

# Mikhail I Katsnelson

## List of Publications by Year in descending order

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411  
papers

83,483  
citations

3189

92  
h-index

359

283  
g-index

422  
all docs

422  
docs citations

422  
times ranked

53509  
citing authors



#	ARTICLE	IF	CITATIONS
19	Evolution in the weak-mutation limit: Stasis periods punctuated by fast transitions between saddle points on the fitness landscape. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.2	7
20	Probing the topology of the quantum analog of a classical skyrmion. Physical Review B, 2021, 103, .	3.2	19
21	A DMI Guide to Magnets Micro-World. Journal of Experimental and Theoretical Physics, 2021, 132, 506-516.	0.9	9
22	Quantifying the interplay between fine structure and geometry of an individual molecule on a surface. Physical Review B, 2021, 103, .	3.2	25
23	High-Pressure Synthesis of Dirac Materials: Layered van der Waals Bonded $\text{BeN}_4$ Polymorph. Physical Review Letters. 2021, 126, 175501.	7.9	90
24	Exchange constants for local spin Hamiltonians from tight-binding models. Physical Review B, 2021, 103, .	3.2	8
25	Random phase approximation for gapped systems: Role of vertex corrections and applicability of the constrained random phase approximation. Physical Review B, 2021, 104, .	3.2	15
26	Gauge invariance and Ward identities in nonlinear response theory. Annals of Physics, 2021, 431, 168523.	2.8	16
27	Scale without conformal invariance in membrane theory. Nuclear Physics B, 2021, 969, 115482.	2.6	6
28	Emergent Quantumness in Neural Networks. Foundations of Physics, 2021, 51, 1.	1.3	14
29	Dislocation structure and mobility in the layered semiconductor InSe: a first-principles study. 2D Materials, 2021, 8, 045028.	4.4	6
30	Environmental screening and ligand-field effects to magnetism in CrI <sub>3</sub> monolayer. Npj Computational Materials, 2021, 7, .	8.9	19
31	Electronic structure of chromium trihalides beyond density functional theory. Physical Review B, 2021, 104, .	3.2	18
32	Importance of charge self-consistency in first-principles description of strongly correlated systems. Npj Computational Materials, 2021, 7, .	8.9	13
33	Magnetic polaron and antiferromagnetic-ferromagnetic transition in doped bilayer Cr <sub>2</sub> Te. Physical Review B, 2020, 101, .	3.2	15
34	Thermal fluctuations in crystalline membranes with long-range dipole interactions. Annals of Physics, 2020, 412, 168016.	2.8	3
35	Relativistic exchange interactions in CrX <sub>3</sub> (X = Te, Se, S). Physical Review B, 2020, 101, .	3.2	15
36	Dual fermion method as a prototype of generic reference-system approach for correlated fermions. Annals of Physics, 2020, 422, 168310.	2.8	9

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37	Magnetic Two-Dimensional Chromium Trihalides: A Theoretical Perspective. Nano Letters, 2020, 20, 6225-6234.	9.3	103
38	Linearized spectral decimation in fractals. Physical Review B, 2020, 102, .	3.2	3
39	Origin of the vortex displacement field in twisted bilayer graphene. Physical Review B, 2020, 102, .	3.2	8
40	Electronic structure of $30\hat{a}^{\sim}$ twisted double bilayer graphene. Physical Review B, 2020, 102, .	3.2	10
41	No waves of intelligent design. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 19639-19640.	7.2	1
42	Detecting quantum critical points in the $t\text{-}t' t''$ Fermi-Hubbard model via complex network theory. Scientific Reports, 2020, 10, 20470.	3.4	9
43	Unconventional magnetism and electronic state in the frustrated layered system $\text{PdCrO}_2$ . Physical Review B, 2020, 102, .	3.2	1
44	Dynamically induced doublon repulsion in the Fermi-Hubbard model probed by a single-particle density of states. Physical Review B, 2020, 102, .	3.2	4
45	Thermal ripples in bilayer graphene. Physical Review B, 2020, 102, .	3.2	3
46	Hidden spin-orbital hexagonal ordering induced by strong correlations in $\text{LiVS}_2$ . Physical Review B, 2020, 102, .	3.2	1
47	Hall conductivity of a Sierpiński carpet. Physical Review B, 2020, 101, .	3.2	36
48	Scaling behavior of crystalline membranes: An $\hat{\mu}$ -expansion approach. Nuclear Physics B, 2020, 956, 115040.	2.6	13
49	The electronic structure of ideal graphene. , 2020, , 1-23.		0
50	Electron states in a magnetic field. , 2020, , 24-62.		1
51	Quantum transport via evanescent waves. , 2020, , 63-76.		0
52	The Klein paradox and chiral tunneling. , 2020, , 77-107.		0
53	Edges, nanoribbons, and quantum dots. , 2020, , 108-140.		0
54	Point defects. , 2020, , 141-167.		0

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55	Optics and response functions. , 2020, , 168-192.		0
56	The Coulomb problem. , 2020, , 193-212.		0
57	Crystal lattice dynamics, structure, and thermodynamics. , 2020, , 213-256.		0
58	Gauge fields and strain engineering. , 2020, , 257-278.		0
59	Scattering mechanisms and transport properties. , 2020, , 279-325.		0
60	Spin effects and magnetism. , 2020, , 326-350.		0
61	Graphene on hexagonal boron nitride. , 2020, , 351-378.		0
62	Twisted bilayer graphene. , 2020, , 379-388.		0
63	Many-body effects in graphene. , 2020, , 389-400.		0
64	Self-induced spin glass state in elemental and crystalline neodymium. Science, 2020, 368, .	12.8	24
65	Temperature-Induced Lifshitz Transition and Possible Excitonic Instability in ZrSiSe. Physical Review Letters, 2020, 124, 236601.	7.9	34
66	Limits on gas impermeability of graphene. Nature, 2020, 579, 229-232.	28.1	220
67	Electronic correlations in nodal-line semimetals. Nature Physics, 2020, 16, 636-641.	16.8	86
68	Nonequilibrium dual-boson approach. Physical Review B, 2020, 101, .	3.2	3
69	Pressure and electric field dependence of quasicrystalline electronic states in $\text{ZrSiSe}$ twisted bilayer graphene. Physical Review B, 2020, 102, .	3.2	3
70	Atom-by-atom construction of attractors in a tunable finite size spin array. New Journal of Physics, 2020, 22, 023038.	2.9	7
71	Orbitally-resolved ferromagnetism of monolayer $\text{CrI}_3$ . 2D Materials, 2020, 7, 025036.	4.4	68
72	Phonon-mediated superconductivity in strongly correlated electron systems: A Luttinger-Ward functional approach. Annals of Physics, 2020, 417, 168100.	2.8	3

