

Michael E Flatt ©

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/44653/publications.pdf>

Version: 2024-02-01

272
papers

10,356
citations

36303
51
h-index

40979
93
g-index

278
all docs

278
docs citations

278
times ranked

8327
citing authors

#	ARTICLE	IF	CITATIONS
1	Challenges for semiconductor spintronics. <i>Nature Physics</i> , 2007, 3, 153-159.	16.7	1,457
2	Single dopants in semiconductors. <i>Nature Materials</i> , 2011, 10, 91-100.	27.5	385
3	Strong Field Interactions between a Nanomagnet and a Photonic Cavity. <i>Physical Review Letters</i> , 2010, 104, 077202.	7.8	268
4	Atom-by-atom substitution of Mn in GaAs and visualization of their hole-mediated interactions. <i>Nature</i> , 2006, 442, 436-439.	27.8	266
5	Temperature Dependence of Wavelength Selectable Zero-Phonon Emission from Single Defects in Hexagonal Boron Nitride. <i>Nano Letters</i> , 2016, 16, 6052-6057.	9.1	212
6	Spin diffusion and injection in semiconductor structures: Electric field effects. <i>Physical Review B</i> , 2002, 66, .	3.2	201
7	Probing Spatial Correlations with Nanoscale Two-Contact Tunneling. <i>Physical Review Letters</i> , 1995, 74, 306-309.	7.8	198
8	Long wavelength InAs/InGaSb infrared detectors: Optimization of carrier lifetimes. <i>Journal of Applied Physics</i> , 1995, 78, 7143-7152.	2.5	189
9	Spatial Structure of an Individual Mn Acceptor in GaAs. <i>Physical Review Letters</i> , 2004, 92, 216806.	7.8	185
10	Time-resolved optical measurements of minority carrier recombination in a mid-wave infrared InAsSb alloy and InAs/InAsSb superlattice. <i>Applied Physics Letters</i> , 2012, 101, 092109.	3.3	184
11	LandégFactors and Orbital Momentum Quenching in Semiconductor Quantum Dots. <i>Physical Review Letters</i> , 2006, 96, 026804.	7.8	180
12	Electric-field dependent spin diffusion and spin injection into semiconductors. <i>Physical Review B</i> , 2002, 66, .	3.2	169
13	Unipolar spin diodes and transistors. <i>Applied Physics Letters</i> , 2001, 78, 1273-1275.	3.3	148
14	Very Large Magnetoresistance in Lateral Ferromagnetic (Ga,Mn)As Wires with Nanoconstrictions. <i>Physical Review Letters</i> , 2003, 91, 216602.	7.8	146
15	Spintronics. <i>Scientific American</i> , 2002, 286, 66-73.	1.0	139
16	High Temperature Gate Control of Quantum Well Spin Memory. <i>Physical Review Letters</i> , 2003, 91, 246601.	7.8	137
17	Nonmagnetic semiconductor spin transistor. <i>Applied Physics Letters</i> , 2003, 83, 2937-2939.	3.3	128
18	Spin Diffusion in Semiconductors. <i>Physical Review Letters</i> , 2000, 84, 4220-4223.	7.8	122

#	ARTICLE	IF	CITATIONS
19	Local Electronic Structure of a Single Magnetic Impurity in a Superconductor. <i>Physical Review Letters</i> , 1997, 78, 3761-3764.	7.8	115
20	Influence of gap extrema on the tunneling conductance near an impurity in an anisotropic superconductor. <i>Physical Review Letters</i> , 1993, 71, 3363-3366.	7.8	114
21	Performance of a spin-based insulated gate field effect transistor. <i>Applied Physics Letters</i> , 2006, 88, 162503.	3.3	108
22	Electron-spin decoherence in bulk and quantum-well zinc-blende semiconductors. <i>Physical Review B</i> , 2001, 64, .	3.2	105
23	Multiband Tight-Binding Model of Local Magnetism in Ga _{1-x} Mn _x As. <i>Physical Review Letters</i> , 2004, 92, 047201.	7.8	98
24	Theory of semiconductor magnetic bipolar transistors. <i>Applied Physics Letters</i> , 2003, 82, 4740-4742.	3.3	90
25	Optomagnonics in magnetic solids. <i>Physical Review B</i> , 2016, 94, .	3.2	90
26	Auger recombination in narrow-gap semiconductor superlattices incorporating antimony. <i>Journal of Applied Physics</i> , 2002, 92, 7311-7316.	2.5	81
27	Electric-Field Coupling to Spin Waves in a Centrosymmetric Ferrite. <i>Physical Review Letters</i> , 2014, 113, 037202.	7.8	81
28	Local electronic structure of defects in superconductors. <i>Physical Review B</i> , 1997, 56, 11213-11231.	3.2	80
29	Spin-Flip Induced Magnetoresistance in Positionally Disordered Organic Solids. <i>Physical Review Letters</i> , 2012, 108, 186602.	7.8	80
30	Theoretical performance limits of 2.1–4.1 1/4m InAs/InGaSb, HgCdTe, and InGaAsSb lasers. <i>Journal of Applied Physics</i> , 1995, 78, 4552-4559.	2.5	77
31	Identification of dominant recombination mechanisms in narrow-bandgap InAs/InAsSb type-II superlattices and InAsSb alloys. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	75
32	Local spectrum of a superconductor as a probe of interactions between magnetic impurities. <i>Physical Review B</i> , 2000, 61, 14810-14814.	3.2	73
33	Local Electronic Structure near Mn Acceptors in InAs: Surface-Induced Symmetry Breaking and Coupling to Host States. <i>Physical Review Letters</i> , 2007, 99, 157202.	7.8	70
34	Spin-orbit coupling and operation of multivalley spin qubits. <i>Physical Review B</i> , 2015, 92, .	3.2	69
35	Synthesis of luminescent europium defects in diamond. <i>Nature Communications</i> , 2014, 5, 3523.	12.8	68
36	Zero-field optical manipulation of magnetic ions in semiconductors. <i>Nature Materials</i> , 2008, 7, 203-208.	27.5	67

