David Awschalom

List of Publications by Year
in descending order

195 papers	25,549 citations	7568 77 h-index	6300 158 g-index
198 all docs	198 docs citations	198 times ranked	16068 citing authors

#	Article	IF	Citations
1	Electrical spin injection in a ferromagnetic semiconductor heterostructure. Nature, 1999, 402, 790-792.	27.8	2,315
2	Quantum Information Processing Using Quantum Dot Spins and Cavity QED. Physical Review Letters, 1999, 83, 4204-4207.	7.8	1,777
3	Challenges for semiconductor spintronics. Nature Physics, 2007, 3, 153-159.	16.7	1,457
4	Lateral drag of spin coherence in gallium arsenide. Nature, 1999, 397, 139-141.	27.8	804
5	Nanoscale Nuclear Magnetic Resonance with a Nitrogen-Vacancy Spin Sensor. Science, 2013, 339, 557-560.	12.6	661
6	Room temperature coherent control of defect spin qubits in silicon carbide. Nature, 2011, 479, 84-87.	27.8	607
7	Quantum computing with defects. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 8513-8518.	7.1	588
8	Quantum technologies with optically interfaced solid-state spins. Nature Photonics, 2018, 12, 516-527.	31.4	581
9	Quantum Spintronics: Engineering and Manipulating Atom-Like Spins in Semiconductors. Science, 2013, 339, 1174-1179.	12.6	579
10	Room-Temperature Spin Memory in Two-Dimensional Electron Gases. Science, 1997, 277, 1284-1287.	12.6	503
11	Nanomechanical coupling between microwave and optical photons. Nature Physics, 2013, 9, 712-716.	16.7	485
12	Coherent manipulation of single spins in semiconductors. Nature, 2008, 453, 1043-1049.	27.8	422
13	Spatial imaging of the spin Hall effect and current-induced polarization in two-dimensional electron gases. Nature Physics, 2005, 1, 31-35.	16.7	415
14	High-Cooperativity Coupling of Electron-Spin Ensembles to Superconducting Cavities. Physical Review Letters, 2010, 105, 140501.	7.8	398
15	Coherent Dynamics of a Single Spin Interacting with an Adjustable Spin Bath. Science, 2008, 320, 352-355.	12.6	365
16	Isolated electron spins in silicon carbide with millisecond coherence times. Nature Materials, 2015, 14, 160-163.	27.5	362
17	A quantum memory intrinsic to single nitrogenâ€“vacancy centres in diamond. Nature Physics, 2011, 7, 789-793.	16.7	334
18	Gigahertz Dynamics of a Strongly Driven Single Quantum Spin. Science, 2009, 326, 1520-1522.	12.6	327

#	Article	IF	Citations
19	Anisotropic interactions of a single spin and dark-spin spectroscopy in diamond. Nature Physics, 2005, 1, 94-98.	16.7	326
20	Decoherence-protected quantum gates for a hybrid solid-state spin register. Nature, 2012, 484, 82-86.	27.8	320
21	Fluorescence thermometry enhanced by the quantum coherence of single spins in diamond. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 8417-8421.	7.1	319
22	Highly enhanced Curie temperature in low-temperature annealed [Ga,Mn]As epilayers. Applied Physics Letters, 2003, 82, 2302-2304.	3.3	302
23	Polytype control of spin qubits in silicon carbide. Nature Communications, 2013, 4, 1819.	12.8	292
24	Magnetic Clusters in Molecular Beams, Metals, and Semiconductors. Science, 1996, 271, 937-941.	12.6	280
25	Quantum control of surface acoustic-wave phonons. Nature, 2018, 563, 661-665.	27.8	263
26	Magnetic Circular Dichroism Studies of Carrier-Induced Ferromagnetism in(Ga1â^'xMnx)As. Physical Review Letters, 1999, 83, 3073-3076.	7.8	258
27	Chip-Scale Nanofabrication of Single Spins and Spin Arrays in Diamond. Nano Letters, 2010, 10, 3168-3172.	9.1	248
28	Engineering shallow spins in diamond with nitrogen delta-doping. Applied Physics Letters, 2012, 101, 082413.	3.3	239
29	All-Optical Magnetic Resonance in Semiconductors. Science, 2000, 287, 473-476.	12.6	226
30	Polarization and Readout of Coupled Single Spins in Diamond. Physical Review Letters, 2006, 97, 087601.	7.8	210
31	Biomimetic Synthesis and Characterization of Magnetic Proteins (Magnetoferritin). Chemistry of Materials, 1998, 10, 279-285.	6.7	204
32	Accelerated quantum control using superadiabatic dynamics in a solid-state lambda system. Nature Physics, 2017, 13, 330-334.	16.7	194
33	Spin coherence and dephasing in GaN. Physical Review B, 2001, 63, .	3.2	190
34	Properties and measurement of scanning tunneling microscope fabricated ferromagnetic particle arrays (invited). Journal of Applied Physics, 1994, 76, 6656-6660.	2.5	189
35	Terahertz Spin Precession and Coherent Transfer of Angular Momenta in Magnetic Quantum Wells. Physical Review Letters, 1996, 77, 2814-2817.	7.8	188
36	Spin-Light Coherence for Single-Spin Measurement and Control in Diamond. Science, 2010, 330, 1212-1215.	12.6	186