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73	Exactly solvable model of strongly correlated $d$ -wave superconductivity. Physical Review B, 2020, 101, .	3.2	7
74	Large-area, periodic, and tunable intrinsic pseudo-magnetic fields in low-angle twisted bilayer graphene. Nature Communications, 2020, 11, 371.	13.0	66
75	Generalization properties of neural network approximations to frustrated magnet ground states. Nature Communications, 2020, 11, 1593.	13.0	73
76	Direct Observation of Incommensurate-Commensurate Transition in Graphene-hBN Heterostructures via Optical Second Harmonic Generation. ACS Applied Materials & Interfaces, 2020, 12, 27758-27764.	8.2	10
77	Multiscale structural complexity of natural patterns. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 30241-30251.	7.2	26
78	Control of magnetic interactions between surface adatoms via orbital repopulation. 2D Materials, 2020, 7, 045007.	4.4	4
79	Diamagnetism of metallic nanoparticles as a result of strong spin-orbit interaction. Physical Review B, 2019, 100, .	3.2	4
80	Bandwidth renormalization due to the intersite Coulomb interaction. Journal of Physics Condensed Matter, 2019, 31, 465603.	1.8	9
81	On the feasibility of saltational evolution. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 21068-21075.	7.2	18
82	Dual boson approach with instantaneous interaction. Physical Review B, 2019, 100, .	3.2	16
83	Strong Electron-Phonon Coupling and its Influence on the Transport and Optical Properties of Hole-Doped Single-Layer InSe. Physical Review Letters, 2019, 123, 176401.	7.9	37
84	Large out-of-plane piezoelectricity of oxygen functionalized MXenes for ultrathin piezoelectric cantilevers and diaphragms. Nano Energy, 2019, 65, 104058.	16.3	49
85	Power-law energy level spacing distributions in fractals. Physical Review B, 2019, 99, .	3.2	18
86	Two-particle Fermi liquid parameters at the Mott transition: Vertex divergences, Landau parameters, and incoherent response in dynamical mean-field theory. Physical Review B, 2019, 99, .	3.2	20
87	Resonant optical second harmonic generation in graphene-based heterostructures. Physical Review B, 2019, 99, .	3.2	36
88	Effective Ising model for correlated systems with charge ordering. Physical Review B, 2019, 99, .	3.2	19
89	Separation of conditions as a prerequisite for quantum theory. Annals of Physics, 2019, 403, 112-135.	2.8	5
90	Electron-phonon properties, structural stability, and superconductivity of doped antimonene. Physical Review B, 2019, 99, .	3.2	27

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91	Heisenberg-exchange-free nanoskyrmion mosaic. <i>Journal of Physics Condensed Matter</i> , 2019, 31, 17LT01.	1.8	9
92	Dodecagonal bilayer graphene quasicrystal and its approximants. <i>Npj Computational Materials</i> , 2019, 5, .	8.9	53
93	Anisotropic Two-Dimensional Screening at the Surface of Black Phosphorus. <i>Physical Review Letters</i> , 2019, 123, 216403.	7.9	21
94	Measuring the Berry phase of graphene from wavefront dislocations in Friedel oscillations. <i>Nature</i> , 2019, 574, 219-222.	28.1	49
95	Thermodynamics of the metal-insulator transition in the extended Hubbard model. <i>SciPost Physics</i> , 2019, 6, .	4.9	8
96	Towards physical principles of biological evolution. <i>Physica Scripta</i> , 2018, 93, 043001.	2.5	26
97	First-order metal-insulator transitions in the extended Hubbard model due to self-consistent screening of the effective interaction. <i>Physical Review B</i> , 2018, 97, .	3.2	10
98	Precursors of the insulating state in the square-lattice Hubbard model. <i>Physical Review B</i> , 2018, 97, .	3.2	23
99	Quantum Monte Carlo study of electrostatic potential in graphene. <i>Physical Review B</i> , 2018, 97, .	3.2	28
100	Impact of Many-Body Effects on Landau Levels in Graphene. <i>Physical Review Letters</i> , 2018, 120, 187701.	7.9	18
101	Unconventional mass enhancement around the Dirac nodal loop in ZrSiS. <i>Nature Physics</i> , 2018, 14, 178-183.	16.8	129
102	Holographic local quench and effective complexity. <i>Journal of High Energy Physics</i> , 2018, 2018, 1.	4.7	29
103	Gate-tunable infrared plasmons in electron-doped single-layer antimony. <i>Physical Review B</i> , 2018, 98, .	3.2	8
104	Nanoskyrmion engineering with sp <sup>-</sup> electron materials: Sn monolayer on a SiC(0001) surface. <i>Physical Review B</i> , 2018, 98, .	3.2	7
105	An orbitally derived single-atom magnetic memory. <i>Nature Communications</i> , 2018, 9, 3904.	13.0	34
106	Plasmon confinement in fractal quantum systems. <i>Physical Review B</i> , 2018, 97, .	3.2	33
107	Two-dimensional dispersion of magnetostatic volume spin waves. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 255803.	1.8	1
108	Excitonic Instability and Pseudogap Formation in Nodal Line Semimetal ZrSiS. <i>Physical Review Letters</i> , 2018, 120, 216401.	7.9	40

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109	Antiferromagnetic order without recourse to staggered fields. <i>Physical Review B</i> , 2018, 98, .	3.2	3
110	Competing Coulomb and electron-phonon interactions in NbS <sub>2</sub> . <i>Npj Quantum Materials</i> , 2018, 3, .	5.2	41
111	Logical inference derivation of the quantum theoretical description of Stern-Gerlach and Einstein-Podolsky-Rosen-Bohm experiments. <i>Annals of Physics</i> , 2018, 396, 96-118.	2.8	9
112	Effective Heisenberg Model and Exchange Interaction for Strongly Correlated Systems. <i>Physical Review Letters</i> , 2018, 121, 037204.	7.9	32
113	Physical foundations of biological complexity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E8678-E8687.	7.2	77
114	Magnon-assisted tunnelling in van der Waals heterostructures based on CrBr <sub>3</sub> . <i>Nature Electronics</i> , 2018, 1, 344-349.	26.5	239
115	Non-Heisenberg covalent magnetism in iron oxide clusters. <i>Physical Review Materials</i> , 2018, 2, .	2.5	6
116	Density functional based simulations of proton permeation of graphene and hexagonal boron nitride. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 5813-5817.	2.8	50
117	Large positive in-plane magnetoresistance induced by localized states at nanodomain boundaries in graphene. <i>Nature Communications</i> , 2017, 8, 14453.	13.0	27
118	Theory of plasmonic effects in nonlinear optics: The case of graphene. <i>Physical Review B</i> , 2017, 95, .	3.2	49
119	Simultaneous loss of interlayer coherence and long-range magnetism in quasi-two-dimensional PdCrO <sub>2</sub> . <i>Nature Communications</i> , 2017, 8, 15001.	13.0	12
120	Probing Single Vacancies in Black Phosphorus at the Atomic Level. <i>Nano Letters</i> , 2017, 17, 3607-3612.	9.3	109
121	Towards the ab initio based theory of phase transformations in iron and steel. <i>Physics of Metals and Metallography</i> , 2017, 118, 362-388.	1.0	27
122	Coulomb interactions and screening effects in few-layer black phosphorus: a tight-binding consideration beyond the long-wavelength limit. <i>2D Materials</i> , 2017, 4, 025064.	4.4	28
123	Dynamical control of electron-phonon interactions with high-frequency light. <i>Physical Review B</i> , 2017, 95, .	3.2	13
124	Band Filling Control of the Dzyaloshinskii-Moriya Interaction in Weakly Ferromagnetic Insulators. <i>Physical Review Letters</i> , 2017, 119, 167201.	7.9	42
125	Exchange interactions in transition metal oxides: the role of oxygen spin polarization. <i>Journal of Physics Condensed Matter</i> , 2017, 29, 335801.	1.8	30
126	The Bethe-Slater curve revisited; new insights from electronic structure theory. <i>Scientific Reports</i> , 2017, 7, 4058.	3.4	35

