

# David Awschalom

## List of Publications by Year in descending order

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Version: 2024-02-01

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  | Five-second coherence of a single spin with single-shot readout in silicon carbide. <i>Science Advances</i> , 2022, 8, eabm5912.  | 10.3 | 57        |
| 2  | Generalized scaling of spin qubit coherence in over 12,000 host materials. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2121808119. | 7.1  | 38        |
| 3  | Key Device and Materials Specifications for a Repeater Enabled Quantum Internet. <i>IEEE Transactions on Quantum Engineering</i> , 2021, 2, 1-9.  | 4.9  | 6         |
| 4  | Probing the Coherence of Solid-State Qubits at Avoided Crossings. <i>PRX Quantum</i> , 2021, 2, .   | 9.2  | 29        |
| 5  | Quantum Engineering With Hybrid Magnonic Systems and Materials (Invited Paper). <i>IEEE Transactions on Quantum Engineering</i> , 2021, 2, 1-36.  | 4.9  | 69        |
| 6  | Development of Quantum Interconnects (QulCs) for Next-Generation Information Technologies. <i>PRX Quantum</i> , 2021, 2, .  | 9.2  | 172       |
| 7  | Quantum guidelines for solid-state spin defects. <i>Nature Reviews Materials</i> , 2021, 6, 906-925.  | 48.7 | 185       |
| 8  | Theoretical and experimental study of the nitrogen-vacancy center in 4H-SiC. <i>Physical Review Materials</i> , 2021, 5, .  | 2.4  | 6         |
| 9  | Relaxation of a single defect spin by the low-frequency gyrotropic mode of a magnetic vortex. <i>Journal of Applied Physics</i> , 2021, 130, .  | 2.5  | 5         |
| 10 | Photoluminescence spectra of point defects in semiconductors: Validation of first-principles calculations. <i>Physical Review Materials</i> , 2021, 5, .                                    | 2.4  | 29        |
| 11 | Parasitic erbium photoluminescence in commercial telecom fiber optical components. <i>Optics Letters</i> , 2021, 46, 4852.  | 3.3  | 2         |
| 12 | 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        |
| 13 | Tunable Cr <sup>4+</sup> Molecular Color Centers. <i>Journal of the American Chemical Society</i> , 2021, 143, 21350-21363.   | 13.7 | 29        |
| 14 | Tunable and Transferable Diamond Membranes for Integrated Quantum Technologies. <i>Nano Letters</i> , 2021, 21, 10392-10399.  | 9.1  | 13        |
| 15 | Spatiotemporal Mapping of a Photocurrent Vortex in Monolayer MoS <sub>2</sub> Using Diamond Quantum Sensors. <i>Physical Review X</i> , 2020, 10, .   | 8.9  | 15        |
| 16 | Trigonal Bipyramidal V <sup>3+</sup> Complex as an Optically Addressable Molecular Qubit Candidate. <i>Journal of the American Chemical Society</i> , 2020, 142, 20400-20408.               | 13.7 | 46        |
| 17 | Optically addressable molecular spins for quantum information processing. <i>Science</i> , 2020, 370, 1309-1312.  | 12.6 | 148       |
| 18 | Universal coherence protection in a solid-state spin qubit. <i>Science</i> , 2020, 369, 1493-1497.  | 12.6 | 77        |