#	ARTICLE	IF	CITATIONS
37	Size dependence of strong coupling between nanomagnets and photonic cavities. Physical Review B, 2010, 82, .	3.2	66
38	Strong Modulation of Spin Currents in Bilayer Graphene by Static and Fluctuating Proximity Exchange Fields. Physical Review Letters, 2017, 118, 187201.	7.8	66
39	Teleportation of Electronic Many-Qubit States Encoded in the Electron Spin of Quantum Dots via Single Photons. Physical Review Letters, 2005, 94, 107401.	7.8	65
40	Warping a single Mn acceptor wavefunction by straining the GaAs host. Nature Materials, 2007, 6, 512-515.	27.5	65
41	Carrier recombination rates in narrow-gapInAs/Ga _{1-x} In _x Sb-based superlattices. Physical Review B, 1999, 59, 5745-5750.	3.2	64
42	Room-temperature electron spin relaxation in bulk InAs. Applied Physics Letters, 2000, 77, 1333-1335.	3.3	64
43	Theoretical performance of very long wavelength InAs/In _x Ga _{1-x} Sb superlattice based infrared detectors. Applied Physics Letters, 1994, 65, 2530-2532.	3.3	63
44	Onset of Ferromagnetism in Low-Doped $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle mml:msub\rangle\langle mml:mi>Ga</mml:mi\rangle\langle mml:mrow>\langle mml:mn>1</mml:mn\rangle\langle mml:mo>\hat{x}</mml:mo\rangle\langle mml:mi>x</mml:mi\rangle\langle mml:mo>\times</mml:mo\rangle\langle mml:mi>y</mml:mi\rangle\langle mml:mo>\times</mml:mo\rangle\langle mml:mi>z</mml:mi\rangle$. Physical Review Letters, 2007, 99, 227205.	7.8	62
45	Effects of layer thickness and alloy composition on carrier lifetimes in mid-wave infrared InAs/InAsSb superlattices. Applied Physics Letters, 2014, 105, 022107.	3.3	59
46	Generalized superlattice K \cdot p theory and intersubband optical transitions. Physical Review B, 1996, 53, 1963-1978.	3.2	58
47	Tunable Giant Spin Hall Conductivities in a Strong Spin-Orbit Semimetal: $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle mml:msub\rangle\langle mml:mi>Bi</mml:mi\rangle\langle mml:mrow>\langle mml:mn>1</mml:mn\rangle\langle mml:mo>\hat{z}</mml:mo\rangle\langle mml:mi>x</mml:mi\rangle\langle mml:mo>\times</mml:mo\rangle\langle mml:mi>y</mml:mi\rangle\langle mml:mo>\times</mml:mo\rangle\langle mml:mi>z</mml:mi\rangle$. Physical Review Letters, 2015, 114, 107201.	7.8	57
48	Accuracy of Circular Polarization as a Measure of Spin Polarization in Quantum Dot Qubits. Physical Review Letters, 2003, 91, 257901.	7.8	55
49	Spintronics. IEEE Transactions on Electron Devices, 2007, 54, 907-920.	3.0	54
50	Distinguishing Spin Relaxation Mechanisms in Organic Semiconductors. Physical Review Letters, 2013, 110, 176602.	7.8	52
51	Spin relaxation in (110) and (001) InAs/GaSb superlattices. Physical Review B, 2003, 68, .	3.2	51
52	$\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle mml:mi>g</mml:mi\rangle\langle mml:math>$ factors and diamagnetic coefficients of electrons, holes, and excitons in InAs/InP quantum dots. Physical Review B, 2012, 85, .	3.2	51
53	Electron spin-phonon interaction symmetries and tunable spin relaxation in silicon and germanium. Physical Review B, 2012, 85, .	3.2	49
54	Spin injection and detection up to room temperature in Heusler alloy/ $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle mml:mrow>\langle mml:mi>n</mml:mi\rangle\langle mml:mi>n</mml:mi\rangle\langle mml:mrow>\langle mml:math>$ -GaAs spin valves. Physical Review B, 2016, 94, .	7.8	49

#	ARTICLE	IF	CITATIONS
55	Impact of the synthesis method on the solid-state charge transport of radical polymers. <i>Journal of Materials Chemistry C</i> , 2018, 6, 111-118.	5.5	48
56	All-Electrical Control of Single Ion Spins in a Semiconductor. <i>Physical Review Letters</i> , 2006, 97, 106803.	7.8	47
57	Semiclassical theory of magnetoresistance in positionally disordered organic semiconductors. <i>Physical Review B</i> , 2012, 85, .	3.2	47
58	Opportunities for Long-Range Magnon-Mediated Entanglement of Spin Qubits via On- and Off-Resonant Coupling. <i>PRX Quantum</i> , 2021, 2, .	9.2	46
59	III-V interband $5.2 \frac{1}{4}m$ laser operating at 185 K. <i>Applied Physics Letters</i> , 1997, 71, 3764-3766.	3.3	45
60	Theoretical performance of mid-infrared broken-gap multilayer superlattice lasers. <i>Applied Physics Letters</i> , 1997, 70, 3212-3214.	3.3	45
61	Impurity Effects on Quasiparticlec-Axis Planar Tunneling and STM Spectra in High-TcCuprates. <i>Physical Review Letters</i> , 1998, 80, 4546-4549.	7.8	45
62	Carrier recombination dynamics in a (GaInSb/InAs)/AlGaSb superlattice multiple quantum well. <i>Applied Physics Letters</i> , 1996, 68, 2135-2137.	3.3	44
63	Long-lived spin plasmons in a spin-polarized two-dimensional electron gas. <i>Physical Review B</i> , 2014, 90, .	3.2	44
64	Electrovariable Nanoplasmonics and Self-Assembling Smart Mirrors. <i>Journal of Physical Chemistry C</i> , 2010, 114, 1735-1747.	3.1	43
65	Immense Magnetic Response of Exciplex Light Emission due to Correlated Spin-Charge Dynamics. <i>Physical Review X</i> , 2016, 6, .	8.9	43
66	Temperature dependence of Auger recombination in a multilayer narrow-band-gap superlattice. <i>Physical Review B</i> , 1998, 58, 13047-13054.	3.2	42
67	Atomically precise impurity identification and modification on the manganese doped GaAs(110) surface with scanning tunneling microscopy. <i>Physical Review B</i> , 2008, 78, .	3.2	42
68	Strained and Unstrained Layer Superlattices for Infrared Detection. <i>Journal of Electronic Materials</i> , 2009, 38, 1800-1804.	2.2	40
69	High detectivity InGaAsSb pin infrared photodetector for blood glucose sensing. <i>Electronics Letters</i> , 2000, 36, 1301.	1.0	39
70	Spatial Structure of Mn-Mn Acceptor Pairs in GaAs. <i>Physical Review Letters</i> , 2005, 95, 256402.	7.8	38
71	Organic magnetoelectroluminescence for room temperature transduction between magnetic and optical information. <i>Nature Communications</i> , 2014, 5, 3609.	12.8	38
72	Effect of interface structure on the optical properties of InAs/GaSb laser active regions. <i>Applied Physics Letters</i> , 2002, 80, 1683-1685.	3.3	37

