

M Brian Maple

List of Publications by Year in descending order

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149
papers

5,149
citations

136740

32
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91712

69
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150
all docs

150
docs citations

150
times ranked

3781
citing authors

#	ARTICLE	IF	CITATIONS
1	Superconductivity and heavy fermion behavior in PrOs ₄ Sb ₁₂ . Physical Review B, 2002, 65, .	1.1	658
2	Partially gapped Fermi surface in the heavy-electron superconductor URu ₂ Si ₂ . Physical Review Letters, 1986, 56, 185-188.	2.9	624
3	Electronic correlations in the iron pnictides. Nature Physics, 2009, 5, 647-650.	6.5	317
4	UFe ₄ P ₁₂ and CeFe ₄ P ₁₂ : Nonmetallic isotypes of superconducting LaFe ₄ P ₁₂ . Journal of Applied Physics, 1985, 57, 3073-3075.	1.1	226
5	c-axis Josephson Tunneling between YBa ₂ Cu ₃ O _{7-δ} and Pb: Direct Evidence for Mixed Order Parameter Symmetry in a High-T _c Superconductor. Physical Review Letters, 1997, 79, 3050-3053.	2.9	195
6	Infrared spectroscopy and nano-imaging of the insulator-to-metal transition in vanadium dioxide. Physical Review B, 2009, 79, .	1.1	164
7	Limits on superconductivity-related magnetization in $\text{Sr}_2\text{PrOs}_4\text{Sb}_{12}$ $\text{Sr}_2\text{PrOs}_4\text{Sb}_{12}$ $\text{PrOs}_4\text{Sb}_{12}$ Physical Review B, 2010, 81, .	1.1	146
8	Kondo insulating behaviour in the filled skutterudite compound CeOs ₄ Sb ₁₂ . Journal of Physics Condensed Matter, 2001, 13, 4495-4503.	0.7	135
9	Superconductivity in $\text{La}_x\text{Ce}_{1-x}\text{Os}_4\text{Sb}_{12}$ $\text{La}_x\text{Ce}_{1-x}\text{Os}_4\text{Sb}_{12}$ $\text{La}_x\text{Ce}_{1-x}\text{Os}_4\text{Sb}_{12}$		

#	ARTICLE	IF	CITATIONS
19	Optical signatures of Dirac nodal lines in NbAs ₂ . Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 1168-1173.	3.3	60
20	Incommensurate Spin Fluctuations in the Spin-Triplet Superconductor Candidate URuTe_2 . Physical Review Letters, 2020, 125, 237003.	2.9	60
21	Ferromagnetism and possible heavy-fermion behavior in single crystals of NdOs ₄ Sb ₁₂ . Physical Review B, 2005, 72, .	1.1	59
22	Antiferromagnetic critical pressure in URu_2Si_5 hydrostatic conditions. Physical Review B, 2010, 82, .	1.1	55
23	Non-Fermi Liquid Regimes and Superconductivity in the Low Temperature Phase Diagrams of Strongly Correlated d- and f-Electron Materials. Journal of Low Temperature Physics, 2010, 161, 4-54.	0.6	54
24	Superconductivity of La_3Bi_5 . Physical Review B, 2014, 89, .	1.4	58
25	Pd/Cu Site Interchange and Non-Fermi-Liquid Behavior in UCu ₄ Pd. Physical Review Letters, 1998, 81, 3960-3963.	2.9	52
26	Evolution of the Kondo lattice electronic structure above the transport coherence temperature. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 23467-23476. magnetic and electric transport properties of Ce	3.3	40
27	RhSn_4 . Degree of Rh_5f	1.1	38
28	localization in URu_2Si_5 . Electron energy-loss spectroscopy and spin-orbit sum rule. Physical Review B, 2010, 82, .	1.1	36
29			

