Richard P Campion

List of Publications by Year
in descending order

78 papers	4,197 citations	201575 27 h-index	106281 65 g-index
79 all docs	79 docs citations	79 times ranked	4302 citing authors

#	Article	IF	Citations
1	Defect-driven antiferromagnetic domain walls in CuMnAs films. Nature Communications, 2022, 13, 724.	5.8	8
2	Atomically sharp domain walls in an antiferromagnet. Science Advances, 2022, 8, eabn3535.	4.7	12
3	Protected Long-Distance Guiding of Hypersound Underneath a Nanocorrugated Surface. ACS Nano, 2021, 15, 4802-4810.	7.3	4
4	Hysteretic effects and magnetotransport of electrically switched CuMnAs. Physical Review B, 2021, 104, .	1.1	5
5	Asymmetric magnetic relaxation behavior of domains and domain walls observed through the FeRh first-order metamagnetic phase transition. Physical Review B, 2020, 102, .	1.1	8
6	Molecular beam epitaxy of CuMnAs. Physical Review Materials, 2020, 4, .	0.9	14
7	Modeling Photocathode Performance Using MedeA-VASP Simulation Software. IEEE Transactions on Nuclear Science, 2020, 67, 1987-1992.	1.2	0
8	Modelling Photocathode Performance using Density Functional Theory. , 2019, , .		1
9	Terahertz electrical writing speed in an antiferromagnetic memory. Science Advances, 2018, 4, eaar3566.	4.7	221
10	Current polarity-dependent manipulation of antiferromagnetic domains. Nature Nanotechnology, 2018, 13, 362-365.	15.6	116
11	A high electron mobility phonotransistor. Communications Physics, 2018, 1, .	2.0	3
12	Investigation of exchange coupled bilayer Fe/CuMnAs by pumpâ€“probe experiment. Physica Status Solidi - Rapid Research Letters, 2017, 11, 1600441.	1.2	3
13	Nanoscale thermoelectrical detection of magnetic domain wall propagation. Physical Review B, 2017, 95, .	1.1	17
14	Electrical switching of an antiferromagnet. Science, 2016, 351, 587-590.	6.0	1,049
15	Coherent phonon optics in a chip with an electrically controlled active device. Scientific Reports, 2015, 5, 8279.	1.6	9
16	Paramagnetic to antiferromagnetic transition in epitaxial tetragonal CuMnAs (invited). Journal of Applied Physics, 2015, 117, .	1.1	9
17	III-V semiconductor waveguides for photonic functionality at 780 nm. , 2014, , .		1
18	Determining Curie temperatures in dilute ferromagnetic semiconductors: High Curie temperature (Ga,Mn)As. Applied Physics Letters, 2014, 104, .	1.5	29

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19	Spin-dependent phenomena and device concepts explored in (Ga,Mn)As. Reviews of Modern Physics, 2014, 86, 855-896.	16.4	141
20	An antidamping spinâ€“orbit torque originating from the Berry curvature. Nature Nanotechnology, 2014, 9, 211-217.	15.6	273
21	Piezoelectric control of the mobility of a domain wall driven by adiabatic and non-adiabatic torques. Nature Materials, 2013, 12, 808-814.	13.3	64
22	Magnetic and structural properties of (Ga,Mn)As/(Al,Ga,Mn)As bilayer films. Applied Physics Letters, 2013, 102, 112404.	1.5	5
23	Spin gating electrical current. Applied Physics Letters, 2012, 101, .	1.5	14
24	Electrical excitation and detection of magnetic dynamics with impedance matching. Applied Physics Letters, 2012, 101, 182402.	1.5	3
25	Analysing Surface Structures on (Ga, Mn)As by Atomic Force Microscopy. Journal of Nanoscience and Nanotechnology, 2012, 12, 7545-7549.	0.9	0
26	Non-volatile ferroelectric gating of magnetotransport anisotropy in (Ga,Mn)(As,P). Applied Physics Letters, 2012, 100, .	1.5	6
27	Anion modulation epitaxy (AME), an alternative growth strategy for group IIIâ€nitrides. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 530-533.	0.8	2
28	Insight into the Growth and Control of Single-Crystal Layers of Geâ€“Sbâ€“Te Phase-Change Material. Crystal Growth and Design, 2011, 11, 4606-4610.	1.4	34
29	Nano-sized light emitting diodes by near field laser exposure. Applied Physics Letters, 2011, 98, .	1.5	7
30	Surface morphology and magnetic anisotropy in (Ga,Mn)As. Applied Physics Letters, 2011, 98, 152503.	1.5	10
31	Spinâ€“orbit-driven ferromagnetic resonance. Nature Nanotechnology, 2011, 6, 413-417.	15.6	182
32	Fast switching of magnetization in the ferromagnetic semiconductor (Ga,Mn)(As,P) using nonequilibrium phonon pulses. Applied Physics Letters, 2011, 99, .	1.5	8
33	Magnetic Linear Dichroism in the Angular Dependence of Core-Level Photoemission from (Ga,Mn)As Using Hard X Rays. Physical Review Letters, 2011, 107, 197601.	2.9	14
34	Ferroelectric polymer gates for non-volatile field effect control of ferromagnetism in (Ga, Mn)As layers. Nanotechnology, 2011, 22, 254004.	1.3	14
35	Tracking Data Certification for the Lunar Reconnaissance Orbiter. , 2010, , .		1
36	Direct Laser Writing of Nanoscale Lightâ€Emitting Diodes. Advanced Materials, 2010, 22, 3176-3180.	11.1	16

