

CONTENTS - *Continued*

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 63, NUMBER 3

MARCH 2001

BRIEF REPORTS

General methods of statistical physics

Critical behavior of the long-range Ising chain from the largest-cluster probability distribution (<i>4 pages</i>)	037101
Katarina Uzelac, Zvonko Glumac, and Ante Aničić	
Unified optimization criterion for energy converters (<i>4 pages</i>)	037102
A. Calvo Hernández, A. Medina, J. M. M. Roco, J. A. White, and S. Velasco	
Quantum phase transitions and the extended coupled cluster method (<i>4 pages</i>)	037103
N. E. Ligterink, N. R. Walet, and R. F. Bishop	
Two-step melting transition in confined hard spheres in three dimensions (<i>4 pages</i>)	037104
Willem K. Kegel	

Chaos and pattern formation

Spectral oscillations in a frequency-modulation laser operation (<i>4 pages</i>)	037201
Stefano Longhi	
Two-dimensional type-I intermittency (<i>4 pages</i>)	037202
Chil-Min Kim and Won-Ho Kye	

Nonlinear hydrodynamics and turbulence

Invisible mean field dynamos (<i>4 pages</i>)	037301
R. Kaiser and A. Tilgner	

Plasma physics

Interaction of an electromagnetic wave packet with an ionization front: Copropagating configuration (<i>4 pages</i>)	037401
M. I. Bakunov, A. V. Maslov, and P. A. Ivanov	
Bounds on the length of magnetic field lines in a two-dimensional plasma (<i>4 pages</i>)	037402
Manuel Núñez	

Classical physics, including nonlinear media

Decay of discrete nonlinear Schrödinger breathers through inelastic multiphonon scattering (<i>4 pages</i>)	037601
Magnus Johansson	
Phase retrieval from images in the presence of first-order vortices (<i>4 pages</i>)	037602
L. J. Allen, H. M. L. Faulkner, K. A. Nugent, M. P. Oxley, and D. Paganin	
Ermakov-Lewis angles for one-parameter supersymmetric families of Newtonian free damping modes (<i>4 pages</i>)	037603
Haret C. Rosu and Pedro B. Espinoza	

ERRATA

Erratum: Largest cluster in subcritical percolation [Phys. Rev. E 62 , 1660 (2000)] (<i>1 page</i>)	039901(E)
Martin Z. Bazant	

Cumulative Author Index	i
-----------------------------------	---

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 63, NUMBER 3

MARCH 2001

Simulation and design of stable channel-guided laser wakefield accelerators (13 pages)	036502
R. F. Hubbard, D. Kaganovich, B. Hafizi, C. I. Moore, P. Sprangle, A. Ting, and A. Zigler	
Constraints on plasma compensation of beam-beam effects in muon colliders (4 pages)	036503
K. V. Lotov	

Classical physics, including nonlinear media

Nonlinearity and disorder: Classification and stability of nonlinear impurity modes (18 pages)	036601
Andrey A. Sukhorukov, Yuri S. Kivshar, Ole Bang, Jens J. Rasmussen, and Peter L. Christiansen	
Soliton internal mode bifurcations: Pure power law? (5 pages)	036602
T. Kapitula, P. G. Kevrekidis, and C. K. R. T. Jones	
Twisted localized modes (6 pages)	036603
P. G. Kevrekidis, A. R. Bishop, and K. Ø. Rasmussen	
Stability of multiple pulses in discrete systems (8 pages)	036604
T. Kapitula, P. G. Kevrekidis, and B. A. Malomed	
Phase-induced stability in a parametric dimer (9 pages)	036605
Mauro Copelli and Katja Lindenberg	
Localized electromagnetic and weak gravitational fields in the source-free space (10 pages)	036606
G. N. Borzdov	
Scattering of sound by a vorticity filament: An experimental and numerical investigation (11 pages)	036607
Sébastien Manneville, Philippe Roux, Mickaël Tanter, Agnès Maurel, Mathias Fink, Frédéric Bottausci, and Philippe Petitjeans	
Measurement of the gain volume in amplifying and scattering media by a two-beam spatial-correlation method (4 pages)	036608
Tetsu Ito and Makoto Tomita	
Dynamics of a charged particle in a linearly polarized traveling electromagnetic wave (9 pages)	036609
A. Bourdier and S. Gond	
Group velocity, energy velocity, and superluminal propagation in finite photonic band-gap structures (5 pages)	036610
G. D'Aguanno, M. Centini, M. Scalora, C. Sibilia, M. J. Bloemer, C. M. Bowden, J. W. Haus, and M. Bertolotti	
Isomeric photonic molecules formed from coupled microresonators (4 pages)	036611
G. Guttroff, M. Bayer, A. Forchel, P. A. Knipp, and T. L. Reinecke	
Stability of repulsive Bose-Einstein condensates in a periodic potential (11 pages)	036612
J. C. Bronski, L. D. Carr, B. Deconinck, J. N. Kutz, and K. Promislow	
Dichromatic nonlinear eigenmodes in slab waveguide with $\chi^{(2)}$ nonlinearity (5 pages)	036613
S. A. Darmanyan and M. Nevière	
Radiative losses due to pulse interactions in birefringent nonlinear optical fibers (9 pages)	036614
Noel F. Smyth and William L. Kath	