#	ARTICLE		IF	CITATIONS
73	Tunability of electron spin coherence in III-V quantum wells. <i>Journal of Applied Physics</i> , 2002, 91, 8682.	2.5	37	
74	Method for full Bloch sphere control of a localized spin via a single electrical gate. <i>Applied Physics Letters</i> , 2008, 92, .	3.3	37	
75	Interface contributions to spin relaxation in a short-period InAs/GaSb superlattice. <i>Physical Review B</i> , 2001, 64, .	3.2	36	
76	Understanding voltage-induced localization of nanoparticles at a liquid-liquid interface. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 073102.	1.8	35	
77	Differential gain, differential index, and linewidth enhancement factor for a 4 1/4 m superlattice laser active layer. <i>Journal of Applied Physics</i> , 1999, 86, 713-718.	2.5	34	
78	Thermal chiral anomaly in the magnetic-field-induced ideal Weyl phase of Bi1-xSbx. <i>Nature Materials</i> , 2021, 20, 1525-1531.	27.5	34	
79	Intersubband spin-density excitations in quantum wells with Rashba spin splitting. <i>Physical Review B</i> , 2002, 66, .	3.2	33	
80	Electron and hole spin dynamics in semiconductor quantum dots. <i>Applied Physics Letters</i> , 2005, 86, 113111.	3.3	33	
81	Room-temperature electric-field controlled spin dynamics in (110) InAs quantum wells. <i>Applied Physics Letters</i> , 2005, 86, 202114.	3.3	33	
82	Spin-Hall Effect in a [110] GaAs Quantum Well. <i>Physical Review Letters</i> , 2006, 97, 266601.	7.8	33	
83	Charge Transport in Conjugated Polymers with Pendent Stable Radical Groups. <i>Chemistry of Materials</i> , 2018, 30, 4799-4807.	6.7	33	
84	Fermi level dependent spin pumping from a magnetic insulator into a topological insulator. <i>Physical Review Research</i> , 2019, 1, .	3.6	33	
85	Nonlinear Spin-Polarized Transport through a Ferromagnetic Domain Wall. <i>Physical Review Letters</i> , 2002, 89, 098302.	7.8	32	
86	Spin-orientation-dependent spatial structure of a magnetic acceptor state in a zinc-blende semiconductor. <i>Physical Review B</i> , 2005, 72, .	3.2	32	
87	Electric-Field Control of a Hydrogenic Donor's Spin in a Semiconductor. <i>Physical Review Letters</i> , 2009, 102, 017603. Electric-field manipulation of the Landé g factor of a hole in an InGaAs quantum well. <i>Physical Review Letters</i> , 2009, 102, 017603.	7.8	32	
88	Comparison of normal and inverted band structure HgTe/CdTe superlattices for very long wavelength infrared detectors. <i>Journal of Electronic Materials</i> , 2005, 34, 905-908.	3.2	31	
89	Predicted ultrafast single-qubit operations in semiconductor quantum dots. <i>Applied Physics Letters</i> , 2006, 88, 233108.	2.2	30	

