Luis Bonilla

List of Publications by Year in descending order

246 papers	6,830 citations	109321 35 h-index	74163 75 g-index
274 all docs	274 docs citations	274 times ranked	3521 citing authors

#	ARTICLE	IF	CITATIONS
1	Fingering instability in spreading epithelial monolayers: roles of cell polarisation, substrate friction and contractile stresses. Soft Matter, 2021, 17, 8276-8290.	2.7	10
2	Anomalous Angiogenesis in Retina. Biomedicines, 2021, 9, 224.	3.2	7
3	Designing Hyperchaos and Intermittency in Semiconductor Superlattices. Physical Review Letters, 2021, 127, 096601.	7.8	7
4	Kovacs Memory Effect with an Optically Levitated Nanoparticle. Physical Review Letters, 2021, 127, 130603.	7.8	15
5	Uncovering spatiotemporal patterns in semiconductor superlattices by efficient data processing tools. Physical Review E, 2021, 104, 035303.	2.1	0
6	Fluctuation-induced current from freestanding graphene. Physical Review E, 2020, 102, 042101.	2.1	20
7	Numerical study of the rippling instability driven by electron-phonon coupling in graphene. Physical Review B, 2020, 101, .	3.2	5
8	Two dimensional soliton in tumor induced angiogenesis. Journal of Statistical Mechanics: Theory and Experiment, 2020, 2020, 083402.	2.3	3
9	Notch signaling and taxis mechanisms regulate early stage angiogenesis: A mathematical and computational model. PLoS Computational Biology, 2020, 16, e1006919.	3.2	25
10	Tracking collective cell motion by topological data analysis. PLoS Computational Biology, 2020, 16, e1008407.	3.2	17
11	Integrodifference master equation describing actively growing blood vessels in angiogenesis. International Journal of Nonlinear Sciences and Numerical Simulation, 2020, 21, 705-713.	1.0	1
12	Active Ornstein-Uhlenbeck particles. Physical Review E, 2019, 100, 022601.	2.1	46
13	Stochastic Models of Blood Vessel Growth. Springer Proceedings in Mathematics and Statistics, 2019, , 413-436.	0.2	2
14	Contrarian compulsions produce exotic time-dependent flocking of active particles. Physical Review E, 2019, 99, 012612.	2.1	16
15	Variational formulation, asymptotic analysis, and finite element simulation of wrinkling phenomena in modified plate equations modeling biofilms growing on agar substrates. Computer Methods in Applied Mechanics and Engineering, 2018, 333, 257-286.	6.6	5
16	Parameter dependence of high-frequency nonlinear oscillations and intrinsic chaos in short GaAs/(Al,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.5	6
17	Crossover between parabolic and hyperbolic scaling, oscillatory modes, and resonances near flocking. Physical Review E, 2018, 98, .	2.1	6
18	A convergent numerical scheme for integrodifferential kinetic models of angiogenesis. Journal of Computational Physics, 2018, 375, 1270-1294.	3.8	7

