David V Baxter

List of Publications by Year
in descending order

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102 papers	2,345 citations	236925 25 h-index	223800 46 g-index
105 all docs	105 docs citations	105 times ranked	2769 citing authors

#	Article	IF	Citations
1	Self-Assembled Virus-like Particles with Magnetic Cores. Nano Letters, 2007, 7, 2407-2416.	9.1	164
2	Neutron-antineutron oscillations: Theoretical status and experimental prospects. Physics Reports, 2016, 612, 1-45.	25.6	138
3	Fitting to magnetoresistance under weak localization in three dimensions. Journal De Physique, 1989, 50, 1673-1688.	1.8	118
4	Structure and stability of sputter deposited betaâ€tungsten thin films. Applied Physics Letters, 1994, 64, 3231-3233.	3.3	111
5	Anisotropic magnetoresistance inGa1â^'xMnxAs. Physical Review B, 2002, 65, .	3.2	107
6	Measurement of resistance and spin-memory loss (spin relaxation) at interfaces using sputtered current perpendicular-to-plane exchange-biased spin valves. Physical Review B, 2000, 62, 1178-1185.	3.2	93
7	Mechanistic Role of H2O and the Ligand in the Chemical Vapor Deposition of Cu, Cu2O, CuO, and Cu3N from Bis(1,1,1,5,5,5-hexafluoropentane-2,4-dionato)copper(II). Chemistry of Materials, 1995, 7, 1589-1596.	6.7	84
8	Magnetic Virus-like Nanoparticles in N. benthamiana Plants: A New Paradigm for Environmental and Agronomic Biotechnological Research. ACS Nano, 2011, 5, 4037-4045.	14.6	84
9	Molecular Routes to Metal Carbides, Nitrides, and Oxides. 2. Studies of the Ammonolysis of Metal Dialkylamides and Hexamethyldisilylamides. Chemistry of Materials, 1996, 8, 1222-1228.	6.7	76
10	Structure and Properties of Iron Oxide Nanoparticles Encapsulated by Phospholipids with Poly(ethylene glycol) Tails. Journal of Physical Chemistry C, 2007, 111, 18078-18086.	3.1	70
11	Multiple Bonds between Metal Atoms in Ordered Assemblies. 2. Quadrupole Bonds in the Mesomorphic State. Journal of the American Chemical Society, 1994, 116, 4551-4566.	13.7	60
12	Hydrophilic Monodisperse Magnetic Nanoparticles Protected by an Amphiphilic Alternating Copolymer. Journal of Physical Chemistry C, 2008, 112, 16809-16817.	3.1	59
13	Magnetic nanoparticles with functional silanes: evolution of well-defined shells from anhydride containing silane. Journal of Materials Chemistry, 2009, 19, 4231.	6.7	53
14	Theoretical studies of electron transfer in metal dimers: XY+â†'X+Y, where X, Y=Be, Mg, Ca, Zn, Cd. Journal of Chemical Physics, 1987, 87, 926-935.	3.0	49
15	Status of the low energy neutron source at Indiana University. Nuclear Instruments & Methods in Physics Research B, 2005, 241, 209-212.	1.4	45
16	Quantum-Critical Conductivity Scaling for a Metal-Insulator Transition. Science, 2000, 287, 633-636.	12.6	44
17	Positive Hall effect in paramagnetic amorphous Zr-Fe. Physical Review B, 1988, 37, 4499-4501.	3.2	43
18	A New Cold Neutron Imaging Instrument at NIST. Physics Procedia, 2015, 69, 48-54.	1.2	38