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|----|--|------|-----------|
| 19 | Entanglement and control of single nuclear spins in isotopically engineered silicon carbide. <i>Nature Materials</i> , 2020, 19, 1319-1325.                            | 27.5 | 98        |
| 20 | Vanadium spin qubits as telecom quantum emitters in silicon carbide. <i>Science Advances</i> , 2020, 6, eaaz1192.  | 10.3 | 96        |
| 21 | Developing silicon carbide for quantum spintronics. <i>Applied Physics Letters</i> , 2020, 116, .  | 3.3  | 101       |
| 22 | Symmetry breaking of the persistent spin helix in quantum transport. <i>Physical Review B</i> , 2020, 101, .   | 3.2  | 18        |
| 23 | Purcell Enhancement of a Single Silicon Carbide Color Center with Coherent Spin Control. <i>Nano Letters</i> , 2020, 20, 3427-3434.                                    | 9.1  | 79        |
| 24 | Coherent control and high-fidelity readout of chromium ions in commercial silicon carbide. <i>Npj Quantum Information</i> , 2020, 6, .                                 | 6.7  | 42        |
| 25 | Epitaxial Er-doped Y2O3 on silicon for quantum coherent devices. <i>APL Materials</i> , 2020, 8, .   | 5.1  | 23        |
| 26 | High-Q Nanophotonic Resonators on Diamond Membranes using Templated Atomic Layer Deposition of TiO2. <i>Nano Letters</i> , 2020, 20, 4603-4609.                        | 9.1  | 11        |
| 27 | All-Optical Cryogenic Thermometry Based on Nitrogen-Vacancy Centers in Nanodiamonds. <i>Physical Review Applied</i> , 2019, 12, .                                      | 3.8  | 33        |
| 28 | Heterodyne detection of radio-frequency electric fields using point defects in silicon carbide. <i>Applied Physics Letters</i> , 2019, 115, .                          | 3.3  | 11        |
| 29 | Correlating dynamic strain and photoluminescence of solid-state defects with stroboscopic x-ray diffraction microscopy. <i>Nature Communications</i> , 2019, 10, 3386. | 12.8 | 15        |
| 30 | Simple non-galvanic flip-chip integration method for hybrid quantum systems. <i>Applied Physics Letters</i> , 2019, 114, .   | 3.3  | 15        |
| 31 | Spin-phonon interactions in silicon carbide addressed by Gaussian acoustics. <i>Nature Physics</i> , 2019, 15, 490-495.  | 16.7 | 159       |
| 32 | SiC Cantilevers for Generating Uniaxial Stress. , 2019, , .  |      | 2         |
| 33 | Electrical and optical control of single spins integrated in scalable semiconductor devices. <i>Science</i> , 2019, 366, 1225-1230.                                    | 12.6 | 157       |
| 34 | Stabilization of point-defect spin qubits by quantum wells. <i>Nature Communications</i> , 2019, 10, 5607.   | 12.8 | 42        |
| 35 | Electrically driven optical interferometry with spins in silicon carbide. <i>Science Advances</i> , 2019, 5, eaay0527.   | 10.3 | 55        |
| 36 | Quantum control of surface acoustic-wave phonons. <i>Nature</i> , 2018, 563, 661-665.  | 27.8 | 263       |

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|----|---|------|-----------|
| 37 | Atomic layer deposition of titanium nitride for quantum circuits. Applied Physics Letters, 2018, 113, .   | 3.3  | 58        |
| 38 | Quantum technologies with optically interfaced solid-state spins. Nature Photonics, 2018, 12, 516-527.  | 31.4 | 581       |
| 39 | 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        |
| 40 | Microscale-Resolution Thermal Mapping Using a Flexible Platform of Patterned Quantum Sensors. Nano Letters, 2018, 18, 4684-4690.  | 9.1  | 33        |
| 41 | Strain annealing of SiC nanoparticles revealed through Bragg coherent diffraction imaging for quantum technologies. Physical Review Materials, 2018, 2, .   | 2.4  | 12        |
| 42 | <i>In situ</i> study of annealing-induced strain relaxation in diamond nanoparticles using Bragg coherent diffraction imaging. APL Materials, 2017, 5, .  | 5.1  | 18        |
| 43 | Resonant optical spectroscopy and coherent control of $C_r$ ensembles in SiC and GaN. Physical Review B, 2017, 95, .  | 3.2  | 59        |
| 44 | Holonomic Quantum Control by Coherent Optical Excitation in Diamond. Physical Review Letters, 2017, 119, 140503.  | 7.8  | 123       |
| 45 | 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        |
| 46 | Helicity dependent photocurrent in electrically gated $(Bi_{1-x}Sb_x)_2Te_3$ thin films. Nature Communications, 2017, 8, 1037.  | 12.8 | 66        |
| 47 | Long-range spin wave mediated control of defect qubits in nanodiamonds. Npj Quantum Information, 2017, 3, .   | 6.7  | 101       |
| 48 | Designing a cavity-mediated quantum cphase gate between NV spin qubits in diamond. Physical Review B, 2017, 95, .   | 3.2  | 10        |
| 49 | Isolated Spin Qubits in SiC with a High-Fidelity Infrared Spin-to-Photon Interface. Physical Review X, 2017, 7, .   | 8.9  | 125       |
| 50 | Accelerated quantum control using superadiabatic dynamics in a solid-state lambda system. Nature Physics, 2017, 13, 330-334.  | 16.7 | 194       |
| 51 | Stark tuning and electrical charge state control of single divacancies in silicon carbide. Applied Physics Letters, 2017, 111, .  | 3.3  | 62        |
| 52 | Optical charge state control of spin defects in 4H-SiC. Nature Communications, 2017, 8, 1876.   | 12.8 | 83        |
| 53 | Control of Spin Defects in Wide-Bandgap Semiconductors for Quantum Technologies. Proceedings of the IEEE, 2016, 104, 2009-2023.   | 21.3 | 48        |
| 54 | Quantum decoherence dynamics of divacancy spins in silicon carbide. Nature Communications, 2016, 7, 12935.  | 12.8 | 128       |

