

# Michael E Flatt ©

## List of Publications by Year in descending order

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272  
papers

10,356  
citations

36303  
51  
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40979  
93  
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278  
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278  
docs citations

278  
times ranked

8327  
citing authors

#	ARTICLE	IF	CITATIONS
1	Opposite current-induced spin polarizations in bulk-metallic $\text{Bi}_{1-x}\text{Sbx}$ and bulk-insulating $\text{Bi}_{1-x}\text{Sbx}$ . Physical Review B, 2021, 103, .	3.2	8
2	Theory of oblique-field magnetoresistance from spin centers in three-terminal spintronic devices. Physical Review B, 2021, 103, .	3.2	0
3	Impact of DC bias on weak optical-field-driven electron emission in nano-vacuum-gap detectors. Journal of the Optical Society of America B: Optical Physics, 2021, 38, 1009.	2.1	8
4	Tunable tunnel barriers in a semiconductor via ionization of individual atoms. Journal of Physics Condensed Matter, 2021, 33, 275002.	1.8	1
5	Exploring a quantum-information-relevant magnonic material: Ultralow damping at low temperature in the organic ferrimagnet V[TCNE] <sub>x</sub> . AVS Quantum Science, 2021, 3, .	4.9	5
6	Thermal chiral anomaly in the magnetic-field-induced ideal Weyl phase of $\text{Bi}_{1-x}\text{Sbx}$ . Nature Materials, 2021, 20, 1525-1531.	27.5	34
7	Electrically detected magnetic resonance and near-zero field magnetoresistance in 28Si/28SiO <sub>2</sub> . Journal of Applied Physics, 2021, 130, 065701.	2.5	7
8	Raman Spectroscopy and Aging of the Low-Loss Ferrimagnet Vanadium Tetracyanoethylene. Journal of Physical Chemistry C, 2021, 125, 20380-20388.	3.1	3
9	Enhanced magnetic anisotropy in lanthanum M-type hexaferrites by quantum-confined charge transfer. Physical Review Materials, 2021, 5, .	2.4	8
10	Predicted strong coupling of solid-state spins via a single magnon mode. Materials for Quantum Technology, 2021, 1, 011001.	3.1	30
11	Suppression of the Optical Linewidth and Spin Decoherence of a Quantum Spin Center in a p - n Diode. PRX Quantum, 2021, 2, .	9.2	1
12	Opportunities for Long-Range Magnon-Mediated Entanglement of Spin Qubits via On- and Off-Resonant Coupling. PRX Quantum, 2021, 2, .	9.2	46
13	Effects of 29Si and 1H on the near-zero field magnetoresistance response of Si/SiO <sub>2</sub> interface states: Implications for oxide tunneling currents. Applied Physics Letters, 2021, 119, .	3.3	6
14	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
15	Observation of Radiation-Induced Leakage Current Defects in MOS Oxides With Multifrequency Electrically Detected Magnetic Resonance and Near-Zero-Field Magnetoresistance. IEEE Transactions on Nuclear Science, 2020, 67, 228-233.	2.0	11
16	Itinerant ferromagnetism and intrinsic anomalous Hall effect in amorphous iron-germanium. Physical Review B, 2020, 101, .	3.2	10
17	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. Journal of Applied Physics, 2020, 128, 124504.	2.5	7
18	$\text{N}^{\text{normal}}$ complexes in GaAs studied at the atomic scale by cross-sectional scanning tunneling microscopy. Physical Review B, 2020, 102, .	3.2	4

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19	Image of Dynamic Local Exchange Interactions in the dc Magnetoresistance of Spin-Polarized Current through a Dopant. <i>Physical Review Letters</i> , 2020, 125, 257203.		7.8	2
20	Organic Ferrimagnetic Material Vanadium Tetracyanoethylene for Non-reciprocal Microwave Applications. , 2020, , .			1
21	Modeling of Near Zero-Field Magnetoresistance and Electrically Detected Magnetic Resonance in Irradiated Si/SiO <sub>2</sub> MOSFETs. <i>IEEE Transactions on Nuclear Science</i> , 2020, 67, 1669-1673.		2.0	14
22	Probing the local electronic structure of isovalent Bi atoms in InP. <i>Physical Review B</i> , 2020, 101, .		3.2	2
23	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
24	Low-Energy Optical Pulse Detection Using Biased Plasmonic Nanoantennas. , 2020, , .			0
25	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
26	Voltage-Controlled Topological Spin Switch for Ultralow-Energy Computing: Performance Modeling and Benchmarking. <i>Physical Review Applied</i> , 2019, 11, .		3.8	4
27	Strain Effects on the Energy-Level Alignment at Metal/Organic Semiconductor Interfaces. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 12717-12722.		8.0	8
28	Designing and Characterizing Metolenses for the Increased Light Extraction of MWIR LEDs. , 2019, , .			0
29	Current-Induced Spin Polarization in Nonmagnetic Semiconductors. <i>Journal of Superconductivity and Novel Magnetism</i> , 2019, 32, 109-114.		1.8	2
30	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
31	Low-damping ferromagnetic resonance in electron-beam patterned, high-<i>Q</i> vanadium tetracyanoethylene magnon cavities. <i>APL Materials</i> , 2019, 7, .		5.1	17
32	Strain engineering of the intrinsic spin Hall conductivity in a SrTiO <sub>3</sub> quantum well. <i>Physical Review Materials</i> , 2019, 3, .		2.4	8
33	Fermi level dependent spin pumping from a magnetic insulator into a topological insulator. <i>Physical Review Research</i> , 2019, 1, .		3.6	33
34	Room-Temperature Quantum Coherence in Emission from Organic Semiconductors. <i>Materials and Energy</i> , 2018, , 143-188.		0.1	0
35	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
36	Identifying Defects Responsible For Leakage Currents in Thin Dielectric Films. , 2018, , .			1

