Bryan L Gallagher

List of Publications by Year
in descending order

111	5,119	136885	88593
papers	citations	32 h-index	70 g-index

113	113	113	4748
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Switching the uniaxial magnetic anisotropy by ion irradiation induced compensation. Journal Physics D: Applied Physics, 2018, 51, 145001.	1.3	6
2	Current polarity-dependent manipulation of antiferromagnetic domains. Nature Nanotechnology, 2018, 13, 362-365.	15.6	116
3	Investigation of exchange coupled bilayer Fe/CuMnAs by pumpâ€“probe experiment. Physica Status Solidi - Rapid Research Letters, 2017, 11, 1600441.	1.2	3
4	Electrical switching of an antiferromagnet. Science, 2016, 351, 587-590.	6.0	1,049
5	Interfacial contribution to thickness dependent in-plane anisotropic magnetoresistance. AIP Advances, 2015, 5, 127108.	0.6	5
6	Reconfigurable Boolean Logic Using Magnetic Single-Electron Transistors. PLoS ONE, 2015, 10, e0125142.	1.1	2
7	Paramagnetic to antiferromagnetic transition in epitaxial tetragonal CuMnAs (invited). Journal of Applied Physics, 2015, 117, .	1.1	9
8	Determining Curie temperatures in dilute ferromagnetic semiconductors: High Curie temperature (Ga,Mn)As. Applied Physics Letters, 2014, 104, .	1.5	29
9	Spin-dependent phenomena and device concepts explored in (Ga,Mn)As. Reviews of Modern Physics, 2014, 86, 855-896.	16.4	141
10	An antidamping spinâ€“orbit torque originating from the Berry curvature. Nature Nanotechnology, 2014, 9, 211-217.	15.6	273
11	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
12	Magnetic and structural properties of (Ga,Mn)As/(Al,Ga,Mn)As bilayer films. Applied Physics Letters, 2013, 102, 112404.	1.5	5
13	Spin gating electrical current. Applied Physics Letters, 2012, 101, .	1.5	14
14	Electrical excitation and detection of magnetic dynamics with impedance matching. Applied Physics Letters, 2012, 101, 182402.	1.5	3
15	Analysing Surface Structures on (Ga, Mn)As by Atomic Force Microscopy. Journal of Nanoscience and Nanotechnology, 2012, 12, 7545-7549.	0.9	0
16	Non-volatile ferroelectric gating of magnetotransport anisotropy in (Ga,Mn)(As,P). Applied Physics Letters, 2012, 100, .	1.5	6
17	Surface morphology and magnetic anisotropy in (Ga,Mn)As. Applied Physics Letters, 2011, 98, 152503.	1.5	10
18	Spinâ€“orbit-driven ferromagnetic resonance. Nature Nanotechnology, 2011, 6, 413-417.	15.6	182

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19	Fast switching of magnetization in the ferromagnetic semiconductor (Ga,Mn)(As,P) using nonequilibrium phonon pulses. Applied Physics Letters, 2011, 99, .	1.5	8
20	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
21	Ferroelectric polymer gates for non-volatile field effect control of ferromagnetism in (Ga, Mn)As layers. Nanotechnology, 2011, 22, 254004.	1.3	14
22	Domain wall resistance in perpendicular (Ga,Mn)As: Dependence on pinning. Journal of Magnetism and Magnetic Materials, 2010, 322, 3481-3484.	1.0	2
23	Microscopic Analysis of the Valence Band and Impurity Band Theories of (Ga,Mn)As. Physical Review Letters, 2010, 105, 227202.	2.9	36
24	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
25	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
26	Tuning perpendicular magnetic anisotropy in (Ga,Mn)(As,P) by thermal annealing. Applied Physics Letters, 2010, 97, 122504.	1.5	11
27	A low field technique for measuring magnetic and magnetoresistance anisotropy coefficients applied to (Ga,Mn)As. Applied Physics Letters, 2009, 95, .	1.5	2
28	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
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.	1.0	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.	1.0	18
31	Synthesis, stoichiometry and thermal stability of Zn3N2 powders prepared by ammonolysis reactions. Journal of Solid State Chemistry, 2008, 181, 158-165.	1.4	27
32	Non-volatile ferroelectric control of ferromagnetism in (Ga,Mn)As. Nature Materials, 2008, 7, 464-467.	13.3	150
33	Chapter 4 Transport Properties of Ferromagnetic Semiconductors. Semiconductors and Semimetals, 2008, , 135-205.	0.4	2
34	Focus on Dilute Magnetic Semiconductors. New Journal of Physics, 2008, 10, 055004.	1.2	17
35	Achieving high Curie temperature in (Ga,Mn)As. Applied Physics Letters, 2008, 93, .	1.5	165
36	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

