

Massimiliano Di Ventra

List of Publications by Year in descending order

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252
papers

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22153

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262
docs citations

262
times ranked

13678
citing authors

#	ARTICLE	IF	CITATIONS
1	Second Harmonic Generation Exploiting Ultra-Stable Resistive Switching Devices for Secure Hardware Systems. IEEE Nanotechnology Magazine, 2022, 21, 71-80.	2.0	5
2	Non-equilibrium criticality and efficient exploration of glassy landscapes with memory dynamics. Physica A: Statistical Mechanics and Its Applications, 2022, 591, 126727.	2.6	2
3	Polariton-Based Quantum Memristors. Physical Review Applied, 2022, 17, .	3.8	3
4	Antiferromagnetic Parametric Resonance Driven by Voltage-Controlled Magnetic Anisotropy. Physical Review Applied, 2022, 17, .	3.8	6
5	Custodial Chiral Symmetry in a Su-Schrieffer-Heeger Electrical Circuit with Memory. Physical Review Letters, 2022, 128, 097701.	7.8	13
6	An experimental demonstration of the memristor test. Physica E: Low-Dimensional Systems and Nanostructures, 2022, 142, 115290.	2.7	4
7	The promise of spintronics for unconventional computing. Journal of Magnetism and Magnetic Materials, 2021, 521, 167506.	2.3	66
8	Effect of quantum resonances on local temperature in nonequilibrium open systems. Physical Review B, 2021, 103, .	3.2	5
9	The Fourier signatures of memristive hysteresis. Journal Physics D: Applied Physics, 2021, 54, 245302.	2.8	3
10	Thousand-fold Increase in Plasmonic Light Emission via Combined Electronic and Optical Excitations. Nano Letters, 2021, 21, 2658-2665.	9.1	12
11	Directed percolation and numerical stability of simulations of digital memcomputing machines. Chaos, 2021, 31, 063127.	2.5	1
12	Synaptic Plasticity in Memristive Artificial Synapses and Their Robustness Against Noisy Inputs. Frontiers in Neuroscience, 2021, 15, 660894.	2.8	17
13	Nanomagnetic Self-Organizing Logic Gates. Physical Review Applied, 2021, 16, .	3.8	1
14	Mode-assisted joint training of deep Boltzmann machines. Scientific Reports, 2021, 11, 19000.	3.3	1
15	On the validity of memristor modeling in the neural network literature. Neural Networks, 2020, 121, 52-56.	5.9	31
16	Stress-Testing Memcomputing on Hard Combinatorial Optimization Problems. IEEE Transactions on Neural Networks and Learning Systems, 2020, 31, 2222-2226.	11.3	5
17	Mode-assisted unsupervised learning of restricted Boltzmann machines. Communications Physics, 2020, 3, .	5.3	12
18	Efficient solution of Boolean satisfiability problems with digital memcomputing. Scientific Reports, 2020, 10, 19741.	3.3	8