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37	Blurring the Boundaries Between Topological and Nontopological Phenomena in Dots. <i>Physical Review Letters</i> , 2018, 121, 256804.	7.8	11
38	Tuning spin dynamics and localization near the metal-insulator transition in Fe/GaAs heterostructures. <i>Physical Review B</i> , 2018, 98, .	3.2	0
39	Self-organized Quantum Rings: Physical Characterization and Theoretical Modeling. <i>Nanoscience and Technology</i> , 2018, , 91-120.	1.5	0
40	Charge Transport in Conjugated Polymers with Pendent Stable Radical Groups. <i>Chemistry of Materials</i> , 2018, 30, 4799-4807.	6.7	33
41	Interaction of two domain walls during spin-torque-induced coherent motion. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 315802.	1.8	1
42	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
43	Materials considerations for forming the topological insulator phase in InAs/GaSb heterostructures. <i>Physical Review Materials</i> , 2018, 2, .	2.4	17
44	Atomic-Scale Magnetometry of Dynamic Magnetization. <i>Physical Review Letters</i> , 2017, 118, 087601.	7.8	2
45	Voltage-driven magnetization control in topological insulator/magnetic insulator heterostructures. <i>AIP Advances</i> , 2017, 7, 055923.	1.3	7
46	Electric-Field Control of Magnon Gaps in a Ferromagnet using a Spatially-Periodic Electric Field. <i>Spin</i> , 2017, 07, 1740012.	1.3	4
47	Observation of the symmetry of core states of a single Fe impurity in GaAs. <i>Physical Review B</i> , 2017, 96, .	3.2	3
48	Spatially resolved electronic structure of an isovalent nitrogen center in GaAs. <i>Physical Review B</i> , 2017, 96, .	3.2	8
49	Strong Modulation of Spin Currents in Bilayer Graphene by Static and Fluctuating Proximity Exchange Fields. <i>Physical Review Letters</i> , 2017, 118, 187201.	7.8	66
50	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
51	Spin injection and detection up to room temperature in Heusler alloy<math>\text{Ga}_2\text{Mn}_3\text{Al}</math>. <i>Physical Review B</i> , 2016, 94, .	3.2	49
52	Low loss spin wave resonances in organic-based ferrimagnet vanadium tetracyanoethylene thin films. <i>Applied Physics Letters</i> , 2016, 109, .	3.3	25
53	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
54	The effect of fringe fields from patterned magnetic domains on the electroluminescence of organic light-emitting diodes. <i>Proceedings of SPIE</i> , 2016, , .	0.8	0

