# Andrew C Irvine

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3399837/publications.pdf

Version: 2024-02-01

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|---|---|---|---|
| 49 papers | 1,930 citations | 304743 22 h-index | 243625 44 g-index |
| 50 all docs | 50 docs citations | 50 times ranked | 2552 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Noise-based approximation to thermal spin-injection in Fe/GaAs. Applied Physics Letters, 2017, 111, 142401. | 3.3 | 0 |
| 2 | Inertial displacement of a domain wall excited by ultra-short circularly polarized laser pulses. Nature Communications, 2017, 8, 15226. | 12.8 | 22 |
| 3 | Precise measurements of the dipole moment and polarizability of the neutral exciton and positive trion in a single quantum dot. Physical Review B, 2017, 95, . | 3.2 | 13 |
| 4 | Electrical control of quantum-dot fine-structure splitting for high-fidelity hole spin initialization. Physical Review B, 2016, 93, . | 3.2 | 10 |
| 5 | Efficient conversion of light to charge and spin in Hall-bar microdevices. Physical Review B, 2015, 91, . | 3.2 | 4 |
| 6 | Reconfigurable Boolean Logic Using Magnetic Single-Electron Transistors. PLoS ONE, 2015, 10, e0125142. | 2.5 | 2 |
| 7 | Electrical manipulation of ferromagnetic NiFe by antiferromagnetic IrMn. Physical Review B, 2015, 92, . | 3.2 | 102 |
| 8 | Optical Spin-Transfer-Torque-Driven Domain-Wall Motion in a Ferromagnetic Semiconductor. Physical Review Letters, 2015, 114, 067202. | 7.8 | 30 |
| 9 | Magnonic charge pumping via spinâ€“orbit coupling. Nature Nanotechnology, 2015, 10, 50-54. | 31.5 | 64 |
| 10 | Ultrafast high-fidelity initialization of a quantum-dot spin qubit without magnetic fields. Physical Review B, 2014, 90, . | 3.2 | 18 |
| 11 | An antidamping spinâ€“orbit torque originating from the Berry curvature. Nature Nanotechnology, 2014, 9, 211-217. | 31.5 | 273 |
| 12 | Spin-orbit torque opposing the Oersted torque in ultrathin Co/Pt bilayers. Applied Physics Letters, 2014, 104, . | 3.3 | 55 |
| 13 | Enhanced inverse spin-Hall effect in ultrathin ferromagnetic/normal metal bilayers. Applied Physics Letters, 2013, 102, . | 3.3 | 12 |
| 14 | Piezoelectric control of the mobility of a domain wall driven by adiabatic and non-adiabatic torques. Nature Materials, 2013, 12, 808-814. | 27.5 | 64 |
| 15 | High-resolution photocurrent spectroscopy of the positive trion state in a single quantum dot. Physical Review B, 2013, 87, . | 3.2 | 9 |
| 16 | Spin gating electrical current. Applied Physics Letters, 2012, 101, . | 3.3 | 14 |
| 17 | Detection of Electrically Modulated Inverse Spin Hall Effect in an<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Fe</mml:mi><mml:mo>/</mml:mo><mml:mi>GaAs</mml:mi></mml:math>Microdevice. Physical Review Letters, 2012, 109, 076601. | 7.8 | 23 |
| 18 | Selective coherent x-ray diffractive imaging of displacement fields in (Ga,Mn)As/GaAs periodic wires. Physical Review B, 2011, 84, . | 3.2 | 23 |