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19	An Experimental Proof that Resistance-Switching Memory Cells are not Memristors. <i>Advanced Electronic Materials</i> , 2020, 6, 2000010.	5.1	20
20	Application of Floquet theory to dynamical systems with memory. <i>Chaos</i> , 2020, 30, 123102.	2.5	3
21	Critical branching processes in digital memcomputing machines. <i>Europhysics Letters</i> , 2019, 127, 30005.	2.0	5
22	Digital memcomputing: From logic to dynamics to topology. <i>Annals of Physics</i> , 2019, 409, 167935.	2.8	8
23	Local temperatures out of equilibrium. <i>Physics Reports</i> , 2019, 830, 1-66.	25.6	22
24	Chaos as a symmetry-breaking phenomenon. <i>Modern Physics Letters B</i> , 2019, 33, 1950287.	1.9	3
25	Taming a nonconvex landscape with dynamical long-range order: Memcomputing Ising benchmarks. <i>Physical Review E</i> , 2019, 100, 053311.	2.1	13
26	On the Universality of Memcomputing Machines. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2019, 30, 1610-1620.	11.3	3
27	Accelerating deep learning with memcomputing. <i>Neural Networks</i> , 2019, 110, 1-7.	5.9	23
28	Josephson Thermal Memory. <i>Physical Review Applied</i> , 2018, 9, .	3.8	40
29	Instantons in Self-Organizing Logic Gates. <i>Physical Review Applied</i> , 2018, 9, .	3.8	13
30	Phase-dependent noise in Josephson junctions. <i>EPJ Applied Physics</i> , 2018, 81, 10601.	0.7	1
31	Memcomputing Numerical Inversion With Self-Organizing Logic Gates. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2018, 29, 2645-2650.	11.3	5
32	Surface effects on ionic Coulomb blockade in nanometer-size pores. <i>Nanotechnology</i> , 2018, 29, 025703.	2.6	6
33	Evidence of Exponential Speed-Up in the Solution of Hard Optimization Problems. <i>Complexity</i> , 2018, 2018, 1-13.	1.6	20
34	An energy-resolved atomic scanning probe. <i>New Journal of Physics</i> , 2018, 20, 115005.	2.9	10
35	Many-body multivaluedness of particle-current variance in closed and open cold-atom systems. <i>Physical Review A</i> , 2018, 98, .	2.5	1
36	Tunable current circulation in triangular quantum-dot metastructures. <i>Europhysics Letters</i> , 2018, 123, 47002.	2.0	13

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37	Perspective: Memcomputing: Leveraging memory and physics to compute efficiently. <i>Journal of Applied Physics</i> , 2018, 123, .	2.5	60
38	Polynomial-time solution of prime factorization and NP-complete problems with digital memcomputing machines. <i>Chaos</i> , 2017, 27, 023107.	2.5	67
39	Conducting-insulating transition in adiabatic memristive networks. <i>Physical Review E</i> , 2017, 95, 012305.	2.1	14
40	Ion Transport and Dehydration in Subnanoscale Pores. <i>Biophysical Journal</i> , 2017, 112, 544a.	0.5	0
41	Classification of DNA nucleotides with transverse tunneling currents. <i>Nanotechnology</i> , 2017, 28, 015502.	2.6	8
42	Solitonic Josephson-based meminductive systems. <i>Scientific Reports</i> , 2017, 7, 46736.	3.3	30
43	Absence of chaos in digital memcomputing machines with solutions. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2017, 381, 3255-3257.	2.1	14
44	Hysteretic Superconducting Heat-Flux Quantum Modulator. <i>Physical Review Applied</i> , 2017, 7, .	3.8	19
45	Exploration and characterization of the memcapacitor and memristor properties of Niâ€“DNA nanowire devices. <i>NPG Asia Materials</i> , 2017, 9, e430-e430.	7.9	10
46	Absence of periodic orbits in digital memcomputing machines with solutions. <i>Chaos</i> , 2017, 27, 101101.	2.5	10
47	Dehydration as a Universal Mechanism for Ion Selectivity in Graphene and Other Atomically Thin Pores. <i>Nano Letters</i> , 2017, 17, 4719-4724.	9.1	161
48	MemComputing: An efficient topological computing paradigm. , 2017, , .		1
49	Topological Field Theory and Computing with Instantons. <i>Annalen Der Physik</i> , 2017, 529, 1700123.	2.4	23
50	Thermodynamic meaning of local temperature of nonequilibrium open quantum systems. <i>Physical Review B</i> , 2016, 94, .	3.2	15
51	Sequencing proteins with transverse ionic transport in nanochannels. <i>Scientific Reports</i> , 2016, 6, 25232.	3.3	17
52	Surface trap mediated electronic transport in biofunctionalized silicon nanowires. <i>Nanotechnology</i> , 2016, 27, 345503.	2.6	16
53	Matter-wave propagation in optical lattices: geometrical and flat-band effects. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2016, 49, 075301.	1.5	7
54	Memcomputing Implementation of Ant Colony Optimization. <i>Neural Processing Letters</i> , 2016, 44, 265-277.	3.2	11