Computational physics

Viscous flow and jump dynamics in molecular supercooled liquids. I. Translations (10 pages)	036701
Cristiano De Michele and Dino Leporini	
Viscous flow and jump dynamics in molecular supercooled liquids. II. Rotations (10 pages)	036702
Cristiano De Michele and Dino Leporini	
Three-dimensional optical trajectory tracing and energy deposition of a laser beam in a laser-driven fusion (5 pages)	036703
Shi-Bing Liu, Ping-Qing Luo, Yong-Hui Zhang, Shao-Ping Zhu, and Wei-Yan Zhang	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 63, NUMBER 3

MARCH 2001

Nonlinear hydrodynamics and turbulence

Singularities in the Boussinesq equation and in the generalized Korteweg–de Vries equation (7 pages)	036301
Yang Lei and Yang Kongqing	
Anomalous scaling in two models of passive scalar advection: Effects of anisotropy and compressibility (7 pages)	036302
N. V. Antonov and Juha Honkonen	
Stability of a viscous fluid in an oscillating gravitational field (8 pages)	036303
A. A. Ivanov and A. S. Chuvatin	
Cascades in helical turbulence (4 pages)	036304
P. D. Ditlevsen and P. Giuliani	
Amplitude measurements of Faraday waves (9 pages)	036305
A. Wernet, C. Wagner, D. Papathanassiou, H. W. Müller, and K. Knorr	
Formulation of subgrid stresses for large-scale fluid equations (7 pages)	036306
Fernando O. Minotti and Sergio Dasso	
Saffman-Taylor problem on a sphere (10 pages)	036307
Fernando Parisio, Fernando Moraes, José A. Miranda, and Michael Widom	

Plasma physics

Transitions of macroscopic structures and self-induced chaos observed in plasmas by a dc hollow cathode discharge having features of nonlinear open systems (8 pages)	036401
Y. Kondoh, T. Ubusawa, D. Asanuma, Y. Hayakawa, A. Matsuoka, T. Takahashi, M. Goto, and T. Okada	
Ionizational instability in an ionized inert gas flowing in a magnetic field (9 pages)	036402
R. V. Vasil'eva, A. V. Erofeev, E. A. D'yakonova, T. A. Lapushkina, and S. A. Poniaev	
Experimental study of a subpicosecond pulse laser interacting with metallic and dielectric targets (4 pages)	036403
L. M. Chen, J. Zhang, H. Teng, Q. L. Dong, Z. L. Chen, T. J. Liang, L. Z. Zhao, and Z. Y. Wei	
Atomic spectral line free parameter deconvolution procedure (7 pages)	036404
V. Milosavljević and G. Poparić	
Stochastic properties of strongly coupled plasmas (9 pages)	036405
I. V. Morozov, G. E. Norman, and A. A. Valuev	
Levitation of cylindrical particles in the sheath of an rf plasma (6 pages)	036406
B. M. Annaratone, A. G. Khrapak, A. V. Ivlev, G. Söllner, P. Bryant, R. Sütterlin, U. Konopka, K. Yoshino, M. Zuzic, H. M. Thomas, and G. E. Morfill	
Necessity of bunch compression for heavy-ion-induced hydrodynamics and studies of beam fragmentation in solid targets at a proposed synchrotron facility (8 pages)	036407
N. A. Tahir, A. Kozyreva, P. Spiller, D. H. H. Hoffmann, and A. Shutov	
Plasma perturbation induced by laser photodetachment (7 pages)	036408
M. Nishiura, M. Sasao, M. Wada, and M. Bacal	
Kinetic model of ionization waves in a positive column at intermediate pressures in inert gases (10 pages)	036409
Yu. B. Golubovskii, V. A. Maiorov, V. O. Nekutchaev, J. Behnke, and J. F. Behnke	
Hydrodynamic characteristics of transient Ni-like x-ray lasers (6 pages)	036410
Y. J. Li and J. Zhang	