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|---|---|---|---|
| 19 | Strain field in (Ga,Mn)As/GaAs periodic wires revealed by coherent X-ray diffraction. Europhysics Letters, 2011, 94, 66001. | 2.0 | 22 |
| 20 | Electrically tunable hole tunnelling from a single self-assembled quantum dot embedded in an n-i-Schottky photovoltaic cell. Applied Physics Letters, 2011, 99, 031102. | 3.3 | 11 |
| 21 | Bias-controlled single-electron charging of a self-assembled quantum dot in a two-dimensional-electron-gas-based<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>n</mml:mi><mml:mo>â^’</mml:mo><mml:mi>i</mml:mi></mml:mrow></mml:math>-Schottky diode. Physical Review B, 2011, 83, . | 3.2 | 15 |
| 22 | Voltage-controlled electron tunneling from a single self-assembled quantum dot embedded in a two-dimensional-electron-gas-based photovoltaic cell. Journal of Applied Physics, 2011, 110, . | 2.5 | 16 |
| 23 | Domain wall resistance in perpendicular (Ga,Mn)As: Dependence on pinning. Journal of Magnetism and Magnetic Materials, 2010, 322, 3481-3484. | 2.3 | 2 |
| 24 | Coulomb oscillations of indium-doped ZnO nanowire transistors in a magnetic field. Physical Review B, 2010, 82, . | 3.2 | 13 |
| 25 | Electrical control of fine-structure splitting in self-assembled quantum dots for entangled photon pair creation. Applied Physics Letters, 2010, 97, . | 3.3 | 20 |
| 26 | Current-driven domain wall motion across a wide temperature range in a (Ga,Mn)(As,P) device. Applied Physics Letters, 2010, 97, . | 3.3 | 25 |
| 27 | Spin Hall Effect Transistor. Science, 2010, 330, 1801-1804. | 12.6 | 288 |
| 28 | Spin-injection Hall effect in a planar photovoltaicÂcell. Nature Physics, 2009, 5, 675-681. | 16.7 | 68 |
| 29 | Magneto-optical and micromagnetic simulation study of the current-driven domain wall motion in ferromagnetic (Ga,Mn)As. Journal of Magnetism and Magnetic Materials, 2009, 321, 971-973. | 2.3 | 7 |
| 30 | The origin and control of the sources of AMR in (Ga,Mn)As devices. Journal of Magnetism and Magnetic Materials, 2009, 321, 1001-1008. | 2.3 | 18 |
| 31 | Low-voltage control of ferromagnetism in a semiconductor pâ€“n junction. New Journal of Physics, 2009, 11, 023008. | 2.9 | 23 |
| 32 | Enhanced annealing, high Curie temperature, and low-voltage gating in (Ga,Mn)As: A surface oxide control study. Physical Review B, 2008, 78, . | 3.2 | 110 |
| 33 | Lithographically and electrically controlled strain effects on anisotropic magnetoresistance in (Ga,Mn)As. New Journal of Physics, 2008, 10, 065003. | 2.9 | 57 |
| 34 | Magnetic reversal under external field and current-driven domain wall motion in (Ga,Mn)As: influence of extrinsic pinning. New Journal of Physics, 2008, 10, 085007. | 2.9 | 10 |
| 35 | Local control of magnetocrystalline anisotropy in (Ga,Mn)As microdevices: Demonstration in current-induced switching. Physical Review B, 2007, 76, . | 3.2 | 63 |
| 36 | Anisotropic Magnetoresistance Components in (Ga,Mn)As. Physical Review Letters, 2007, 99, 147207. | 7.8 | 107 |

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|---|---|---|---|
| 37 | Ordinary and extraordinary Coulomb blockade magnetoresistance in a (Ga, Mn)As single electron transistor. Solid State Communications, 2007, 144, 536-541. | 1.9 | 8 |
| 38 | Coulomb blockade anisotropic magnetoresistance and voltage controlled magnetic switching in a ferromagnetic GaMnAs single electron transistor. Journal of Magnetism and Magnetic Materials, 2007, 310, 1883-1888. | 2.3 | 8 |
| 39 | Coulomb Blockade Anisotropic Magnetoresistance Effect in a(Ga,Mn)AsSingle-Electron Transistor. Physical Review Letters, 2006, 97, 077201. | 7.8 | 100 |
| 40 | Aperiodic lattices in silicon nano-wire for spectrally engineered DWDM photonics. , 2006, , . | | 0 |
| 41 | Nanoscale Coulomb blockade memory and logic devices. Nanotechnology, 2001, 12, 155-159. | 2.6 | 20 |
| 42 | Coulomb blockade memory using integrated single-electron transistor/metal-oxide-semiconductor transistor gain cells. IEEE Transactions on Electron Devices, 2000, 47, 2334-2339. | 3.0 | 31 |
| 43 | A high-speed silicon-based few-electron memory with metalâ€“ oxideâ€“semiconductor field-effect transistor gain element. Journal of Applied Physics, 2000, 87, 8594-8603. | 2.5 | 16 |
| 44 | A memory cell with single-electron and metal-oxide-semiconductor transistor integration. Applied Physics Letters, 1999, 74, 1293-1295. | 3.3 | 46 |
| 45 | Simulation of Si multiple tunnel junctions. Physica B: Condensed Matter, 1999, 272, 85-87. | 2.7 | 5 |
| 46 | Single-electron effects in heavily doped polycrystalline silicon nanowires. Applied Physics Letters, 1998, 73, 1113-1115. | 3.3 | 35 |
| 47 | Recombination current in GaAs/AlGaAs heterostructure bipolar transistors. International Journal of Electronics, 1997, 83, 761-778. | 1.4 | 6 |
| 48 | Demonstration of gallium-defect annealing at 280 K in irradiated GaAs andAlxGa1â^'xAs. Physical Review B, 1994, 49, 5695-5698. | 3.2 | 7 |
| 49 | First observation of the EL2 lattice defect in indium gallium arsenide grown by molecular-beam epitaxy. Physical Review Letters, 1992, 68, 2168-2171. | 7.8 | 35 |