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127	Mechanics of thermally fluctuating membranes. Npj 2D Materials and Applications, 2017, 1, .	8.1	41
128	Extended Tersoff potential for boron nitride: Energetics and elastic properties of pristine and defective $h$ -BN. Physical Review B, 2017, 96, .	3.2	97
129	Dynamical and Reversible Control of Topological Spin Textures. Physical Review Letters, 2017, 118, 157201.	7.9	45
130	Disentangling the effects of selection and loss bias on gene dynamics. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E5616-E5624.	7.2	44
131	Optical conductivity of a quantum electron gas in a Sierpinski carpet. Physical Review B, 2017, 96, .	3.2	29
132	Inevitability of the emergence and persistence of genetic parasites caused by evolutionary instability of parasite-free states. Biology Direct, 2017, 12, 31.	4.6	59
133	Observing Imperfection in Atomic Interfaces for van der Waals Heterostructures. Nano Letters, 2017, 17, 5222-5228.	9.3	53
134	Role of direct exchange and Dzyaloshinskii-Moriya interactions in magnetic properties of graphene derivatives: $C^2$ and $F$ and $n$	3.2	56
135	Spin-orbit coupling and magnetic interactions in Si(111):{C,Si,Sn,Pb}. Physical Review B, 2016, 94, .	3.2	21
136	Plaquette valence bond theory of high-temperature superconductivity. Physical Review B, 2016, 94, .	3.2	20
137	Nonequilibrium itinerant-electron magnetism: A time-dependent mean-field theory. Physical Review B, 2016, 94, .	3.2	8
138	A new 2D monolayer BiXene, $M_2C$ ( $M = Mo, Tc, Os$ ). Nanoscale, 2016, 8, 15753-15762.	5.7	46
139	Standard model of the rare earths analyzed from the Hubbard I approximation. Physical Review B, 2016, 94, .	3.2	65
140	Quantum elasticity of graphene: Thermal expansion coefficient and specific heat. Physical Review B, 2016, 94, .	3.2	50
141	Self-Induced Glassiness and Pattern Formation in Spin Systems Subject to Long-Range Interactions. Physical Review Letters, 2016, 117, 137201.	7.9	11
142	Self-consistent dual boson approach to single-particle and collective excitations in correlated systems. Physical Review B, 2016, 93, .	3.2	47
143	Stripe glasses in ferromagnetic thin films. Physical Review B, 2016, 93, .	3.2	10
144	Quantum transport in Sierpinski carpets. Physical Review B, 2016, 93, .	3.2	68

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145	Double occupancy in dynamical mean-field theory and the dual boson approach. Physical Review B, 2016, 93, .	3.2	26
146	Laser-induced topological transitions in phosphorene with inversion symmetry. Physical Review B, 2016, 93, .	3.2	61
147	Microscopic Origin of Heisenberg and Non-Heisenberg Exchange Interactions in Ferromagnetic bcc Fe. Physical Review Letters, 2016, 116, 217202.	7.9	69
148	Intrinsic Charge Carrier Mobility in Single-Layer Black Phosphorus. Physical Review Letters, 2016, 116, 246401.	7.9	132
149	Structural and Electronic Properties of Germanene on $\text{MoS}_2$ . Physical Review Letters, 2016, 116, 256804.	7.9	329
150	Racah Materials: Role of Atomic Multiplets and Intermediate Valence in f-Electron Systems. MRS Advances, 2016, 1, 2967-2974.	1.0	1
151	Decoherence wave in magnetic systems and creation of Néel antiferromagnetic state by measurement. Physical Review B, 2016, 93, .	3.2	10
152	Scaling Behavior and Strain Dependence of In-Plane Elastic Properties of Graphene. Physical Review Letters, 2016, 116, 015901.	7.9	107
153	Chirality-Dependent Transmission of Spin Waves through Domain Walls. Physical Review Letters, 2016, 116, 147204.	7.9	42
154	Phonon-Assisted Resonant Tunneling of Electrons in Graphene/Boron Nitride Transistors. Physical Review Letters, 2016, 116, 186603.	7.9	78
155	Macroscopic self-reorientation of interacting two-dimensional crystals. Nature Communications, 2016, 7, 10800.	13.0	108
156	Edge Plasmons in Two-Component Electron Liquids in the Presence of Pseudomagnetic Fields. Physical Review Letters, 2016, 117, 196803.	7.9	25
157	Capturing nonlocal interaction effects in the Hubbard model: Optimal mappings and limits of applicability. Physical Review B, 2016, 94, .	3.2	23
158	From local to nonlocal correlations: The Dual Boson perspective. Physical Review B, 2016, 94, .	3.2	34
159	Energetics, barriers and vibrational spectra of partially and fully hydrogenated hexagonal boron nitride. Physical Chemistry Chemical Physics, 2016, 18, 19359-19367.	2.8	12
160	Spectroscopic metrics allow in situ measurement of mean size and thickness of liquid-exfoliated few-layer graphene nanosheets. Nanoscale, 2016, 8, 4311-4323.	5.7	194
161	Anomalous Magnetothermopower in a Metallic Frustrated Antiferromagnet. Physical Review Letters, 2016, 116, 087202.	7.9	18
162	Production of Highly Monolayer Enriched Dispersions of Liquid-Exfoliated Nanosheets by Liquid Cascade Centrifugation. ACS Nano, 2016, 10, 1589-1601.	14.9	365

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163	Exchange parameters of strongly correlated materials: Extraction from spin-polarized density functional theory plus dynamical mean-field theory. <i>Physical Review B</i> , 2015, 91, .	3.2	98
164	Ultralong-range order in the Fermi-Hubbard model with long-range interactions. <i>Physical Review B</i> , 2015, 92, .	3.2	21
165	Toward a realistic description of multilayer black phosphorus: From $G$ to large-scale tight-binding simulations. <i>Physical Review B</i> , 2015, 92, .	3.2	187
166	Magnetism and Interaction-Induced Gap Opening in Graphene with Vacancies or Hydrogen Adatoms: Quantum Monte Carlo Study. <i>Physical Review Letters</i> , 2015, 114, 246801.	7.9	53
167	Effect of Structural Relaxation on the Electronic Structure of Graphene on Hexagonal Boron Nitride. <i>Physical Review Letters</i> , 2015, 115, 186801.	7.9	93
168	Dirac points with giant spin-orbit splitting in the electronic structure of two-dimensional transition-metal carbides. <i>Physical Review B</i> , 2015, 92, .	3.2	65
169	Effective Hamiltonians for Rapidly Driven Many-Body Lattice Systems: Induced Exchange Interactions and Density-Dependent Hoppings. <i>Physical Review Letters</i> , 2015, 115, 075301.	7.9	78
170	Racah materials: role of atomic multiplets in intermediate valence systems. <i>Scientific Reports</i> , 2015, 5, 15429.	3.4	22
171	Chemical modifications and stability of phosphorene with impurities: a first principles study. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 15209-15217.	2.8	78
172	Probing of valley polarization in graphene via optical second-harmonic generation. <i>Physical Review B</i> , 2015, 91, .	3.2	41
173	Relaxation of moiré patterns for slightly misaligned identical lattices: graphene on graphite. <i>2D Materials</i> , 2015, 2, 034010.	4.4	164
174	Quantum theory as a description of robust experiments: Derivation of the Pauli equation. <i>Annals of Physics</i> , 2015, 359, 166-186.	2.8	17
175	Phonon-Pump Extreme-Ultraviolet-Photoemission Probe in Graphene: Anomalous Heating of Dirac Carriers by Lattice Deformation. <i>Physical Review Letters</i> , 2015, 114, 125503.	7.9	29
176	Misfit stabilized embedded nanoparticles in metallic alloys. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 27249-27257.	2.8	14
177	Germanene: the germanium analogue of graphene. <i>Journal of Physics Condensed Matter</i> , 2015, 27, 443002.	1.8	304
178	The most incompressible metal osmium at static pressures above 750 gigapascals. <i>Nature</i> , 2015, 525, 226-229.	28.1	159
179	Ultrafast optical modification of exchange interactions in iron oxides. <i>Nature Communications</i> , 2015, 6, 8190.	13.0	164
180	Increasing the elastic modulus of graphene by controlled defect creation. <i>Nature Physics</i> , 2015, 11, 26-31.	16.8	298

