041603
F. Gutheim, H. Müller-Krumbhaar, and E. Brener	
Adsorbed layer structure of cationic surfactants on quartz (5 pages)	041604
Jamie C. Schulz, Gregory G. Warr, Paul D. Butler, and W. A. Hamilton	

(Continued)