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19	Coherence Resonance and Stochastic Resonance in an Excitable Semiconductor Superlattice. Physical Review Letters, 2018, 121, 086805.	7.8	27
20	Fast Detection of a Weak Signal by a Stochastic Resonance Induced by a Coherence Resonance in an Excitable $GaAs/Al$ Superlattice. Physical Review Letters, 2018, 121, 086806.	7.8	22
21	Stochastic Models of Tumor Induced Angiogenesis. Springer Proceedings in Mathematics and Statistics, 2018, , 97-116.	0.2	0
22	Ordered, Disordered and Partially Synchronized Schools of Fish. International Journal of Nonlinear Sciences and Numerical Simulation, 2017, 18, 163-174.	1.0	0
23	Enhancing chaotic behavior at room temperature in GaAs/(Al,Ga)As superlattices. Physical Review B, 2017, 95, .	3.2	7
24	Strain engineering of graphene nanoribbons: pseudomagnetic versus external magnetic fields. European Physical Journal B, 2017, 90, 1.	1.5	6
25	Noise-enhanced chaos in a weakly coupled GaAs/(Al,Ga)As superlattice. Physical Review E, 2017, 95, 012218.	2.1	14
26	Bifurcation analysis and phase diagram of a spin-string model with buckled states. Physical Review E, 2017, 96, 062147.	2.1	10
27	Two-dimensional collective electron magnetotransport, oscillations, and chaos in a semiconductor superlattice. Physical Review E, 2017, 96, 062215.	2.1	3
28	Ensemble Averages, Soliton Dynamics and Influence of Haptotaxis in a Model of Tumor-Induced Angiogenesis. Entropy, 2017, 19, 209.	2.2	6
29	On the mathematical modelling of tumor-induced angiogenesis. Mathematical Biosciences and Engineering, 2017, 14, 45-66.	1.9	15
30	Maximum Entropy Closure of Balance Equations for Miniband Semiconductor Superlattices. Entropy, 2016, 18, 260.	2.2	0
31	Chaos-based true random number generators. Journal of Mathematics in Industry, 2016, 7, .	1.2	32
32	Axial ligand effect on the catalytic activity of biomimetic Fe-porphyrin catalyst: An experimental and DFT study. Journal of Catalysis, 2016, 344, 768-777.	6.2	20
33	Pseudospin lifetime in relaxed-shape armchair graphene nanoribbons due to in-plane phonon modes. Physical Review B, 2016, 93, .	3.2	7
34	Wavelength selection of rippling patterns in myxobacteria. Physical Review E, 2016, 93, 012412.	2.1	3
35	Stochastic model of tumor-induced angiogenesis: Ensemble averages and deterministic equations. Physical Review E, 2016, 93, 022413.	2.1	19
36	Critical radius and temperature for buckling in graphene. Physical Review B, 2016, 93, .	3.2	15

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37	STM-driven transition from rippled to buckled graphene in a spin-membrane model. Physical Review B, 2016, 94, .	3.2	11
38	Soliton driven angiogenesis. Scientific Reports, 2016, 6, 31296.	3.3	15
39	Solitonlike attractor for blood vessel tip density in angiogenesis. Physical Review E, 2016, 94, 062415.	2.1	13
40	Band diagram of strained graphene nanoribbons. , 2016, , .		0
41	Modulated Bloch Waves in Semiconductor Superlattices. Mathematics in Industry, 2016, , 749-755.	0.3	0
42	Measuring strain and rotation fields at the dislocation core in graphene. Physical Review B, 2015, 92, .	3.2	11
43	Theory of force-extension curves for modular proteins and DNA hairpins. Physical Review E, 2015, 91, 052712.	2.1	23
44	Ripples in hexagonal lattices of atoms coupled to Glauber spins. Journal of Statistical Mechanics: Theory and Experiment, 2015, 2015, P05015.	2.3	12
45	Spin Control in Quantum Dots for Quantum Information Processing. NATO Science for Peace and Security Series C: Environmental Security, 2015, , 3-13.	0.2	0
46	Protein unfolding and refolding as transitions through virtual states. Europhysics Letters, 2014, 108, 28002.	2.0	5
47	Hybrid modeling of tumor-induced angiogenesis. Physical Review E, 2014, 90, 062716.	2.1	29
48	Dynamics of optically injected currents in carbon nanotubes. Physical Review B, 2014, 90, .	3.2	2
49	Thermoelectromechanical effects in relaxed-shape graphene and band structures of graphene quantum dots. Physical Review B, 2014, 90, .	3.2	8
50	Higher-Order Averaging of Fokker--Planck Equations for Nonlinear Fiber Lay-Down Processes. SIAM Journal on Applied Mathematics, 2014, 74, 366-391.	1.8	5
51	Noise-enhanced spontaneous chaos in semiconductor superlattices at room temperature. Europhysics Letters, 2014, 107, 37002.	2.0	18
52	Influence of primary-particle density in the morphology of agglomerates. Physical Review E, 2014, 90, 012306.	2.1	11
53	Gate control of Berry phase in III-V semiconductor quantum dots. Physical Review B, 2014, 89, .	3.2	12
54	Transport in semiconductor nanowire superlattices described by coupled quantum mechanical and kinetic models. Journal of Physics Condensed Matter, 2013, 25, 335301.	1.8	3