#	Article	IF	Citations
37	Quantum guidelines for solid-state spin defects. Nature Reviews Materials, 2021, 6, 906-925.	48.7	185
38	First-principles theory of the luminescence lineshape for the triplet transition in diamond NV centres. New Journal of Physics, 2014, 16, 073026.	2.9	183
39	Development of Quantum Interconnects (QuICs) for Next-Generation Information Technologies. PRX Quantum, 2021, 2, .	9.2	172
40	(Ga,Mn)As as a digital ferromagnetic heterostructure. Applied Physics Letters, 2000, 77, 2379-2381.	3.3	168
41	Spin-Seebeck Effect: A Phonon Driven Spin Distribution. Physical Review Letters, 2011, 106, 186601.	7.8	168
42	Excited-State Spectroscopy Using Single Spin Manipulation in Diamond. Physical Review Letters, 2008, 101, 117601.	7.8	160
43	Spinâ€“phonon interactions in silicon carbide addressed by Gaussian acoustics. Nature Physics, 2019, 15, 490-495.	16.7	159
44	Probing Surface Noise with Depth-Calibrated Spins in Diamond. Physical Review Letters, 2014, 113, 027602.	7.8	158
45	Measurement and Control of Single Nitrogen-Vacancy Center Spins above 600ÂK. Physical Review X, 2012, 2, .	8.9	157
46	Electrical and optical control of single spins integrated in scalable semiconductor devices. Science, 2019, 366, 1225-1230.	12.6	157
47	Electrically and Mechanically Tunable Electron Spins in Silicon Carbide Color Centers. Physical Review Letters, 2014, 112, 187601.	7.8	152
48	Optically addressable molecular spins for quantum information processing. Science, 2020, 370, 1309-1312.	12.6	148
49	Vector magnetic field microscopy using nitrogen vacancy centers in diamond. Applied Physics Letters, 2010, 96, .	3.3	140
50	Quantum Control over Single Spins in Diamond. Annual Review of Condensed Matter Physics, 2013, 4, 23-50.	14.5	139
51	Interplay between ferromagnetism, surface states, and quantum corrections in a magnetically doped topological insulator. Physical Review B, 2012, 86, .	3.2	133
52	Coherent heteroepitaxy of Bi2Se3 on GaAs (111)B. Applied Physics Letters, 2010, 97, .	3.3	132
53	Quantum decoherence dynamics of divacancy spins in silicon carbide. Nature Communications, 2016, 7, 12935.	12.8	128
54	Isolated Spin Qubits in SiC with a High-Fidelity Infrared Spin-to-Photon Interface. Physical Review X, 2017, 7, .	8.9	125