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55	Observation of ionic Coulomb blockade in Nanopores. <i>Nature Materials</i> , 2016, 15, 850-855.	27.5	175
56	A Memristive Pascaline. <i>IEEE Transactions on Circuits and Systems II: Express Briefs</i> , 2016, 63, 558-562.	3.0	10
57	Decoding DNA, RNA and peptides with quantum tunnelling. <i>Nature Nanotechnology</i> , 2016, 11, 117-126.	31.5	183
58	Digital Memcomputing Machines. , 2016, , .		0
59	Local temperatures of strongly-correlated quantum dots out of equilibrium. <i>Physical Review B</i> , 2015, 91, .	3.2	29
60	Reconfigurable transmission lines with memcapacitive materials. <i>Applied Physics Letters</i> , 2015, 107, 253101.	3.3	3
61	Just Add Memory. <i>Scientific American</i> , 2015, 312, 56-61.	1.0	10
62	Edge binding of sine-Gordon solitons in spin-orbit-coupled Bose-Einstein condensates. <i>Physical Review A</i> , 2015, 91, .	2.5	8
63	Scale-free networks as an epiphenomenon of memory. <i>Europhysics Letters</i> , 2015, 109, 28006.	2.0	16
64	Tunable quantum temperature oscillations in graphene nanostructures. <i>Physical Review B</i> , 2015, 91, .	3.2	19
65	Memcomputing $\langle i \rangle NP \langle /i \rangle$ -complete problems in polynomial time using polynomial resources and collective states. <i>Science Advances</i> , 2015, 1, e1500031.	10.3	58
66	The role of measurement time on the universal crossover from $1/f$ to non- $1/f$ noise behavior. <i>Journal of Computational Electronics</i> , 2015, 14, 203-208.	2.5	2
67	Memcomputing with membrane memcapacitive systems. <i>Nanotechnology</i> , 2015, 26, 225201.	2.6	24
68	Universal Memcomputing Machines. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2015, 26, 2702-2715.	11.3	106
69	Quantum transport in ultracold atoms. <i>Nature Physics</i> , 2015, 11, 998-1004.	16.7	113
70	Correlation dynamics and enhanced signals for the identification of serial biomolecules and DNA bases. <i>Nanotechnology</i> , 2014, 25, 125705.	2.6	26
71	Memcapacitive neural networks. <i>Electronics Letters</i> , 2014, 50, 141-143.	1.0	28
72	Quantum shock waves and population inversion in collisions of ultracold atomic clouds. <i>Physical Review A</i> , 2014, 89, .	2.5	28

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73	Memristor-based devices for sensing. , 2014, , .		25
74	Novel implementation of memristive systems for data encryption and obfuscation. Journal of Applied Physics, 2014, 115, .	2.5	11
75	Publisher's Note: Superconducting Memristors [Phys. Rev. Applied, 034011 (2014)]. Physical Review Applied, 2014, 2, .	3.8	1
76	Dynamic computing random access memory: A brain-inspired computing paradigm with memristors. , 2014, , .		0
77	Phase-induced transport in atomic gases: From superfluid to Mott insulator. Physical Review A, 2014, 90, .	2.5	12
78	Density-Functional Theory of Thermoelectric Phenomena. Physical Review Letters, 2014, 112, 196401.	7.8	24
79	Programmable Redox State of the Nickel Ion Chain in DNA. Nano Letters, 2014, 14, 1026-1031.	9.1	17
80	Memcomputing: A computing paradigm to store and process information on the same physical platform. , 2014, , .		7
81	Introduction for solid state membranes for bio-molecules sensing and manipulation. Journal of Computational Electronics, 2014, 13, 779-780.	2.5	2
82	Driving knots on DNA with AC/DC electric fields: topological friction and memory effects. Soft Matter, 2014, 10, 6491-6498.	2.7	33
83	Dynamic computing random access memory. Nanotechnology, 2014, 25, 285201.	2.6	33
84	Landauer, Kubo, and microcanonical approaches to quantum transport and noise: A comparison and implications for cold-atom dynamics. Physical Review A, 2014, 90, .	2.5	34
85	Improving sequencing by tunneling with multiplexing and cross-correlations. Journal of Computational Electronics, 2014, 13, 794-800.	2.5	3
86	Dynamically generated flat-band phases in optical kagome lattices. Physical Review A, 2014, 90, .	2.5	27
87	Superconducting Memristors. Physical Review Applied, 2014, 2, .	3.8	40
88	Nonequilibrium Ionic Response of Biased Mechanically Controllable Break Junction (MCBJ) Electrodes. Journal of Physical Chemistry C, 2014, 118, 3758-3765.	3.1	17
89	Memristive sensors for pH measure in dry conditions. Surface Science, 2014, 624, 76-79.	1.9	28
90	Enhanced noise at high bias in atomic-scale Au break junctions. Scientific Reports, 2014, 4, 4221.	3.3	30