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55	Optomagnonics in magnetic solids. Physical Review B, 2016, 94, .	3.2	90
56	Temperature Dependence of Wavelength Selectable Zero-Phonon Emission from Single Defects in Hexagonal Boron Nitride. Nano Letters, 2016, 16, 6052-6057.	9.1	212
57	Nanometer-scale exchange interactions between spin centers in diamond. Physical Review B, 2016, 93, .	3.2	7
58	Exchange-Driven Spin Relaxation in Ferromagnet-Oxide-Semiconductor Heterostructures. Physical Review Letters, 2016, 116, 107201.	7.8	5
59	Nonlocal Drag of Magnons in a Ferromagnetic Bilayer. Physical Review Letters, 2016, 116, 237202.	7.8	5
60	Immense Magnetic Response of Exciplex Light Emission due to Correlated Spin-Charge Dynamics. Physical Review X, 2016, 6, .	8.9	43
61	Anisotropy of electron and hole $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" \rangle \langle mml:mi \rangle g \langle /mml:mi \rangle \langle /mml:math \rangle$ tensors of quantum dots: An intuitive picture based on spin-correlated orbital currents. Physical Review B, 2016, 93, .	3.2	25
62	Anisotropic spin relaxation in $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" \rangle \langle mml:mi \rangle n \langle /mml:mi \rangle \langle /mml:math \rangle$ -GaAs from strong inhomogeneous hyperfine fields produced by the dynamical polarization of nuclei. Physical Review B, 2015, 92, .	3.2	9
63	Spin-orbit coupling and operation of multivalley spin qubits. Physical Review B, 2015, 92, .	3.2	69
64	Ferromagnetic Resonance Spin Pumping and Electrical Spin Injection in Silicon-Based Metal-Oxide-Semiconductor Heterostructures. Physical Review Letters, 2015, 115, 246602.	7.8	10
65	Ideal performance of and defect-assisted carrier recombination in MWIR and LWIR InAs/InAsSb superlattice detectors. Proceedings of SPIE, 2015, , .	0.8	4
66	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
67	Temperature dependent carrier lifetime measurements of InAs/InAsSb T <sub>2</sub> SLs. Proceedings of SPIE, 2015, , .	0.8	2
68	Tunable Giant Spin Hall Conductivities in a Strong Spin-Orbit Semimetal: $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" \rangle \langle mml:msub \rangle \langle mml:mi \rangle Bi \langle /mml:mi \rangle \langle mml:mrow \rangle \langle mml:mn \rangle 1 \langle /mml:mn \rangle \langle mml:mo \rangle \hat{x} \langle /mml:mo \rangle \langle mml:mi \rangle x \langle /mml:mi \rangle \langle mml:mo \rangle \hat{z} \langle /mml:mo \rangle \langle mml:mi \rangle z \langle /mml:mi \rangle$ . Physical Review Letters, 2015, 114, 107201.	7.8	57
69	Temperature-dependent optical measurements of the dominant recombination mechanisms in InAs/InAsSb type-2 superlattices. Journal of Applied Physics, 2015, 118, .	2.5	22
70	Tuning the dynamic exchange interaction in ferromagnet/semiconductor heterostructures. Proceedings of SPIE, 2015, , .	0.8	1
71	Origin of the Magnetoresistance in Oxide Tunnel Junctions Determined through Electric Polarization Control of the Interface. Physical Review X, 2015, 5, .	8.9	29
72	Electrical control of Faraday rotation at a liquid-liquid interface. Faraday Discussions, 2015, 178, 363-370.	3.2	0

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73	Geometric and compositional influences on spin-orbit induced circulating currents in nanostructures. <i>Physical Review B</i> , 2014, 90, .	3.2	9
74	Organic magnetoresistance from deep traps. <i>Journal of Applied Physics</i> , 2014, 116, .	2.5	18
75	Derivation of effective spin-orbit Hamiltonians and spin lifetimes with application to $\text{SrTiO}_3$ . <i>Physical Review B</i> , 2014, 89, .	3.2	10
76	Effects of layer thickness and alloy composition on carrier lifetimes in mid-wave infrared InAs/InAsSb superlattices. <i>Applied Physics Letters</i> , 2014, 105, 022107.	3.3	59
77	Synthesis of luminescent europium defects in diamond. <i>Nature Communications</i> , 2014, 5, 3523.	12.8	68
78	Spin-Orbit-Induced Circulating Currents in a Semiconductor Nanostructure. <i>Physical Review Letters</i> , 2014, 112, 187201.	7.8	20
79	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
80	Electric-Field Coupling to Spin Waves in a Centrosymmetric Ferrite. <i>Physical Review Letters</i> , 2014, 113, 037202.	7.8	81
81	Spin relaxation in materials lacking coherent charge transport. <i>Physical Review B</i> , 2014, 90, .	3.2	20
82	Organic magnetoelectroluminescence for room temperature transduction between magnetic and optical information. <i>Nature Communications</i> , 2014, 5, 3609.	12.8	38
83	Long-lived spin plasmons in a spin-polarized two-dimensional electron gas. <i>Physical Review B</i> , 2014, 90, .	3.2	44
84	Resonant control of spins in the quasi-one-dimensional channel by interplay of confinement and Zeeman splitting. , 2014, , .	0	
85	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
86	The right ambience for a single spin. <i>Nature</i> , 2013, 503, 205-206.	27.8	3
87	Hysteretic control of organic conductance due to remanent magnetic fringe fields. <i>Applied Physics Letters</i> , 2013, 102, 042408.	3.3	8
88	Distinguishing Spin Relaxation Mechanisms in Organic Semiconductors. <i>Physical Review Letters</i> , 2013, 110, 176602.	7.8	52
89	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
90	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