#	ARTICLE	IF	CITATIONS
91	Carrier recombination lifetime characterization of molecular beam epitaxially grown HgCdTe. <i>Applied Physics Letters</i> , 2008, 93, 192111.	3.3	30
92	Size-dependent exciton $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle mml:mi>g</mml:mi>\langle /mml:math>$ factor in self-assembled InAs/InP quantum dots. <i>Physical Review B</i> , 2009, 79, .	3.2	30
93	Predicted strong coupling of solid-state spins via a single magnon mode. <i>Materials for Quantum Technology</i> , 2021, 1, 011001.	3.1	30
94	Anisotropic splitting of intersubband spin plasmons in quantum wells with bulk and structural inversion asymmetry. <i>Physical Review B</i> , 2003, 68, .	3.2	29
95	Giant Stark effect in quantum dots at liquid/liquid interfaces: A new option for tunable optical filters. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 18212-18214.	7.1	29
96	Origin of the Magnetoresistance in Oxide Tunnel Junctions Determined through Electric Polarization Control of the Interface. <i>Physical Review X</i> , 2015, 5, .	8.9	29
97	Spin Gunn Effect. <i>Physical Review Letters</i> , 2006, 96, 026602.	7.8	28
98	Surface Induced Asymmetry of Acceptor Wave Functions. <i>Physical Review Letters</i> , 2010, 104, 086404.	7.8	28
99	All-optical measurement of vertical charge carrier transport in mid-wave infrared InAs/GaSb type-II superlattices. <i>Applied Physics Letters</i> , 2013, 102, 202101.	3.3	28
100	Classical and Quantum Dynamics of a Periodically Driven Particle in a Triangular Well. <i>Annals of Physics</i> , 1996, 245, 113-146.	2.8	27
101	Hot carrier dynamics in a (GaInSb/InAs)/GaInAlAsSb superlattice multiple quantum well measured with mid-wave infrared, subpicosecond photoluminescence upconversion. <i>Applied Physics Letters</i> , 1997, 70, 1125-1127.	3.3	27
102	Excited-state dynamics and carrier capture in InGaAs/GaAs quantum dots. <i>Applied Physics Letters</i> , 2001, 79, 3320-3322.	3.3	27
103	Narrow gap HgCdTe absorption behavior near the band edge including nonparabolicity and the Urbach tail. <i>Applied Physics Letters</i> , 2006, 89, 062109.	3.3	26
104	Enhanced binding energy of manganese acceptors close to the GaAs(110) surface. <i>Physical Review B</i> , 2010, 82, .	3.2	26
105	Effects of spin-spin interactions on magnetoresistance in disordered organic semiconductors. <i>Physical Review B</i> , 2012, 85, .	3.2	26
106	Experimental and theoretical density-dependent absorption spectra in (GaInSb/InAs)/AlGaSb superlattice multiple quantum wells. <i>Applied Physics Letters</i> , 1998, 72, 229-231.	3.3	25
107	Local Electronic Structure of Defects in Superconductors. <i>Solid State Physics</i> , 1999, 52, 137-228.	0.5	25
108	Silicon spintronics warms up. <i>Nature</i> , 2009, 462, 419-420.	27.8	25

#	ARTICLE	IF	CITATIONS
109	Low loss spin wave resonances in organic-based ferrimagnet vanadium tetracyanoethylene thin films. <i>Applied Physics Letters</i> , 2016, 109, .	3.3	25
110	Anisotropy of electron and hole $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" \rangle \langle mml:mi>g \rangle \langle /mml:mi \rangle \langle /mml:math \rangle$ tensors of quantum dots: An intuitive picture based on spin-correlated orbital currents. <i>Physical Review B</i> , 2016, 93, .	3.2	25
111	Bandgap and temperature dependence of Auger recombination in InAs/InAsSb type-II superlattices. <i>Journal of Applied Physics</i> , 2016, 119, 215705.	2.5	24
112	Reply to "Comment on "Temperature limits on infrared detectivities of InAs/In _x Ga _{1-x} Sb superlattices and bulk Hg _{1-x} Cd _x Te". [J. Appl. Phys. 74, 4774 (1993)]. <i>Journal of Applied Physics</i> , 1995, 77, 4156-4158.	2.5	23
113	Van Hove features in Bi ₂ Sr ₂ CaCu ₂ O _{8+δ} and effective parameters for Ni impurities inferred from STM spectra. <i>Physical Review B</i> , 2002, 66, .	3.2	23
114	Control of electron-spin coherence using Landau level quantization in a two-dimensional electron gas. <i>Physical Review B</i> , 2004, 70, .	3.2	23
115	Modeling of very long infrared wavelength InAs/GaInSb strained layer superlattice detectors. , 2002, , .		22
116	Magnetic Circular Dichroism from the Impurity Band in III-V Diluted Magnetic Semiconductors. <i>Physical Review Letters</i> , 2008, 101, 157203.	7.8	22
117	Temperature-dependent optical measurements of the dominant recombination mechanisms in InAs/InAsSb type-2 superlattices. <i>Journal of Applied Physics</i> , 2015, 118, .	2.5	22
118	Anisotropic spatial structure of deep acceptor states in GaAs and GaP. <i>Physical Review B</i> , 2008, 77, .	3.2	21
119	Magnetic Fringe-Field Control of Electronic Transport in an Organic Film. <i>Physical Review X</i> , 2012, 2, .	8.9	21
120	Derivation of effective spin-orbit Hamiltonians and spin lifetimes with application to $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" \rangle \langle mml:msub \rangle \langle mml:mi \rangle SrTiO \langle /mml:mi \rangle \langle mml:mn \rangle 3 \langle /mml:mn \rangle \langle mml:msub \rangle \langle /mml:msub \rangle$. <i>Physical Review B</i> , 2014, 89, .		
121	Quasiparticle resonant states as a probe of short-range electronic structure and Andrei-Ov coherence. <i>Physical Review B</i> , 2000, 61, R14920-R14923.	3.2	20
122	Optimal quantum control for conditional rotation of exciton qubits in semiconductor quantum dots. <i>Physical Review B</i> , 2011, 84, .	3.2	20
123	Spin-Orbit-Induced Circulating Currents in a Semiconductor Nanostructure. <i>Physical Review Letters</i> , 2014, 112, 187201.	7.8	20
124	Spin relaxation in materials lacking coherent charge transport. <i>Physical Review B</i> , 2014, 90, .	3.2	20
125	Electric field dependence of spin coherence in (001)GaAs \cdot Al _x Gal \cdot xAs quantum wells. <i>Physical Review B</i> , 2005, 72, .	3.2	19
126	Image of the energy gap anisotropy in the vibrational spectrum of a high-temperature superconductor. <i>Physical Review Letters</i> , 1993, 70, 658-661.	7.8	18