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181	Science and technology roadmap for graphene, related two-dimensional crystals, and hybrid systems. <i>Nanoscale</i> , 2015, 7, 4598-4810.	5.7	2,452
182	Plasmons in Strongly Correlated Systems: Spectral Weight Transfer and Renormalized Dispersion. <i>Physical Review Letters</i> , 2014, 113, 246407.	7.9	49
183	Motion of Domain Walls and the Dynamics of Kinks in the Magnetic Peierls Potential. <i>Physical Review Letters</i> , 2014, 113, 217202.	7.9	21
184	Thermodynamics of quantum crystalline membranes. <i>Physical Review B</i> , 2014, 89, .	3.2	39
185	Beyond extended dynamical mean-field theory: Dual boson approach to the two-dimensional extended Hubbard model. <i>Physical Review B</i> , 2014, 90, .	3.2	76
186	Moiré Patterns as a Probe of Interplanar Interactions for Graphene on h-BN. <i>Physical Review Letters</i> , 2014, 113, 135504.	7.9	130
187	Proton transport through one-atom-thick crystals. <i>Nature</i> , 2014, 516, 227-230.	28.1	668
188	Measuring the Dzyaloshinskii-Moriya interaction in a weak ferromagnet. <i>Nature Physics</i> , 2014, 10, 202-206.	16.8	149
189	Many-Body Renormalization of the Minimal Conductivity in Graphene. <i>Physical Review Letters</i> , 2014, 112, 116604.	7.9	33
190	Commensurate-incommensurate transition in graphene on hexagonal boron nitride. <i>Nature Physics</i> , 2014, 10, 451-456.	16.8	737
191	Topological Matter: Graphene and Superfluid $^3\text{He}$ . <i>Journal of Low Temperature Physics</i> , 2014, 175, 655-666.	1.4	6
192	Phonons and electron-phonon coupling in graphene-hBN heterostructures. <i>Annalen Der Physik</i> , 2014, 526, 381-386.	2.4	40
193	Quantum capacitance and Landau parameters of massless Dirac fermions in graphene. <i>Annalen Der Physik</i> , 2014, 526, 359-365.	2.4	13
194	First-principles modeling of magnetic excitations in $\text{Mn}_2\text{C}$ . <i>Physical Review B</i> , 2014, 89, .	7.9	116
195	Fermi Condensation Near van Hove Singularities Within the Hubbard Model on the Triangular Lattice. <i>Physical Review Letters</i> , 2014, 112, 070403.	7.9	116
196	Quantum theory as the most robust description of reproducible experiments. <i>Annals of Physics</i> , 2014, 347, 45-73.	2.8	37
197	Optimal Hubbard Models for Materials with Nonlocal Coulomb Interactions: Graphene, Silicene, and Benzene. <i>Physical Review Letters</i> , 2013, 111, 036601.	7.9	209
198	Monte Carlo Study of the Semimetal-Insulator Phase Transition in Monolayer Graphene with a Realistic Interelectron Interaction Potential. <i>Physical Review Letters</i> , 2013, 111, 056801.	7.9	155

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199	Origin of Anomalous Water Permeation through Graphene Oxide Membrane. Nano Letters, 2013, 13, 3930-3935.	9.3	233
200	Giant Magnetic Susceptibility of Gold Nanorods Detected by Magnetic Alignment. Physical Review Letters, 2013, 111, 127202.	7.9	22
201	In-plane magnetic textures at the surface of topological insulators. Europhysics Letters, 2013, 104, 17001.	2.1	4
202	Doping mechanisms in graphene-MoS2 hybrids. Applied Physics Letters, 2013, 103, .	3.4	107
203	Giant Magnetodrag in Graphene at Charge Neutrality. Physical Review Letters, 2013, 111, 166601.	7.9	69
204	Graphene as a Prototype Crystalline Membrane. Accounts of Chemical Research, 2013, 46, 97-105.	16.1	101
205	Effect of magnetism on kinetics of $\hat{I}_3 \rightarrow \hat{I}_2$ transformation and pattern formation in iron. Journal of Physics Condensed Matter, 2013, 25, 135401.	1.8	7
206	Equilibration and thermalization of classical systems. New Journal of Physics, 2013, 15, 033009.	2.9	19
207	Importance of Correlation Effects in hcp Iron Revealed by a Pressure-Induced Electronic Topological Transition. Physical Review Letters, 2013, 110, 117206.	7.9	58
208	Interaction phenomena in graphene seen through quantum capacitance. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 3282-3286.	7.2	239
209	Dual origin of defect magnetism in graphene and its reversible switching by molecular doping. Nature Communications, 2013, 4, 2010.	13.0	230
210	Structure and magnetism of disordered carbon. Journal of Physics Condensed Matter, 2013, 25, 255301.	1.8	0
211	Ferromagnetic two-dimensional crystals: Single layers of $K_2CuF_4$ . Physical Review B, 2013, 88, .	3.2	85
212	Effects of structural and chemical disorders on the vis/UV spectra of carbonaceous interstellar grains. Monthly Notices of the Royal Astronomical Society, 2013, 432, 2962-2974.	4.5	7
213	Exchange interactions and frustrated magnetism in single-side hydrogenated and fluorinated graphene. Physical Review B, 2013, 88, .	3.2	77
214	Field-effect control of tunneling barrier height by exploiting graphene's low density of states. Journal of Applied Physics, 2013, 113, .	2.5	35
215	Effect of impurities on the growth and morphology of cementite nanowires. Journal of Physics Condensed Matter, 2012, 24, 395001.	1.8	1
216	Effects of spin-dependent quasiparticle renormalization in Fe, Co, and Ni photoemission spectra: An experimental and theoretical study. Physical Review B, 2012, 85, .	3.2	60

#	ARTICLE	IF	CITATIONS
217	Enhanced Screening in Chemically Functionalized Graphene. <i>Physical Review Letters</i> , 2012, 109, 156601.	7.9	25
218	Polarization of graphene in a strong magnetic field beyond the Dirac cone approximation. <i>Solid State Communications</i> , 2012, 152, 1446-1455.	1.9	9
219	Lattice Expansion in Seamless Bilayer Graphene Constrictions at High Bias. <i>Nano Letters</i> , 2012, 12, 4455-4459.	9.3	32
220	Electron Pumping in Graphene Mechanical Resonators. <i>Nano Letters</i> , 2012, 12, 850-854.	9.3	77
221	Strong Coulomb drag and broken symmetry in double-layer graphene. <i>Nature Physics</i> , 2012, 8, 896-901.	16.8	365
222	Field-Effect Tunneling Transistor Based on Vertical Graphene Heterostructures. <i>Science</i> , 2012, 335, 947-950.	12.8	2,268
223	Adsorption of cobalt on graphene: Electron correlation effects from a quantum chemical perspective. <i>Physical Review B</i> , 2012, 86, .	3.2	71
224	Electronic, magnetic and transport properties of graphene ribbons terminated by nanotubes. <i>New Journal of Physics</i> , 2012, 14, 123012.	2.9	13
225	Bending modes, anharmonic effects, and thermal expansion coefficient in single-layer and multilayer graphene. <i>Physical Review B</i> , 2012, 86, .	3.2	99
226	Dangling bonds and magnetism of grain boundaries in graphene. <i>Physical Review B</i> , 2012, 85, .	3.2	57
227	Electron Tunneling through Ultrathin Boron Nitride Crystalline Barriers. <i>Nano Letters</i> , 2012, 12, 1707-1710.	9.3	724
228	Interaction-Driven Spectrum Reconstruction in Bilayer Graphene. <i>Science</i> , 2011, 333, 860-863.	12.8	262
229	Transition-metal adatoms on graphene: Influence of local Coulomb interactions on chemical bonding and magnetic moments. <i>Physical Review B</i> , 2011, 84, .	3.2	149
230	Temperature-driven $\hat{I}_\pm$ -to- $\hat{I}^2$ phase transformation in Ti, Zr and Hf from first-principles theory combined with lattice dynamics. <i>Europhysics Letters</i> , 2011, 96, 66006.	2.1	27
231	Melting of graphene: from two to one dimension. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 202202.	1.8	105
232	Strength of Effective Coulomb Interactions in Graphene and Graphite. <i>Physical Review Letters</i> , 2011, 106, 236805.	7.9	453
233	Two-Dimensional Mott-Hubbard Electrons in an Artificial Honeycomb Lattice. <i>Science</i> , 2011, 332, 1176-1179.	12.8	187
234	sp-Electron Magnetic Clusters with a Large Spin in Graphene. <i>ACS Nano</i> , 2011, 5, 2440-2446.	14.9	80