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91	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
92	Core-state manipulation of single Fe impurities in GaAs with a scanning tunneling microscope. <i>Physical Review B</i> , 2013, 87, .	3.2	18
93	Including fringe fields from a nearby ferromagnet in a percolation theory of organic magnetoresistance. <i>Physical Review B</i> , 2013, 87, .	3.2	12
94	Intrinsic spin Hall effect at asymmetric oxide interfaces: Role of transverse wave functions. <i>Physical Review B</i> , 2013, 88, .	3.2	12
95	Magnetic anisotropy of single Mn acceptors in GaAs in an external magnetic field. <i>Physical Review B</i> , 2013, 88, .	3.2	5
96	Spin-orbit interaction from low-symmetry localized defects in semiconductors. <i>Europhysics Letters</i> , 2012, 98, 17013.	2.0	1
97	Spin-Flip Induced Magnetoresistance in Positionally Disordered Organic Solids. <i>Physical Review Letters</i> , 2012, 108, 186602.	7.8	80
98	Magnetic Fringe-Field Control of Electronic Transport in an Organic Film. <i>Physical Review X</i> , 2012, 2, .	8.9	21
99	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
100	<math display="block">\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{display="block"} \rangle \langle \text{mml:mi} \text{g} \langle \text{mml:mi} \rangle \text{factors and diamagnetic coefficients of electrons, holes, and excitons in InAs/InP quantum dots. Physical Review B}, 2012, 85, .	3.2	51
101	Experimental demonstration of a magnetic bipolar junction transistor. , 2012, , .		1
102	Substitutional nickel impurities in diamond: Decoherence-free subspaces for quantum information processing. <i>Europhysics Letters</i> , 2012, 99, 67006.	2.0	5
103	Effects of spin-spin interactions on magnetoresistance in disordered organic semiconductors. <i>Physical Review B</i> , 2012, 85, .	3.2	26
104	Semiclassical theory of magnetoresistance in positionally disordered organic semiconductors. <i>Physical Review B</i> , 2012, 85, .	3.2	47
105	Electron spin-phonon interaction symmetries and tunable spin relaxation in silicon and germanium. <i>Physical Review B</i> , 2012, 85, .	3.2	49
106	Theory of organic magnetoresistance in disordered organic semiconductors. <i>Proceedings of SPIE</i> , 2012, , .	0.8	1
107	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
108	Optimal quantum control for conditional rotation of exciton qubits in semiconductor quantum dots. <i>Physical Review B</i> , 2011, 84, .	3.2	20

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109	Electron beam formation from spin-orbit interactions in zinc-blende semiconductor quantum wells. Proceedings of SPIE, 2011, , .	0.8	1
110	Single dopants in semiconductors. Nature Materials, 2011, 10, 91-100.	27.5	385
111	Hidden order revealed. Nature Physics, 2011, 7, 285-286. Electric-field manipulation of the Landé g factor of a hole in an InAs quantum well. $\text{g} = \frac{\mu_B}{e} \frac{m_e}{m_h} \frac{1}{\epsilon_0} \frac{V}{k_B T}$	16.7	8
112	Spin torque and charge resistance of ferromagnetic semiconductor nanomagnets. $\text{G} = \frac{\mu_B}{e} \frac{m_e}{m_h} \frac{1}{\epsilon_0} \frac{V}{k_B T}$	3.2	31
113	Spin torque and charge resistance of ferromagnetic semiconductor nanomagnets. $\text{G} = \frac{\mu_B}{e} \frac{m_e}{m_h} \frac{1}{\epsilon_0} \frac{V}{k_B T}$	3	3
114	Nonequilibrium nuclear polarization and induced hyperfine and dipolar magnetic fields in semiconductor nanostructures. Physical Review B, 2011, 84, .	3.2	4
115	Coherent strong-field coupling of a ferromagnetic nanomagnet with a photonic cavity. Proceedings of SPIE, 2010, , .	0.8	1
116	Optimization of MWIR type-II superlattices for infrared detection. Proceedings of SPIE, 2010, , .	0.8	0
117	Electrovariable Nanoplasmonics and Self-Assembling Smart Mirrors. Journal of Physical Chemistry C, 2010, 114, 1735-1747.	3.1	43
118	Electron-Beam Formation from Spin-Orbit Interactions in Zinc-Blende Semiconductor Quantum Wells. Physical Review Letters, 2010, 105, 157202.	7.8	12
119	Enhanced binding energy of manganese acceptors close to the GaAs(110) surface. Physical Review B, 2010, 82, .	3.2	26
120	Robust path-dependent spin rotation on the nanoscale in a semiconductor quantum well. , 2010, , .	0	
121	Size dependence of strong coupling between nanomagnets and photonic cavities. Physical Review B, 2010, 82, .	3.2	66
122	Strong Field Interactions between a Nanomagnet and a Photonic Cavity. Physical Review Letters, 2010, 104, 077202.	7.8	268
123	Surface Induced Asymmetry of Acceptor Wave Functions. Physical Review Letters, 2010, 104, 086404.	7.8	28
124	Gate control of a spin transistor via spin-orbit focusing; of electron beams. , 2010, , .	0	
125	Defect states in type-II strained-layer superlattices. Proceedings of SPIE, 2010, , .	0.8	5
126	Size-dependent exciton factor in self-assembled InAs/InP quantum dots. Physical Review B, 2009, 79, .	3.2	30