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19	Syntheses, Structures, and Thermal Behavior of Cu(hfacac) Complexes Derived from Ethanolamines. Inorganic Chemistry, 1997, 36, 2930-2937.	4.0	34
20	High-temperature Hall effect inGa1â^'xMnxAs. Physical Review B, 2004, 69, .	3.2	33
21	New high-sensitivity searches for neutrons converting into antineutrons and/or sterile neutrons at the HIBEAM/NNBAR experiment at the European Spallation Source. Journal of Physics G: Nuclear and Particle Physics, 2021, 48, 070501.	3.6	33
22	Chemical Vapor Deposition of Metal Fluorides Using Sodium and Zirconium Fluoroalkoxides. Chemistry of Materials, 1994, 6, 1684-1692.	6.7	31
23	Chemical vapour deposition of electrochromic tungsten oxide films employing volatile tungsten(VI) oxo alkoxide/Î²-diketonate complexes. Chemical Communications, 1996, , 1129-1130.	4.1	30
24	Low pressure chemical vapor deposition of metallic films of iron, manganese, cobalt, copper, germanium and tin employing bis(trimethyl)silylamido complexes, M(N(SiMe3)2)n. Chemical Vapor Deposition, 1995, 1, 49-51.	1.3	27
25	Superconducting magnetic Wollaston prism for neutron spin encoding. Review of Scientific Instruments, 2014, 85, 053303.	1.3	27
26	Temperature-Frequency Scaling in Amorphous Niobium-Silicon near the Metal-Insulator Transition. Physical Review Letters, 1998, 80, 4261-4264.	7.8	26
27	Spin echo modulated small-angle neutron scattering using superconducting magnetic Wollaston prisms. Journal of Applied Crystallography, 2016, 49, 55-63.	4.5	26
28	Structure and Magnetic Alignment of Metalloporphyrazine Columnar Aggregates in Their Mesophases and Crystalline Phasesâ€. Chemistry of Materials, 2002, 14, 1930-1936.	6.7	25
29	M2(OR)6 compounds (M = Al, Mo, W; R = t-Bu, cy-Hex) as single-source precursors. Studies of thermolysis under helium flow. Chemistry of Materials, 1991, 3, 221-222.	6.7	24
30	Synthesis and Thermal and Hydrolytic Conversion of Heterometallic Copper Oxide-Alkoxides. Inorganic Chemistry, 1994, 33, 2167-2179.	4.0	24
31	Weak localization in two and three dimensions: Dephasing by zero-point motion. Physical Review Letters, 1987, 59, 1853-1855.	7.8	23
32	Spin echo small angle neutron scattering using a continuously pumped 3He neutron polarisation analyser. Review of Scientific Instruments, 2015, 86, 023902.	1.3	23
33	Electrical resistivity of icosahedral Mg-Al-Zn alloys. Physical Review B, 1987, 35, 4819-4822.	3.2	22
34	Resistance and spin-direction memory loss at Nb/Cu interfaces. Journal of Applied Physics, 1999, 85, 4545-4547.	2.5	22
35	Unveiling contextual realities by microscopically entangling a neutron. Nature Communications, 2020, 11, 930.	12.8	22
36	Synthesis and Thermolytic Behavior of Mixed-Valence Homo- and Heterometallic Group 14 Alkoxides. Inorganic Chemistry, 1998, 37, 2547-2553.	4.0	20

