

Jaroslav Fabian

List of Publications by Year in descending order

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213
papers

22,828
citations

32410

55
h-index

9346

148
g-index

216
all docs

216
docs citations

216
times ranked

18510
citing authors

#	ARTICLE	IF	CITATIONS
1	Supercurrent rectification and magnetochiral effects in symmetric Josephson junctions. Nature Nanotechnology, 2022, 17, 39-44.	15.6	134
2	Connections between spin-orbit torques and unidirectional magnetoresistance in ferromagnetic-metal/heavy-metal heterostructures. Physical Review B, 2022, 105, .	1.1	8
3	Effect of Rashba and Dresselhaus spin-orbit coupling on supercurrent rectification and magnetochiral anisotropy of ballistic Josephson junctions. Journal of Physics Condensed Matter, 2022, 34, 154005.	0.7	39
4	Revealing the impact of strain in the optical properties of bubbles in monolayer MoSe ₂ . Nanoscale, 2022, 14, 5758-5768.	2.8	9
5	Engineering Proximity Exchange by Twisting: Reversal of Ferromagnetic and Emergence of Antiferromagnetic Dirac Bands in Graphene/CrI_2 . Physical Review Letters, 2022, 128, 106401.	2.9	18
6	Signatures of superconducting triplet pairing in NiGa-bilayer junctions. New Journal of Physics, 2022, 24, 033046.	1.2	5
7	Counterintuitive gate dependence of weak antilocalization in bilayer graphene/WS_2 heterostructures. Physical Review B, 2022, 105, .	1.1	17
8	Near-field nanoscopy of excitons and ultrafast interlayer dynamics in van der Waals crystals. , 2022, , .		0
9	Proximity spin-orbit and exchange coupling in ABA and ABC trilayer graphene van der Waals heterostructures. Physical Review B, 2022, 105, .	1.1	12
10	Strong Substrate Strain Effects in Multilayered WS ₂ Revealed by High-Pressure Optical Measurements. ACS Applied Materials & Interfaces, 2022, , .	4.0	8
11	Interplay of boundary states of graphene nanoribbons with a Kondo impurity. Physical Review B, 2022, 105, .	1.1	5
12	Edge states in proximitized graphene ribbons and flakes in a perpendicular magnetic field: Emergence of lone pseudohelical pairs and pure spin-current states. Physical Review B, 2022, 105, .	1.1	0
13	Heterostructures of Graphene and Topological Insulators Bi ₂ Se ₃ , Bi ₂ Te ₃ , and Sb ₂ Te ₃ . Physica Status Solidi (B): Basic Research, 2021, 258, 2000081.	0.7	19
14	Graphene on two-dimensional hexagonal BN, AlN, and GaN: Electronic, spin-orbit, and spin relaxation properties. Physical Review B, 2021, 103, .	1.1	18
15	Large exciton binding energies in MnPS_3 as a case study of a van der Waals layered magnet. Physical Review B, 2021, 103, .		
16	Twist-angle engineering of excitonic quantum interference and optical nonlinearities in stacked 2D semiconductors. Nature Communications, 2021, 12, 1553.	5.8	28
17	Intrinsic and extrinsic spin-orbit coupling and spin relaxation in monolayer PtSe_2 . Physical Review B, 2021, 103, .		
18	Subcycle contact-free nanoscopy of ultrafast interlayer transport in atomically thin heterostructures. Nature Photonics, 2021, 15, 594-600.	15.6	55