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|----|---|------|-----------|
| 55 | Cavity-Enhanced Measurements of Defect Spins in Silicon Carbide. <i>Physical Review Applied</i> , 2016, 6, .  | 3.8  | 43        |
| 56 | High-Fidelity Bidirectional Nuclear Qubit Initialization in SiC. <i>Physical Review Letters</i> , 2016, 117, 220503.  | 7.8  | 16        |
| 57 | Suppressing Spectral Diffusion of Emitted Photons with Optical Pulses. <i>Physical Review Letters</i> , 2016, 116, 033603.  | 7.8  | 24        |
| 58 | Patterned Formation of Highly Coherent Nitrogen-Vacancy Centers Using a Focused Electron Irradiation Technique. <i>Nano Letters</i> , 2016, 16, 2450-2454.            | 9.1  | 89        |
| 59 | Optical manipulation of the Berry phase in a solid-state spin qubit. <i>Nature Photonics</i> , 2016, 10, 184-189.   | 31.4 | 88        |
| 60 | Designing defect spins for wafer-scale quantum technologies. <i>MRS Bulletin</i> , 2015, 40, 1146-1153.   | 3.5  | 21        |
| 61 | Decoherence of Near-Surface Nitrogen-Vacancy Centers Due to Electric Field Noise. <i>Physical Review Letters</i> , 2015, 115, 087602.                                 | 7.8  | 93        |
| 62 | Theoretical model of dynamic spin polarization of nuclei coupled to paramagnetic point defects in diamond and silicon carbide. <i>Physical Review B</i> , 2015, 92, . | 3.2  | 59        |
| 63 | Proton magnetic resonance imaging using a nitrogen-vacancy spin sensor. <i>Nature Nanotechnology</i> , 2015, 10, 120-124.   | 31.5 | 124       |
| 64 | Optical Polarization of Nuclear Spins in Silicon Carbide. <i>Physical Review Letters</i> , 2015, 114, 247603.   | 7.8  | 109       |
| 65 | Reduced Plasma-Induced Damage to Near-Surface Nitrogen-Vacancy Centers in Diamond. <i>Nano Letters</i> , 2015, 15, 2887-2891.   | 9.1  | 30        |
| 66 | Hybrid Plasmonic Photonic Crystal Cavity for Enhancing Emission from near-Surface Nitrogen Vacancy Centers in Diamond. <i>ACS Photonics</i> , 2015, 2, 465-469.       | 6.6  | 21        |
| 67 | Persistent optical gating of a topological insulator. <i>Science Advances</i> , 2015, 1, e1500640.  | 10.3 | 31        |
| 68 | Quantum entanglement at ambient conditions in a macroscopic solid-state spin ensemble. <i>Science Advances</i> , 2015, 1, e1501015.                                   | 10.3 | 79        |
| 69 | Isolated electron spins in silicon carbide with millisecond coherence times. <i>Nature Materials</i> , 2015, 14, 160-163.   | 27.5 | 362       |
| 70 | Three-dimensional localization of spins in diamond using <sup>12</sup> C implantation. <i>Applied Physics Letters</i> , 2014, 105, .                                  | 3.3  | 56        |
| 71 | Silicon carbide photonic crystal cavities with integrated color centers. <i>Applied Physics Letters</i> , 2014, 105, .  | 3.3  | 90        |
| 72 | Multipulse Double-Quantum Magnetometry with Near-Surface Nitrogen-Vacancy Centers. <i>Physical Review Letters</i> , 2014, 113, 030803.                                | 7.8  | 71        |