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127	Electric-Field Control of a Hydrogenic Donor's Spin in a Semiconductor. <i>Physical Review Letters</i> , 2009, 102, 017603.	7.8	32
128	Electrical manipulation of an electronic two-state system in Ge quantum dots. <i>Applied Physics Letters</i> , 2009, 95, .	3.3	10
129	High speed single dopant spin manipulation with a single electrical gate. , 2009, , .	0	
130	Strained and Unstrained Layer Superlattices for Infrared Detection. <i>Journal of Electronic Materials</i> , 2009, 38, 1800-1804.	2.2	40
131	Silicon spintronics warms up. <i>Nature</i> , 2009, 462, 419-420.	27.8	25
132	Nanoparticles at electrified liquid-liquid interfaces: new options for electro-optics. <i>Faraday Discussions</i> , 2009, 143, 109.	3.2	16
133	Theory and modeling of type-II strained-layer superlattice detectors. <i>Proceedings of SPIE</i> , 2009, , .	0.8	16
134	Optical and electrical manipulation of single ion spins in semiconductors. , 2009, , .	2	
135	Optoelectronic manipulation of single spins in semiconductors. <i>Proceedings of SPIE</i> , 2009, , .	0.8	0
136	Zero-field optical manipulation of magnetic ions in semiconductors. <i>Nature Materials</i> , 2008, 7, 203-208.	27.5	67
137	A one-way street for spin current. <i>Nature Physics</i> , 2008, 4, 587-588.	16.7	9
138	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
139	Understanding voltage-induced localization of nanoparticles at a liquid-liquid interface. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 073102.	1.8	35
140	Method for Full Bloch-Sphere Control of a Localized Spin via a Single Electrical Gate. , 2008, , .	0	
141	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
142	Anisotropic spatial structure of deep acceptor states in GaAs and GaP. <i>Physical Review B</i> , 2008, 77, .	3.2	21
143	Carrier recombination lifetime characterization of molecular beam epitaxially grown HgCdTe. <i>Applied Physics Letters</i> , 2008, 93, 192111.	3.3	30
144	Magnetic Circular Dichroism from the Impurity Band in III-V Diluted Magnetic Semiconductors. <i>Physical Review Letters</i> , 2008, 101, 157203.	7.8	22

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145	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
146	Manipulation of individual electronic spins in semiconductors. <i>Proceedings of SPIE</i> , 2008, , .	0.8	0
147	Time-resolved carrier dynamics and the quantum confined Stark effect in a bilayer quantum dot waveguide at 1340nm. , 2008, , .		0
148	Onset of Ferromagnetism in Low-Doped<math display="block">\text{Onset of Ferromagnetism in Low-Doped}Physical Review Letters, 2007, 99, 227205.		
149	Hole-mediated interactions of Mn acceptors on GaAs (110) (invited). <i>Journal of Applied Physics</i> , 2007, 101, 09G515.	2.5	7
150	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
151	Semiconductor Spintronics for Quantum Computation. <i>NATO Science Series Series II, Mathematics, Physics and Chemistry</i> , 2007, , 1-52.	0.1	0
152	Warping a single Mn acceptor wavefunction by straining the GaAs host. <i>Nature Materials</i> , 2007, 6, 512-515.	27.5	65
153	Challenges for semiconductor spintronics. <i>Nature Physics</i> , 2007, 3, 153-159.	16.7	1,457
154	Spintronics. <i>IEEE Transactions on Electron Devices</i> , 2007, 54, 907-920.	3.0	54
155	Spin Gunn Effect. <i>Physical Review Letters</i> , 2006, 96, 026602.	7.8	28
156	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
157	Performance of a spin-based insulated gate field effect transistor. <i>Applied Physics Letters</i> , 2006, 88, 162503.	3.3	108
158	Landé gFactors and Orbital Momentum Quenching in Semiconductor Quantum Dots. <i>Physical Review Letters</i> , 2006, 96, 026804.	7.8	180
159	Single- and two-color HgTe/CdTe superlattice based infrared detectors. , 2006, , .		4
160	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
161	Electrical and optical performance of InAs/GaSb superlattice LWIR detectors. , 2006, , .		5
162	Processes limiting the performance of InAs/GaSb superlattice mid-infrared PIN mesa photodiodes. , 2006, 6119, 36.		2

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163	Publisher's Note: All-Electrical Control of Single Ion Spins in a Semiconductor [Phys. Rev. Lett.97, 106803 (2006)]. Physical Review Letters, 2006, 97, .	7.8	0
164	Narrow gap HgCdTe absorption behavior near the band edge including nonparabolicity and the Urbach tail. Applied Physics Letters, 2006, 89, 062109.	3.3	26
165	Performance of spin-based current-gating devices., 2006, , .		0
166	All-Electrical Control of Single Ion Spins in a Semiconductor. Physical Review Letters, 2006, 97, 106803.	7.8	47
167	Spin-Hall Effect in a [110] GaAs Quantum Well. Physical Review Letters, 2006, 97, 266601.	7.8	33
168	Predicted ultrafast single-qubit operations in semiconductor quantum dots. Applied Physics Letters, 2006, 88, 233108.	3.3	30
169	Quaternary GaInAsSb 2.0-2.5 micron back-illuminated focal plane array for blood glucose monitoring., 2005, , .		2
170	Comparison of normal and inverted band structure HgTe/CdTe superlattices for very long wavelength infrared detectors. Journal of Electronic Materials, 2005, 34, 905-908.	2.2	30
171	Magnetic Fields From Nuclear Polarization in Parabolic Quantum Wells. Journal of Superconductivity and Novel Magnetism, 2005, 18, 207-213.	0.5	3
172	Proposal for measuring the entanglement of nearby spins by multiphoton interference. Europhysics Letters, 2005, 71, 387-393.	2.0	0
173	Electron and hole spin dynamics in semiconductor quantum dots. Applied Physics Letters, 2005, 86, 113111.	3.3	33
174	Spin-orientation-dependent spatial structure of a magnetic acceptor state in a zinc-blende semiconductor. Physical Review B, 2005, 72, .	3.2	32
175	Heterostructure unipolar spin transistors. Journal of Applied Physics, 2005, 97, 104508.	2.5	9
176	Spatial Structure of Mn-Mn Acceptor Pairs in GaAs. Physical Review Letters, 2005, 95, 256402.	7.8	38
177	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
178	Electric field dependence of spin coherence in (001)GaAs $\text{Al}_x\text{Ga}_{1-x}$ As quantum wells. Physical Review B, 2005, 72, .	3.2	19
179	Room-temperature electric-field controlled spin dynamics in (110) InAs quantum wells. Applied Physics Letters, 2005, 86, 202114.	3.3	33
180	Effect of electrical bias on spin transport across a magnetic domain wall. Journal of Applied Physics, 2004, 96, 7424-7427.	2.5	8