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19	All-electrical creation and control of spin-galvanic signal in graphene and molybdenum ditelluride heterostructures at room temperature. <i>Communications Physics</i> , 2021, 4, .	2.0	20
20	Van der Waals heterostructures for spintronics and opto-spintronics. <i>Nature Nanotechnology</i> , 2021, 16, 856-868.	15.6	261
21	Electrical Control of Valley-Zeeman Spin-Orbit-Coupling-Induced Spin Precession at Room Temperature. <i>Physical Review Letters</i> , 2021, 127, 047202.	2.9	35
22	Bilayer graphene encapsulated within monolayers of WS_2 or Cr_2 : Tunable proximity spin-orbit or exchange coupling. <i>Physical Review B</i> , 2021, 104, .	1.1	15
23	Narrow-band high-lying excitons with negative-mass electrons in monolayer WSe_2 . <i>Nature Communications</i> , 2021, 12, 5500.	5.8	29
24	Boosting proximity spin-orbit coupling in graphene/ WSe_2 heterostructures via hydrostatic pressure. <i>Npj 2D Materials and Applications</i> , 2021, 5, .	3.9	34
25	Quasi-1D exciton channels in strain-engineered 2D materials. <i>Science Advances</i> , 2021, 7, eabj3066.	4.7	37
26	Superconducting triplet pairings and anisotropic magnetoresistance effects in ferromagnet/superconductor/ferromagnet double-barrier junctions. <i>Physical Review B</i> , 2021, 104, .	1.1	5
27	Twist-angle dependent proximity induced spin-orbit coupling in graphene/transition metal dichalcogenide heterostructures. <i>Physical Review B</i> , 2021, 104, .	1.1	44
28	Intersubband excitations in ultrathin core-shell nanowires in the one-dimensional quantum limit probed by resonant inelastic light scattering. <i>Physical Review B</i> , 2021, 104, .	1.1	3
29	Magnetic proximity in a van der Waals heterostructure of magnetic insulator and graphene. <i>2D Materials</i> , 2020, 7, 015026.	2.0	80
30	Landau levels in spin-orbit coupling proximitized graphene: Bulk states. <i>Physical Review B</i> , 2020, 102, .	1.1	5
31	Spin Relaxation in Wave Superconductors in the Presence of Resonant Spin-Flip Scatterers. <i>Physical Review Letters</i> , 2020, 125, 087001.	2.9	4
32	Swapping Exchange and Spin-Orbit Coupling in 2D van der Waals Heterostructures. <i>Physical Review Letters</i> , 2020, 125, 196402.	2.9	32
33	Proximity Spin-Orbit Torque on a Two-Dimensional Magnet within van der Waals Heterostructure: Current-Driven Antiferromagnet-to-Ferromagnet Reversible Nonequilibrium Phase Transition in Bilayer CrI_3 . <i>Nano Letters</i> , 2020, 20, 2288-2295.	4.5	89
34	Quantum Anomalous Hall Effects in Graphene from Proximity-Induced Uniform and Staggered Spin-Orbit and Exchange Coupling. <i>Physical Review Letters</i> , 2020, 124, 136403.	2.9	67
35	Chiral Majorana fermions in graphene from proximity-induced superconductivity. <i>Physical Review B</i> , 2020, 101, .	1.1	13
36	Interfacial Spin-Orbit Coupling: A Platform for Superconducting Spintronics. <i>Physical Review Applied</i> , 2020, 13, .	1.5	32

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37	Giant proximity exchange and valley splitting in transition metal dichalcogenide/ hBN heterostructures. Physical Review B, 2020, 101, .	1.1	9
38	Anomalous Josephson Hall effect charge and transverse spin currents in superconductor/ferromagnetic-insulator/superconductor junctions. Physical Review B, 2020, 101, .	1.1	9
39	Proximity exchange effects in $\text{Cr}_2\text{Ge}_2\text{Te}_5$ and monolayer $\text{Cr}_2\text{Ge}_2\text{Te}_5$. Physical Review B, 2020, 101, .	1.3	29
40	Electronic and magnetic properties of FeGe_2 films embedded in vertical spin valve devices. Physical Review Materials, 2020, 4, .	0.9	1
41	Proximity exchange effects in $\text{MoSe}_2/\text{WSe}_2$ heterostructures with CrI_3 . Physical Review B, 2020, 101, .	1.1	113
42	Spin relaxation in fluorinated single and bilayer graphene. Physical Review B, 2019, 100, .	1.1	10
43	Strain-tunable orbital, spin-orbit, and optical properties of monolayer transition-metal dichalcogenides. Physical Review B, 2019, 100, .	1.1	91
44	Lightwave Valleytronics at Multi-Terahertz Clock Rates. , 2019, , .		0
45	Single and bilayer graphene on the topological insulator Bi_2Se_3 : Electronic and spin-orbit properties from first principles. Physical Review B, 2019, 100, .	1.1	20
46	Skew Andreev reflection in ferromagnet/superconductor junctions. Physical Review B, 2019, 100, .	1.1	9
47	Lightwave control of the valley pseudospin in a monolayer of tungsten diselenide. EPJ Web of Conferences, 2019, 205, 05011.	0.1	0
48	$k \cdot p$ theory for phosphorene: Effective g -factors, Landau levels, and excitons. Physical Review B, 2019, 100, .	1.1	36
49	Spin-orbit coupling in elemental two-dimensional materials. Physical Review B, 2019, 100, .	1.1	45
50	Absence of a giant spin Hall effect in plasma-hydrogenated graphene. Physical Review B, 2019, 99, .	1.1	27
51	Electron-hole collisions in an atomically thin semiconductor. Journal of Physics: Conference Series, 2019, 1220, 012001.	0.3	0
52	Ultralong spin lifetimes in one-dimensional semiconductor nanowires. Applied Physics Letters, 2019, 114, 202101.	1.5	10
53	Common nonlinear features and spin-orbit coupling effects in the Zeeman splitting of novel wurtzite materials. Physical Review B, 2019, 99, .	1.1	13
54	Unusual spin properties of InP wurtzite nanowires revealed by Zeeman splitting spectroscopy. Physical Review B, 2019, 99, .	1.1	14