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55	Electrical control of phonon-mediated spin relaxation rate in semiconductor quantum dots: Rashba versus Dresselhaus spin-orbit coupling. Physical Review B, 2013, 87, .	3.2	23
56	Numerical methods for kinetic equations in semiconductor superlattices. Computer Physics Communications, 2013, 184, 720-731.	7.5	3
57	Effects of noise on hysteresis and resonance width in graphene and nanotubes resonators. Physical Review B, 2013, 87, .	3.2	1
58	Spin echo dynamics under an applied drift field in graphene nanoribbon superlattices. Applied Physics Letters, 2013, 103, 233112.	3.3	7
59	Spin transition rates in nanowire superlattices: Rashba spin–orbit coupling effects. Journal Physics D: Applied Physics, 2013, 46, 265302.	2.8	4
60	Coupled multiphysics, barrier localization, and critical radius effects in embedded nanowire superlattices. Journal of Applied Physics, 2013, 113, 244306.	2.5	5
61	Sawtooth patterns in force-extension curves of biomolecules: An equilibrium-statistical-mechanics theory. Physical Review E, 2013, 88, 012704.	2.1	22
62	Temperature-dependent dynamical nuclear polarization bistabilities in double quantum dots in the spin-blockade regime. Physical Review B, 2013, 88, .	3.2	7
63	Spin-oscillator model for the unzipping of biomolecules by mechanical force. Physical Review E, 2012, 86, 021919.	2.1	9
64	Ripples in a string coupled to Glauber spins. Physical Review E, 2012, 85, 031125.	2.1	17
65	The influence of anisotropic gate potentials on the phonon induced spin-flip rate in GaAs quantum dots. Applied Physics Letters, 2012, 100, 023108.	3.3	13
66	Ripples in a graphene membrane coupled to Glauber spins. Journal of Statistical Mechanics: Theory and Experiment, 2012, 2012, P09015.	2.3	13
67	Theory of homogeneous vapour condensation and surface deposition from boundary layers. Journal of Fluid Mechanics, 2012, 706, 534-559.	3.4	1
68	Higher Order Averaging of Linear Fokker--Planck Equations with Periodic Forcing. SIAM Journal on Applied Mathematics, 2012, 72, 1315-1342.	1.8	7
69	Model of ripples in graphene. Physical Review B, 2012, 86, .	3.2	19
70	Velocity of pulses in discrete excitable systems. Nonlinear Analysis: Real World Applications, 2012, 13, 2794-2803.	1.7	0
71	Driving Dislocations in Graphene. Science, 2012, 337, 161-162.	12.6	18
72	Numerical method for hydrodynamic modulation equations describing Bloch oscillations in semiconductor superlattices. Journal of Computational Physics, 2012, 231, 4499-4514.	3.8	1

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73	Preface of the â€œSymposium on Models in Nano and Biomaterialsâ€•. , 2011, , .		0
74	Wave fronts, pulses and wave trains in photoexcited superlattices behaving as excitable or oscillatory media. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 395003.	2.1	1
75	Statics and dynamics of a harmonic oscillator coupled to a one-dimensional Ising system. , 2011, , .		1
76	Spatially Confined Bloch Oscillations in Semiconductor Superlattices. , 2011, , .		0
77	Theory of defect dynamics in graphene: defect groupings and their stability. Continuum Mechanics and Thermodynamics, 2011, 23, 337-346.	2.2	9
78	Spatially confined Bloch oscillations in semiconductor superlattices. Europhysics Letters, 2011, 95, 47001.	2.0	6
79	Nonequilibrium free energy, H theorem and self-sustained oscillations for Boltzmannâ€"BGK descriptions of semiconductor superlattices. Journal of Statistical Mechanics: Theory and Experiment, 2011, 2011, P01018.	2.3	1
80	Theory of spatially inhomogeneous Bloch oscillations in semiconductor superlattices. Physical Review B, 2011, 84, .	3.2	9
81	Phase diagrams and switching of voltage and magnetic field in dilute magnetic semiconductor nanostructures. Physica Status Solidi - Rapid Research Letters, 2010, 4, 76-78.	2.4	0
82	Photoexcited semiconductor superlattices as constrained excitable media: Motion of dipole domains and current self-oscillations. Physical Review B, 2010, 81, .	3.2	6
83	Nonequilibrium dynamics of a fast oscillator coupled to Glauber spins. Journal of Statistical Mechanics: Theory and Experiment, 2010, 2010, P09019.	2.3	11
84	Phase transitions in a mechanical system coupled to Glauber spins. Journal of Statistical Mechanics: Theory and Experiment, 2010, 2010, P06016.	2.3	9
85	Two miniband model for self-sustained oscillations of the current through resonant-tunneling semiconductor superlattices. Physical Review B, 2010, 82, .	3.2	11
86	Relocation Dynamics During Voltage Switching in Spin-Polarized Superlattices. Mathematics in Industry, 2010, , 159-165.	0.3	0
87	Self-Sustained Spin-Polarized Current Oscillations in Multiquantum Well Structures. Mathematics in Industry, 2010, , 147-152.	0.3	0
88	Magnetoswitching of current oscillations in dilute magnetic semiconductor nanostructures. Physical Review B, 2009, 80, .	3.2	3
89	Self-sustained spin-polarized current oscillations in multiquantum well structures. New Journal of Physics, 2009, 11, 013033.	2.9	7
90	Self-sustained current oscillations in the kinetic theory of semiconductor superlattices. Journal of Computational Physics, 2009, 228, 7689-7705.	3.8	9