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91	On the physical properties of memristive, memcapacitive and meminductive systems. <i>Nanotechnology</i> , 2013, 24, 255201.	2.6	90
92	Fast DNA sequencing by electrical means inches closer. <i>Nanotechnology</i> , 2013, 24, 342501.	2.6	19
93	Memory Models of Adaptive Behavior. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2013, 24, 1437-1448.	11.3	35
94	Quantum-statistics-induced flow patterns in driven ideal Fermi gases. <i>Physical Review A</i> , 2013, 88, .	2.5	7
95	Determining Excitation-Energy Transfer Times and Mechanisms from Stochastic Time-Dependent Density Functional Theory. <i>Journal of Physical Chemistry B</i> , 2013, 117, 14408-14419.	2.6	7
96	Probing Water Structures in Nanopores Using Tunneling Currents. <i>Physical Review Letters</i> , 2013, 111, 216804.	7.8	3
97	Controlling transport of ultracold atoms in one-dimensional optical lattices with artificial gauge fields. <i>Physical Review A</i> , 2013, 87, .	2.5	19
98	The parallel approach. <i>Nature Physics</i> , 2013, 9, 200-202.	16.7	213
99	Molecular neuron based on the Franck-Condon blockade. <i>Nanotechnology</i> , 2013, 24, 384001.	2.6	2
100	Interaction-induced conducting-non-conducting transition of ultra-cold atoms in one-dimensional optical lattices. <i>New Journal of Physics</i> , 2013, 15, 063026.	2.9	21
101	Ionic Coulomb blockade in nanopores. <i>Journal of Physics Condensed Matter</i> , 2013, 25, 065101.	1.8	31
102	Single-base DNA discrimination via transverse ionic transport. <i>Nanotechnology</i> , 2013, 24, 415101.	2.6	12
103	A 2D driven brownian particle with memory. , 2013, , .		0
104	Generalized Floquet Theory: Application to Dynamical Systems with Memory and Bloch's Theorem for Nonlocal Potentials. <i>Physical Review Letters</i> , 2013, 110, 170602.	7.8	27
105	Reading, writing, and squeezing the entangled states of two nanomechanical resonators coupled to a SQUID. <i>Physical Review B</i> , 2013, 87, .	3.2	20
106	Foundations of stochastic time-dependent current-density functional theory for open quantum systems: Potential pitfalls and rigorous results. <i>Physical Review B</i> , 2013, 87, .	3.2	5
107	Complex dynamics and scale invariance of one-dimensional memristive networks. <i>Physical Review E</i> , 2013, 87, 022116.	2.1	24
108	Changing the state of a memristive system with white noise. <i>Physical Review E</i> , 2013, 87, 042103.	2.1	22