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55	Heterostructures of graphene and hBN: Electronic, spin-orbit, and spin relaxation properties from first principles. <i>Physical Review B</i> , 2019, 99, .	1.1	47
56	Many-Body Quantum Monte-Carlo Study of 2D Materials: Cohesion and Band Gap in Single-Layer Phosphorene. <i>Physical Review X</i> , 2019, 9, .	2.8	27
57	Interplay of resonant states and Landau levels in functionalized graphene. <i>Physical Review B</i> , 2019, 99, .	1.1	5
58	Valleytronics on the subcycle timescale. , 2019, , .		0
59	Protected Pseudohelical Edge States in $\langle \mathbf{m} \cdot \mathbf{Z} \rangle$ -Trivial Proximitized Graphene. <i>Physical Review Letters</i> . 2018. 120. 156402.	2.9	57
60	Resonant scattering due to adatoms in graphene: Top, bridge, and hollow positions. <i>Physical Review B</i> , 2018, 97, .	1.1	23
61	Lightwave valleytronics in a monolayer of tungsten diselenide. <i>Nature</i> , 2018, 557, 76-80.	13.7	201
62	Spin properties of black phosphorus and phosphorene, and their prospects for spin calorics. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 174001.	1.3	12
63	Terahertz Quasiparticle Acceleration: From Electron-Hole Collisions To Lightwave Valleytronics. , 2018, , .		0
64	Observation of Spin-Valley-Coupling-Induced Large Spin-Lifetime Anisotropy in Bilayer Graphene. <i>Physical Review Letters</i> , 2018, 121, 127702.	2.9	59
65	Transport Spectroscopy of Sublattice-Resolved Resonant Scattering in Hydrogen-Doped Bilayer Graphene. <i>Physical Review Letters</i> , 2018, 121, 136801.	2.9	11
66	Connection between zero-energy Yu-Shiba-Rusinov states and σ transitions in magnetic Josephson junctions. <i>Physical Review B</i> , 2018, 98, .	1.1	10
67	Electrically tunable exchange splitting in bilayer graphene on monolayer $\text{Cr}_2\text{X}_2\text{Te}_6$ with X = Ge, Si, and Sn. <i>New Journal of Physics</i> , 2018, 20, 073007.	1.2	43
68	Spin-orbit coupling effects in zinc-blende InSb and wurtzite InAs nanowires: Realistic calculations with multiband $\langle \mathbf{k} \cdot \mathbf{A} \rangle$ method. <i>Physical Review B</i> , 2018, 97, .	1.1	32
69	Electric-field control of interfacial spin-orbit fields. <i>Nature Electronics</i> , 2018, 1, 350-355.	13.1	26
70	Copper adatoms on graphene: Theory of orbital and spin-orbital effects. <i>Physical Review B</i> , 2017, 95, .	1.1	28
71	Coexistence of tunneling magnetoresistance and Josephson effects in SFIFS junctions. <i>AIP Advances</i> , 2017, 7, 025008.	0.6	5
72	Gate-tunable black phosphorus spin valve with nanosecond spin lifetimes. <i>Nature Physics</i> , 2017, 13, 888-893.	6.5	119