#	ARTICLE	IF	CITATIONS
235	Quantum Transport via Evanescent Waves in Undoped Graphene. Journal of Computational and Theoretical Nanoscience, 2011, 8, 912-918.	0.4	4
236	Giant Nonlocality Near the Dirac Point in Graphene. Science, 2011, 332, 328-330.	12.8	255
237	Temperature-dependent resistivity in bilayer graphene due to flexural phonons. Physical Review B, 2011, 83, .	3.2	86
238	Two-Site Kondo Effect in Atomic Chains. Physical Review Letters, 2011, 107, 106804.	7.9	58
239	Theory of optically forbidden d-d transitions in strongly correlated crystals. Journal of Physics Condensed Matter, 2010, 22, 382201.	1.8	7
240	Non-spherical shapes of capsules within a fourth-order curvature model. European Physical Journal E, 2010, 32, 223-228.	1.6	37
241	Correlated band theory of spin and orbital contributions to Dzyaloshinskii-Moriya interactions. Physical Review B, 2010, 82, .	3.2	62
242	Fluorographene: A Two-Dimensional Counterpart of Teflon. Small, 2010, 6, 2877-2884.	10.2	1,146
243	Analytical approximation for single-impurity Anderson model. JETP Letters, 2010, 91, 319-325.	1.4	9
244	Energy gaps and a zero-field quantum Hall effect in graphene by strain engineering. Nature Physics, 2010, 6, 30-33.	16.8	1,554
245	Correlation-induced single-flux-quantum penetration in quantum rings. Nature Physics, 2010, 6, 173-177.	16.8	22
246	Approach to Equilibrium in Nano-scale Systems at Finite Temperature. Journal of the Physical Society of Japan, 2010, 79, 124005.	1.6	25
247	Dynamical stability of body center cubic iron at the Earth's core conditions. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 9962-9964.	7.2	58
248	Correlated Electrons Step by Step: Itinerant-to-Localized Transition of Fe Impurities in Free-Electron Metal Hosts. Physical Review Letters, 2010, 104, 117601.	7.9	22
249	A new route towards uniformly functionalized single-layer graphene. Journal Physics D: Applied Physics, 2010, 43, 175302.	2.9	25
250	Flexuron: A self-trapped state of electron in crystalline membranes. Physical Review B, 2010, 82, .	3.2	37
251	Resonant Scattering by Realistic Impurities in Graphene. Physical Review Letters, 2010, 105, 056802.	7.9	300
252	Atomistic simulations of structural and thermodynamic properties of bilayer graphene. Physical Review B, 2010, 81, .	3.2	122

#	ARTICLE	IF	CITATIONS
253	Limits on Charge Carrier Mobility in Suspended Graphene due to Flexural Phonons. Physical Review Letters, 2010, 105, 266601.	7.9	347
254	Density of States and Zero Landau Level Probed through Capacitance of Graphene. Physical Review Letters, 2010, 105, 136801.	7.9	202
255	Effect of Ligand Substitution on the Exchange Interactions in $\text{Mn}^{12}$ -Type Single-Molecule Magnets. Inorganic Chemistry, 2010, 49, 10902-10906.	4.2	27
256	Stable and fast semi-implicit integration of the stochastic Landau-Lifshitz equation. Journal of Physics Condensed Matter, 2010, 22, 176001.	1.8	87
257	Just Add Water. Science, 2010, 329, 1157-1158.	12.8	8
258	Modeling electronic structure and transport properties of graphene with resonant scattering centers. Physical Review B, 2010, 82, .	3.2	218
259	Many-Body Orbital Paramagnetism in Doped Graphene Sheets. Physical Review Letters, 2010, 104, 225503.	7.9	57
260	Correlation effects in the total energy, the bulk modulus, and the lattice constant of a transition metal: Combined local-density approximation and dynamical mean-field theory applied to Ni and Mn. Physical Review B, 2009, 79, .	3.2	80
261	Strength of Correlation Effects in the Electronic Structure of Iron. Physical Review Letters, 2009, 103, 267203.	7.9	107
262	Superperturbation solver for quantum impurity models. Europhysics Letters, 2009, 85, 27007.	2.1	46
263	Dynamical stabilization of the body centered cubic phase in lanthanum and thorium by phonon-phonon interaction. Journal of Physics Condensed Matter, 2009, 21, 175402.	1.8	12
264	Origin of the Canonical Ensemble: Thermalization with Decoherence. Journal of the Physical Society of Japan, 2009, 78, 094003.	1.6	28
265	Room-temperature ferromagnetism in graphite driven by two-dimensional networks of point defects. Nature Physics, 2009, 5, 840-844.	16.8	559
266	Atomic collapse, Lorentz boosts, Klein scattering, and other quantum-relativistic phenomena in graphene. Solid State Communications, 2009, 149, 1087-1093.	1.9	98
267	Control of Graphene's Properties by Reversible Hydrogenation: Evidence for Graphane. Science, 2009, 323, 610-613.	12.8	3,748
268	Defect-induced ferromagnetism in fullerenes. European Physical Journal B, 2009, 68, 529-535.	1.5	38
269	$\hat{\Gamma}^3$ -Mn at the border between weak and strong correlations. European Physical Journal B, 2009, 72, 473-478.	1.5	18
270	Topological Defects and Shape of Aromatic Self-Assembled Vesicles. Journal of Physical Chemistry B, 2009, 113, 10549-10551.	2.7	0