#	Article	IF	Citations
55	Proton magnetic resonance imaging using a nitrogenâ€“vacancy spin sensor. Nature Nanotechnology, 2015, 10, 120-124.	31.5	124
56	Holonomic Quantum Control by Coherent Optical Excitation in Diamond. Physical Review Letters, 2017, 119, 140503.	7.8	123
57	Optically detected coherent spin dynamics of a single electron in a quantum dot. Nature Physics, 2007, 3, 770-773.	16.7	121
58	Spin-polarized Zener tunneling in (Ga,Mn)As. Physical Review B, 2002, 65, .	3.2	120
59	Optical Polarization of Nuclear Spins in Silicon Carbide. Physical Review Letters, 2015, 114, 247603.	7.8	109
60	All-optical control of a solid-state spin using coherent dark states. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 7595-7600.	7.1	108
61	Long-range spin wave mediated control of defect qubits in nanodiamonds. Npj Quantum Information, 2017, 3, .	6.7	101
62	Developing silicon carbide for quantum spintronics. Applied Physics Letters, 2020, 116, .	3.3	101
63	Electrical Tuning of Single Nitrogen-Vacancy Center Optical Transitions Enhanced by Photoinduced Fields. Physical Review Letters, 2011, 107, 266403.	7.8	100
64	Entanglement and control of single nuclear spins in isotopically engineered silicon carbide. Nature Materials, 2020, 19, 1319-1325.	27.5	98
65	Spatiotemporal Near-Field Spin Microscopy in Patterned Magnetic Heterostructures. Physical Review Letters, 1996, 76, 1948-1951.	7.8	97
66	The Diamond Age Diamond Age of Spintronics. Scientific American, 2007, 297, 84-91.	1.0	97
67	Vanadium spin qubits as telecom quantum emitters in silicon carbide. Science Advances, 2020, 6, eaaz1192.	10.3	96
68	Decoherence of Near-Surface Nitrogen-Vacancy Centers Due to Electric Field Noise. Physical Review Letters, 2015, 115, 087602.	7.8	93
69	Theory of semiconductor magnetic bipolar transistors. Applied Physics Letters, 2003, 82, 4740-4742.	3.3	90
70	Silicon carbide photonic crystal cavities with integrated color centers. Applied Physics Letters, 2014, 105, .	3.3	90
71	Patterned Formation of Highly Coherent Nitrogen-Vacancy Centers Using a Focused Electron Irradiation Technique. Nano Letters, 2016, 16, 2450-2454.	9.1	89
72	Optical manipulation of the Berry phase in a solid-state spin qubit. Nature Photonics, 2016, 10, 184-189.	31.4	88

#	Article	IF	Citations
73	Optical charge state control of spin defects in 4H-SiC. Nature Communications, 2017, 8, 1876.	12.8	83
74	Teaching magnets new tricks. Nature, 2000, 408, 923-924.	27.8	82
75	Assembly of submicrometre ferromagnets in gallium arsenide semiconductors. Nature, 1995, 377, 707-710.	27.8	81
76	Excited-state spin coherence of a single nitrogenâ€“vacancy centre in diamond. Nature Physics, 2010, 6, 668-672.	16.7	80
77	Quantum entanglement at ambient conditions in a macroscopic solid-state spin ensemble. Science Advances, 2015, 1, e1501015.	10.3	79
78	Purcell Enhancement of a Single Silicon Carbide Color Center with Coherent Spin Control. Nano Letters, 2020, 20, 3427-3434.	9.1	79
79	Universal coherence protection in a solid-state spin qubit. Science, 2020, 369, 1493-1497.	12.6	77
80	Ellipsometric study of the electronic structure ofGa1â^'xMnxAsand low-temperatureGaAs. Physical Review B, 2004, 70, .	3.2	76
81	Multipulse Double-Quantum Magnetometry with Near-Surface Nitrogen-Vacancy Centers. Physical Review Letters, 2014, 113, 030803.	7.8	71
82	Ultrafast optical control of orbital and spin dynamics in a solid-state defect. Science, 2014, 345, 1333-1337.	12.6	70
83	Quantum Engineering With Hybrid Magnonic Systems and Materials (Invited Paper). IEEE Transactions on Quantum Engineering, 2021, 2, 1-36.	4.9	69
84	Deterministic coupling of delta-doped nitrogen vacancy centers to a nanobeam photonic crystal cavity. Applied Physics Letters, 2014, 105, .	3.3	68
85	Defects in SiC for quantum computing. Journal of Applied Physics, 2011, 109, .	2.5	66
86	Helicity dependent photocurrent in electrically gated (Bi1â^'x Sb x)2Te3 thin films. Nature Communications, 2017, 8, 1037.	12.8	66
87	Time-resolved Faraday rotation spectroscopy of spin dynamics in digital magnetic heterostructures. IEEE Journal of Selected Topics in Quantum Electronics, 1995, 1, 1082-1092.	2.9	65
88	Homoepitaxial Growth of Single Crystal Diamond Membranes for Quantum Information Processing. Advanced Materials, 2012, 24, OP54-9.	21.0	63
89	Stark tuning and electrical charge state control of single divacancies in silicon carbide. Applied Physics Letters, 2017, 111, .	3.3	62
90	Magnetism of nanometer-scale iron particles arrays (invited). Journal of Applied Physics, 1999, 85, 5249-5254.	2.5	60