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73	Magnetoanisotropic Josephson effect due to interfacial spin-orbit fields in superconductor/ferromagnet/superconductor junctions. Physical Review B, 2017, 95, .	1.1	22
74	Femtosecond photo-switching of interface polaritons in black phosphorus heterostructures. Nature Nanotechnology, 2017, 12, 207-211.	15.6	174
75	Proximity Effects in Bilayer Graphene on Monolayer WS_2 : Field-Effect Spin Valley Locking, Spin-Orbit Valve, and Spin Transistor. Physical Review Letters, 2017, 119, 146401.	11.1	109
76	Model spin-orbit coupling Hamiltonians for graphene systems. Physical Review B, 2017, 95, .	1.1	143
77	Giant Spin Lifetime Anisotropy in Graphene Induced by Proximity Effects. Physical Review Letters, 2017, 119, 206601.	2.9	161
78	Intuitive approach to the unified theory of spin relaxation. Physical Review B, 2017, 96, .	1.1	12
79	Femtosecond switch-on of hybrid polaritons in black phosphorus heterostructures. , 2017, , .		0
80	Ultrafast photo-activation of interface polaritons in black phosphorus heterostructures. , 2017, , .		0
81	Excitonic Stark effect in MoS_2 . Physical Review B, 2016, 94, .		
82	Robust spin-orbit torque and spin-galvanic effect at the Fe/GaAs (001) interface at room temperature. Nature Communications, 2016, 7, 13802.	5.8	48
83	First-principles studies of orbital and spin-orbit properties of GaAs, GaSb, InAs, and InSb zinc-blende and wurtzite semiconductors. Physical Review B, 2016, 94, .	1.1	54
84	Anisotropic Polar Magneto-Optic Kerr Effect of Ultrathin $Fe/GaAs(001)$. Physical Review Letters, 2016, 116, 157202.	2.9	13
85	Spin-Orbit Interaction. Physical Review Letters, 2016, 117, 157202. Excitonic Valley Effects in Monolayer WS_2 under High Magnetic Fields. Nano Letters, 2016, 16, 7899-7904.	4.5	114
86	Spin-orbit coupling in methyl functionalized graphene. Physical Review B, 2016, 93, .	1.1	24
87	Trivial and inverted Dirac bands and the emergence of quantum spin Hall states in graphene on transition-metal dichalcogenides. Physical Review B, 2016, 93, .	1.1	227
88	Theory of electronic and spin-orbit proximity effects in graphene on Cu(111). Physical Review B, 2016, 93, .	1.1	36
89	Realistic multiband $k \cdot p$ model for graphene on $InAs$ and InP in wurtzite phase. Physical Review B, 2016, 93, .	1.1	40
90	Theory of proximity-induced exchange coupling in graphene on hBN/(Co, Ni). Physical Review B, 2016, 94, .	1.1	74

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91	Spin-orbit coupling and spin relaxation in phosphorene: Intrinsic versus extrinsic effects. Physical Review B, 2016, 94, .	1.1	44
92	Enhanced spin-orbit coupling in core/shell nanowires. Nature Communications, 2016, 7, 12413.	5.8	34
93	Magnetotransport signatures of the proximity exchange and spin-orbit couplings in graphene. Physical Review B, 2016, 94, .	1.1	16
94	RESONANT SCATTERING OFF MAGNETIC IMPURITIES IN GRAPHENE: MECHANISM FOR ULTRAFAST SPIN RELAXATION. , 2015, , .		0
95	Probing topological transitions in HgTe/CdTe quantum wells by magneto-optical measurements. Physical Review B, 2015, 91, .	1.1	18
96	Theory of spin-orbit-induced spin relaxation in functionalized graphene. Physical Review B, 2015, 92, .	1.1	20
97	Graphene on transition-metal dichalcogenides: A platform for proximity spin-orbit physics and optospintronics. Physical Review B, 2015, 92, .	1.1	268
98	Resonant Scattering by Magnetic Impurities as a Model for Spin Relaxation in Bilayer Graphene. Physical Review Letters, 2015, 115, 196601.	2.9	29
99	Spin transport in hydrogenated graphene. 2D Materials, 2015, 2, 022002.	2.0	81
100	Magnetoanisotropic Andreev Reflection in Ferromagnet-Superconductor Junctions. Physical Review Letters, 2015, 115, 116601.	2.9	46
101	Electric Field Control of Spin Lifetimes in Nb/SrTiO_3 Spin-Orbit Fields. Physical Review Letters. 2015, 115, 136601.	2.9	18
102	Emergence of spin-orbit fields in magnetotransport of quasi-two-dimensional iron on gallium arsenide. Nature Communications, 2015, 6, 7374.	5.8	28
103	Graphene spintronics: the European Flagship perspective. 2D Materials, 2015, 2, 030202.	2.0	243
104	$k \cdot p$ theory for two-dimensional transition metal dichalcogenide semiconductors. 2D Materials, 2015, 2, 022001.	2.0	676
105	Tunneling Anomalous and Spin Hall Effects. Physical Review Letters, 2015, 115, 056602.	2.9	49
106	Spin-orbit coupling in fluorinated graphene. Physical Review B, 2015, 91, .	1.1	56
107	Anisotropic optical properties of Fe/GaAs(001) nanolayers from first principles. Physical Review B, 2014, 90, .	1.1	9
108	Spin Relaxation Mechanism in Graphene: Resonant Scattering by Magnetic Impurities. Physical Review Letters, 2014, 112, 116602.	2.9	185