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91	Toy nanoindentation model and incipient plasticity. Chaos, Solitons and Fractals, 2009, 42, 1623-1630.	5.1	5
92	Theory of surface deposition from boundary layers containing condensable vapour and particles. Journal of Fluid Mechanics, 2009, 626, 183-210.	3.4	5
93	Self‐sustained current oscillations in a multi‐quantum‐well spin polarized structure with normal contacts. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 1270-1275.	1.8	0
94	Multiquantum well spin polarized current oscillator. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 1099-1101.	2.7	0
95	Homogeneous nucleation of opposite moving dipole domains and current self-oscillations in undoped photoexcited superlattices. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 1209-1211.	2.7	2
96	Periodized discrete elasticity models for defects in graphene. Physical Review B, 2008, 78, .	3.2	44
97	Dislocations in graphene. New Journal of Physics, 2008, 10, 053021.	2.9	80
98	Nonlinear Electron and Spin Transport in Semiconductor Superlattices. SIAM Journal on Applied Mathematics, 2008, 69, 494-513.	1.8	15
99	Homogeneous Branched-Chain Explosions. SIAM Journal on Applied Mathematics, 2008, 68, 619-628.	1.8	1
100	Hydrodynamic Limit of a Fokker‐Planck Equation Describing Fiber Lay-Down Processes. SIAM Journal on Applied Mathematics, 2008, 68, 648-665.	1.8	27
101	Heterogeneous Vapor Condensation in Boundary Layers. , 2008, , .		0
102	Nonlinear Electron Transport in Nanostructures. , 2008, , .		1
103	Homogeneous nucleation of dislocations as bifurcations in a periodized discrete elasticity model. Europhysics Letters, 2008, 81, 36001.	2.0	15
104	Self-Sustained Spin-Polarized Current Oscillations in Diluted Magnetic Semiconductor Superlattices. IEEE Transactions on Magnetics, 2008, 44, 2662-2665.	2.1	0
105	Critical Thickness for Misfit Dislocation Formation in InAs/GaAs(110) Heteroepitaxy. Mathematics in Industry, 2008, , 381-386.	0.3	0
106	Multi-quantum-well spin oscillator. Applied Physics Letters, 2007, 91, .	3.3	11
107	Relocation dynamics and multistable switching in semiconductor superlattices. Journal of Computational and Applied Mathematics, 2007, 204, 18-24.	2.0	0
108	Dislocations in cubic crystals described by discrete models. Physica A: Statistical Mechanics and Its Applications, 2007, 376, 361-377.	2.6	10