Physics of beams

Stimulated electromagnetic shock radiation: Classical second-order calculations (19 pages)	036501
A. A. Risbud and N. C. Kamerkar	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 63, NUMBER 3

MARCH 2001

Chaotic dynamics from interspike intervals (5 pages)	036205
Alexey N. Pavlov, Olga V. Sosnovtseva, Erik Mosekilde, and Vadim S. Anishchenko	
Singular statistics (16 pages)	036206
Eugène Bogomolny, Ulrich Gerland, and Charles Schmit	
Dynamic localization of Lyapunov vectors in Hamiltonian lattices (9 pages)	036207
Arkady Pikovsky and Antonio Politi	
Milnor strange nonchaotic attractor with complex basin of attraction (4 pages)	036208
H. L. Yang	
Nonlinear noise reduction using reference data (4 pages)	036209
Karsten Sternickel, Arndt Effern, Klaus Lehnertz, Thomas Schreiber, and Peter David	
Strong desynchronizing effects of weak noise in globally coupled systems (7 pages)	036210
Jun-nosuke Teramae and Yoshiki Kuramoto	
Interacting pairs of periodic solutions lead to tori in lasers subject to delayed feedback (11 pages)	036211
D. Pieroux, T. Erneux, T. Luzyanina, and K. Engelborghs	
Using thresholding at varying intervals to obtain different temporal patterns (9 pages)	036212
Sudeshna Sinha	
Lyapunov exponents in disordered chaotic systems: Avoided crossing and level statistics (4 pages)	036213
Volker Ahlers, Rüdiger Zillmer, and Arkady Pikovsky	
Phase signal coupling induced $n:m$ phase synchronization in drive-response oscillators (6 pages)	036214
J. Y. Chen, K. W. Wong, H. Y. Zheng, and J. W. Shuai	
Approach to energy eigenvalues and eigenfunctions from nonperturbative regions of eigenfunctions (4 pages)	036215
Wen-ge Wang	
Cluster synchronization modes in an ensemble of coupled chaotic oscillators (4 pages)	036216
Vladimir N. Belykh, Igor V. Belykh, and Erik Mosekilde	
Learning to control a complex multistable system (12 pages)	036217
Sabino Gadaleta and Gerhard Dangelmayr	
Sensitive boundary condition dependence of noise-sustained structure (5 pages)	036218
Koichi Fujimoto and Kunihiro Kaneko	
Analysis of a parametrically driven pendulum (17 pages)	036219
Randy Kobes, Junxian Liu, and Slaven Peleš	
Real-time memory on an excitable field (4 pages)	036220
Ikuko N. Motoike, Kenichi Yoshikawa, Yasutaka Iguchi, and Satoshi Nakata	
Dimension of interaction dynamics (15 pages)	036221
Daniel Wójcik, Andrzej Nowak, and Marek Kuś	
Localization transition in incommensurate non-Hermitian systems (6 pages)	036222
Amin Jazaeri and Indubala I. Satija	
Bicritical scaling behavior in unidirectionally coupled oscillators (10 pages)	036223
Sang-Yoon Kim and Woochang Lim	
Chaotic advection near a three-vortex collapse (17 pages)	036224
X. Leoncini, L. Kuznetsov, and G. M. Zaslavsky	
Phase-frequency synchronization in a chain of periodic oscillators in the presence of noise and harmonic forcings (8 pages)	036225
Tatjana E. Vadivasova, Galina I. Strelkova, and Vadim S. Anishchenko	
Transition to stochastic synchronization in spatially extended systems (10 pages)	036226
Lucia Baroni, Roberto Livi, and Alessandro Torcini	
Fractals and dynamical chaos in a two-dimensional Lorentz gas with sinks (10 pages)	036227
I. Claus and P. Gaspard	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 63, NUMBER 3