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109	Kondo Memory in Driven Strongly Correlated Quantum Dots. <i>Physical Review Letters</i> , 2013, 111, 086601.	7.8	68
110	Self-organization and solution of shortest-path optimization problems with memristive networks. <i>Physical Review E</i> , 2013, 88, 013305.	2.1	51
111	Analogue-to-digital and digital-to-analogue conversion with memristive devices. <i>Electronics Letters</i> , 2012, 48, 73.	1.0	20
112	Second and higher harmonics generation with memristive systems. <i>Applied Physics Letters</i> , 2012, 100, .	3.3	18
113	Topological Jamming of Spontaneously Knotted Polyelectrolyte Chains Driven Through a Nanopore. <i>Physical Review Letters</i> , 2012, 109, 118301.	7.8	93
114	Bosonic and fermionic transport phenomena of ultracold atoms in one-dimensional optical lattices. <i>Physical Review A</i> , 2012, 85, .	2.5	34
115	Current oscillations in vanadium dioxide: Evidence for electrically triggered percolation avalanches. <i>Physical Review B</i> , 2012, 86, .	3.2	76
116	Dynamical crossover between the infinite-volume and empty-lattice limits of ultra-cold fermions in 1D optical lattices. <i>Europhysics Letters</i> , 2012, 99, 40003.	2.0	13
117	Photoactivation of neurons by laser-generated local heating. <i>AIP Advances</i> , 2012, 2, 032154.	1.3	19
118	Neuromorphic, Digital, and Quantum Computation With Memory Circuit Elements. <i>Proceedings of the IEEE</i> , 2012, 100, 2071-2080.	21.3	201
119	Memristive properties of single-molecule magnets. <i>Physical Review B</i> , 2012, 86, .	3.2	22
120	Fast computation with memory circuit elements. , 2012, , .		3
121	Biologically-Inspired Electronics with Memory Circuit Elements. , 2012, , 15-36.		5
122	Stochastic memory: Memory enhancement due to noise. <i>Physical Review E</i> , 2012, 85, 011116.	2.1	58
123	Teaching Memory Circuit Elements via Experiment-Based Learning. <i>IEEE Circuits and Systems Magazine</i> , 2012, 12, 64-74.	2.3	17
124	DNA Characterization by Transverse Electrical Current in a Nanochannel. <i>Methods in Molecular Biology</i> , 2012, 870, 149-163.	0.9	4
125	DNA sequencing via electron tunneling. , 2012, , .		2
126	Lagrange formalism of memory circuit elements: Classical and quantum formulations. <i>Physical Review B</i> , 2012, 85, .	3.2	23

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127	Solving mazes with memristors: A massively parallel approach. <i>Physical Review E</i> , 2011, 84, 046703.	2.1	127
128	<i>Colloquium</i>: Heat flow and thermoelectricity in atomic and molecular junctions. <i>Reviews of Modern Physics</i> , 2011, 83, 131-155.	45.6	708
129	DNA spintronics sees the light. <i>Nature Nanotechnology</i> , 2011, 6, 198-199.	31.5	12
130	Memory materials: a unifying description. <i>Materials Today</i> , 2011, 14, 584-591.	14.2	74
131	Stochastic quantum molecular dynamics for finite and extended systems. <i>Chemical Physics</i> , 2011, 391, 27-36.	1.9	13
132	Memory effects in complex materials and nanoscale systems. <i>Advances in Physics</i> , 2011, 60, 145-227.	14.4	677
133	Chaotic memristor. <i>Applied Physics A: Materials Science and Processing</i> , 2011, 102, 885-889.	2.3	50
134	Viscous corrections to the resistance of nanojunctions: A dispersion relation approach. <i>Physical Review B</i> , 2011, 83, .	3.2	12
135	Emulation of floating memcapacitors and meminductors using current conveyors. <i>Electronics Letters</i> , 2011, 47, 243.	1.0	114
136	Memory Circuit Elements: From Systems to Applications. <i>Journal of Computational and Theoretical Nanoscience</i> , 2011, 8, 441-448.	0.4	30
137	Ion motion and electrochemistry in nanostructures. <i>MRS Bulletin</i> , 2011, 36, 914-920.	3.5	7
138	Practical Approach to Programmable Analog Circuits With Memristors. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2010, 57, 1857-1864.	5.4	503
139	Experimental demonstration of associative memory with memristive neural networks. <i>Neural Networks</i> , 2010, 23, 881-886.	5.9	924
140	Sequencing at the end of the tunnel. <i>Nature Nanotechnology</i> , 2010, 5, 828-829.	31.5	1
141	Thermoelectric phenomena in disordered open quantum systems. <i>Physical Review B</i> , 2010, 81, .	3.2	3
142	Ionic Memcapacitive Effects in Nanopores. <i>Nano Letters</i> , 2010, 10, 2674-2678.	9.1	76
143	Memristive circuits simulate memcapacitors and meminductors. <i>Electronics Letters</i> , 2010, 46, 517.	1.0	139
144	Dehydration and ionic conductance quantization in nanopores. <i>Journal of Physics Condensed Matter</i> , 2010, 22, 454126.	1.8	38