#	ARTICLE	IF	CITATIONS
271	Chemical functionalization of graphene. <i>Journal of Physics Condensed Matter</i> , 2009, 21, 344205.	1.8	331
272	Effect of a High- $\hat{I}^z$ Environment on Charge Carrier Mobility in Graphene. <i>Physical Review Letters</i> , 2009, 102, 206603.	7.9	347
273	Scaling properties of flexible membranes from atomistic simulations: Application to graphene. <i>Physical Review B</i> , 2009, 80, .	3.2	146
274	Enhancement of Chemical Activity in Corrugated Graphene. <i>Journal of Physical Chemistry C</i> , 2009, 113, 14176-14178.	3.2	216
275	Ligand-Controlled Magnetic Interactions in Mn <sub>4</sub> Clusters. <i>Inorganic Chemistry</i> , 2009, 48, 11903-11908.	4.2	28
276	Mild sonochemical exfoliation of bromine-intercalated graphite: a new route towards graphene. <i>Journal Physics D: Applied Physics</i> , 2009, 42, 112003.	2.9	64
277	Dual fermion approach to the two-dimensional Hubbard model: Antiferromagnetic fluctuations and Fermi arcs. <i>Physical Review B</i> , 2009, 79, .	3.2	110
278	Efficient Perturbation Theory for Quantum Lattice Models. <i>Physical Review Letters</i> , 2009, 102, 206401.	7.9	105
279	Finite Temperature Lattice Properties of Graphene beyond the Quasiharmonic Approximation. <i>Physical Review Letters</i> , 2009, 102, 046808.	7.9	433
280	Metal-insulator transition by suppression of spin fluctuations. <i>Europhysics Letters</i> , 2009, 85, 37006.	2.1	27
281	Cluster dual fermion approach to nonlocal correlations. <i>JETP Letters</i> , 2008, 86, 677-682.	1.4	35
282	First-principles studies of water adsorption on graphene: The role of the substrate. <i>Applied Physics Letters</i> , 2008, 93, .	3.4	294
283	Modeling of Graphite Oxide. <i>Journal of the American Chemical Society</i> , 2008, 130, 10697-10701.	14.2	736
284	Pseudomagnetic Fields and Ballistic Transport in a Suspended Graphene Sheet. <i>Physical Review Letters</i> , 2008, 101, 226804.	7.9	152
285	Optical properties of graphene: The Fermi-liquid approach. <i>Europhysics Letters</i> , 2008, 84, 37001.	2.1	58
286	Molecular Doping of Graphene. <i>Nano Letters</i> , 2008, 8, 173-177.	9.3	1,025
287	Macroscopic Graphene Membranes and Their Extraordinary Stiffness. <i>Nano Letters</i> , 2008, 8, 2442-2446.	9.3	607
288	Chaotic Dirac Billiard in Graphene Quantum Dots. <i>Science</i> , 2008, 320, 356-358.	12.8	2,098

#	ARTICLE	IF	CITATIONS
289	Chemical Functionalization of Graphene with Defects. Nano Letters, 2008, 8, 4373-4379.	9.3	607
290	Half-metallic ferromagnets: From band structure to many-body effects. Reviews of Modern Physics, 2008, 80, 315-378.	45.8	860
291	Midgap states in corrugated graphene: Ab initio calculations and effective field theory. Europhysics Letters, 2008, 84, 17003.	2.1	113
292	Orbital magnetism in transition metal systems: The role of local correlation effects. Europhysics Letters, 2008, 82, 37001.	2.1	57
293	Dual fermion approach to susceptibility of correlated lattice fermions. Physical Review B, 2008, 77, .	3.2	55
294	Controlling the Kondo Effect in $\text{CoCu}_n$ Clusters Atom by Atom. Physical Review Letters, 2008, 101, 266803.	7.9	77
295	Dual fermion approach to nonlocal correlations in the Hubbard model. Physical Review B, 2008, 77, .	3.2	290
296	Intrinsic nanoscale inhomogeneity in ordering systems due to elastic-mediated interactions. Europhysics Letters, 2007, 80, 66001.	2.1	6
297	Quantum-Hall Activation Gaps in Graphene. Physical Review Letters, 2007, 99, 206803.	7.9	127
298	Anharmonic Magnetic Deformation of Self-Assembled Molecular Nanocapsules. Physical Review Letters, 2007, 98, 146101.	7.9	31
299	Theory of bulk and surface quasiparticle spectra for Fe, Co, and Ni. Physical Review B, 2007, 76, .	3.2	147
300	Magnetism and Local Distortions near Carbon Impurity in $\text{Fe}_3\text{C}$ -Iron. Physical Review Letters, 2007, 99, 247205.	7.9	76
301	Electronic structure of a $\text{Mn}_{12}$ molecular magnet: Theory and experiment. Physical Review B, 2007, 75, .	3.2	41
302	Non-quasiparticle effects in half-metallic ferromagnets. Journal of Physics Condensed Matter, 2007, 19, 315201.	1.8	23
303	Atomic Collapse and Quasi-Rydberg States in Graphene. Physical Review Letters, 2007, 99, 246802.	7.9	220
304	Graphene: carbon in two dimensions. Materials Today, 2007, 10, 20-27.	14.6	1,393
305	Detection of individual gas molecules adsorbed on graphene. Nature Materials, 2007, 6, 652-655.	28.1	7,114
306	Intrinsic ripples in graphene. Nature Materials, 2007, 6, 858-861.	28.1	1,514

#	ARTICLE	IF	CITATIONS
307	The structure of suspended graphene sheets. <i>Nature</i> , 2007, 446, 60-63.	28.1	4,511
308	Vacuum Polarization and Screening of Supercritical Impurities in Graphene. <i>Physical Review Letters</i> , 2007, 99, 236801.	7.9	241
309	Phonon related properties of transition metals, their carbides, and nitrides: A first-principles study. <i>Journal of Applied Physics</i> , 2007, 101, 123519.	2.5	312
310	Role of the d-f Coulomb interaction in intermediate valence and Kondo systems: a numerical renormalization group study. <i>European Physical Journal B</i> , 2007, 55, 377-382.	1.5	3
311	Conductance quantization in graphene nanoribbons: adiabatic approximation. <i>European Physical Journal B</i> , 2007, 57, 225-228.	1.5	47
312	Nonlinear screening of charge impurities in graphene. <i>Physical Review B</i> , 2006, 74, .	3.2	146
313	Electron Correlations and the Minority-Spin Band Gap in Half-Metallic Heusler Alloys. <i>Physical Review Letters</i> , 2006, 96, 137203.	7.9	61
314	Solvent-Driven Formation of Bolaamphiphilic Vesicles. <i>Journal of Physical Chemistry B</i> , 2006, 110, 30-32.	2.7	9
315	Reply to the Comment by O. Eriksson and J. M. Wills on "Nature of non-magnetic strongly-correlated state in $\hat{\Gamma}$ -plutonium". <i>Europhysics Letters</i> , 2006, 76, 172-173.	2.1	0
316	Unconventional quantum Hall effect and Berry's phase of $2\pi$ in bilayer graphene. <i>Nature Physics</i> , 2006, 2, 177-180.	16.8	1,785
317	Chiral tunnelling and the Klein paradox in graphene. <i>Nature Physics</i> , 2006, 2, 620-625.	16.8	3,383
318	Zitterbewegung, chirality, and minimal conductivity in graphene. <i>European Physical Journal B</i> , 2006, 51, 157-160.	1.5	583
319	Nature of non-magnetic strongly-correlated state in $\hat{\Gamma}$ -plutonium. <i>Europhysics Letters</i> , 2006, 74, 479-485.	2.1	50
320	Multiplet effects in the electronic structure of heavy rare-earth metals. <i>Journal of Physics Condensed Matter</i> , 2006, 18, 6329-6335.	1.8	18
321	Spectral Function of Ferromagnetic 3d Metals: A Self-Consistent LSDA+DMFT Approach Combined with the One-Step Model of Photoemission. <i>Physical Review Letters</i> , 2006, 97, 227601.	7.9	80
322	Half-Metallic Ferromagnetism Induced by Dynamic Electron Correlations in VAs. <i>Physical Review Letters</i> , 2006, 96, 197203.	7.9	37
323	High-temperature ferromagnetism of sp electrons in narrow impurity bands: application to CaB <sub>6</sub> . <i>Journal of Physics Condensed Matter</i> , 2006, 18, 7209-7225.	1.8	133
324	Non-quasiparticle states in the core level spectra of ferromagnetic semiconductors and half-metallic ferromagnets. <i>European Physical Journal B</i> , 2005, 43, 479-487.	1.5	10