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|----|---|------|-----------|
| 73 | Probing Surface Noise with Depth-Calibrated Spins in Diamond. <i>Physical Review Letters</i> , 2014, 113, 027602.   | 7.8  | 158       |
| 74 | First-principles theory of the luminescence lineshape for the triplet transition in diamond NV centres. <i>New Journal of Physics</i> , 2014, 16, 073026.   | 2.9  | 183       |
| 75 | Deterministic coupling of delta-doped nitrogen vacancy centers to a nanobeam photonic crystal cavity. <i>Applied Physics Letters</i> , 2014, 105, .   | 3.3  | 68        |
| 76 | Current-Induced Spin Polarization in Anisotropic Spin-Orbit Fields. <i>Physical Review Letters</i> , 2014, 112, 056601.   | 7.8  | 30        |
| 77 | Engineered Micro- and Nanoscale Diamonds as Mobile Probes for High-Resolution Sensing in Fluid. <i>Nano Letters</i> , 2014, 14, 4959-4964.  | 9.1  | 44        |
| 78 | Dynamic nuclear polarization from current-induced electron spin polarization. <i>Physical Review B</i> , 2014, 90, .  | 3.2  | 15        |
| 79 | Ultrafast optical control of orbital and spin dynamics in a solid-state defect. <i>Science</i> , 2014, 345, 1333-1337.  | 12.6 | 70        |
| 80 | Electrically and Mechanically Tunable Electron Spins in Silicon Carbide Color Centers. <i>Physical Review Letters</i> , 2014, 112, 187601.  | 7.8  | 152       |
| 81 | Engineering and quantum control of single spins in semiconductors. <i>MRS Bulletin</i> , 2013, 38, 139-143.   | 3.5  | 6         |
| 82 | Nanomechanical coupling between microwave and optical photons. <i>Nature Physics</i> , 2013, 9, 712-716.  | 16.7 | 485       |
| 83 | Nanoscale Nuclear Magnetic Resonance with a Nitrogen-Vacancy Spin Sensor. <i>Science</i> , 2013, 339, 557-560.  | 12.6 | 661       |
| 84 | Quantum Spintronics: Engineering and Manipulating Atom-Like Spins in Semiconductors. <i>Science</i> , 2013, 339, 1174-1179.   | 12.6 | 579       |
| 85 | Quantum Control over Single Spins in Diamond. <i>Annual Review of Condensed Matter Physics</i> , 2013, 4, 23-50.  | 14.5 | 139       |
| 86 | Polytype control of spin qubits in silicon carbide. <i>Nature Communications</i> , 2013, 4, 1819.   | 12.8 | 292       |
| 87 | Spins charge ahead. <i>Nature Photonics</i> , 2013, 7, 510-511.   | 31.4 | 2         |
| 88 | Fluorescence thermometry enhanced by the quantum coherence of single spins in diamond. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 8417-8421. | 7.1  | 319       |
| 89 | All-optical control of a solid-state spin using coherent dark states. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 7595-7600.                  | 7.1  | 108       |
| 90 | Quantum computing with defects. <i>MRS Bulletin</i> , 2013, 38, 802-807.  | 3.5  | 44        |