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145	Experimental demonstration of associative memory with memristive neural networks. Nature Precedings, 2009, , .	0.1	20
146	Thermospin effects in a quantum dot connected to ferromagnetic leads. Physical Review B, 2009, 79, .	3.2	164
147	Frequency doubling and memory effects in the spin Hall effect. Physical Review B, 2009, 79, .	3.2	25
148	Quantized Ionic Conductance in Nanopores. Physical Review Letters, 2009, 103, 128102.	7.8	92
149	Stochastic quantum molecular dynamics. Physical Review B, 2009, 80, .	3.2	22
150	Information compressibility, entropy variation and approach to steady state in open systems. Europhysics Letters, 2009, 85, 40004.	2.0	9
151	Circuit Elements With Memory: Memristors, Memcapacitors, and Meminductors. Proceedings of the IEEE, 2009, 97, 1717-1724.	21.3	871
152	Putting Memory Into Circuit Elements: Memristors, Memcapacitors, and Meminductors [Point of View]. Proceedings of the IEEE, 2009, 97, 1371-1372.	21.3	64
153	Comment on "Molecular Transport Junctions: Clearing Mists". Advanced Materials, 2009, 21, 1547-1547.	21.0	5
154	Effect of Noise on DNA Sequencing via Transverse Electronic Transport. Biophysical Journal, 2009, 97, 1990-1996.	0.5	74
155	Memristive model of amoeba learning. Physical Review E, 2009, 80, 021926.	2.1	374
156	Incompleteness of the Landauer formula for electronic transport. Physical Review B, 2009, 79, .	3.2	63
157	Memory Metamaterials. Science, 2009, 325, 1518-1521.	12.6	760
158	Thermoelectric Effects in Nanoscale Junctions. Nano Letters, 2009, 9, 97-101.	9.1	153
159	The potential and challenges of nanopore sequencing. , 2009, , 261-268.		23
160	<i>Colloquium</i>: Physical approaches to DNA sequencing and detection. Reviews of Modern Physics, 2008, 80, 141-165.	45.6	437
161	The potential and challenges of nanopore sequencing. Nature Biotechnology, 2008, 26, 1146-1153.	17.5	2,201
162	Local electron and ionic heating effects on the conductance of nanostructures. Journal of Physics Condensed Matter, 2008, 20, 374102.	1.8	15

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163	A voltage probe of the spin Hall effect. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 025204.	1.8	10
164	The decay of excited He from stochastic density-functional theory: a quantum measurement theory interpretation. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 395214.	1.8	4
165	Stochastic time-dependent current-density-functional theory: A functional theory of open quantum systems. <i>Physical Review B</i> , 2008, 78, .	3.2	36
166	Current-voltage characteristics of semiconductor/ferromagnet junctions in the spin-blockade regime. <i>Physical Review B</i> , 2008, 77, .	3.2	19
167	Electronic viscosity in a quantum well: A test for the local-density approximation. <i>Physical Review B</i> , 2007, 76, .	3.2	10
168	Turbulence-Induced Magnetic Flux Asymmetry at Nanoscale Junctions. <i>Physical Review Letters</i> , 2007, 99, 226802.	7.8	8
169	Comment on "Characterization of the tunneling conductance across DNA bases", <i>Physical Review E</i> , 2007, 76, 013901; author reply 013902.	2.1	35
170	Stochastic Time-Dependent Current-Density-Functional Theory. <i>Physical Review Letters</i> , 2007, 98, 226403.	7.8	69
171	SaieetÂal.Reply:. <i>Physical Review Letters</i> , 2007, 98, .	7.8	7
172	Microscopic current dynamics in nanoscale junctions. <i>Physical Review B</i> , 2007, 75, .	3.2	65
173	Spin blockade at semiconductor/ferromagnet junctions. <i>Physical Review B</i> , 2007, 75, .	3.2	11
174	Electron Turbulence at Nanoscale Junctions. <i>Nano Letters</i> , 2007, 7, 1789-1792.	9.1	15
175	Influence of the Environment and Probes on Rapid DNA Sequencing via Transverse Electronic Transport. <i>Biophysical Journal</i> , 2007, 93, 2384-2390.	0.5	113
176	Local ionic and electron heating in single-molecule junctions. <i>Nature Nanotechnology</i> , 2007, 2, 698-703.	31.5	171
177	Electrostatic modification of novel materials. <i>Reviews of Modern Physics</i> , 2006, 78, 1185-1212.	45.6	465
178	Fast DNA Sequencing via Transverse Electronic Transport. <i>Nano Letters</i> , 2006, 6, 779-782.	9.1	381
179	Local Electron Heating in Nanoscale Conductors. <i>Nano Letters</i> , 2006, 6, 2935-2938.	9.1	61
180	Measurement of Current-Induced Local Heating in a Single Molecule Junction. <i>Nano Letters</i> , 2006, 6, 1240-1244.	9.1	222