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109	NONLINEAR ELECTRONIC TRANSPORT IN SEMICONDUCTOR SUPERLATTICES. , 2007, , .		0
110	Kinetics of Nucleation and Growth: Classical Nucleation and Helium Bubbles in Nuclear Materials. , 2007, , 291-307.		0
111	Kinetics of helium bubble formation in nuclear materials. Physica D: Nonlinear Phenomena, 2006, 222, 131-140.	2.8	12
112	Numerical Methods for a Quantum Draft–diffusion Equation in Semiconductor Physics. Journal of Mathematical Chemistry, 2006, 40, 3-13.	1.5	7
113	Voltage switching and domain relocation in semiconductor superlattices. Physical Review B, 2006, 73, .	3.2	27
114	EXACT SOLUTIONS AND DYNAMICS OF GLOBALLY COUPLED OSCILLATORS. Mathematical Models and Methods in Applied Sciences, 2006, 16, 1919-1959.	3.3	3
115	Igniting homogeneous nucleation. Physical Review E, 2005, 71, 021601.	2.1	10
116	Discrete models of dislocations and their motion in cubic crystals. Physical Review B, 2005, 71, .	3.2	26
117	WIGNER–POISSON AND NONLOCAL DRIFT-DIFFUSION MODEL EQUATIONS FOR SEMICONDUCTOR SUPERLATTICES. Mathematical Models and Methods in Applied Sciences, 2005, 15, 1253-1272.	3.3	14
118	Periodically Generated Propagating Pulses. SIAM Journal on Applied Mathematics, 2005, 65, 1053-1079.	1.8	1
119	The Kuramoto model: A simple paradigm for synchronization phenomena. Reviews of Modern Physics, 2005, 77, 137-185.	45.6	2,547
120	Non-linear dynamics of semiconductor superlattices. Reports on Progress in Physics, 2005, 68, 577-683.	20.1	190
121	Miniband transport and oscillations in semiconductor superlattices. Nanotechnology, 2004, 15, S229-S233.	2.6	5
122	Theory of charge fluctuations and domain relocation times in semiconductor superlattices. Physica D: Nonlinear Phenomena, 2004, 199, 105-114.	2.8	2
123	Low-Field Limit for a Nonlinear Discrete Drift-Diffusion Model Arising in Semiconductor Superlattices Theory. SIAM Journal on Applied Mathematics, 2004, 64, 1526-1549.	1.8	16
124	Free Boundary Problems Describing Two-Dimensional Pulse Recycling and Motion in Semiconductors. , 2004, , 147-152.		0
125	Wave dynamics in two-dimensional samples of n-GaAs with point contacts. Chaos, Solitons and Fractals, 2003, 17, 283-288.	5.1	2
126	Depinning Transitions in Discrete Reaction-Diffusion Equations. SIAM Journal on Applied Mathematics, 2003, 63, 1056-1082.	1.8	45

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127	Pulse Propagation in Discrete Systems of Coupled Excitable Cells. SIAM Journal on Applied Mathematics, 2003, 63, 619-635.	1.8	33
128	Oscillatory wave fronts in chains of coupled nonlinear oscillators. Physical Review E, 2003, 67, 056621.	2.1	34
129	Edge Dislocations in Crystal Structures Considered as Traveling Waves in Discrete Models. Physical Review Letters, 2003, 90, 135502.	7.8	34
130	Free-boundary problems describing two-dimensional pulse recycling and motion in semiconductors. Physical Review E, 2003, 67, 036202.	2.1	4
131	Generalized drift-diffusion model for miniband superlattices. Physical Review B, 2003, 68, .	3.2	28
132	Effects of disorder on the wave front depinning transition in spatially discrete systems. Physical Review E, 2002, 65, 035207.	2.1	5
133	Three eras of micellization. Physical Review E, 2002, 66, 061406.	2.1	32
134	Nonlinear stochastic discrete drift-diffusion theory of charge fluctuations and domain relocation times in semiconductor superlattices. Physical Review B, 2002, 65, .	3.2	12
135	Theory of nonlinear charge transport, wave propagation, and self-oscillations in semiconductor superlattices. Journal of Physics Condensed Matter, 2002, 14, R341-R381.	1.8	65
136	Temperature-induced breakdown of stationary electric field domains in superlattices. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 13, 798-801.	2.7	1
137	Nonlinear Transport in Semiconductor Superlattices. Mathematics in Industry, 2002, , 372-385.	0.3	0
138	Periodic Recycling and Motion of Wavefronts in a Model of the Gunn Effect with Saturating Current Characteristics. Mathematics in Industry, 2002, , 386-398.	0.3	0
139	Wavefronts in Photoexcited Semiconductor Superlattices. Mathematics in Industry, 2002, , 365-371.	0.3	0
140	HIGH-FIELD LIMIT OF THE VLASOV–POISSON–FOKKER–PLANCK SYSTEM: A COMPARISON OF DIFFERENT PERTURBATION METHODS. Mathematical Models and Methods in Applied Sciences, 2001, 11, 1457-1468.	3.3	45
141	SPATIOTEMPORAL STRUCTURES IN UNDOPED PHOTOEXCITED SEMICONDUCTOR SUPERLATTICES. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2001, 11, 2817-2822.	1.7	3
142	Wave Front Depinning Transition in Discrete One-Dimensional Reaction-Diffusion Systems. Physical Review Letters, 2001, 86, 6034-6037.	7.8	43
143	Temperature dependence of current self-oscillations and electric-field domains in sequential-tunneling doped superlattices. Physical Review B, 2001, 64, .	3.2	17
144	Axisymmetric pulse recycling and motion in bulk semiconductors. Physical Review E, 2001, 65, 016607.	2.1	6