#	ARTICLE	IF	CITATIONS
181	Multiband Tight-Binding Model of Local Magnetism in Ga <sub>1-x</sub> Mn <sub>x</sub> As. Physical Review Letters, 2004, 92, 047201.	7.8	98
182	Control of electron-spin coherence using Landau level quantization in a two-dimensional electron gas. Physical Review B, 2004, 70, .	3.2	23
183	Nuclear spin dynamics in parabolic quantum wells. Physical Review B, 2004, 69, .	3.2	9
184	Impurity-induced low-energy resonances in Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8+δ</sub> . Physical Review B, 2004, 70, .	3.2	13
185	Spatial Structure of an Individual Mn Acceptor in GaAs. Physical Review Letters, 2004, 92, 216806.	7.8	185
186	Discrete Fourier transform in nanostructures using scattering. Journal of Applied Physics, 2004, 95, 8167-8171.	2.5	1
187	Relativity on a chip. Nature, 2004, 427, 21-22.	27.8	3
188	Title is missing!. Journal of Superconductivity and Novel Magnetism, 2003, 16, 233-236.	0.5	1
189	Nonmagnetic semiconductor spin transistor. Applied Physics Letters, 2003, 83, 2937-2939.	3.3	128
190	Accuracy of Circular Polarization as a Measure of Spin Polarization in Quantum Dot Qubits. Physical Review Letters, 2003, 91, 257901.	7.8	55
191	Very Large Magnetoresistance in Lateral Ferromagnetic (Ga,Mn)As Wires with Nanoconstrictions. Physical Review Letters, 2003, 91, 216602.	7.8	146
192	Anisotropic splitting of intersubband spin plasmons in quantum wells with bulk and structural inversion asymmetry. Physical Review B, 2003, 68, .	3.2	29
193	High Temperature Gate Control of Quantum Well Spin Memory. Physical Review Letters, 2003, 91, 246601.	7.8	137
194	Estimates of Impact Ionization Coefficients in Superlattice-Based Mid-Wavelength Infrared Avalanche Photodiodes. Materials Research Society Symposia Proceedings, 2003, 799, 98.	0.1	0
195	Spin relaxation in (110) and (001) InAs/GaSb superlattices. Physical Review B, 2003, 68, .	3.2	51
196	Theory of semiconductor magnetic bipolar transistors. Applied Physics Letters, 2003, 82, 4740-4742.	3.3	90
197	Electric Field Tunability of Nuclear and Electronic Spin Dynamics due to the Hyperfine Interaction in Semiconductor Nanostructures. Physical Review Letters, 2003, 90, 237601.	7.8	16
198	Effects of impurity scattering on electron-phonon resonances in semiconductor superlattice high-field transport. Physical Review B, 2003, 68, .	3.2	2

#	ARTICLE	IF	CITATIONS
199	Nonlinear Spin-Polarized Transport through a Ferromagnetic Domain Wall. <i>Physical Review Letters</i> , 2002, 89, 098302.	7.8	32
200	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
201	Auger recombination in narrow-gap semiconductor superlattices incorporating antimony. <i>Journal of Applied Physics</i> , 2002, 92, 7311-7316.	2.5	81
202	Van Hove features in Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8+δ</sub> and effective parameters for Ni impurities inferred from STM spectra. <i>Physical Review B</i> , 2002, 66, .	3.2	23
203	Tunability of electron spin coherence in III-V quantum wells. <i>Journal of Applied Physics</i> , 2002, 91, 8682.	2.5	37
204	Modeling of very long infrared wavelength InAs/GaInSb strained layer superlattice detectors. , 2002, , .		22
205	Intersubband spin-density excitations in quantum wells with Rashba spin splitting. <i>Physical Review B</i> , 2002, 66, .	3.2	33
206	Spin diffusion and injection in semiconductor structures: Electric field effects. <i>Physical Review B</i> , 2002, 66, .	3.2	201
207	Spin Dynamics in Semiconductors. <i>Nanoscience and Technology</i> , 2002, , 107-145.	1.5	12
208	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
209	Electric-field dependent spin diffusion and spin injection into semiconductors. <i>Physical Review B</i> , 2002, 66, .	3.2	169
210	Spintronics. <i>Scientific American</i> , 2002, 286, 66-73.	1.0	139
211	Unipolar spin diodes and transistors. <i>Applied Physics Letters</i> , 2001, 78, 1273-1275.	3.3	148
212	Electron-spin decoherence in bulk and quantum-well zinc-blende semiconductors. <i>Physical Review B</i> , 2001, 64, .	3.2	105
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	Band engineering of infrared avalanche photodiodes for improved impact ionization coefficient ratios. , 2001, , .		0
215	Nickel probes superconductivity. <i>Nature</i> , 2001, 411, 901-903.	27.8	6
216	Excited-state dynamics and carrier capture in InGaAs/GaAs quantum dots. <i>Applied Physics Letters</i> , 2001, 79, 3320-3322.	3.3	27