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37	Domain wall resistance in perpendicular (Ga,Mn)As: Dependence on pinning. Journal of Magnetism and Magnetic Materials, 2010, 322, 3481-3484.	1.0	2
38	Microscopic Analysis of the Valence Band and Impurity Band Theories of (Ga,Mn)As. Physical Review Letters, 2010, 105, 227202.	2.9	36
39	Current-driven domain wall motion across a wide temperature range in a (Ga,Mn)(As,P) device. Applied Physics Letters, 2010, 97, .	1.5	25
40	Nanoscale Potential Fluctuations in (GaMn)As/GaAs Heterostructures: From Individual Ions to Charge Clusters and Electrostatic Quantum Dots. Nano Letters, 2010, 10, 4874-4879.	4.5	6
41	Tuning perpendicular magnetic anisotropy in (Ga,Mn)(As,P) by thermal annealing. Applied Physics Letters, 2010, 97, 122504.	1.5	11
42	A low field technique for measuring magnetic and magnetoresistance anisotropy coefficients applied to (Ga,Mn)As. Applied Physics Letters, 2009, 95, .	1.5	2
43	Photoemission of Ga_{1â€“x}Mn_x As with high Curie temperature and transformation into MnAs of zincblende structure. Physica Status Solidi (B): Basic Research, 2009, 246, 1435-1439.	0.7	7
44	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.	1.0	7
45	The origin and control of the sources of AMR in (Ga,Mn)As devices. Journal of Magnetism and Magnetic Materials, 2009, 321, 1001-1008.	1.0	18
46	Non-volatile ferroelectric control of ferromagnetism in (Ga,Mn)As. Nature Materials, 2008, 7, 464-467.	13.3	150
47	Achieving high Curie temperature in (Ga,Mn)As. Applied Physics Letters, 2008, 93, .	1.5	165
48	Microstructural characterization of low-temperature grown GaMnN on GaAs(0â€‰0â€‰1) substrates by plasma-assisted MBE. Semiconductor Science and Technology, 2007, 22, 1131-1139.	1.0	2
49	Domain imaging and domain wall propagation in (Ga, Mn)As thin films with tensile strain. Journal of Applied Physics, 2007, 101, 106101.	1.1	27
50	Anisotropic Magnetoresistance Components in (Ga,Mn)As. Physical Review Letters, 2007, 99, 147207.	2.9	107
51	Ordinary and extraordinary Coulomb blockade magnetoresistance in a (Ga, Mn)As single electron transistor. Solid State Communications, 2007, 144, 536-541.	0.9	8
52	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.	1.0	8
53	Coercivity enlargement in (Ga,Mn)As thin films with small amount of MnAs nanoclusters. Journal of Magnetism and Magnetic Materials, 2007, 310, 2126-2128.	1.0	6
54	The growth of high quality GaMnAs layers and heterostructures by molecular beam epitaxy. Physica Status Solidi (B): Basic Research, 2007, 244, 2944-2949.	0.7	0