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37	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
38	Anisotropic Magnetoresistance Components in (Ga,Mn)As. Physical Review Letters, 2007, 99, 147207.	2.9	107
39	Ordinary and extraordinary Coulomb blockade magnetoresistance in a (Ga, Mn)As single electron transistor. Solid State Communications, 2007, 144, 536-541.	0.9	8
40	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
41	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
42	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
43	Structural chemistry of Cu3N powders obtained by ammonolysis reactions. Solid State Sciences, 2007, 9, 907-913.	1.5	32
44	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
45	Characterization of Ga1â^'xMnxAs/(001)GaAs epilayers grown by low-temperature molecular beam epitaxy. Philosophical Magazine Letters, 2006, 86, 395-401.	0.5	5
46	Molecular beam epitaxy of p-type cubic GaMnN layers. Journal of Crystal Growth, 2005, 278, 685-689.	0.7	9
47	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
48	Photoelectron spectroscopy study of Ga1â^'xMnxAs(001) surface oxide and low temperature cleaning. Surface Science, 2005, 585, 66-74.	0.8	11
49	p-type conductivity in cubic (Ga,Mn)N thin films. Applied Physics Letters, 2005, 86, 152114.	1.5	34
50	Large Tunneling Anisotropic Magnetoresistance in (Ga,Mn)As Nanoconstrictions. Physical Review Letters, 2005, 94, 127202.	2.9	88
51	Spin Reorientation Transition in Single-Domain(Ga,Mn)As. Physical Review Letters, 2005, 95, 217204.	2.9	133
52	Determination of the Mn concentration in GaMnAs. Semiconductor Science and Technology, 2005, 20, 369-373.	1.0	22
53	P-type conductivity in cubic GaMnN layers grown by molecular beam epitaxy. Semiconductor Science and Technology, 2004, 19, L13-L16.	1.0	35
54	Surface effects in Mn L3,2 x-ray absorption spectra from (Ga,Mn)As. Applied Physics Letters, 2004, 84, 4065-4067.	1.5	82