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145	Quasiperiodic current and strange attractors in ac-driven superlattices. Physical Review B, 2001, 63, .	3.2	27
146	Chaotic motion of space charge wave fronts in semiconductors under time-independent voltage bias. Physical Review E, 2001, 63, 056216.	2.1	16
147	Two-dimensional oscillatory patterns in semiconductors with point contacts. Physical Review E, 2001, 64, 036203.	2.1	5
148	Dynamic scenarios of multistable switching in semiconductor superlattices. Physical Review E, 2001, 63, 066207.	2.1	46
149	Motion of wave fronts in semiconductor superlattices. Physical Review E, 2001, 64, 036204.	2.1	25
150	Field domains in semiconductor superlattices: Dynamic scenarios of multistable switching. Springer Proceedings in Physics, 2001, , 801-802.	0.2	1
151	Axisymmetric Gunn effect. Springer Proceedings in Physics, 2001, , 134-135.	0.2	0
152	CONTROLLABLE BIFURCATION PROCESSES IN UNDOPED, PHOTOEXCITED GaAs/AlAs SUPERLATTICES. , 2001, , .		1
153	Dynamics of electric field domain walls in semiconductor superlattices. Physica E: Low-Dimensional Systems and Nanostructures, 2000, 7, 299-301.	2.7	2
154	Bifurcation Behavior of a Superlattice Model. SIAM Journal on Applied Mathematics, 2000, 60, 2029-2057.	1.8	15
155	Microscopic derivation of transport coefficients and boundary conditions in discrete drift-diffusion models of weakly coupled superlattices. Physical Review B, 2000, 62, 2786-2796.	3.2	43
156	Synchronization in populations of globally coupled oscillators with inertial effects. Physical Review E, 2000, 62, 3437-3454.	2.1	78
157	Chapman-Enskog method and synchronization of globally coupled oscillators. Physical Review E, 2000, 62, 4862-4868.	2.1	17
158	Wave fronts may move upstream in semiconductor superlattices. Physical Review E, 2000, 61, 4866-4876.	2.1	34
159	The Description of Homogeneous Branched-Chain Explosions with Slow Radical Recombination by Self-Adjusting Time Scales. SIAM Journal on Applied Mathematics, 2000, 61, 528-550.	1.8	7
160	Wave Propagation and Oscillations in a Semiconductor Nanostructure. , 2000, , 209-217.		0
161	Electron Patterns Under Bistable Electro-Optical Absorption in Quantum Well Structures. , 2000, , 325-326.		0
162	Non-Linear Charge Dynamics in Semiconductor Superlattices. , 2000, , 334-335.		0

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163	Pattern formation under bistable electro-optical absorption in quantum wells: I. Journal of Physics Condensed Matter, 1999, 11, 6395-6411.	1.8	3
164	Dynamical behaviour of photo-excited and voltage biased MQW structures with bistable electro-optical absorption. Journal of Optics B: Quantum and Semiclassical Optics, 1999, 1, 84-89.	1.4	0
165	Current self-oscillations, spikes, and crossover between charge monopole and dipole waves in semiconductor superlattices. Physical Review B, 1999, 60, 4489-4492.	3.2	42
166	Determination of EL2 capture and emission coefficients in semi-insulating n-GaAs. Applied Physics Letters, 1999, 74, 988-990.	3.3	14
167	Multifractal dimension of chaotic attractors in a driven semiconductor superlattice. Physical Review B, 1999, 60, 5694-5697.	3.2	21
168	Pattern formation under bistable electro-optical absorption in quantum wells: II. Journal of Physics Condensed Matter, 1999, 11, 6413-6426.	1.8	0
169	Pattern formation and stability under bistable electro-optical absorption in quantum wells. Microelectronic Engineering, 1998, 43-44, 153-163.	2.4	0
170	Coherent patterns and self-focusing of electrons by a thin nonlinear barrier. Superlattices and Microstructures, 1998, 23, 467-470.	3.1	1
171	Forcing of chaos in semiconductor superlattices. Superlattices and Microstructures, 1998, 23, 13-17.	3.1	1
172	Aging in the linear harmonic oscillator. Physica A: Statistical Mechanics and Its Applications, 1998, 250, 315-326.	2.6	36
173	Time-periodic phases in populations of nonlinearly coupled oscillators with bimodal frequency distributions. Physica D: Nonlinear Phenomena, 1998, 113, 79-97.	2.8	62
174	Asymptotic description of transients and synchronized states of globally coupled oscillators. Physica D: Nonlinear Phenomena, 1998, 114, 296-314.	2.8	27
175	Patterns under quantum confined Stark effect. Journal of Physics Condensed Matter, 1998, 10, L539-L546.	1.8	0
176	Photorefractive Gunn effect. Physical Review B, 1998, 58, 7046-7052.	3.2	13
177	Exactly Solvable Phase Oscillator Models with Synchronization Dynamics. Physical Review Letters, 1998, 81, 3643-3646.	7.8	30
178	Explosive Bifurcation to Chaos in Weakly Coupled Semiconductor Superlattices. Physical Review Letters, 1998, 81, 1290-1293.	7.8	76
179	Transition between static and dynamic electric-field domain formation in weakly coupled GaAs/AlAs superlattices. Physical Review B, 1998, 58, R7528-R7531.	3.2	23
180	Breaking the symmetry in bimodal frequency distributions of globally coupled oscillators. Physical Review E, 1998, 57, 5287-5290.	2.1	36