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|-----|---|------|-----------|
| 91  | Epitaxial growth of europium monoxide on diamond. Applied Physics Letters, 2013, 103, 222402.   | 3.3  | 7         |
| 92  | Spin Coherence during Optical Excitation of a Single Nitrogen-Vacancy Center in Diamond. Physical Review Letters, 2012, 108, 157602.                    | 7.8  | 28        |
| 93  | Feedback cooling of cantilever motion using a quantum point contact transducer. Applied Physics Letters, 2012, 101, 133104.                             | 3.3  | 10        |
| 94  | Interplay between ferromagnetism, surface states, and quantum corrections in a magnetically doped topological insulator. Physical Review B, 2012, 86, . | 3.2  | 133       |
| 95  | Engineering shallow spins in diamond with nitrogen delta-doping. Applied Physics Letters, 2012, 101, 082413.  | 3.3  | 239       |
| 96  | Decoherence-protected quantum gates for a hybrid solid-state spin register. Nature, 2012, 484, 82-86.   | 27.8 | 320       |
| 97  | Measurement and Control of Single Nitrogen-Vacancy Center Spins above 600ÅK. Physical Review X, 2012, 2, .  | 8.9  | 157       |
| 98  | Homoepitaxial Growth of Single Crystal Diamond Membranes for Quantum Information Processing. Advanced Materials, 2012, 24, OP54-9.                      | 21.0 | 63        |
| 99  | A quantum memory intrinsic to single nitrogenâ€“vacancy centres in diamond. Nature Physics, 2011, 7, 789-793.   | 16.7 | 334       |
| 100 | Electrical Tuning of Single Nitrogen-Vacancy Center Optical Transitions Enhanced by Photoinduced Fields. Physical Review Letters, 2011, 107, 266403.    | 7.8  | 100       |
| 101 | Defects in SiC for quantum computing. Journal of Applied Physics, 2011, 109, .  | 2.5  | 66        |
| 102 | Room temperature coherent control of defect spin qubits in silicon carbide. Nature, 2011, 479, 84-87.   | 27.8 | 607       |
| 103 | Spin-Seebeck Effect: A Phonon Driven Spin Distribution. Physical Review Letters, 2011, 106, 186601.   | 7.8  | 168       |
| 104 | One-dimensional alignment of nanoparticles via magnetic sorting. Applied Physics Letters, 2010, 96, 163103.   | 3.3  | 6         |
| 105 | Spin-Light Coherence for Single-Spin Measurement and Control in Diamond. Science, 2010, 330, 1212-1215.   | 12.6 | 186       |
| 106 | Excited-state spin coherence of a single nitrogenâ€“vacancy centre in diamond. Nature Physics, 2010, 6, 668-672.  | 16.7 | 80        |
| 107 | Polarization based control of optical hysteresis in coupled GaAs microdisks. Applied Physics Letters, 2010, 97, 011106.                                 | 3.3  | 0         |
| 108 | Mapping spin-orbit splitting in strained (In,Ga)As epilayers. Physical Review B, 2010, 82, .  | 3.2  | 22        |

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|-----|--|------|-----------|
| 109 | Epitaxial EuO thin films on GaAs. Applied Physics Letters, 2010, 97, 112509.   | 3.3  | 49        |
| 110 | Vector magnetic field microscopy using nitrogen vacancy centers in diamond. Applied Physics Letters, 2010, 96, .                       | 3.3  | 140       |
| 111 | Coherent heteroepitaxy of Bi <sub>2</sub> Se <sub>3</sub> on GaAs (111)B. Applied Physics Letters, 2010, 97, .                         | 3.3  | 132       |
| 112 | Chip-Scale Nanofabrication of Single Spins and Spin Arrays in Diamond. Nano Letters, 2010, 10, 3168-3172.                              | 9.1  | 248       |
| 113 | Quantum computing with defects. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 8513-8518. | 7.1  | 588       |
| 114 | Interlayer and interfacial exchange coupling in ferromagnetic metal/semiconductor heterostructures. Physical Review B, 2010, 81, .     | 3.2  | 19        |
| 115 | High-Cooperativity Coupling of Electron-Spin Ensembles to Superconducting Cavities. Physical Review Letters, 2010, 105, 140501.        | 7.8  | 398       |
| 116 | Generation and transport of photoexcited electrons in single-crystal diamond. Applied Physics Letters, 2009, 94, .                     | 3.3  | 34        |
| 117 | Gigahertz Dynamics of a Strongly Driven Single Quantum Spin. Science, 2009, 326, 1520-1522.  | 12.6 | 327       |
| 118 | Polarized Emission From Twin Microdisk Photonic Molecules. IEEE Journal of Quantum Electronics, 2009, 45, 932-936.                     | 1.9  | 3         |
| 119 | Coherent manipulation of single spins in semiconductors. Nature, 2008, 453, 1043-1049.   | 27.8 | 422       |
| 120 | Time-resolved dynamics of the spin Hall effect. Nature Physics, 2008, 4, 843-846.  | 16.7 | 52        |
| 121 | Coherent Dynamics of a Single Spin Interacting with an Adjustable Spin Bath. Science, 2008, 320, 352-355.                              | 12.6 | 365       |
| 122 | Electrical control of spin coherence in ZnO. Applied Physics Letters, 2008, 92, 162109.  | 3.3  | 20        |
| 123 | Decoherence dynamics of a single spin versus spin ensemble. Physical Review B, 2008, 77, .   | 3.2  | 55        |
| 124 | The Diamond Age of Spintronics: Room Temperature Spin Control. , 2008, , .   |      | 0         |
| 125 | High-field magnetocrystalline anisotropic resistance effect in (Ga,Mn)As. Physical Review B, 2008, 77, .                               | 3.2  | 33        |
| 126 | Excited-State Spectroscopy Using Single Spin Manipulation in Diamond. Physical Review Letters, 2008, 101, 117601.                      | 7.8  | 160       |