#	ARTICLE	IF	CITATIONS
217	Mid-infrared InAs/GaInSb separate confinement heterostructure laser diode structures. <i>Journal of Applied Physics</i> , 2001, 89, 3283-3289.	2.5	9
218	Interface contributions to spin relaxation in a short-period InAs/GaSb superlattice. <i>Physical Review B</i> , 2001, 64, .	3.2	36
219	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 &amp; Technology A, Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2000, 18, 1623.	1.6	5
220	Quasiparticle resonant states as a probe of short-range electronic structure and Andreiov coherence. <i>Physical Review B</i> , 2000, 61, R14920-R14923.	3.2	20
221	Room-temperature electron spin relaxation in bulk InAs. <i>Applied Physics Letters</i> , 2000, 77, 1333-1335.	3.3	64
222	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
223	Comparison of linewidth enhancement factors in midinfrared active region materials. <i>Journal of Applied Physics</i> , 2000, 87, 7164-7168.	2.5	15
224	Spin Diffusion in Semiconductors. <i>Physical Review Letters</i> , 2000, 84, 4220-4223.	7.8	122
225	High detectivity InGaAsSb pin infrared photodetector for blood glucose sensing. <i>Electronics Letters</i> , 2000, 36, 1301.	1.0	39
226	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
227	Optimization of active regions in midinfrared lasers. <i>Applied Physics Letters</i> , 1999, 74, 188-190.	3.3	18
228	Carrier recombination rates in narrow-gap InAs/Ga <sub>1-x</sub> In <sub>x</sub> Sb-based superlattices. <i>Physical Review B</i> , 1999, 59, 5745-5750.	3.2	64
229	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
230	Growth and operation tolerances for Sb-based mid-infrared lasers. <i>Journal of Crystal Growth</i> , 1999, 201-202, 844-848.	1.5	1
231	Comparison of mid-infrared laser diode active regions. , 1999, , .		4
232	Local Electronic Structure of Defects in Superconductors. <i>Solid State Physics</i> , 1999, 52, 137-228.	0.5	25
233	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
234	Electronic structure engineering of mid-infrared lasers. , 1999, , .		0

#	ARTICLE	IF	CITATIONS
235	Temperature dependence of Auger recombination in a multilayer narrow-band-gap superlattice. Physical Review B, 1998, 58, 13047-13054.	3.2	42
236	Impurity Effects on Quasiparticlec-Axis Planar Tunneling and STM Spectra in High-TcCuprates. Physical Review Letters, 1998, 80, 4546-4549.	7.8	45
237	Experimental and theoretical density-dependent absorption spectra in (GaN <sub>x</sub> S <sub>1-x</sub> /InAs)/AlGaSb superlattice multiple quantum wells. Applied Physics Letters, 1998, 72, 229-231.	3.3	25
238	Sensitivity of optimization of mid-infrared InAs/InGaSb laser active regions to temperature and composition variations. Applied Physics Letters, 1998, 72, 1424-1426.	3.3	18
239	Inapplicability of a simply parameterized threshold current in Sb-based IR lasers. , 1998, , .		0
240	Local Electronic Structure of a Single Magnetic Impurity in a Superconductor. Physical Review Letters, 1997, 78, 3761-3764.	7.8	115
241	III-V interband 5.2 $\frac{1}{4}$ m laser operating at 185 K. Applied Physics Letters, 1997, 71, 3764-3766.	3.3	45
242	Local electronic structure of defects in superconductors. Physical Review B, 1997, 56, 11213-11231.	3.2	80
243	Theoretical Performance Of Mid-Infrared Broken-Gap Multilayer Superlattice Lasers. Materials Research Society Symposia Proceedings, 1997, 484, 71.	0.1	3
244	Auger Recombination in Antimony-Based, Strain-Balanced, Narrow-Band-Gap Superlattics. Materials Research Society Symposia Proceedings, 1997, 484, 83.	0.1	1
245	Theoretical performance of mid-infrared broken-gap multilayer superlattice lasers. Applied Physics Letters, 1997, 70, 3212-3214.	3.3	45
246	Hot carrier dynamics in a (GaN <sub>x</sub> S <sub>1-x</sub> /InAs)/GaInAlAsSb superlattice multiple quantum well measured with mid-wave infrared, subpicosecond photoluminescence upconversion. Applied Physics Letters, 1997, 70, 1125-1127.	3.3	27
247	Pressure dependence of band offsets in InAs/Ga <sub>1-x</sub> In <sub>x</sub> Sb superlattices. Physical Review B, 1997, 55, 4477-4481.	3.2	11
248	Superlattice IR detectors: a theoretical view. , 1996, , .		1
249	Theoretical Performance of MID-IR Broken-Gap Superlattice Quantum Well Lasers. Materials Research Society Symposia Proceedings, 1996, 450, 85.	0.1	1
250	Classical and Quantum Dynamics of a Periodically Driven Particle in a Triangular Well. Annals of Physics, 1996, 245, 113-146.	2.8	27
251	Carrier recombination dynamics in a (GaN <sub>x</sub> S <sub>1-x</sub> /InAs)/AlGaSb superlattice multiple quantum well. Applied Physics Letters, 1996, 68, 2135-2137.	3.3	44
252	Reply to "Comment on "Temperature limits on infrared detectivities of InAs/In <sub>x</sub> Ga <sub>1-x</sub> Sb superlattices and bulk Hg <sub>1-x</sub> Cd <sub>x</sub> Te" [J. Appl. Phys. 80, 2542 (1996)]. Journal of Applied Physics, 1996, 80, 2545-2546. 7		