#	ARTICLE	IF	CITATIONS
325	Two-dimensional gas of massless Dirac fermions in graphene. <i>Nature</i> , 2005, 438, 197-200.	28.1	18,948
326	Thermodynamics of a two-dimensional Heisenberg ferromagnet with dipolar interaction. <i>Physical Review B</i> , 2005, 71, .	3.2	18
327	Ab Initio Theory of Dynamical Core-Hole Screening in Graphite from X-Ray Absorption Spectra. <i>Physical Review Letters</i> , 2005, 94, 167401.	7.9	51
328	Polar magneto-optical Kerr effect for low-symmetric ferromagnets. <i>Physical Review B</i> , 2005, 72, .	3.2	4
329	Experimental Observation and Theoretical Description of the Pure Fano Effect in the Valence-Band Photoemission of Ferromagnets. <i>Physical Review Letters</i> , 2005, 95, 166401.	7.9	21
330	Kondo Resonance for Orbitally Degenerate Systems. <i>Physical Review Letters</i> , 2004, 93, 236403.	7.9	18
331	Parity effects in spin decoherence. <i>Physical Review B</i> , 2004, 70, .	3.2	59
332	Symmetry Assumptions, Kramers-Kronig Transformation and Analytical Continuation in Ab Initio Calculations of Optical Conductivities. <i>Physica Scripta</i> , 2004, T109, 170.	2.5	19
333	Nonperturbative anharmonic phenomena in crystal lattice dynamics. <i>AIP Conference Proceedings</i> , 2004, , .	0.4	2
334	Magnetic susceptibility, exchange interactions and spin-wave spectra in the local spin density approximation. <i>Journal of Physics Condensed Matter</i> , 2004, 16, 7439-7446.	1.8	60
335	Mn <sub>1-x</sub> Al <sub>x</sub> phases in the Ti <sup>3+</sup> /Si <sup>3+</sup> system studied by thin-film synthesis and ab initio calculations. <i>Physical Review B</i> , 2004, 70, .	3.2	212
336	Electronic structure and exchange interactions in V <sub>15</sub> magnetic molecules: LDA+U results. <i>Journal of Applied Physics</i> , 2003, 93, 7080-7082.	2.5	20
337	Initial and final state effects in the x-ray absorption process of La <sub>1-x</sub> Sr <sub>x</sub> MnO <sub>3</sub> . <i>Physical Review B</i> , 2003, 68, .	3.2	21
338	Quantum Oscillations without Quantum Coherence. <i>Physical Review Letters</i> , 2003, 90, 210401.	7.9	54
339	Many-spin calculation of tunneling splittings in Mn <sub>12</sub> magnetic molecules. <i>Journal of Applied Physics</i> , 2002, 91, 7152.	2.5	1
340	Robustness of the Van Hove Scenario for High-T <sub>c</sub> Superconductors. <i>Physical Review Letters</i> , 2002, 89, 076401.	7.9	94
341	Real-space imaging of an orbital Kondo resonance on the Cr(001) surface. <i>Nature</i> , 2002, 415, 507-509.	28.1	68
342	Finite-Temperature Magnetism of Transition Metals: An ab initio Dynamical Mean-Field Theory. <i>Physical Review Letters</i> , 2001, 87, 067205.	7.9	369

#	ARTICLE	IF	CITATIONS
343	Spectroscopic observation of polaron-lattice band structure in the conducting polymer polyaniline. <i>Journal of Physics Condensed Matter</i> , 2001, 13, 3907-3912.	1.8	8
344	Effects of van Hove singularities on magnetism and superconductivity in the $t\text{-}t'$ -Hubbard model: A parquet approach. <i>Physical Review B</i> , 2001, 64, .	3.2	85
345	Many-spin effects and tunneling properties of magnetic molecules. <i>Journal of Applied Physics</i> , 2000, 87, 6268-6270.	2.5	7
346	First-principles calculations of magnetic interactions in correlated systems. <i>Physical Review B</i> , 2000, 61, 8906-8912.	3.2	204
347	Non-Fermi-liquid behavior in Kondo lattices induced by peculiarities of magnetic ordering and spin dynamics. <i>Physical Review B</i> , 2000, 61, 14640-14646.	3.2	17
348	Electron spectrum, thermodynamics, and transport in antiferromagnetic metals at low temperatures. <i>Physical Review B</i> , 2000, 62, 5647-5656.	3.2	11
349	Breakdown of Luttinger liquid state in a one-dimensional frustrated spinless fermion model. <i>Physical Review B</i> , 2000, 61, 15534-15537.	3.2	13
350	Structure, elastic moduli, and thermodynamics of sodium and potassium at ultrahigh pressures. <i>Physical Review B</i> , 2000, 61, 14420-14424.	3.2	41
351	Mechanisms of Decoherence in Weakly Anisotropic Molecular Magnets. <i>Physical Review Letters</i> , 2000, 84, 3458-3461.	7.9	51
352	Fermi-liquid theory of electronic topological transitions and screening anomalies in metals. <i>Physical Review B</i> , 2000, 61, 1643-1645.	3.2	12
353	Peculiarities of defect structure and mechanical properties of iridium: Results of ab initio electronic structure calculations. <i>Physical Review B</i> , 2000, 62, 7802-7808.	3.2	50
354	Antiferromagnetism and d-wave superconductivity in cuprates: A cluster dynamical mean-field theory. <i>Physical Review B</i> , 2000, 62, R9283-R9286.	3.2	316
355	LDA++ approach to the electronic structure of magnets: correlation effects in iron. <i>Journal of Physics Condensed Matter</i> , 1999, 11, 1037-1048.	1.8	90
356	Self-consistent spin-wave theory of two-dimensional magnets with impurities. <i>Physical Review B</i> , 1999, 60, 14779-14786.	3.2	8
357	Scaling theory of magnetic ordering in the Kondo lattices with anisotropic exchange interactions. <i>Physical Review B</i> , 1999, 59, 9348-9356.	3.2	25
358	Quantum fluctuations in the vicinity of the spin flop transition in large-spin clusters. <i>Journal of Applied Physics</i> , 1999, 85, 4530-4532.	2.5	2
359	Anisotropy of thermal expansion and electronic topological transitions in Zn and Cd under pressure. <i>Physical Review B</i> , 1999, 59, 4557-4560.	3.2	52
360	Self-consistent spin-wave theory of layered Heisenberg magnets. <i>Physical Review B</i> , 1999, 60, 1082-1099.	3.2	99

#	ARTICLE	IF	CITATIONS
361	Many-spin model and the spin Hamiltonian of Mn <sub>12</sub> clusters. Journal of Applied Physics, 1999, 85, 4533-4535.	2.5	6
362	Spin-wave contributions to nuclear magnetic relaxation in magnetic metals. Physical Review B, 1999, 60, 14569-14572.	3.2	0
363	Fluctuation-induced nucleation and dynamics of kinks on dislocation: Soliton and oscillation regimes in the two-dimensional Frenkel-Kontorova model. Physical Review B, 1999, 60, 1013-1018.	3.2	18
364	Many-spin interactions and spin excitations in Mn <sub>12</sub> . Physical Review B, 1999, 59, 6919-6926.	3.2	65
365	Real-space first-principles electronic structure of edge dislocations: NiAl. Philosophical Magazine Letters, 1998, 78, 427-433.	1.2	12
366	Ab initio calculations of quasiparticle band structure in correlated systems: LDA++ approach. Physical Review B, 1998, 57, 6884-6895.	3.2	589
367	Quantum fluctuations in many-spin magnetic molecules. Physical Review B, 1998, 58, R14733-R14736.	3.2	21
368	Peculiarities of phonon spectra and lattice heat capacity in Ir and Rh. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1997, 75, 389-406.	0.6	17
369	Scaling picture of magnetism formation in the anomalous f-electron systems: Interplay of the Kondo effect and spin dynamics. Physical Review B, 1997, 56, 8109-8128.	3.2	43
370	Electronic phase transitions in a one-dimensional spinless fermion model with competing interactions. Physical Review B, 1997, 56, 12939-12946.	3.2	15
371	Thermal expansion and the equation of state of Ir and Rh. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1997, 75, 407-418.	0.6	7
372	Close packing of atoms, geometric frustrations and the formation of heterogeneous states in crystals. Journal of Physics Condensed Matter, 1997, 9, 7837-7844.	1.8	5
373	The effect of electronic localized states at dislocations on the $\tilde{\text{chemical}}^{\text{TM}}$ impurity-dislocation interaction. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1996, 73, 845-860.	0.6	6
374	Spin dynamics in magnets: Equation of motion and finite temperature effects. Physical Review B, 1996, 54, 1019-1035.	3.2	287
375	Electronic contributions to spin-wave characteristics in antiferromagnetic metals. Physical Review B, 1996, 53, 14008-14011.	3.2	4
376	1/N expansion for critical exponents of magnetic phase transitions in the CPN <sup>d-1</sup> model for $2 < d < 4$ . Physical Review B, 1996, 54, 11953-11956.	3.2	34
377	Ab initio instanton molecular dynamics for the description of tunneling phenomena. Physical Review A, 1996, 54, 4802-4809.	2.5	14
378	Stochastic approach to simulation of lattice vibrations in strongly anharmonic crystals: Anomalous frequency dependence of the dynamic structure factor. Physical Review B, 1996, 54, 3286-3294.	3.2	23