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55	Magnetic domain imaging of ferromagnetic GaMnAs films. Journal of Applied Physics, 2004, 95, 7399-7401.	1.1	9
56	Influence of low temperature annealing on the micromagnetic structure of GaMnAs films. Journal of Applied Physics, 2004, 95, 3225-3227.	1.1	16
57	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
58	The growth of high quality GaMnAs films by MBE. Journal of Materials Science: Materials in Electronics, 2004, 15, 727-731.	1.1	7
59	Light-emitting diodes based on GaMnAs/GaAs heterostructures. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 21, 1002-1006.	1.3	1
60	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
61	Sol-gel formation of ordered nanostructured doped ZnO films. Journal of Materials Chemistry, 2004, 14, 1087.	6.7	87
62	The growth of GaMnAs films by molecular beam epitaxy using arsenic dimers. Journal of Crystal Growth, 2003, 251, 311-316.	0.7	44
63	High-quality GaMnAs films grown with arsenic dimers. Journal of Crystal Growth, 2003, 247, 42-48.	0.7	88
64	Dc-transport properties of ferromagnetic (Ga,Mn)As semiconductors. Applied Physics Letters, 2003, 83, 320-322.	1.5	98
65	Graphical computing in the undergraduate laboratory: Teaching and interfacing with LabVIEW. American Journal of Physics, 2003, 71, 1062-1074.	0.3	26
66	Investigation of radiative recombination from Mn-related states in Ga1â^'xMnxAs. Applied Physics Letters, 2003, 83, 866-868.	1.5	5
67	Magnetoresistance and Hall effect in the ferromagnetic semiconductor Ga1â^'xMnxAs. Journal of Applied Physics, 2003, 93, 6787-6789.	1.1	56
68	High-Curie-temperature Ga1â^'xMnxAs obtained by resistance-monitored annealing. Applied Physics Letters, 2002, 81, 4991-4993.	1.5	318
69	Hall effect and hole densities in Ga1â^'xMnxAs. Applied Physics Letters, 2002, 81, 3010-3012.	1.5	125
70	Magnetoresistance oscillations in a periodic magnetic field due to internal Landau band structure. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 12, 212-215.	1.3	0
71	Quasi-ballistic transport of 2D electrons through magnetic barriers. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 12, 229-232.	1.3	4
72	Electrical transport of 2D electrons in non-uniform magnetic fields. Physica E: Low-Dimensional Systems and Nanostructures, 2001, 11, 171-176.	1.3	9

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73	Giant magnetoresistance induced by magnetic barriers. IEEE Transactions on Magnetics, 2001, 37, 1992-1994.	1.2	7
74	Magnetic force microscopy studies of the domain structure of Co/Pd multilayers in a magnetic field. Journal of Applied Physics, 2001, 89, 7534-7536.	1.1	14
75	The transport of 2D electrons through magnetic barriers. Physica E: Low-Dimensional Systems and Nanostructures, 2000, 7, 997-1000.	1.3	6
76	Quantum Hall effect breakdown in two-dimensional hole gases. Physica E: Low-Dimensional Systems and Nanostructures, 2000, 6, 136-139.	1.3	10
77	Transport properties of a two-dimensional electron gas due to a spatially random magnetic field. Physica E: Low-Dimensional Systems and Nanostructures, 2000, 6, 751-754.	1.3	8
78	Longitudinal and Hall resistance induced by large-amplitude magnetic barriers. Physica E: Low-Dimensional Systems and Nanostructures, 2000, 6, 755-758.	1.3	12
79	Boundary scattering in wet-etched InAs/GaSb heterostructure wires: with and without magnetic field. Semiconductor Science and Technology, 1999, 14, 478-483.	1.0	6
80	Quantum Hall effect breakdown of two dimensional hole gases. Microelectronic Engineering, 1999, 47, 35-37.	1.1	4
81	Gating of InAs/GaSb quantum wells using a silicon monoxide gate insulator. Applied Physics Letters, 1998, 73, 88-90.	1.5	6
82	Temperature dependence of large positive magnetoresistance in hybrid ferromagnetic/semiconductor devices. Applied Physics Letters, 1998, 72, 1724-1726.	1.5	55
83	Studies of the extreme quantum limit of 2D hole systems. Physica B: Condensed Matter, 1995, 211, 417-419.	1.3	2
84	High magnetic field millimetre and submillimetre spectroscopy of ultra-high mobility 2D hole systems. Physica B: Condensed Matter, 1995, 211, 440-443.	1.3	10
85	Quantum transport of p-type GaAs/(AlGa)As heterostructures grown on non-(100) substrates by molecular beam epitaxy. Microelectronics Journal, 1995, 26, 739-744.	1.1	5
86	Growth and characterization of p-type As heterostructures grown on high-index GaAs surfaces. Thin Solid Films, 1995, 267, 106-113.	0.8	3
87	Theoretical Calculation of Drag Component of Tensor M in Quantizing Magnetic Field. Communications in Theoretical Physics, 1995, 23, 11-18.	1.1	0
88	The effect of current, illumination and contact nature on equilibration between bulk and edge current-carrying states. Semiconductor Science and Technology, 1994, 9, 1455-1464.	1.0	6
89	The extreme quantum regime of 2D electron and hole systems. Physica B: Condensed Matter, 1994, 201, 301-314.	1.3	12
90	Growth and electrical transport properties of very high mobility twoâ€dimensional hole gases displaying persistent photoconductivity. Applied Physics Letters, 1994, 65, 2054-2056.	1.5	35