MARCH 2001

Bunching transition in a time-headway model of a bus route (7 pages)	036115
Takashi Nagatani	
Synergetic theory for a jamming transition in traffic flow (4 pages)	036116
Alexander I. Olemskoi and Alexei V. Khomenko	
Phase-field modeling of stress-induced instabilities (27 pages)	036117
Klaus Kassner, Chaouqi Misbah, Judith Müller, Jens Kappey, and Peter Kohlert	
Fate of zero-temperature Ising ferromagnets (4 pages)	036118
V. Spirin, P. L. Krapivsky, and S. Redner	
Irreversible phase transitions driven by an oscillatory parameter in a far-from-equilibrium system (8 pages)	036119
G. P. Saracco and E. V. Albano	
Elastic properties of inhomogeneous media with chaotic structure (7 pages)	036120
V. V. Novikov, K. W. Wojciechowski, D. V. Belov, and V. P. Privalko	
Soluble two-species diffusion-limited models in arbitrary dimensions (25 pages)	036121
M. Mobilia and P.-A. Bares	
Dynamic scaling for avalanches in disordered systems (6 pages)	036122
Guang-Ping Zheng and Mo Li	
Translational invariance in nucleation theories: Theoretical formulation (13 pages)	036123
Y. Drossinos, P. G. Kevrekidis, and P. G. Georgopoulos	
Random field Ising systems on a general hierarchical lattice: Rigorous inequalities (5 pages)	036124
Avishay Efrat and Moshe Schwartz	
Renormalization group and perfect operators for stochastic differential equations (22 pages)	036125
Qing Hou, Nigel Goldenfeld, and Alan McKane	
Intermittence and roughening of periodic elastic media (7 pages)	036126
E. T. Seppälä, M. J. Alava, and P. M. Duxbury	
Decoherence and thermalization in a simple bosonic system (9 pages)	036127
Pavel Cejnar, Vladimir Zelevinsky, and Valentin V. Sokolov	
Self-generated power-law tails in probability distributions (4 pages)	036128
H. Eduardo Roman and Markus Porto	
Locked-to-running transition in the two-dimensional underdamped driven Frenkel-Kontorova model (13 pages)	036129
O. M. Braun, M. V. Paliy, J. Röder, and A. R. Bishop	
Self-organized criticality and the self-organizing map (6 pages)	036130
John A. Flanagan	
Random walks on fractals and stretched exponential relaxation (4 pages)	036131
Philippe Jund, Rémi Jullien, and Ian Campbell	
Heat kernel regularization of the effective action for stochastic reaction-diffusion equations (17 pages)	036132
David Hochberg, Carmen Molina-París, and Matt Visser	
Chaos and pattern formation	
Transcritical riddling in a system of coupled maps (15 pages)	036201
O. Popovych, Yu. Maistrenko, E. Mosekilde, A. Pikovsky, and J. Kurths	
Integrals of motion and semipermeable surfaces to bound the amplitude of a plasma instability (8 pages)	036202
S. Neukirch	
Parametric dependent Hamiltonians, wave functions, random matrix theory, and quantal-classical correspondence (7 pages)	036203
Doron Cohen and Tsampikos Kottos	
Synchronization of Kauffman networks (10 pages)	036204
Luis G. Morelli and Damián H. Zanette	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 63, NUMBER 3