#	ARTICLE	IF	CITATIONS
127	Sensitivity of optimization of mid-infrared InAs/InGaSb laser active regions to temperature and composition variations. <i>Applied Physics Letters</i> , 1998, 72, 1424-1426.	3.3	18
128	Optimization of active regions in midinfrared lasers. <i>Applied Physics Letters</i> , 1999, 74, 188-190.	3.3	18
129	Core-state manipulation of single Fe impurities in GaAs with a scanning tunneling microscope. <i>Physical Review B</i> , 2013, 87, .	3.2	18
130	Organic magnetoresistance from deep traps. <i>Journal of Applied Physics</i> , 2014, 116, .	2.5	18
131	Low-damping ferromagnetic resonance in electron-beam patterned, high- <i>i</i> Q <i>/i</i> vanadium tetracyanoethylene magnon cavities. <i>APL Materials</i> , 2019, 7, .	5.1	17
132	Materials considerations for forming the topological insulator phase in InAs/GaSb heterostructures. <i>Physical Review Materials</i> , 2018, 2, .	2.4	17
133	Electric Field Tunability of Nuclear and Electronic Spin Dynamics due to the Hyperfine Interaction in Semiconductor Nanostructures. <i>Physical Review Letters</i> , 2003, 90, 237601.	7.8	16
134	Nanoparticles at electrified liquidâ€“liquid interfaces: new options for electro-optics. <i>Faraday Discussions</i> , 2009, 143, 109.	3.2	16
135	Theory and modeling of type-II strained-layer superlattice detectors. <i>Proceedings of SPIE</i> , 2009, , .	0.8	16
136	Coherent exciton lasing in ZnSe/ZnCdSe quantum wells?. <i>Applied Physics Letters</i> , 1995, 66, 1313-1315.	3.3	15
137	Comparison of linewidth enhancement factors in midinfrared active region materials. <i>Journal of Applied Physics</i> , 2000, 87, 7164-7168.	2.5	15
138	Method for measuring the momentum-dependent relative phase of the superconducting gap of high-temperature superconductors. <i>Physical Review B</i> , 1993, 48, 10626-10629.	3.2	14
139	A New Analytical Tool for the Study of Radiation Effects in 3-D Integrated Circuits: Near-Zero Field Magnetoresistance Spectroscopy. <i>IEEE Transactions on Nuclear Science</i> , 2019, 66, 428-436.	2.0	14
140	Modeling of Near Zero-Field Magnetoresistance and Electrically Detected Magnetic Resonance in Irradiated Si/SiO ₂ MOSFETs. <i>IEEE Transactions on Nuclear Science</i> , 2020, 67, 1669-1673.	2.0	14
141	Subharmonic generation in quantum systems. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1994, 187, 151-156.	2.1	13
142	Impurity-induced low-energy resonances in Bi ₂ Sr ₂ CaCu ₂ O _{8+Î} . <i>Physical Review B</i> , 2004, 70, .	3.2	13
143	Spin Dynamics in Semiconductors. <i>Nanoscience and Technology</i> , 2002, , 107-145.	1.5	12
144	Electron-Beam Formation from Spin-Orbit Interactions in Zinc-Blende Semiconductor Quantum Wells. <i>Physical Review Letters</i> , 2010, 105, 157202.	7.8	12

#	ARTICLE	IF	CITATIONS
145	Including fringe fields from a nearby ferromagnet in a percolation theory of organic magnetoresistance. <i>Physical Review B</i> , 2013, 87, .	3.2	12
146	Intrinsic spin Hall effect at asymmetric oxide interfaces: Role of transverse wave functions. <i>Physical Review B</i> , 2013, 88, .	3.2	12
147	Pressure dependence of band offsets in InAs/Ga _{1-x} In _x Sb superlattices. <i>Physical Review B</i> , 1997, 55, 4477-4481.	3.2	11
148	Blurring the Boundaries Between Topological and Nontopological Phenomena in Dots. <i>Physical Review Letters</i> , 2018, 121, 256804.	7.8	11
149	Observation of Radiation-Induced Leakage Current Defects in MOS Oxides With Multifrequency Electrically Detected Magnetic Resonance and Near-Zero-Field Magnetoresistance. <i>IEEE Transactions on Nuclear Science</i> , 2020, 67, 228-233.	2.0	11
150	Band structure engineering of superlattice-based short-, mid-, and long-wavelength infrared avalanche photodiodes for improved impact ionization rates. <i>Journal of Applied Physics</i> , 2002, 92, 3771-3777.	2.5	10
151	Electrical manipulation of an electronic two-state system in Ge quantum dots. <i>Applied Physics Letters</i> , 2009, 95, .	3.3	10
152	Ferromagnetic Resonance Spin Pumping and Electrical Spin Injection in Silicon-Based Metal-Oxide-Semiconductor Heterostructures. <i>Physical Review Letters</i> , 2015, 115, 246602.	7.8	10
153	Itinerant ferromagnetism and intrinsic anomalous Hall effect in amorphous iron-germanium. <i>Physical Review B</i> , 2020, 101, .	3.2	10
154	Mid-infrared InAs/GaInSb separate confinement heterostructure laser diode structures. <i>Journal of Applied Physics</i> , 2001, 89, 3283-3289.	2.5	9
155	Nuclear spin dynamics in parabolic quantum wells. <i>Physical Review B</i> , 2004, 69, .	3.2	9
156	Heterostructure unipolar spin transistors. <i>Journal of Applied Physics</i> , 2005, 97, 104508.	2.5	9
157	A one-way street for spin current. <i>Nature Physics</i> , 2008, 4, 587-588.	16.7	9
158	Chemical trends of substitutional transition-metal dopants in diamond: An <i>ab initio</i> study. <i>Physical Review B</i> , 2012, 86, .	3.2	9
159	Geometric and compositional influences on spin-orbit induced circulating currents in nanostructures. <i>Physical Review B</i> , 2014, 90, .	3.2	9
160	Anisotropic spin relaxation in GaAs from strong inhomogeneous hyperfine fields produced by the dynamical polarization of nuclei. <i>Physical Review B</i> , 2015, 92, .	3.2	9
161	Theory of a scanning tunneling microscope with a two-protrusion tip. <i>Physical Review B</i> , 1996, 53, R10536-R10539.	3.2	8
162	Effect of electrical bias on spin transport across a magnetic domain wall. <i>Journal of Applied Physics</i> , 2004, 96, 7424-7427.	2.5	8