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109	Gate-defined coupled quantum dots in topological insulators. <i>Physical Review B</i> , 2014, 89, .	1.1	13
110	Tunneling anisotropic thermopower and Seebeck effects in magnetic tunnel junctions. <i>Physical Review B</i> , 2014, 90, .	1.1	12
111	Band structure and spin-orbit coupling engineering in transition-metal dichalcogenides. <i>Annalen Der Physik</i> , 2014, 526, A89.	0.9	3
112	Optical conductivity of hydrogenated graphene from first principles. <i>Physical Review B</i> , 2014, 89, .	1.1	15
113	Spin hot spots in single-electron GaAs-based quantum dots. <i>Physica Status Solidi (B): Basic Research</i> , 2014, 251, 1924-1930.	0.7	2
114	Electric control of tunneling energy in graphene double dots. <i>Physical Review B</i> , 2014, 89, .	1.1	6
115	Graphene spintronics. <i>Nature Nanotechnology</i> , 2014, 9, 794-807.	15.6	1,290
116	Tunneling magnetothermopower in magnetic tunnel junctions. <i>Physical Review B</i> , 2014, 89, .	1.1	13
117	Magnetic Control of Spin-Orbit Fields: A First-Principles Study of Fe/GaAs Junctions. <i>Physical Review Letters</i> , 2013, 111, 036603.	2.9	30
118	Magneto-optical conductivity of graphene on polar substrates. <i>Physical Review B</i> , 2013, 88, .	1.1	43
119	Spin-orbit-interaction induced singularity of the charge density relaxation propagator. <i>Physical Review B</i> , 2013, 88, .	1.1	2
120	Effects of optical and surface polar phonons on the optical conductivity of doped graphene. <i>Physical Review B</i> , 2013, 87, .	1.1	44
121	Magnetic quantum ratchet effect in graphene. <i>Nature Nanotechnology</i> , 2013, 8, 104-107.	15.6	116
122	Impact of Electron-Impurity Scattering on the Spin Relaxation Time in Graphene: A First-Principles Study. <i>Physical Review Letters</i> , 2013, 110, 156602.	2.9	40
123	Annealing-induced magnetic moments detected by spin precession measurements in epitaxial graphene on SiC. <i>Physical Review B</i> , 2013, 87, .	1.1	24
124	Spin-Orbit Coupling in Hydrogenated Graphene. <i>Physical Review Letters</i> , 2013, 110, 246602.	2.9	154
125	Integrating MBE materials with graphene to induce novel spin-based phenomena. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2013, 31, 04D105.	0.6	12
126	Spin-orbit coupled particle in a spin bath. <i>Physical Review B</i> , 2013, 87, .	1.1	5