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181	Microscopic model for sequential tunneling in semiconductor multiple quantum wells. Physical Review B, 1997, 55, R16053-R16056.	3.2	48
182	Stationary states and phase diagram for a model of the Gunn effect under realistic boundary conditions. Physical Review E, 1997, 56, 1490-1499.	2.1	5
183	Current-voltage characteristic and stability in resonant-tunneling n-dopedsemiconductor superlattices. Physical Review B, 1997, 55, 2466-2475.	3.2	69
184	Asymptotic analysis of the Gunn effect with realistic boundary conditions. Physical Review E, 1997, 56, 1500-1510.	2.1	19
185	Universality of the Gunn effect: Self-sustained oscillations mediated by solitary waves. Physical Review E, 1997, 56, 3628-3632.	2.1	12
186	Electrically tunable GHz oscillations in doped GaAs-AlAs superlattices. Physical Review B, 1997, 55, 2476-2488.	3.2	134
187	Periodic Generation and Propagation of Traveling Fronts in DC Voltage Biased Semiconductor Superlattices. SIAM Journal on Applied Mathematics, 1997, 57, 1588-1614.	1.8	29
188	Asymptotic Behavior of an Initial-Boundary Value Problem for the Vlasov--Poisson--Fokker--Planck System. SIAM Journal on Applied Mathematics, 1997, 57, 1343-1372.	1.8	45
189	Asymptotics of the trap-dominated Gunn effect in p-type Ge. Physica D: Nonlinear Phenomena, 1997, 108, 168-190.	2.8	11
190	Spikes in the Current Self-Oscillations of Doped GaAs/AlAs Superlattices. Physica Status Solidi (B): Basic Research, 1997, 204, 500-503.	1.5	15
191	Lateral Electronâ€"Hole Plasma Domains under Bistable Electro-Optical Absorption in Quantum Wells. Physica Status Solidi (B): Basic Research, 1997, 204, 559-562.	1.5	6
192	Liapunov functionals and large-time-asymptotics of mean-field nonlinear Fokker-Planck equations. Transport Theory and Statistical Physics, 1996, 25, 733-751.	0.4	17
193	Dynamics of electric-field domains and chaos in semiconductor superlattices. Solid-State Electronics, 1996, 40, 161-165.	1.4	5
194	H-theorem for electrostatic or self-gravitating Vlasov-Poisson-Fokker-Planck systems. Physics Letters, Section A: General, Atomic and Solid State Physics, 1996, 212, 55-59.	2.1	12
195	Chaotic dynamics of electric-field domains in periodically driven superlattices. Physical Review B, 1996, 53, 10008-10018.	3.2	55
196	Closure of the Monte Carlo dynamical equations in the spherical Sherrington-Kirkpatrick model. Physical Review B, 1996, 54, 4170-4182.	3.2	15
197	Solitary-wave conduction inp-type Ge under time-dependent voltage bias. Physical Review B, 1996, 53, 1327-1335.	3.2	13
198	Coherent patterns and self-induced diffraction of electrons on a thin nonlinear layer. Physical Review B, 1996, 54, 1537-1540.	3.2	12

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