#	ARTICLE	IF	CITATIONS
163	Hidden order revealed. <i>Nature Physics</i> , 2011, 7, 285-286.	16.7	8
164	Hysteretic control of organic conductance due to remanent magnetic fringe fields. <i>Applied Physics Letters</i> , 2013, 102, 042408.	3.3	8
165	Manipulation of the electroluminescence of organic light-emitting diodes via fringe fields from patterned magnetic domains. <i>Applied Physics Letters</i> , 2016, 109, .	3.3	8
166	Spatially resolved electronic structure of an isovalent nitrogen center in GaAs. <i>Physical Review B</i> , 2017, 96, .	3.2	8
167	Strain Effects on the Energy-Level Alignment at Metal/Organic Semiconductor Interfaces. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 12717-12722.	8.0	8
168	Opposite current-induced spin polarizations in bulk-metallic $\text{Bi}_{2-x}\text{Sb}_x$ and bulk-insulating $\text{Bi}_{2-x}\text{Sb}_x$. <i>Physical Review B</i> , 2021, 103, .	3.2	8
169	Impact of DC bias on weak optical-field-driven electron emission in nano-vacuum-gap detectors. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2021, 38, 1009.	2.1	8
170	Enhanced magnetic anisotropy in lanthanum M-type hexaferrites by quantum-confined charge transfer. <i>Physical Review Materials</i> , 2021, 5, .	2.4	8
171	Strain engineering of the intrinsic spin Hall conductivity in a SrTiO ₃ quantum well. <i>Physical Review Materials</i> , 2019, 3, .	2.4	8
172	Reply to "Comment on "Temperature limits on infrared detectivities of InAs/In _x Ga _{1-x} Sb superlattices and bulk Hg _{1-x} Cd _x Te". [J. Appl. Phys. 80, 2542 (1996)]. <i>Journal of Applied Physics</i> , 1996, 80, 2545-2546.	2.5	7
173	Theory of Mid-wavelength Infrared Laser Active Regions: Intrinsic Properties and Design Strategies. <i>Springer Series in Optical Sciences</i> , 2006, , 3-92.	0.7	7
174	Hole-mediated interactions of Mn acceptors on GaAs (110) (invited). <i>Journal of Applied Physics</i> , 2007, 101, 09G515.	2.5	7
175	Nanometer-scale exchange interactions between spin centers in diamond. <i>Physical Review B</i> , 2016, 93, .	3.2	7
176	Voltage-driven magnetization control in topological insulator/magnetic insulator heterostructures. <i>AIP Advances</i> , 2017, 7, 055923.	1.3	7
177	Broadband electron paramagnetic resonance spectroscopy in diverse field conditions using optically detected nitrogen-vacancy centers in diamond. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 305004.	2.8	7
178	Extraction of isotropic electron-nuclear hyperfine coupling constants of paramagnetic point defects from near-zero field magnetoresistance spectra via least squares fitting to models developed from the stochastic quantum Liouville equation. <i>Journal of Applied Physics</i> , 2020, 128, 124504.	2.5	7
179	Electrically detected magnetic resonance and near-zero field magnetoresistance in 28Si/28SiO ₂ . <i>Journal of Applied Physics</i> , 2021, 130, 065701.	2.5	7
180	Exact theory of long-wavelength one-phonon amplitudes in atom-surface scattering. <i>Physical Review B</i> , 1991, 43, 7422-7426.	3.2	6

#	ARTICLE	IF	CITATIONS
181	Kohn anomalies in superconductors. <i>Physical Review B</i> , 1994, 50, 1190-1198.	3.2	6
182	Nickel probes superconductivity. <i>Nature</i> , 2001, 411, 901-903.	27.8	6
183	Design of Phosphorus-Containing MWIR Type-II Superlattices for Infrared Photon Detectors. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2013, 19, 1-6.	2.9	6
184	Effects of 29Si and 1H on the near-zero field magnetoresistance response of Si/SiO2 interface states: Implications for oxide tunneling currents. <i>Applied Physics Letters</i> , 2021, 119, .	3.3	6
185	Ideal performance of cascade and noncascade intersubband and interband long-wavelength semiconductor lasers. <i>Applied Physics Letters</i> , 1999, 75, 2020-2022.	3.3	5
186	Molecular beam epitaxy growth and characterization of broken-gap (type II) superlattices and quantum wells for midwave-infrared laser diodes. <i>Journal of Vacuum Science & Technology A: Vacuum, Surfaces, and Processing</i> , 2000, 18, 1623.	1.6	5
187	Electrical and optical performance of InAs/GaSb superlattice LWIR detectors. , 2006, , .		5
188	Defect states in type-II strained-layer superlattices. <i>Proceedings of SPIE</i> , 2010, , .	0.8	5
189	Substitutional nickel impurities in diamond: Decoherence-free subspaces for quantum information processing. <i>Europhysics Letters</i> , 2012, 99, 67006.	2.0	5
190	Magnetic anisotropy of single Mn acceptors in GaAs in an external magnetic field. <i>Physical Review B</i> , 2013, 88, .	3.2	5
191	Anomalous organic magnetoresistance from competing carrier-spin-dependent interactions with localized electronic and nuclear spins. <i>Physical Review B</i> , 2014, 90, .	3.2	5
192	Exchange-Driven Spin Relaxation in Ferromagnet-Oxide-Semiconductor Heterostructures. <i>Physical Review Letters</i> , 2016, 116, 107201.	7.8	5
193	Nonlocal Drag of Magnons in a Ferromagnetic Bilayer. <i>Physical Review Letters</i> , 2016, 116, 237202.	7.8	5
194	Exploring a quantum-information-relevant magnonic material: Ultralow damping at low temperature in the organic ferrimagnet V[TCNE]x. <i>AVS Quantum Science</i> , 2021, 3, .	4.9	5
195	Comparison of mid-infrared laser diode active regions. , 1999, , .		4
196	Single- and two-color HgTe/CdTe superlattice based infrared detectors. , 2006, , .		4
197	Nonequilibrium nuclear polarization and induced hyperfine and dipolar magnetic fields in semiconductor nanostructures. <i>Physical Review B</i> , 2011, 84, .	3.2	4
198	Ideal performance of and defect-assisted carrier recombination in MWIR and LWIR InAs/InAsSb superlattice detectors. <i>Proceedings of SPIE</i> , 2015, , .	0.8	4