MARCH 2001

Nonlinear hydrodynamics and turbulence

Single-bubble sonoluminescence from noble gases (<i>4 pages</i>)	035301(R)
Kyuichi Yasui	
Shock wave criterion for propagating solitary states in driven surface waves (<i>4 pages</i>)	035302(R)
O. Lioubashevski and J. Fineberg	
Measuring nonextensivity parameters in a turbulent Couette-Taylor flow (<i>4 pages</i>)	035303(R)
Christian Beck, Gregory S. Lewis, and Harry L. Swinney	
Symmetry breaking, anomalous scaling, and large-scale flow generation in a convection cell (<i>4 pages</i>)	035304(R)
Ananias G. Tomboulides and Victor Yakhot	

Classical physics, including nonlinear media

Equivalence of three approaches describing partially incoherent wave propagation in inertial nonlinear media (<i>4 pages</i>)	035601(R)
Demetrios N. Christodoulides, Eugenia D. Eugenieva, Tamer H. Coskun, Mordechai Segev, and Matthew Mitchell	

REGULAR ARTICLES

General methods of statistical physics

Critical properties of the reaction-diffusion model $2A \rightarrow 3A$, $2A \rightarrow 0$ (<i>10 pages</i>)	036101
Enrico Carlon, Malte Henkel, and Ulrich Schollwöck	
Pair contact process with diffusion: A new type of nonequilibrium critical behavior? (<i>3 pages</i>)	036102
Haye Hinrichsen	
Noisy random resistor networks: Renormalized field theory for the multifractal moments of the current distribution (<i>20 pages</i>)	036103
Olaf Stenull and Hans-Karl Janssen	
Variational mean-field study of a continuum model of crystalline tensionless surfaces (<i>9 pages</i>)	036104
Esteban Moro and Rodolfo Cuerno	
Mean first passage times of processes driven by white shot noise (<i>8 pages</i>)	036105
F. Laio, A. Porporato, L. Ridolfi, and I. Rodriguez-Iturbe	
Partition function for a one-dimensional δ -function Bose gas (<i>14 pages</i>)	036106
Go Kato and Miki Wadati	
Traveling waves in an optimal velocity model of freeway traffic (<i>11 pages</i>)	036107
Peter Berg and Andrew Woods	
Kinetic evolution of unmixing in an AlLi alloy using x-ray intensity fluctuation spectroscopy (<i>7 pages</i>)	036108
F. Livet, F. Bley, R. Caudron, E. Geissler, D. Abernathy, C. Detlefs, G. Grübel, and M. Sutton	
Dynamic phase transition in a time-dependent Ginzburg-Landau model in an oscillating field (<i>11 pages</i>)	036109
H. Fujisaka, H. Tutu, and P. A. Rikvold	
Noise properties in the Nagel-Schreckenberg traffic model (<i>6 pages</i>)	036110
Shu-ping Chen and Ding-wei Huang	
Self-organized criticality and universality in a nonconservative earthquake model (<i>5 pages</i>)	036111
Stefano Lise and Maya Paczuski	
Domain wall formation in the Cahn-Hilliard-Cook equation (<i>6 pages</i>)	036112
Jacek Dziarmaga and Mariusz Sadzikowski	
Exact sampling from nonattractive distributions using summary states (<i>5 pages</i>)	036113
Andrew M. Childs, Ryan B. Patterson, and David J. C. MacKay	
Exact phase diagram of a model with aggregation and chipping (<i>7 pages</i>)	036114
R. Rajesh and Satya N. Majumdar	

(Continued)

CONTENTS - *Continued*

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 63, NUMBER 3

MARCH 2001

Difference between “proteinlike” and “nonproteinlike” heteropolymers (7 pages)	031913
Hu Chen, Xin Zhou, and Zhong-Can Ou-Yang	
Noise-induced transport of two coupled particles (10 pages)	031914
Stefan Klumpp, Andreas Mielke, and Christian Wald	
Theory of periodic swarming of bacteria: Application to <i>Proteus mirabilis</i> (11 pages)	031915
A. Czirók, M. Matsushita, and T. Vicsek	
Stochastic resonance in neuron models: Endogenous stimulation revisited (6 pages)	031916
Hans E. Plesser and Theo Geisel	

BRIEF REPORTS

Statistical physics of soft matter

Nonequilibrium roughening transition in a volume conserving system (3 pages)	032101
Kwangho Park, Hyun-Joo Kim, and In-mook Kim	
Liquid-solid phase transition of a system with two particles in a rectangular box (4 pages)	032102
Akinori Awazu	