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37	Analogy Between the "Hidden Order" and the Orbital Antiferromagnetism in URu_2Si_2 . Physical Review Letters, 2016, 117, 227601.	2.9	28
38	Field-dependent ordered phases and Kondo phenomena in the filled skutterudite compound $PrOs_4As_{12}$. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 6783-6789.	3.3	27
39	Search for pressure-induced superconductivity in $CeFeAsO$ and $CeFePO$ iron pnictides. Physical Review B, 2011, 83, .	1.1	26
40	Ferromagnetic quantum critical point in UCo_1-xFe_x . Physical Review B, 2013, 87, .	1.1	26
41	Evidence of modified ferromagnetism at a buried Permalloy/CoO interface at room temperature. Physical Review B, 2007, 75, .	1.1	25
42	Yb valence change in $Ce_{1-x}Yb_xCoIn_5$ from spectroscopy and bulk properties. Physical Review B, 2013, 88, .	1.1	25
43	From antiferromagnetic and hidden order to Pauli paramagnetism in URu_2Si_2 compounds with f electron duality. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 30220-30227.	3.3	25
44	The evolution of the ordered states of single-crystal URu_2Si_2 under pressure. Journal of Physics Condensed Matter, 2008, 20, 095225.	0.7	24
45	Probing the superconductivity of $PrPt_{1-x}Ce_x$ Ce substitution. Physical Review B, 2014, 89, .	1.1	24
46	Phase diagram and thermal expansion measurements on the system $URu_2\hat{a}^x Fe_x Si_2$. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13348-13353.	3.3	23
47	Spatio-temporal dynamics of oscillatory heterogeneous catalysis: CO oxidation on platinum. Journal of Chemical Physics, 1995, 102, 8614-8625.	1.2	22
48	Effect of yttrium substitution on the superconducting properties of $La_{1-x}Y_xCoIn_5$. Physical Review B, 2008, 77, .	1.1	21
49	Multiple state of URu_2Si_2 . Physical Review B, 2008, 77, .	1.1	20
50	$\tilde{\Gamma}$ -3-Type Lattice Instability and the Hidden Order of URu_2Si_2 . Journal of the Physical Society of Japan, 2013, 82, 013601.	0.7	20
51	Hybridization-driven orthorhombic lattice instability in URu_2Si_2 . Physical Review B, 2013, 88, .	1.1	18
52	Investigation of magnetic order in SmT_2Zn . Physical Review B, 2013, 88, .	1.1	18

#	ARTICLE	IF	CITATIONS
55	Broken time-reversal symmetry in superconducting $\text{Pr}_{1-x}\text{Ce}_x\text{Pt}_4\text{Ge}_{12}$. Physical Review B, 2015, 91, .	1.1	17
56	Evolution of critical pressure with increasing Fe substitution in the heavy-fermion system URu_2Si_2 . Physical Review B, 2016, 94, .	1.1	16
57	Polar Kerr Effect from Time-Reversal Symmetry Breaking in the Heavy-Fermion Superconductor $\text{PrOs}_4\text{Sb}_{12}$. Physical Review Letters, 2018, 120, 187004.	2.9	16
58	Nuclear magnetic resonance studies of pseudospin fluctuations in URu_2Si_2 . Physical Review B, 2013, 88, .	1.1	15
59	Magnetic and structural phase transitions in UAu_2Si_2 . Journal of Applied Physics, 1991, 69, 4810-4812.	1.1	14
60	The structure of the 21K superconductor ThPd_6B_6 , determined by quantitative electron diffraction and through-focus electron holography. Philosophical Magazine Letters, 1995, 71, 131-138.	0.5	14
61	Distinct magnetic spectra in the hidden order and antiferromagnetic phases in URu_2Si_2 . Physical Review B, 2016, 94, .	1.1	14
62	Nature of the spin resonance mode in CeCoIn_5 . Communications Physics, 2020, 3, .	2.0	14
63	In situ layer-by-layer growth of $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ thin films by multitarget sputter deposition. Applied Physics Letters, 1992, 61, 2826-2828.	1.5	13
64	Atomic Displacement Parameters: A Useful Tool in the Search for New Thermoelectric Materials?. Materials Research Society Symposia Proceedings, 1998, 545, 13.	0.1	13
65	High pressure transport studies of the LiFeAs analogs CuFeTe_2 and FeAs_2 . Superconductor Science and Technology, 2012, 25, 084018.	1.8	13
66	Superconducting gap structure in ambient-pressure-grown $\text{LaO}_{1-x}\text{F}_x\text{BiS}$. Physical Review B, 2016, 94, .	1.1	13
67	Spatial coupling in heterogeneous catalysis. Journal of Chemical Physics, 1995, 103, 8209-8215.	1.2	12
68	Kondo resonance behavior of heavy fermion f-electron materials (invited). Journal of Applied Physics, 2000, 87, 6088-6091.	1.1	12
69	Unusual local disorder in $\text{NdOs}_4\text{Sb}_{12}$ and $\text{PrOs}_4\text{Sb}_{12}$ kutterudites. Physical Review B, 2012, 86, .	1.1	12
70	Phase diagram of $\text{URu}_2\text{Fe}_2\text{Si}_2$ in high magnetic fields. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 9826-9831.	3.3	12
71	Search for multipolar instability in URu_2Si_2 studied by ultrasonic measurements under pulsed magnetic field. Physical Review B, 2018, 97, .	1.2	12
72	Superconductors: Induction of superconductivity by applied magnetic fields. Nature, 1985, 315, 95-96.	13.7	11