#	ARTICLE	IF	CITATIONS
199	Electric-Field Control of Magnon Gaps in a Ferromagnet using a Spatially-Periodic Electric Field. <i>Spin</i> , 2017, 07, 1740012.	1.3	4
200	Theory of spin-coherent electrical transport through a defect spin state in a metal/insulator/ferromagnet tunnel junction undergoing ferromagnetic resonance. <i>Physical Review B</i> , 2018, 98, .	3.2	4
201	Voltage-Controlled Topological Spin Switch for Ultralow-Energy Computing: Performance Modeling and Benchmarking. <i>Physical Review Applied</i> , 2019, 11, .	3.8	4
202	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>N</mml:mi><mml:mtext>^</mml:mtext><mml:mi>n</mml:mi><mml:mi>H</mml:mi></mml:math> complexes in GaAs studied at the atomic scale by cross-sectional scanning tunneling microscopy. <i>Physical Review B</i> , 2020, 102, .	3.2	4
203	Probing Spatial Correlations with Nanoscale Two-Contact Tunneling. <i>Physical Review Letters</i> , 1995, 74, 3305-3305.	7.8	3
204	Theoretical Performance Of Mid-Infrared Broken-Gap Multilayer Superlattice Lasers. <i>Materials Research Society Symposia Proceedings</i> , 1997, 484, 71.	0.1	3
205	Relativity on a chip. <i>Nature</i> , 2004, 427, 21-22.	27.8	3
206	Magnetic Fields From Nuclear Polarization in Parabolic Quantum Wells. <i>Journal of Superconductivity and Novel Magnetism</i> , 2005, 18, 207-213.	0.5	3
207	Spin torque and charge resistance of ferromagnetic semiconductor<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>2</mml:mn><mml:mi>I</mml:mi></mml:mrow></mml:math> and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>I</mml:mi>\propto<mml:math> domain walls. <i>Physical Review B</i> , 2011, 84, .	3	
208	The right ambience for a single spin. <i>Nature</i> , 2013, 503, 205-206.	27.8	3
209	Observation of the symmetry of core states of a single Fe impurity in GaAs. <i>Physical Review B</i> , 2017, 96, .	3.2	3
210	Raman Spectroscopy and Aging of the Low-Loss Ferrimagnet Vanadium Tetracyanoethylene. <i>Journal of Physical Chemistry C</i> , 2021, 125, 20380-20388.	3.1	3
211	A technique to measure spin-dependent trapping events at the metal–oxide–semiconductor field-effect transistor interface: Near zero field spin-dependent charge pumping. <i>Journal of Applied Physics</i> , 2020, 128, 244501.	2.5	3
212	Method for measuring the momentum-dependent gap magnitude and relative phase in La _{1.85} Sr _{1.15} CuO ₄ . <i>Journal of Physics and Chemistry of Solids</i> , 1993, 54, 1465-1468.	4.0	2
213	Theoretical comparison of mid-wavelength infrared and long-wavelength infrared lasers. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2001, 359, 533-545.	3.4	2
214	Effects of impurity scattering on electron-phonon resonances in semiconductor superlattice high-field transport. <i>Physical Review B</i> , 2003, 68, .	3.2	2
215	Quaternary GaInAsSb 2.0-2.5 micron back-illuminated focal plane array for blood glucose monitoring. , 2005, .	2	
216	Processes limiting the performance of InAs/GaSb superlattice mid-infrared PIN mesa photodiodes. , 2006, 6119, 36.	2	

#	ARTICLE	IF	CITATIONS
217	Optical and electrical manipulation of single ion spins in semiconductors. , 2009, , .	2	
218	Singlet-to-triplet interconversion using hyperfine as well as ferromagnetic fringe fields. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140326.	3.4	2
219	Temperature dependent carrier lifetime measurements of InAs/InAsSb T ₂ SLs. Proceedings of SPIE, 2015, , .	0.8	2
220	Atomic-Scale Magnetometry of Dynamic Magnetization. Physical Review Letters, 2017, 118, 087601.	7.8	2
221	Current-Induced Spin Polarization in Nonmagnetic Semiconductors. Journal of Superconductivity and Novel Magnetism, 2019, 32, 109-114.	1.8	2
222	Image of Dynamic Local Exchange Interactions in the dc Magnetoresistance of Spin-Polarized Current through a Dopant. Physical Review Letters, 2020, 125, 257203.	7.8	2
223	Probing the local electronic structure of isovalent Bi atoms in InP. Physical Review B, 2020, 101, .	3.2	2
224	Extraction of dipolar coupling constants from low-frequency electrically detected magnetic resonance and near-zero field magnetoresistance spectra via least squares fitting to models developed from the stochastic quantum Liouville equation. Journal of Applied Physics, 2021, 130, 234401.	2.5	2
225	Measuring the relative phase of the energy gap in a high-temperature superconductor with EELS. Surface Science, 1994, 315, L1011-L1015.	1.9	1
226	Two-protrusion STM on an anisotropic superconductor. Journal of Physics and Chemistry of Solids, 1995, 56, 1701-1702.	4.0	1
227	Superlattice IR detectors: a theoretical view. , 1996, , .	1	
228	Theoretical Performance of MID-IR Broken-Gap Superlattice Quantum Well Lasers. Materials Research Society Symposia Proceedings, 1996, 450, 85.	0.1	1
229	Auger Recombination in Antimony-Based, Strain-Balanced, Narrow-Band-Gap Superlattices. Materials Research Society Symposia Proceedings, 1997, 484, 83.	0.1	1
230	Growth and operation tolerances for Sb-based mid-infrared lasers. Journal of Crystal Growth, 1999, 201-202, 844-848.	1.5	1
231	Title is missing!. Journal of Superconductivity and Novel Magnetism, 2003, 16, 233-236.	0.5	1
232	Discrete Fourier transform in nanostructures using scattering. Journal of Applied Physics, 2004, 95, 8167-8171.	2.5	1
233	Coherent strong-field coupling of a ferromagnetic nanomagnet with a photonic cavity. Proceedings of SPIE, 2010, , .	0.8	1
234	Electron beam formation from spin-orbit interactions in zinc-blende semiconductor quantum wells. Proceedings of SPIE, 2011, , .	0.8	1