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55	Angle-Dependent X-Ray Magnetic Circular Dichroism from (Ga,Mn)As: Anisotropy and Identification of Hybridized States. Physical Review Letters, 2006, 96, 117207.	2.9	39
56	Characterization of Ga1â^'xMnxAs/(001)GaAs epilayers grown by low-temperature molecular beam epitaxy. Philosophical Magazine Letters, 2006, 86, 395-401.	0.5	5
57	Molecular beam epitaxy of p-type cubic GaMnN layers. Journal of Crystal Growth, 2005, 278, 685-689.	0.7	9
58	Structural characterisation of zinc-blende Ga1â^'xMnxN epilayers grown by MBE as a function of Ga flux. Journal of Crystal Growth, 2005, 284, 324-334.	0.7	2
59	Photoelectron spectroscopy study of Ga1â^'xMnxAs(001) surface oxide and low temperature cleaning. Surface Science, 2005, 585, 66-74.	0.8	11
60	p-type conductivity in cubic (Ga,Mn)N thin films. Applied Physics Letters, 2005, 86, 152114.	1.5	34
61	Large Tunneling Anisotropic Magnetoresistance in (Ga,Mn)As Nanoconstrictions. Physical Review Letters, 2005, 94, 127202.	2.9	88
62	Spin Reorientation Transition in Single-Domain(Ga,Mn)As. Physical Review Letters, 2005, 95, 217204.	2.9	133
63	Determination of the Mn concentration in GaMnAs. Semiconductor Science and Technology, 2005, 20, 369-373.	1.0	22
64	P-type conductivity in cubic GaMnN layers grown by molecular beam epitaxy. Semiconductor Science and Technology, 2004, 19, L13-L16.	1.0	35
65	Surface effects in Mn L3,2 x-ray absorption spectra from (Ga,Mn)As. Applied Physics Letters, 2004, 84, 4065-4067.	1.5	82
66	Magnetic domain imaging of ferromagnetic GaMnAs films. Journal of Applied Physics, 2004, 95, 7399-7401.	1.1	9
67	Influence of low temperature annealing on the micromagnetic structure of GaMnAs films. Journal of Applied Physics, 2004, 95, 3225-3227.	1.1	16
68	Mnâ€ŠL3,2 x-ray absorption from (Ga,Mn)As and (Ga,Mn)N. Journal of Applied Physics, 2004, 95, 7166-7168.	1.1	14
69	The growth of high quality GaMnAs films by MBE. Journal of Materials Science: Materials in Electronics, 2004, 15, 727-731.	1.1	7
70	Light-emitting diodes based on GaMnAs/GaAs heterostructures. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 21, 1002-1006.	1.3	1
71	Influence of the Mn interstitial on the magnetic and transport properties of (Ga,Mn)As. Journal of Applied Physics, 2004, 95, 6512-6514.	1.1	66
72	The growth of GaMnAs films by molecular beam epitaxy using arsenic dimers. Journal of Crystal Growth, 2003, 251, 311-316.	0.7	44

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73	High-quality GaMnAs films grown with arsenic dimers. Journal of Crystal Growth, 2003, 247, 42-48.	0.7	88
74	Dc-transport properties of ferromagnetic (Ga,Mn)As semiconductors. Applied Physics Letters, 2003, 83, 320-322.	1.5	98
75	Investigation of radiative recombination from Mn-related states in Ga1â^'xMnxAs. Applied Physics Letters, 2003, 83, 866-868.	1.5	5
76	Magnetoresistance and Hall effect in the ferromagnetic semiconductor Ga1â^'xMnxAs. Journal of Applied Physics, 2003, 93, 6787-6789.	1.1	56
77	High-Curie-temperature Ga1â^'xMnxAs obtained by resistance-monitored annealing. Applied Physics Letters, 2002, 81, 4991-4993.	1.5	318
78	Hall effect and hole densities in Ga1â^'xMnxAs. Applied Physics Letters, 2002, 81, 3010-3012.	1.5	125