#	Article	IF	Citations
91	Theoretical model of dynamic spin polarization of nuclei coupled to paramagnetic point defects in diamond and silicon carbide. Physical Review B, 2015, 92, .	3.2	59
92	Resonant optical spectroscopy and coherent control of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">C</mml:mi><mml:msup><mml:mrow><mml:mi mathvariant="normal">r</mml:mi></mml:mrow><mml:mrow><mml:mn>4</mml:mn><mml:mo>+</mml:mo></mml:mrow></mml:msup ensembles in SiC and GaN. Physical Review B, 2017, 95, .	3.2	59
93	Atomic layer deposition of titanium nitride for quantum circuits. Applied Physics Letters, 2018, 113, .	3.3	58
94	Five-second coherence of a single spin with single-shot readout in silicon carbide. Science Advances, 2022, 8, eabm5912.	10.3	57
95	Three-dimensional localization of spins in diamond using 12C implantation. Applied Physics Letters, 2014, 105, .	3.3	56
96	Decoherence dynamics of a single spin versus spin ensemble. Physical Review B, 2008, 77, .	3.2	55
97	Electrically driven optical interferometry with spins in silicon carbide. Science Advances, 2019, 5, eaay0527.	10.3	55
98	Time-resolved dynamics of the spin HallÂeffect. Nature Physics, 2008, 4, 843-846.	16.7	52
99	Epitaxial EuO thin films on GaAs. Applied Physics Letters, 2010, 97, 112509.	3.3	49
100	Control of Spin Defects in Wide-Bandgap Semiconductors for Quantum Technologies. Proceedings of the IEEE, 2016, 104, 2009-2023.	21.3	48
101	Hanle effect measurements of spin lifetimes in InAs self-assembled quantum dots. Applied Physics Letters, 2001, 78, 733-735.	3.3	46
102	Trigonal Bipyramidal V³⁺ Complex as an Optically Addressable Molecular Qubit Candidate. Journal of the American Chemical Society, 2020, 142, 20400-20408.	13.7	46
103	Opportunities for Long-Range Magnon-Mediated Entanglement of Spin Qubits via On- and Off-Resonant Coupling. PRX Quantum, 2021, 2, .	9.2	46
104	Antisite effect on hole-mediated ferromagnetism in (Ga,Mn)As. Physical Review B, 2006, 74, .	3.2	45
105	Quantum computing with defects. MRS Bulletin, 2013, 38, 802-807.	3.5	44
106	Engineered Micro- and Nanoscale Diamonds as Mobile Probes for High-Resolution Sensing in Fluid. Nano Letters, 2014, 14, 4959-4964.	9.1	44
107	Cavity-Enhanced Measurements of Defect Spins in Silicon Carbide. Physical Review Applied, 2016, 6, .	3.8	43
108	Electrometry by optical charge conversion of deep defects in 4H-SiC. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 7879-7883.	7.1	43