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|-----|---|------|-----------|
| 127 | Electrical Manipulation of Spins in Nonmagnetic Semiconductors. Journal of the Physical Society of Japan, 2008, 77, 031006.   | 1.6  | 8         |
| 128 | Spin control in semiconductors: Variations on a theme. , 2007, , .  |      | 0         |
| 129 | Magnetotransport properties of strained Ga <sub>0.95</sub> Mn <sub>0.05</sub> As epilayers close to the metal-insulator transition: Description using Aronov-Altshuler three-dimensional scaling theory. Physical Review B, 2007, 75, . | 3.2  | 16        |
| 130 | Challenges for semiconductor spintronics. Nature Physics, 2007, 3, 153-159.   | 16.7 | 1,457     |
| 131 | Optically detected coherent spin dynamics of a single electron in a quantum dot. Nature Physics, 2007, 3, 770-773.  | 16.7 | 121       |
| 132 | The Diamond Age Diamond Age of Spintronics. Scientific American, 2007, 297, 84-91.  | 1.0  | 97        |
| 133 | Propagation dynamics of individual domain walls in Ga <sub>1-x</sub> Mn <sub>x</sub> As microdevices. Physical Review B, 2006, 74, .  | 3.2  | 26        |
| 134 | Dynamics of coupled qubits interacting with an off-resonant cavity. Physical Review B, 2006, 73, .  | 3.2  | 33        |
| 135 | Initialization and read-out of spins in coupled core-shell quantum dots. Nature Physics, 2006, 2, 831-834.  | 16.7 | 35        |
| 136 | Polarization and Readout of Coupled Single Spins in Diamond. Physical Review Letters, 2006, 97, 087601.   | 7.8  | 210       |
| 137 | Antisite effect on hole-mediated ferromagnetism in (Ga,Mn)As. Physical Review B, 2006, 74, .  | 3.2  | 45        |
| 138 | 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       |
| 139 | Anisotropic interactions of a single spin and dark-spin spectroscopy in diamond. Nature Physics, 2005, 1, 94-98.  | 16.7 | 326       |
| 140 | Domain-wall dynamics at micropatterned constrictions in ferromagnetic (Ga,Mn)As epilayers. Journal of Applied Physics, 2005, 97, 063903.  | 2.5  | 8         |
| 141 | Infrared survey of the carrier dynamics in III-V digital ferromagnetic heterostructures. Physical Review B, 2005, 71, .   | 3.2  | 20        |
| 142 | Optoelectronic control of spin dynamics at near-terahertz frequencies in magnetically doped quantum wells. Physical Review B, 2005, 72, .   | 3.2  | 18        |
| 143 | Magnetoresistance anomalies in (Ga,Mn)As epilayers with perpendicular magnetic anisotropy. Physical Review B, 2005, 71, .   | 3.2  | 42        |
| 144 | Concentration-independent local ferromagnetic Mn configuration in Ga <sub>1-x</sub> Mn <sub>x</sub> As. Physical Review B, 2005, 71, .  | 3.2  | 21        |