#	ARTICLE		IF	CITATIONS
235	Spin-orbit interaction from low-symmetry localized defects in semiconductors. <i>Europhysics Letters</i> , 2012, 98, 17013.		2.0	1
236	Experimental demonstration of a magnetic bipolar junction transistor. , 2012, , .			1
237	Theory of organic magnetoresistance in disordered organic semiconductors. <i>Proceedings of SPIE</i> , 2012, , .		0.8	1
238	A new twist on organic spintronics: controlling transport in organic sandwich devices using fringe fields from ferromagnetic films. <i>Proceedings of SPIE</i> , 2013, , .		0.8	1
239	Tuning the dynamic exchange interaction in ferromagnet/semiconductor heterostructures. <i>Proceedings of SPIE</i> , 2015, , .		0.8	1
240	Identifying Defects Responsible For Leakage Currents in Thin Dielectric Films. , 2018, , .			1
241	Interaction of two domain walls during spin-torque-induced coherent motion. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 315802.		1.8	1
242	Organic Ferrimagnetic Material Vanadium Tetracyanoethylene for Non-reciprocal Microwave Applications. , 2020, , .			1
243	Tunable tunnel barriers in a semiconductor via ionization of individual atoms. <i>Journal of Physics Condensed Matter</i> , 2021, 33, 275002.		1.8	1
244	Single dopants in semiconductors. , 0, .			1
245	Suppression of the Optical Linewidth and Spin Decoherence of a Quantum Spin Center in a p - n Diode. <i>PRX Quantum</i> , 2021, 2, .		9.2	1
246	Measuring a superconductor's gap anisotropy with EELS. <i>Journal of Physics and Chemistry of Solids</i> , 1995, 56, 1717-1718.		4.0	0
247	Inapplicability of a simply parameterized threshold current in Sb-based IR lasers. , 1998, , .			0
248	Electronic Structure Engineering of the Linewidth Enhancement Factor in Mid-Infrared Semiconductor Laser Active Regions. <i>Materials Research Society Symposia Proceedings</i> , 1999, 607, 29.		0.1	0
249	Band engineering of infrared avalanche photodiodes for improved impact ionization coefficient ratios. , 2001, , .			0
250	Estimates of Impact Ionization Coefficients in Superlattice-Based Mid-Wavelength Infrared Avalanche Photodiodes. <i>Materials Research Society Symposia Proceedings</i> , 2003, 799, 98.		0.1	0
251	Proposal for measuring the entanglement of nearby spins by multiphoton interference. <i>Europhysics Letters</i> , 2005, 71, 387-393.		2.0	0
252	Publisherâ€™s Note: All-Electrical Control of Single Ion Spins in a Semiconductor [Phys. Rev. Lett.97, 106803 (2006)]. <i>Physical Review Letters</i> , 2006, 97, .		7.8	0

#	ARTICLE	IF	CITATIONS
253	Performance of spin-based current-gating devices., 2006,,.	0	
254	Semiconductor Spintronics for Quantum Computation. NATO Science Series Series II, Mathematics, Physics and Chemistry, 2007,, 1-52.	0.1	0
255	Method for Full Bloch-Sphere Control of a Localized Spin via a Single Electrical Gate., 2008,,.	0	
256	Manipulation of individual electronic spins in semiconductors. Proceedings of SPIE, 2008,,.	0.8	0
257	Time-resolved carrier dynamics and the quantum confined Stark effect in a bilayer quantum dot waveguide at 1340nm., 2008,,.	0	
258	High speed single dopant spin manipulation with a single electrical gate., 2009,,.	0	
259	Optoelectronic manipulation of single spins in semiconductors. Proceedings of SPIE, 2009,,.	0.8	0
260	Optimization of MWIR type-II superlattices for infrared detection. Proceedings of SPIE, 2010,,.	0.8	0
261	Robust path-dependent spin rotation on the nanoscale in a semiconductor quantum well., 2010,,.	0	
262	Gate control of a spin transistor via spin-orbit “focusing” of electron beams., 2010,,.	0	
263	Resonant control of spins in the quasi-one-dimensional channel by interplay of confinement and Zeeman splitting., 2014,,.	0	
264	Electrical control of Faraday rotation at a liquidâ€“liquid interface. Faraday Discussions, 2015, 178, 363-370.	3.2	0
265	The effect of fringe fields from patterned magnetic domains on the electroluminescence of organic light-emitting diodes. Proceedings of SPIE, 2016,,.	0.8	0
266	Room-Temperature Quantum Coherence in Emission from Organic Semiconductors. Materials and Energy, 2018,, 143-188.	0.1	0
267	Tuning spin dynamics and localization near the metal-insulator transition in Fe/GaAs heterostructures. Physical Review B, 2018, 98, .	3.2	0
268	Self-organized Quantum Rings: Physical Characterization and Theoretical Modeling. Nanoscience and Technology, 2018,, 91-120.	1.5	0
269	Designing and Characterizing Metalenses for the Increased Light Extraction of MWIR LEDs., 2019,,.	0	
270	Theory of oblique-field magnetoresistance from spin centers in three-terminal spintronic devices. Physical Review B, 2021, 103, .	3.2	0

ARTICLE

IF CITATIONS

271	Electronic structure engineering of mid-infrared lasers. , 1999, , .	0
272	Low-Energy Optical Pulse Detection Using Biased Plasmonic Nanoantennas. , 2020, , .	0