#	Article	IF	Citations
109	Magnetoresistance anomalies in (Ga,Mn)As epilayers with perpendicular magnetic anisotropy. Physical Review B, 2005, 71, .	3.2	42
110	Stabilization of point-defect spin qubits by quantum wells. Nature Communications, 2019, 10, 5607.	12.8	42
111	Coherent control and high-fidelity readout of chromium ions in commercial silicon carbide. Npj Quantum Information, 2020, 6, .	6.7	42
112	Generalized scaling of spin qubit coherence in over 12,000 host materials. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2121808119.	7.1	38
113	Femtosecond synchronization of two passively modeâ€locked Ti:sapphire lasers. Review of Scientific Instruments, 1996, 67, 2068-2071.	1.3	36
114	Initialization and read-out of spins in coupled coreâ€“shell quantum dots. Nature Physics, 2006, 2, 831-834.	16.7	35
115	Generation and transport of photoexcited electrons in single-crystal diamond. Applied Physics Letters, 2009, 94, .	3.3	34
116	Dynamics of coupled qubits interacting with an off-resonant cavity. Physical Review B, 2006, 73, .	3.2	33
117	High-field magnetocrystalline anisotropic resistance effect in (Ga,Mn)As. Physical Review B, 2008, 77, .	3.2	33
118	Microscale-Resolution Thermal Mapping Using a Flexible Platform of Patterned Quantum Sensors. Nano Letters, 2018, 18, 4684-4690.	9.1	33
119	All-Optical Cryogenic Thermometry Based on Nitrogen-Vacancy Centers in Nanodiamonds. Physical Review Applied, 2019, 12, .	3.8	33
120	Persistent optical gating of a topological insulator. Science Advances, 2015, 1, e1500640.	10.3	31
121	Current-Induced Spin Polarization in Anisotropic Spin-Orbit Fields. Physical Review Letters, 2014, 112, 056601.	7.8	30
122	Reduced Plasma-Induced Damage to Near-Surface Nitrogen-Vacancy Centers in Diamond. Nano Letters, 2015, 15, 2887-2891.	9.1	30
123	Probing the Coherence of Solid-State Qubits at Avoided Crossings. PRX Quantum, 2021, 2, .	9.2	29
124	Photoluminescence spectra of point defects in semiconductors: Validation of first-principles calculations. Physical Review Materials, 2021, 5, .	2.4	29
125	Tunable Cr⁴⁺ Molecular Color Centers. Journal of the American Chemical Society, 2021, 143, 21350-21363.	13.7	29
126	Spin Coherence during Optical Excitation of a Single Nitrogen-Vacancy Center in Diamond. Physical Review Letters, 2012, 108, 157602.	7.8	28

#	Article	IF	Citations
127	Exciton spin polarization in magnetic semiconductor quantum wires. Applied Physics Letters, 2000, 76, 1167-1169.	3.3	27
128	Propagation dynamics of individual domain walls inGa1â^'xMnxAsmicrodevices. Physical Review B, 2006, 74, .	3.2	26
129	Static and dynamic spectroscopy of(Al,Ga)Asâ^•GaAsmicrodisk lasers with interface fluctuation quantum dots. Physical Review B, 2005, 71, .	3.2	24
130	Suppressing Spectral Diffusion of Emitted Photons with Optical Pulses. Physical Review Letters, 2016, 116, 033603.	7.8	24
131	Local optical control of ferromagnetism and chemical potential in a topological insulator. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 10379-10383.	7.1	24
132	Control of electron-spin coherence using Landau level quantization in a two-dimensional electron gas. Physical Review B, 2004, 70, .	3.2	23
133	Epitaxial Er-doped Y2O3 on silicon for quantum coherent devices. APL Materials, 2020, 8, .	5.1	23
134	Mapping spin-orbit splitting in strained (In,Ga)As epilayers. Physical Review B, 2010, 82, .	3.2	22
135	Molecular beam epitaxy of MnAs/ZnSe hybrid ferromagnetic/semiconductor heterostructures. Applied Physics Letters, 2000, 77, 3812-3814.	3.3	21
136	Concentration-independent local ferromagnetic Mn configuration inGa1â^'xMnxAs. Physical Review B, 2005, 71, .	3.2	21
137	Designing defect spins for wafer-scale quantum technologies. MRS Bulletin, 2015, 40, 1146-1153.	3.5	21
138	Hybrid Plasmonic Photonic Crystal Cavity for Enhancing Emission from near-Surface Nitrogen Vacancy Centers in Diamond. ACS Photonics, 2015, 2, 465-469.	6.6	21
139	Infrared survey of the carrier dynamics in III-V digital ferromagnetic heterostructures. Physical Review B, 2005, 71, .	3.2	20
140	Electrical control of spin coherence in ZnO. Applied Physics Letters, 2008, 92, 162109.	3.3	20
141	Interlayer and interfacial exchange coupling in ferromagnetic metal/semiconductor heterostructures. Physical Review B, 2010, 81, .	3.2	19
142	Optoelectronic control of spin dynamics at near-terahertz frequencies in magnetically doped quantum wells. Physical Review B, 2005, 72, .	3.2	18
143	In situ study of annealing-induced strain relaxation in diamond nanoparticles using Bragg coherent diffraction imaging. APL Materials, 2017, 5, .	5.1	18
144	Symmetry breaking of the persistent spin helix in quantum transport. Physical Review B, 2020, 101, .	3.2	18