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127	Theory of spin relaxation in two-electron laterally coupled Si/SiGe quantum dots. Physical Review B, 2012, 86, .	1.1	17
128	Theory of thermal spin-charge coupling in electronic systems. Physical Review B, 2012, 85, .	1.1	33
129	Charge pumping by magnetization dynamics in magnetic and semimagnetic tunnel junctions with interfacial Rashba or bulk extrinsic spin-orbit coupling. Physical Review B, 2012, 85, .	1.1	29
130	One- and two-photon indirect injection of carriers and spins in silicon. Proceedings of SPIE, 2012, , .	0.8	0
131	Magnetic Moment Formation in Graphene Detected by Scattering of Pure Spin Currents. Physical Review Letters, 2012, 109, 186604.	2.9	262
132	Theory of spin-orbit coupling in bilayer graphene. Physical Review B, 2012, 85, .	1.1	90
133	Theory of Spin Relaxation in Two-Electron Lateral Coupled Quantum Dots. Physical Review Letters, 2012, 108, 246602.	2.9	25
134	Spin-orbit coupling in graphene structures. , 2012, , .		1
135	Nonlinear spin to charge conversion in mesoscopic structures. Physical Review B, 2012, 85, .	1.1	6
136	Magnetic properties of HgTe quantum wells. Physical Review B, 2012, 86, .	1.1	54
137	Spin-Polarized Transport and Spintronic Devices. , 2011, , 615-647.		3
138	Theory of the ac Spin-Valve Effect. Physical Review Letters, 2011, 107, 176604.	2.9	8
139	Theory of single electron spin relaxation in Si/SiGe lateral coupled quantum dots. Physical Review B, 2011, 83, .	1.1	34
140	Theory of optical spin orientation in silicon. Physical Review B, 2011, 83, .	1.1	21
141	Silicon Spintronics: Challenges and Perspectives. ECS Transactions, 2011, 35, 3-12.	0.3	1
142	Theory of the Spin Relaxation of Conduction Electrons in Silicon. Physical Review Letters, 2010, 104, 016601.	2.9	106
143	Theory of pseudospin excitations in coaxial nanotubes. Physical Review B, 2010, 81, .	1.1	2
144	Spin Edge Helices in a Perpendicular Magnetic Field. Physical Review Letters, 2010, 105, 186601.	2.9	8

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145	Proposal for a ferromagnetic multiwell spin oscillator. Applied Physics Letters, 2010, 97, 042104.	1.5	11
146	Theory of Anisotropic Exchange in Laterally Coupled Quantum Dots. Physical Review Letters, 2010, 104, 126401.	2.9	46
147	Self-consistent study of transport in Mn-doped semiconductor heterostructures. , 2010, , .		0
148	Beating of Friedel oscillations induced by spin-orbit interaction. Physical Review B, 2010, 81, .	1.1	35
149	Tight-binding theory of the spin-orbit coupling in graphene. Physical Review B, 2010, 82, .	1.1	425
150	Spin-orbit coupling and anisotropic exchange in two-electron double quantum dots. Physical Review B, 2010, 82, .	1.1	28
151	Magnetic circular dichroism in GaMnAs . Theoretical evidence for and against an impurity band. Physical Review B, 2009, 80, .		
152	Anisotropic plasmons in a two-dimensional electron gas with spin-orbit interaction. Physical Review B, 2009, 79, .	1.1	63
153	Orbital effects on tunneling anisotropic magnetoresistance in Fe/GaAs/Au junctions. Physical Review B, 2009, 80, .	1.1	23
154	Angular dependence of the tunneling anisotropic magnetoresistance in magnetic tunnel junctions. Physical Review B, 2009, 80, .	1.1	40
155	Spin's lifetime extended. Nature, 2009, 458, 580-581.	13.7	11
156	Anisotropic tunneling magnetoresistance and tunneling anisotropic magnetoresistance: Spin-orbit coupling in magnetic tunnel junctions. Physical Review B, 2009, 79, .	1.1	94
157	Band-structure topologies of graphene: Spin-orbit coupling effects from first principles. Physical Review B, 2009, 80, .	1.1	579
158	Electron spin relaxation in graphene: The role of the substrate. Physical Review B, 2009, 80, .	1.1	222
159	Optical orientation in bipolar spintronic devices. Semiconductor Science and Technology, 2008, 23, 114005.	1.0	4
160	Self-sustained Magnetoelectric Oscillations in Magnetic Resonant Tunneling Structures. Physical Review Letters, 2008, 101, 077202.	2.9	8
161	Control of electron spin and orbital resonances in quantum dots through spin-orbit interactions. Physical Review B, 2008, 77, .	1.1	18
162	Electronic and optical properties of ferromagnetic $\text{Ga}_{1-x}\text{Mn}_x\text{As}$ in a multiband tight-binding approach. Physical Review B, 2008, 78, .	1.1	14