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37	Measurements of the Complex Conductivity ofNbxSi1âˆ’xAlloys on the Insulating Side of the Metal-Insulator Transition. Physical Review Letters, 2001, 87, 116602.	7.8	20
38	Quantum corrections to the conductivity in Mg-based metallic glasses. Physical Review B, 1988, 38, 10421-10429.	3.2	19
39	Molecular Routes for the Synthesis of Metal Carbides, Nitrides, and Oxides. 1. Studies of the Thermal Decomposition of M2(OR)6 and M2(CH2Ph)2(OR)4 Compounds Where M = Mo and W. Chemistry of Materials, 1995, 7, 84-92.	6.7	19
40	Synthesis, structural characterization, thermolysis and volatility study of the Schiff base complex Cu[CH3C(O)CHC(NCH2CH2OCH3)CH3]2. Polyhedron, 2001, 20, 2589-2595.	2.2	19
41	Effect of sputtering pressure on the structure and current-perpendicular-to-the-plane magnetotransport of Co/Ag multilayered films. Physical Review B, 1998, 58, 5602-5610.	3.2	18
42	A kinetic Monte Carlo simulation of chemical vapor deposition: non-monotonic variation of surface roughness with growth temperature. Surface Science, 2001, 477, 95-101.	1.9	17
43	Mixed Co/Fe Oxide Nanoparticles in Block Copolymer Micelles. Langmuir, 2008, 24, 12618-12626.	3.5	17
44	Design of a Cryogen Free Cryo-flipper using a High T YBCO Film. Physics Procedia, 2013, 42, 125-129.	1.2	14
45	High resolution neutron Larmor diffraction using superconducting magnetic Wollaston prisms. Scientific Reports, 2017, 7, 865.	3.3	14
46	Studies of Thermotropic Properties and the Mesophase of Mixtures ofn-Alkanoates and Perfluoro-n-alkanoates of Dimolybdenum (MM). Chemistry of Materials, 1998, 10, 1758-1763.	6.7	13
47	Performance of a polarised neutron cryo-flipper using a high TcYBCO film. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 722, 20-23.	1.6	13
48	Enhancing neutron beam production with a convoluted moderator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 762, 31-41.	1.6	13
49	Quantum corrections to the conductivity in Mg70Cu30âˆ’xAux, x = 0, 1, 3, 9, and Mg70Zn30âˆ’xAux, x = 0, 3. Materials Science and Engineering, 1988, 99, 183-186.	0.1	11
50	Kumaret al.Reply. Physical Review Letters, 1988, 60, 1987-1987.	7.8	11
51	Microscopic model for the neutron dynamic structure factor of solid methane in phase II. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 620, 382-390.	1.6	10
52	Moderators at LENS: Performance and Development Research. Physics Procedia, 2012, 26, 153-160.	1.2	10
53	Operator analysis of contextuality-witness measurements for multimode-entangled single-neutron interferometry. Physical Review A, 2020, 101, .	2.5	10
54	High frequency magnetoconductivity of disordered copper films. Solid State Communications, 1993, 85, 941-944.	1.9	9

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55	Neutron Moderator Development Research at the Low Energy Neutron Source. Physics Procedia, 2012, 26, 117-123.	1.2	9
56	LENS Operating Experience. Physics Procedia, 2012, 26, 161-167.	1.2	9
57	Anisotropic electron diffusion and weak localization in Cu/Al multilayers. Physical Review B, 1993, 48, 12202-12216.	3.2	8
58	Spin fluctuations in an amorphous alloy. Physical Review B, 1996, 54, 12238-12244.	3.2	8
59	Magnetic investigations of titanium-doped gamma iron oxides dispersed in polymers. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 3432-3437.	2.1	8
60	Measurements of the neutron brightness from a phase II solid methane moderator at the LENS neutron source. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 620, 375-381.	1.6	8
61	Neutron-state entanglement with overlapping paths. Physical Review Research, 2021, 3, .	3.6	8
62	LENSâ€"a pulsed neutron source for education and research. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 542, 28-31.	1.6	7
63	Magnetic field optimization and design of a superconducting neutron Wollaston prism. Journal of Physics: Conference Series, 2016, 711, 012015.	0.4	7
64	Compact spherical neutron polarimeter using high-Tc YBCO films. Review of Scientific Instruments, 2016, 87, 033901.	1.3	7
65	Materials and neutronic research at the Low Energy Neutron Source. European Physical Journal Plus, 2016, 131, 1.	2.6	7
66	Chemical applications of scanning tunneling microscopy. IBM Journal of Research and Development, 1986, 30, 484-491.	3.1	6
67	Structure of quasi-crystalline Alî—¸Mnî—¸Ru: X-ray and neutron studies. Materials Science and Engineering, 1988, 99, 345-348.	0.1	6
68	Effects of weak localization and superconducting fluctuations on the frequency dependence of the conductivity in copper-semiconductor sandwiches. Physical Review B, 1994, 50, 2606-2621.	3.2	6
69	Neutron spin manipulation devices using YBCO films. Journal of Physics: Conference Series, 2014, 528, 012024.	0.4	6
70	Study of ferromagnetismâ€"superconductivity interactions in Co/Nb multilayers. Journal of Magnetism and Magnetic Materials, 2006, 304, e97-e99.	2.3	5
71	Uniform beam intensity redistribution in the LENS nonlinear transport line. , 2007, , .		5
72	In-situ Polarized³He-Based Neutron Polarization Analyzer for SNS Magnetism Reflectometer. Journal of Physics: Conference Series, 2010, 251, 012086.	0.4	5