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91	Observation of the transition to an insulating state consistent with a Wigner solid in a high-density 2D hole gas. Physica B: Condensed Matter, 1993, 184, 95-99.	1.3	22
92	Observation of a spin polarization phase transition of the 4/3 fractional quantum Hall state in a high-mobility 2D hole system. Journal of Physics Condensed Matter, 1993, 5, L565-L570.	0.7	5
93	Magnetothermopower in silicon MOSFETs. Journal of Physics Condensed Matter, 1993, 5, 1355-1364.	0.7	5
94	Title is missing!. Journal of Physics Condensed Matter, 1993, 5, L449-L456.	0.7	8
95	A direct comparison of the quantized Hall resistance in high critical current gallium arsenide and silicon devices. Surface Science, 1992, 263, 112-115.	0.8	8
96	180Â° phase shift of phonon drag magnetothermopower oscillations in high mobility 2DEGs. Surface Science, 1992, 263, 183-186.	0.8	6
97	Direct comparison of the quantized Hall resistance in gallium arsenide and silicon. Physical Review Letters, 1991, 66, 969-973.	2.9	97
98	The effect of interface roughness scattering and background impurity scattering on the thermopower of a 2DEG in a Si MOSFET. Journal of Physics Condensed Matter, 1990, 2, 10401-10410.	0.7	19
99	Observation of the rectification fluctuations in a mesoscopic n+-GaAs wire. Journal of Physics Condensed Matter, 1990, 2, 5641-5645.	0.7	9
100	Observation of universal thermopower fluctuations. Physical Review Letters, 1990, 64, 2058-2061.	2.9	51
101	Universal thermopower and rectification fluctuations. Surface Science, 1990, 229, 326-330.	0.8	2
102	Photoemission studies on metallic glasses using synchrotron radiation. Materials Science and Engineering, 1988, 99, 265-267.	0.1	17
103	The electron transport properties of metallic glasses. Physics Reports, 1988, 170, 265-324.	10.3	243
104	The thermopower of Si inversion layers. Semiconductor Science and Technology, 1987, 2, 456-459.	1.0	24
105	The thermopower of metallic glasses. Journal of Physics F: Metal Physics, 1985, 15, 911-919.	1.6	27
106	The temperature dependence of the Hall coefficient of metallic glasses: further evidence for electron-electron interaction effects. Journal of Physics F: Metal Physics, 1984, 14, L225-L229.	1.6	22
107	Hybridization in amorphous metals. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1983, 47, 163-176.	0.6	72
108	The influence of small amounts of crystallinity on the transport properties of metallic glasses. Journal of Non-Crystalline Solids, 1983, 57, 251-263.	1.5	20

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109	The positive Hall coefficients of amorphous transition-metal alloys. Journal of Physics F: Metal Physics, 1983, 13, 119-128.	1.6	63
110	The thermoelectric powers and resistivities of amorphous transition metal alloys. Journal of Physics F: Metal Physics, 1982, 12, 1721-1741.	1.6	78
111	Thermoelectric powers of amorphous transition metal alloys and electron-phonon enhancement. Journal of Physics F: Metal Physics, 1981, 11, L207-L212.	1.6	67