Films, interfaces, and crystal growth

Entropy fluctuations for directed polymers in 2 + 1 dimensions (4 pages)	032601
Xiao-Hong Wang, Shlomo Havlin, and Moshe Schwartz	
Positional order and thermal expansion of surface crystalline <i>N</i> -alkane monolayers (3 pages)	032602
B. M. Ocko, E. B. Sirota, M. Deutsch, E. DiMasi, S. Coburn, Joe Strzalka, Songyan Zheng, Andrey Tronin, Thomas Gog, and Chitra Venkataraman	

Liquid crystals

Saddle-splay elasticity and interfacial nematostatics (4 pages)	032701
Alejandro D. Rey	

Biological physics

Thermodynamically important contacts in folding of model proteins (4 pages)	032901
Antonio Scala, Nikolay V. Dokholyan, Sergey V. Buldyrev, and H. Eugene Stanley	

PART 2

RAPID COMMUNICATIONS

General methods of statistical physics

Corrections to scaling for the two-dimensional dynamic <i>XY</i> model (4 pages)	035101(R)
H. P. Ying, B. Zheng, Y. Yu, and S. Trimper	

Chaos and pattern formation

Chaotic motion around prolate deformed bodies (4 pages)	035201(R)
Eduardo Guéron and Patricio S. Letelier	
Reducing nonideal to ideal coupling in random matrix description of chaotic scattering: Application to the time-delay problem (4 pages)	035202(R)
Dmitry V. Savin, Yan V. Fyodorov, and Hans-Jürgen Sommers	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 63, NUMBER 3

MARCH 2001

Dynamics of free-standing smectic-A films (11 pages)	031706
V. P. Romanov and S. V. Ul'yanov	
Time-resolved infrared spectroscopy of nematic-liquid-crystal electro-optic switching (6 pages)	031707
Won Gun Jang and Noel A. Clark	
Fluctuation-entanglement mechanism for director anchoring at nematic polymer surfaces (4 pages)	031708
F. N. Braun and C. Viney	

Polymers

Molecular weight dependence of reductions in the glass transition temperature of thin, freely standing polymer films (10 pages)	031801
K. Dalnoki-Veress, J. A. Forrest, C. Murray, C. Gigault, and J. R. Dutcher	
Cold and warm swelling of hydrophobic polymers (5 pages)	031802
Paolo De Los Rios and Guido Caldarelli	
Chain aggregation in dilute solutions of poly(methyl methacrylate) below the phase-separation temperature (10 pages)	031803
Tomohide Nakagawa, Yoshiaki Nakamura, Naoki Sasaki, and Mitsuo Nakata	
Monte Carlo simulation of morphologies of self-assembled amphiphilic diblock copolymers in solution (4 pages)	031804
Xuehao He, Haojun Liang, and Caiyuan Pan	

Biological physics

Exactness of the annealed and the replica symmetric approximations for random heteropolymers (12 pages)	031901
Ugo Bastolla and Peter Grassberger	
Shot noise in the leaky integrate-and-fire neuron (11 pages)	031902
Nicolas Hohn and Anthony N. Burkitt	
Population dynamics with and without selection (7 pages)	031903
Andrzej Pękalski and Katarzyna Sznajd-Weron	
Long-range intermolecular interaction between broken DNA fragments (6 pages)	031904
Anatoliy O. Pinchuk and Vladimir I. Vysotskii	
Coexistence of multiple spiral waves with independent frequencies in a heterogeneous excitable medium (4 pages)	031905
Fagen Xie, Zhilin Qu, James N. Weiss, and Alan Garfinkel	
Global dynamics and stochastic resonance of the forced FitzHugh-Nagumo neuron model (10 pages)	031906
Pu-Lin Gong and Jian-Xue Xu	
Effects of correlated and independent noise on signal processing in neuronal systems (9 pages)	031907
Feng Liu, Bambi Hu, and Wei Wang	
Analytic model for ring pattern formation by bacterial swimmers (14 pages)	031908
Scott Arouh	
Kinetic proofreading can explain the suppression of supercoiling of circular DNA molecules by type-II topoisomerases (11 pages)	031909
Jie Yan, Marcelo O. Magnasco, and John F. Marko	
Behavioral stochastic resonance: How a noisy army betrays its outpost (11 pages)	031910
Jan A. Freund, Jochen Kienert, Lutz Schimansky-Geier, Beatrix Beisner, Alexander Neiman, David F. Russell, Tatyana Yakusheva, and Frank Moss	
Dynamics of moments of FitzHugh-Nagumo neuronal models and stochastic bifurcations (9 pages)	031911
Seiji Tanabe and K. Pakdaman	
Adaptive learning by extremal dynamics and negative feedback (12 pages)	031912
Per Bak and Dante R. Chialvo	