#	Article	IF	Citations
73	Measuring transport anisotropy in Cu/Si multilayers using weak localization. Journal of Physics Condensed Matter, 1996, 8, 1389-1401.	1.8	4
74	A two-step low pressure chemical vapour deposition process for the production of tungsten metal thin films. Chemical Communications, 1998, , 1447-1448.	4.1	4
75	Demonstration of a single-crystal reflector-filter for enhancing slow neutron beams. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 830, 454-460.	1.6	4
76	An efficient and cost-effective microchannel plate detector for slow neutron radiography. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 891, 53-57.	1.6	4
77	EXAFS studies of La1â^'xGax metallic glasses. Journal of Non-Crystalline Solids, 1986, 79, 41-55.	3.1	3
78	Lowâ€angle xâ€ray diffraction withinsituannealing: Application to W/Cu multilayers. Journal of Applied Physics, 1993, 74, 4331-4338.	2.5	3
79	Introducing single-crystal scattering and optical potentials into MCNPX: Predicting neutron emission from a convoluted moderator. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 814, 39-49.	1.6	3
80	EXAFS studies of the metallic glass La80Ga20. Journal of Non-Crystalline Solids, 1984, 61-62, 409-414.	3.1	2
81	Limits to weak localization in Ca70Mg30â^'xAlx. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1991, 133, 90-93.	5.6	2
82	Giant Magnetoresistance and Oscillation in Epitaxial Fe/Cr(111) Multilayers. Materials Research Society Symposia Proceedings, 1995, 384, 353.	0.1	2
83	Superconductivity in layered Ge/Cu films. Scripta Materialia, 1995, 6, 811-814.	0.5	2
84	Transport anisotropy and dimensional crossover in Ag/Ge multilayers. Journal of Magnetism and Magnetic Materials, 1996, 156, 359-361.	2.3	2
85	Conductivity studies of quantum-critical dynamics. Ferroelectrics, 1996, 176, 239-247.	0.6	2
86	The Neutron Radiation Effects Program (NREP) at Indiana University Cyclotron Facility. , 2006, , .		2
87	Ferromagnetic resonance investigations on Ga0.965Mn0.035As film. Journal of Applied Physics, 2006, 99, 113908.	2.5	2
88	Upgrade of the LENS Proton LINAC: Commissioning and results. , 2007, , .		2
89	Compact ultracold neutron source concept for low-energy accelerator-driven neutron sources. European Physical Journal Plus, 2021, 136, 1.	2.6	2
90	LENS: A new pulsed neutron source for research and education. Journal of Research of the National Institute of Standards and Technology, 2005, 110, 153.	1.2	2

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91	Crystallization of icosahedral Alî—¸Mnî—¸Si. Materials Science and Engineering, 1988, 99, 399-402.	0.1	1
92	Synthesis and structural characterization of tricarbomethoxymethanate complexes of copper(II) and barium(II) and evaluation of their suitability for MOCVD applications. New Journal of Chemistry, 2001, 25, 400-407.	2.8	1
93	A University Based Cold Neutron Source. AIP Conference Proceedings, 2003, , .	0.4	1
94	Non-Linear Beam Transport for the Lens 7 MeV Proton Beam. , 0, , .		1
95	LENS: 2013 Facility Overview. Physics Procedia, 2014, 60, 175-180.	1.2	1
96	Characterization of a Liquid Ammonia Moderator. Journal of Physics: Conference Series, 2018, 1021, 012067.	0.4	1
97	Neutron instrumentation research at the Low Energy Neutron Source. Neutron News, 2020, 31, 44-47.	0.2	1
98	Thermal Expansion and Relaxation of W-Cu Multilayers. Materials Research Society Symposia Proceedings, 1992, 286, 367.	0.1	0
99	Anisotropic Electron Transport in Cu/Al Multilayers. Materials Research Society Symposia Proceedings, 1992, 286, 397.	0.1	0
100	A measurement of the change of the energy dependence of the total cross-section of phase II solid methane from confinement in aerogel glass. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 425-430.	1.4	0
101	Activities of an IAEA Coordinated Research Project on Advanced Cold Moderators. Neutron News, 2019, 30, 19-22.	0.2	0
102	Anisotropic Electron Transport in Metallic Multilayers. , 1994, , 415-422.		0