#	ARTICLE	IF	CITATIONS
253	Generalized superlattice K $\hat{A}$ p theory and intersubband optical transitions. Physical Review B, 1996, 53, 1963-1978.	3.2	58
254	Theory of a scanning tunneling microscope with a two-protrusion tip. Physical Review B, 1996, 53, R10536-R10539.	3.2	8
255	Two-protrusion STM on an anisotropic superconductor. Journal of Physics and Chemistry of Solids, 1995, 56, 1701-1702.	4.0	1
256	Measuring a superconductor's gap anisotropy with EELS. Journal of Physics and Chemistry of Solids, 1995, 56, 1717-1718.	4.0	0
257	Theoretical performance limits of $2.1 \times 4.1 \text{ nm}^2$ InAs/InGaSb, HgCdTe, and InGaAsSb lasers. Journal of Applied Physics, 1995, 78, 4552-4559.	2.5	77
258	Probing Spatial Correlations with Nanoscale Two-Contact Tunneling. Physical Review Letters, 1995, 74, 3305-3305.	7.8	3
259	Probing Spatial Correlations with Nanoscale Two-Contact Tunneling. Physical Review Letters, 1995, 74, 306-309.	7.8	198
260	Coherent exciton lasing in ZnSe/ZnCdSe quantum wells?. Applied Physics Letters, 1995, 66, 1313-1315.	3.3	15
261	Reply to "Comment on 'Temperature limits on infrared detectivities of InAs/In <sub>x</sub> Ga <sub>1-x</sub> Sb superlattices and bulk Hg <sub>1-x</sub> Cd <sub>x</sub> Te' [J. Appl. Phys. 74, 4774 (1993)]". Journal of Applied Physics, 1995, 77, 4156-4158.	2.5	23
262	Long wavelength InAs/InGaSb infrared detectors: Optimization of carrier lifetimes. Journal of Applied Physics, 1995, 78, 7143-7152.	2.5	189
263	Kohn anomalies in superconductors. Physical Review B, 1994, 50, 1190-1198.	3.2	6
264	Subharmonic generation in quantum systems. Physics Letters, Section A: General, Atomic and Solid State Physics, 1994, 187, 151-156.	2.1	13
265	Theoretical performance of very long wavelength InAs/In <sub>x</sub> Ga <sub>1-x</sub> Sb superlattice based infrared detectors. Applied Physics Letters, 1994, 65, 2530-2532.	3.3	63
266	Measuring the relative phase of the energy gap in a high-temperature superconductor with EELS. Surface Science, 1994, 315, L1011-L1015.	1.9	1
267	Method for measuring the momentum-dependent gap magnitude and relative phase in La <sub>1.85</sub> Sr <sub>0.15</sub> CuO <sub>4</sub> . Journal of Physics and Chemistry of Solids, 1993, 54, 1465-1468.	4.0	2
268	Method for measuring the momentum-dependent relative phase of the superconducting gap of high-temperature superconductors. Physical Review B, 1993, 48, 10626-10629.	3.2	14
269	Image of the energy gap anisotropy in the vibrational spectrum of a high-temperature superconductor. Physical Review Letters, 1993, 70, 658-661.	7.8	18
270	Influence of gap extrema on the tunneling conductance near an impurity in an anisotropic superconductor. Physical Review Letters, 1993, 71, 3363-3366.	7.8	114

# ARTICLE

IF CITATIONS

271	Exact theory of long-wavelength one-phonon amplitudes in atom-surface scattering. Physical Review B, 1991, 43, 7422-7426.	3.2	6
272	Single dopants in semiconductors. , 0, .	1	