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|-----|---|------|-----------|
| 145 | Static and dynamic spectroscopy of (Al,Ga)As <sup>+</sup> GaAs microdisk lasers with interface fluctuation quantum dots. Physical Review B, 2005, 71, .   | 3.2  | 24        |
| 146 | Local manipulation of nuclear spin in a semiconductor quantum well. , 2005, , .   |      | 0         |
| 147 | Structure-controlled magnetic anisotropy in ferromagnetic semiconductor superlattices. Physical Review B, 2004, 69, .   | 3.2  | 5         |
| 148 | Control of electron-spin coherence using Landau level quantization in a two-dimensional electron gas. Physical Review B, 2004, 70, .  | 3.2  | 23        |
| 149 | Discrete Fourier transform in nanostructures using scattering. Journal of Applied Physics, 2004, 95, 8167-8171.   | 2.5  | 1         |
| 150 | Ellipsometric study of the electronic structure of Ga <sub>1-x</sub> MnxAs and low-temperature GaAs. Physical Review B, 2004, 70, .   | 3.2  | 76        |
| 151 | Structural engineering of ferromagnetism in III-V digital ferromagnetic heterostructures. Journal of Applied Physics, 2004, 95, 4922-4927.  | 2.5  | 3         |
| 152 | Highly enhanced Curie temperature in low-temperature annealed [Ga,Mn]As epilayers. Applied Physics Letters, 2003, 82, 2302-2304.  | 3.3  | 302       |
| 153 | Optical and electronic manipulation of spin coherence in semiconductors. Proceedings of the IEEE, 2003, 91, 752-760.  | 21.3 | 8         |
| 154 | Optoelectronic control of electron and nuclear spins in semiconductor nanostructures. , 2003, , .   |      | 0         |
| 155 | Damping of micromechanical structures by paramagnetic relaxation. Applied Physics Letters, 2003, 82, 3532-3534.   | 3.3  | 6         |
| 156 | Theory of semiconductor magnetic bipolar transistors. Applied Physics Letters, 2003, 82, 4740-4742.   | 3.3  | 90        |
| 157 | Spin-polarized Zener tunneling in (Ga,Mn)As. Physical Review B, 2002, 65, .   | 3.2  | 120       |
| 158 | Hanle effect measurements of spin lifetimes in InAs self-assembled quantum dots. Applied Physics Letters, 2001, 78, 733-735.  | 3.3  | 46        |
| 159 | Spin coherence and dephasing in GaN. Physical Review B, 2001, 63, .   | 3.2  | 190       |
| 160 | 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         |
| 161 | Teaching magnets new tricks. Nature, 2000, 408, 923-924.  | 27.8 | 82        |
| 162 | Coherent Spin Dynamics and Spin Polarized Transport in Doped Semiconductors. Journal of Superconductivity and Novel Magnetism, 2000, 13, 201-208.   | 0.5  | 6         |

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|-----|--|------|-----------|
| 163 | Exciton spin polarization in magnetic semiconductor quantum wires. Applied Physics Letters, 2000, 76, 1167-1169.   | 3.3  | 27        |
| 164 | Molecular beam epitaxy of MnAs/ZnSe hybrid ferromagnetic/semiconductor heterostructures. Applied Physics Letters, 2000, 77, 3812-3814.                           | 3.3  | 21        |
| 165 | (Ga,Mn)As as a digital ferromagnetic heterostructure. Applied Physics Letters, 2000, 77, 2379-2381.  | 3.3  | 168       |
| 166 | All-Optical Magnetic Resonance in Semiconductors. Science, 2000, 287, 473-476.   | 12.6 | 226       |
| 167 | Magnetism of nanometer-scale iron particles arrays (invited). Journal of Applied Physics, 1999, 85, 5249-5254.   | 2.5  | 60        |
| 168 | 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         |
| 169 | Lateral drag of spin coherence in gallium arsenide. Nature, 1999, 397, 139-141.  | 27.8 | 804       |
| 170 | Electrical spin injection in a ferromagnetic semiconductor heterostructure. Nature, 1999, 402, 790-792.  | 27.8 | 2,315     |
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