(Continued)

CONTENTS - Continued

PHYSICAL REVIEW E

THIRD SERIES, VOLUME 63, NUMBER 3

MARCH 2001

Selection of velocity profile and flow depth in granular flows (8 pages)	031305
B. Andreotti and S. Douady	
Colloidal dispersions, suspensions, and aggregates	
Growth kinetics and structure of fibrin gels (17 pages)	031401
F. Ferri, M. Greco, G. Arcovito, F. Andreasi Bassi, M. De Spirito, E. Paganini, and M. Rocco	
Dynamic susceptibilities of an assembly of dipolar particles in an elastic environment (10 pages)	031402
Yu. L. Raikher, V. V. Rusakov, W. T. Coffey, and Yu. P. Kalmykov	
Phase coexistence in colloidal suspensions: An analytic Poisson-Boltzmann treatment (10 pages)	031403
Michael Knott and Ian J. Ford	
Structured and complex fluids	
Mechanical properties of a model of attractive colloidal solutions (11 pages)	031501
E. Zaccarelli, G. Foffi, K. A. Dawson, F. Sciortino, and P. Tartaglia	
Tube diameter in tightly entangled solutions of semiflexible polymers (22 pages)	031502
David C. Morse	
Novel phases and reentrant melting of two-dimensional colloidal crystals (34 pages)	031503
Leo Radzihovsky, Erwin Frey, and David R. Nelson	
Phase-field modeling of microstructural pattern formation during directional solidification of peritectic alloys without morphological instability (15 pages)	031504
Tak Shing Lo, Alain Karma, and Mathis Plapp	
Rheological and small-angle neutron scattering studies of aqueous solutions of branched PEO-PPO-PEO copolymers (11 pages)	031505
Christelle Perreur, Jean-Pierre Habas, Jean Peyrelasse, Jeanne François, and Alain Lapp	
Films, interfaces, and crystal growth	
Line tension approaching a first-order wetting transition: Experimental results from contact angle measurements (11 pages)	031601
J. Y. Wang, S. Betelu, and B. M. Law	
Interfacial fluctuations near the critical filling transition (6 pages)	031602
A. Bednorz and M. Napiórkowski	
Coiling instability of multilamellar membrane tubes with anchored polymers (11 pages)	031603
Ilan Tsafir, Marie-Alice Guedeau-Boudeville, Daniel Kandel, and Joel Stavans	
Numerical study of the Marangoni instability resulting in surface tension auto-oscillations: General regularities of the system evolution (10 pages)	031604
N. M. Kovalchuk, V. I. Kovalchuk, and D. Vollhardt	
Liquid crystals	
Formation and distribution of point defects on a disclination line near a free nematic interface (9 pages)	031701
Jordi Ignés-Mullol, Jean Baudry, and Patrick Oswald	
Interactions between colloidal inclusions in two-dimensional smectic-C* films (4 pages)	031702
P. Cluzeau, P. Poulin, G. Joly, and H. T. Nguyen	
Influence of ions on the "V-shaped" electro-optic response of ferroelectric liquid crystals (5 pages)	031703
M. Copič, J. E. MacLennan, and N. A. Clark	
Landau-de Gennes theory of surface-enhanced ordering in smectic films (9 pages)	031704
A. N. Shalaginov and D. E. Sullivan	
Surface depinning of smectic-A edge dislocations (6 pages)	031705
M. Slavinec, S. Kralj, S. Zumer, and T. J. Sluckin	

(Continued)