#	ARTICLE	IF	CITATIONS
379	Pressure-induced phonon softening and electronic topological transition in HgBa <sub>2</sub> CuO <sub>4</sub> . <i>Physical Review B</i> , 1996, 54, 1313-1319.	3.2	21
380	AbInitio Spin Dynamics in Magnets. <i>Physical Review Letters</i> , 1995, 75, 729-732.	7.9	219
381	Pseudo-marginal-Fermi-liquid behavior in antiferromagnetic metals. <i>Physical Review B</i> , 1995, 52, 6181-6184.	3.2	11
382	Phase locking in a thermostat: Fermi resonance in metals. <i>Physical Review B</i> , 1995, 51, 12817-12820.	3.2	0
383	Phonon spectra, interatomic interaction potentials and simulation of lattice defects in iridium and rhodium. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1994, 69, 1183-1195.	0.6	20
384	Singularities of the electronic structure and pre-martensitic anomalies of lattice properties in $\bar{2}$ -phases of metals and alloys. <i>Phase Transitions</i> , 1994, 49, 143-191.	1.3	86
385	On the microscopic model of Fe and Ni: the possible breakdown of the ferromagnetic fermi-liquid picture. <i>Journal of Physics Condensed Matter</i> , 1993, 5, 8763-8772.	1.8	35
386	On the self-consistent spin-wave theory of frustrated Heisenberg antiferromagnets. <i>Journal of Physics Condensed Matter</i> , 1992, 4, 5227-5237.	1.8	27
387	Correlation effects at the surface of an itinerant electron ferromagnet. <i>Journal of Physics Condensed Matter</i> , 1992, 4, 3289-3294.	1.8	8
388	A scaling approach to the theory of magnetic Kondo lattices. <i>Journal of Physics Condensed Matter</i> , 1992, 4, 9661-9672.	1.8	6
389	On the Nature of the Rhenium Effect. Peculiarities of the Band Structure and Elastic Moduli of W- and Mo-Based Alloys. <i>Physica Status Solidi (B): Basic Research</i> , 1991, 164, 185-193.	1.6	19
390	Pre-transition softening and anomalous pressure dependence of shear constants in alkali and alkaline-earth metals due to band-structure effects. <i>Journal of Physics Condensed Matter</i> , 1991, 3, 1409-1428.	1.8	13
391	Pseudo-Kondo Lattice State in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-<math>\delta</math></sub> Owing to Strong Anharmonicity of Oxygen Potentials. <i>Europhysics Letters</i> , 1991, 15, 649-654.	2.1	8
392	On the theory of the Mott transition in the paramagnetic phase. <i>Journal of Physics Condensed Matter</i> , 1991, 3, 1475-1491.	1.8	16
393	Current carriers in a quantum two-dimensional antiferromagnet. <i>Journal of Physics Condensed Matter</i> , 1991, 3, 6439-6453.	1.8	16
394	On the Possibility of Describing Lattice Properties of Iridium in Terms of Pseudopotential Theory. <i>Physica Status Solidi (B): Basic Research</i> , 1990, 158, 441-455.	1.6	9
395	On the Effect of Three-Body Interactions and Proximity of the Fermi Level to the Brillouin Zone Faces on Elastic Modules of Simple Metals. <i>Physica Status Solidi (B): Basic Research</i> , 1990, 161, 153-164.	1.6	3
396	On the mean-field theory of magnetically ordered Kondo lattices. <i>Journal of Physics Condensed Matter</i> , 1990, 2, 8715-8719.	1.8	21

#	ARTICLE	IF	CITATIONS
397	Ground state and electron-magnon interaction in an itinerant ferromagnet: half-metallic ferromagnets. <i>Journal of Physics Condensed Matter</i> , 1990, 2, 7151-7171.	1.8	70
398	An experimental and theoretical study of martensitic phase transitions in Li and Na under pressure. <i>Journal of Physics Condensed Matter</i> , 1989, 1, 5319-5335.	1.8	32
399	Itinerant electron ferromagnetism in narrow energy bands. <i>Journal of Physics C: Solid State Physics</i> , 1988, 21, 5521-5537.	1.5	25
400	On the description of the antiferromagnetism without anomalous averages. <i>European Physical Journal B</i> , 1986, 62, 201-205.	1.5	43
401	Pseudogap formation and coexistence of localised and extended states in disordered transition metal alloys. <i>Journal of Physics C: Solid State Physics</i> , 1986, 19, 5173-5185.	1.5	7
402	Temperature Dependences of Conductivity at Small Electron Mean Free Path. <i>Physica Status Solidi (B): Basic Research</i> , 1985, 129, 813-822.	1.6	0
403	Spin waves in narrow band ferromagnet. <i>Journal of Physics C: Solid State Physics</i> , 1985, 18, 4173-4188.	1.5	76
404	Energy gap in intermediate valence compounds. <i>Journal of Physics C: Solid State Physics</i> , 1984, 17, L699-L703.	1.5	7
405	Electron states in the s-f exchange model of a ferromagnetic semiconductor in the spin wave region. <i>Journal of Physics C: Solid State Physics</i> , 1984, 17, 669-681.	1.5	20
406	Metal-insulator transition and antiferromagnetism in the ground state of the Hubbard model. <i>Journal of Physics C: Solid State Physics</i> , 1984, 17, 4291-4308.	1.5	28
407	Exchange interactions and spin-wave stiffness in ferromagnetic metals. <i>Journal of Physics F: Metal Physics</i> , 1984, 14, L125-L128.	1.6	278
408	High-resistivity alloys as highly correlated disordered systems. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1982, 46, 357-364.	0.6	10
409	Spectrum of Oscillations of the Inhomogeneous Electronic Plasma. <i>Physica Status Solidi (B): Basic Research</i> , 1981, 104, K75.	1.6	1
410	Some types of instabilities in the electron energy spectrum of the polar model of the crystal. II. The criterion of stability of a metallic state. <i>Journal of Physics C: Solid State Physics</i> , 1979, 12, 2055-2056.	1.5	16
411	Some types of instabilities in the electron energy spectrum of the polar model of the crystal. I. The maximum-polarity state. <i>Journal of Physics C: Solid State Physics</i> , 1979, 12, 2043-2053.	1.5	56