#	Article	IF	Citations
145	Submicron GaMn quasicrystals in ferromagnetic GaAs. Applied Physics Letters, 1997, 71, 143-145.	3.3	16
146	Magnetotransport properties of strainedGa0.95Mn0.05Asepilayers close to the metal-insulator transition: Description using Aronov-Altshuler three-dimensional scaling theory. Physical Review B, 2007, 75, .	3.2	16
147	High-Fidelity Bidirectional Nuclear Qubit Initialization in SiC. Physical Review Letters, 2016, 117, 220503.	7.8	16
148	Dynamic nuclear polarization from current-induced electron spin polarization. Physical Review B, 2014, 90, .	3.2	15
149	Correlating dynamic strain and photoluminescence of solid-state defects with stroboscopic x-ray diffraction microscopy. Nature Communications, 2019, 10, 3386.	12.8	15
150	Simple non-galvanic flip-chip integration method for hybrid quantum systems. Applied Physics Letters, 2019, 114, .	3.3	15
151	Spatiotemporal Mapping of a Photocurrent Vortex in Monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>MoS</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow> Using Diamond Quantum Sensors. Physical Review X, 2020, 10, .	8.9	15
152	Magnetic anisotropy in arrays of nanometer-scale iron particles. IEEE Transactions on Magnetics, 1998, 34, 1105-1107.	2.1	13
153	Tunable and Transferable Diamond Membranes for Integrated Quantum Technologies. Nano Letters, 2021, 21, 10392-10399.	9.1	13
154	Strain annealing of SiC nanoparticles revealed through Bragg coherent diffraction imaging for quantum technologies. Physical Review Materials, 2018, 2, .	2.4	12
155	Heterodyne detection of radio-frequency electric fields using point defects in silicon carbide. Applied Physics Letters, 2019, 115, .	3.3	11
156	High-Q Nanophotonic Resonators on Diamond Membranes using Templated Atomic Layer Deposition of TiO2. Nano Letters, 2020, 20, 4603-4609.	9.1	11
157	A Î¼+SR study of the magnetic properties of ferritin. , 1997, 104, 269-274.		10
158	Feedback cooling of cantilever motion using a quantum point contact transducer. Applied Physics Letters, 2012, 101, 133104.	3.3	10
159	Designing a cavity-mediated quantum cphase gate between NV spin qubits in diamond. Physical Review B, 2017, 95, .	3.2	10
160	Threeâ€dimensional wavefront imaging by nearâ€field scanning optical microscopy. Review of Scientific Instruments, 1995, 66, 3385-3387.	1.3	8
161	Quantum transport and magneto-optics in a magnetic two-dimensional electron gas. Journal of Applied Physics, 1997, 81, 4858-4860.	2.5	8
162	Optical and electronic manipulation of spin coherence in semiconductors. Proceedings of the IEEE, 2003, 91, 752-760.	21.3	8