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163	Perspectives in spintronics: magnetic resonant tunneling, spin-orbit coupling, and GaMnAs. Journal of Physics: Conference Series, 2008, 129, 012021.	0.3	1
164	Bipolar spintronics: from spin injection to spin-controlled logic. Journal of Physics Condensed Matter, 2007, 19, 165219.	0.7	18
165	Tunneling Anisotropic Magnetoresistance and Spin-Orbit Coupling in $\text{Fe}/\text{GaAs}/\text{Au}$ junctions. Physical Review Letters, 2007, 99, 056601.	2.9	169
166	Theory of digital magnetoresistance in ferromagnetic resonant-tunneling diodes. Physical Review B, 2007, 75, .	1.1	28
167	Semiconductor spintronics. Acta Physica Slovaca, 2007, 57, .	1.4	642
168	Silicon twists. Nature, 2007, 447, 269-270.	13.7	43
169	Numerical simulation of giant magnetoresistance resonant tunneling diodes. , 2006, , .		0
170	Resonant tunneling magnetoresistance in coupled quantum wells. Applied Physics Letters, 2006, 89, 242101.	1.5	30
171	Spin Injection and Detection in Silicon. Physical Review Letters, 2006, 97, 026602.	2.9	131
172	Bipolar spintronics: Fundamentals and applications. IBM Journal of Research and Development, 2006, 50, 121-139.	3.2	41
173	Adiabatic passage schemes in coupled semiconductor nanostructures. Optics Communications, 2006, 264, 426-434.	1.0	22
174	Proposal for a digital converter of analog magnetic signals. Applied Physics Letters, 2006, 89, 193507.	1.5	6
175	Theory of Phonon-Induced Spin Relaxation in Laterally Coupled Quantum Dots. Physical Review Letters, 2006, 96, 186602.	2.9	103
176	Orbital and spin relaxation in single and coupled quantum dots. Physical Review B, 2006, 74, .	1.1	64
177	The Ebers-Moll model for magnetic bipolar transistors. Applied Physics Letters, 2005, 86, 133506.	1.5	12
178	Spin-orbit effects in single-electron states in coupled quantum dots. Physical Review B, 2005, 72, .	1.1	78
179	Spin accumulation in the extrinsic spin Hall effect. Physical Review B, 2005, 72, .	1.1	63
180	Entanglement distillation by adiabatic passage in coupled quantum dots. Physical Review B, 2005, 72, .	1.1	28

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181	Magnetic bipolar transistor. Applied Physics Letters, 2004, 84, 85-87.	1.5	121
182	Spintronics: Fundamentals and applications. Reviews of Modern Physics, 2004, 76, 323-410.	16.4	9,479
183	Spin-polarized current amplification and spin injection in magnetic bipolar transistors. Physical Review B, 2004, 69, .	1.1	53
184	Spin Switch and Spin Amplifier: Magnetic Bipolar Transistor in the Saturation Regime. Acta Physica Polonica A, 2004, 106, 109-118.	0.2	5
185	Spin-Polarized Bipolar Transport and Its Applications. Journal of Superconductivity and Novel Magnetism, 2003, 16, 697-705.	0.5	7
186	Numerical study of anharmonic vibrational decay in amorphous and paracrystalline silicon. Physical Review B, 2003, 67, .	1.1	12
187	Proposal for all-electrical measurement of T1 in semiconductors. Applied Physics Letters, 2003, 82, 221-223.	1.5	34
188	Spin-Voltaic Effect and its Implications. Materials Transactions, 2003, 44, 2062-2065.	0.4	10
189	Spin transport in inhomogeneous magnetic fields: A proposal for Stern-Gerlach-like experiments with conduction electrons. Physical Review B, 2002, 66, .	1.1	21
190	Theory of spin-polarized bipolar transport in magnetic p-n junctions. Physical Review B, 2002, 66, .	1.1	99
191	Spin-Polarized Transport in Inhomogeneous Magnetic Semiconductors: Theory of Magnetic/Nonmagnetic p-n Junctions. Physical Review Letters, 2002, 88, 066603.	2.9	207
192	Proposal for a spin-polarized solar battery. Applied Physics Letters, 2001, 79, 1558-1560.	1.5	76
193	Spin injection through the depletion layer: A theory of spin-polarized p-n junctions and solar cells. Physical Review B, 2001, 64, .	1.1	101
194	Spin electronics and spin computation. Solid State Communications, 2001, 119, 207-215.	0.9	144
195	Spintronics: electron spin coherence, entanglement, and transport. Superlattices and Microstructures, 2000, 27, 289-295.	1.4	49
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