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181	Infrared Imaging of the Nanometer-Thick Accumulation Layer in Organic Field-Effect Transistors. Nano Letters, 2006, 6, 224-228.	9.1	62
182	Current-Induced Effects in Nanoscale Conductors. , 2006, , 185-205.		0
183	Hydrodynamic approach to transport and turbulence in nanoscale conductors. Journal of Physics Condensed Matter, 2006, 18, 11059-11065.	1.8	23
184	Dynamical Corrections to the DFT-LDA Electron Conductance in Nanoscale Systems. Physical Review Letters, 2005, 94, 186810.	7.8	160
185	Effect of Electron-Phonon Scattering on Shot Noise in Nanoscale Junctions. Physical Review Letters, 2005, 95, 166802.	7.8	50
186	Local Heating in Nanoscale Conductors. Nano Letters, 2005, 5, 813-813.	9.1	0
187	Inelastic Effects on the Transport Properties of Alkanethiols. Nano Letters, 2005, 5, 621-624.	9.1	93
188	Inelastic Current-Voltage Characteristics of Atomic and Molecular Junctions. Nano Letters, 2005, 5, 813-813.	9.1	4
189	Electronic Signature of DNA Nucleotides via Transverse Transport. Nano Letters, 2005, 5, 421-424.	9.1	316
190	Approach to Steady-State Transport in Nanoscale Conductors. Nano Letters, 2005, 5, 2569-2572.	9.1	101
191	Are Current-Induced Forces Conservative?. Physical Review Letters, 2004, 92, 176803.	7.8	53
192	Transport in nanoscale systems: the microcanonical versus grand-canonical picture. Journal of Physics Condensed Matter, 2004, 16, 8025-8034.	1.8	107
193	Shot noise in parallel wires. Nanotechnology, 2004, 15, S459-S464.	2.6	25
194	Inelastic Current-Voltage Characteristics of Atomic and Molecular Junctions. Nano Letters, 2004, 4, 1709-1712.	9.1	96
195	Local Heating in Nanoscale Conductors. Nano Letters, 2003, 3, 1691-1694.	9.1	202
196	Effects of geometry and doping on the operation of molecular transistors. Applied Physics Letters, 2003, 82, 1938-1940.	3.3	40
197	Shot noise in nanoscale conductors from first principles. Physical Review B, 2003, 67, .	3.2	37
198	Nonlinear current-induced forces in Si atomic wires. Physical Review B, 2003, 67, .	3.2	25

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199	Chaotic transport in low-dimensional superlattices. Physical Review B, 2003, 67, .	3.2	12
200	Variational and nonvariational principles in quantum transport calculations. Physical Review B, 2002, 66, .	3.2	26
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202	DNA spintronics. Applied Physics Letters, 2002, 81, 925-927.	3.3	101
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