#	Article	IF	Citations
163	Domain-wall dynamics at micropatterned constrictions in ferromagnetic (Ga,Mn)As epilayers. Journal of Applied Physics, 2005, 97, 063903.	2.5	8
164	Electrical Manipulation of Spins in Nonmagnetic Semiconductors. Journal of the Physical Society of Japan, 2008, 77, 031006.	1.6	8
165	Epitaxial growth of europium monoxide on diamond. Applied Physics Letters, 2013, 103, 222402.	3.3	7
166	Coherent Spin Dynamics and Spin Polarized Transport in Doped Semiconductors. Journal of Superconductivity and Novel Magnetism, 2000, 13, 201-208.	0.5	6
167	Damping of micromechanical structures by paramagnetic relaxation. Applied Physics Letters, 2003, 82, 3532-3534.	3.3	6
168	One-dimensional alignment of nanoparticles via magnetic sorting. Applied Physics Letters, 2010, 96, 163103.	3.3	6
169	Engineering and quantum control of single spins in semiconductors. MRS Bulletin, 2013, 38, 139-143.	3.5	6
170	Key Device and Materials Specifications for a Repeater Enabled Quantum Internet. IEEE Transactions on Quantum Engineering, 2021, 2, 1-9.	4.9	6
171	Theoretical and experimental study of the nitrogen-vacancy center in 4H-SiC. Physical Review Materials, 2021, 5, .	2.4	6
172	Organizing nanometer-scale magnets with bacterial threads. IEEE Transactions on Magnetics, 1998, 34, 988-990.	2.1	5
173	Growth and characterization of MnAs/ZnSe ferromagnet/semiconductor hybrid heterostructures. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2001, 19, 1439.	1.6	5
174	Structure-controlled magnetic anisotropy in ferromagnetic semiconductor superlattices. Physical Review B, 2004, 69, .	3.2	5
175	Relaxation of a single defect spin by the low-frequency gyrotropic mode of a magnetic vortex. Journal of Applied Physics, 2021, 130, .	2.5	5
176	Growth Dynamics and Exciton Localization in Strained CdSe Quantum Structures. Materials Research Society Symposia Proceedings, 1995, 417, 169.	0.1	4
177	Optical signatures from magnetic two-dimensional electron gases in magnetic fields to 60 T. Journal of Applied Physics, 1999, 85, 5932-5934.	2.5	4
178	Structural engineering of ferromagnetism in IIIâ€“V digital ferromagnetic heterostructures. Journal of Applied Physics, 2004, 95, 4922-4927.	2.5	3
179	Polarized Emission From Twin Microdisk Photonic Molecules. IEEE Journal of Quantum Electronics, 2009, 45, 932-936.	1.9	3
180	Spins charge ahead. Nature Photonics, 2013, 7, 510-511.	31.4	2

#	Article	IF	Citations
181	SiC Cantilevers for Generating Uniaxial Stress. , 2019, , .		2
182	Parasitic erbium photoluminescence in commercial telecom fiber optical components. Optics Letters, 2021, 46, 4852.	3.3	2
183	Discrete Fourier transform in nanostructures using scattering. Journal of Applied Physics, 2004, 95, 8167-8171.	2.5	1
184	Spintronics: semiconductors, molecules, and quantum information. , 0, , .		1
185	Static and Dynamic Spin Organization in Magnetic Semiconductor Nanostructures. Acta Physica Polonica A, 1992, 82, 573-584.	0.5	1
186	Spatiotemporal near-field spin microscopy in digital magnetic heterostructures. , 0, , .		0
187	Observation of near field modal emission in InGaN multi-quantum well laser diodes by near field scanning optical microscopy. , 0, , .		0
188	Template effects on the molecular beam epitaxy of modulation-doped ZnSe/(Zn,Cd)Se quantum wells on [110] GaAs. , 0, , .		0
189	Semiconductor spintronics: manipulating electron and nuclear spins. , 0, , .		0
190	Optoelectronic control of electron and nuclear spins in semiconductor nanostructures. , 2003, , .		0
191	Gigahertz manipulation of electron spins in semiconductor nanostructures. , 0, , .		0
192	Local manipulation of nuclear spin in a semiconductor quantum well. , 2005, , .		0
193	Spin control in semiconductors: Variations on a theme. , 2007, , .		0
194	The Diamond Age of Spintronics: Room Temperature Spin Control. , 2008, , .		0
195	Polarization based control of optical hysteresis in coupled GaAs microdisks. Applied Physics Letters, 2010, 97, 011106.	3.3	0