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73	Universality in the magnetic response of metamagnetic metals. Physical Review B, 2014, 89, .	1.1	11
74	Effect of atomic disorder and Ce doping on superconductivity of $\text{Ca}_{1-x}\text{Ce}_x\text{FeAs}_2$. Electric transport properties under high pressure. Physical Review B, 2016, 93, .	1.1	11
75	Enhancing superconductivity of YRh_6Sb_7 by atomic disorder. Physical Review B, 2020, 102, .	1.1	11
76	Hydrostaticity and hidden order: effects of experimental conditions on the temperature-pressure phase diagram of URu_2Si_2 . High Pressure Research, 2009, 29, 335-343.	0.4	10
77	Quantum Critical Scaling in the Disordered Itinerant Ferromagnet $\text{UCo}_{1-x}\text{Fe}_x\text{Ge}$. Physical Review Letters, 2016, 117, 237202.	2.9	10
78	^{171}Yb SR studies of heavy fermion systems. Hyperfine Interactions, 1991, 64, 517-522.	0.2	9
79	Resonant photoemission spectroscopy of the quenched superconductivity system $\text{Y}_{1-x}\text{Pr}_x\text{Ba}_2\text{Cu}_3\text{O}_{7-x}$ single crystals. Physical Review B, 2002, 66, .	1.1	9
80	Scaling behavior of angular-dependent resistivity in CeCoIn_5 : Possible evidence for d-wave density waves. Physical Review B, 2006, 73, .	1.1	9
81	Superconductivity, magnetic order, and quadrupolar order in the filled skutterudite system $\text{Pr}_{1-x}\text{Nd}_x\text{Os}_4\text{Sb}_{12}$. Physical Review B, 2011, 83, .	1.1	9
82	Pressure-induced superconductivity in LaFeAsO : The role of anionic height and magnetic ordering. Applied Physics Letters, 2014, 105, .	1.5	9
83	From local moment to mixed-valence regime in $\text{Ce}_{1-x}\text{Yb}_x\text{CoIn}_5$ alloys. Physical Review B, 2014, 89, .	1.1	9
84	Electrodynamics of the antiferromagnetic phase in URu_2Si_2 . Physical Review B, 2015, 92, .	1.1	8
85	Specific heat of nickel diglycine dihydrate between 0.5 and 10 K. Journal of Applied Physics, 1982, 53, 2671-2673. Neutron scattering study of URu_2Si_2 . Physical Review B, 2015, 92, .	1.1	8
86	Neutron scattering study of URu_2Si_2 . Physical Review B, 2015, 92, .	1.1	8
87	Electrical resistivity of single crystals of LaFeAsO under applied pressure. Physical Review B, 2014, 90, .	1.1	8
88	Complex vibrations in arsenide skutterudites and oxyskutterudites. Physical Review B, 2015, 91, .	1.1	8
89	Isoelectronic perturbations to f - d -electron hybridization and the enhancement of hidden order in URu_2Si_2 . Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	8
90	Correlations between T_c and n/m^* (carrier density/ effective mass) in high- T_c and organic superconductors. Hyperfine Interactions, 1991, 63, 131-137.	0.2	7

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91	TRANSITION FROM HEAVY FERMION METAL TO 16 K SUPERCONDUCTOR IN SINGLE CRYSTAL YbxLu(1-x)Ni2B2C: TRANSPORT STUDIES. International Journal of Modern Physics B, 1999, 13, 3725-3728.	1.0	7
92	Magnetotransport properties of single-crystalline LaFeAsO. Physical Review B, 2013, 88, .	1.1	7
93	Muon spin rotation and relaxation in Pr1-xNdxCe4Sb12: Magnetic and superconducting ground states. Physical Review B, 2014, 89, .	1.1	7
94	Epitaxial stabilization of ultra thin films of electron doped manganites. Applied Physics Letters, 2014, 104, 202409.	1.5	7
95	Fermi-surface topologies and low-temperature phases of the filled skutterudite compounds $CeOs_4$ and $NdOs_4$. Physical Review B, 2016, 94, .	1.1	7
96	Universal heat conduction in $Ce_{1-x}Yb_xCoIn_5$: Evidence for robust nodal-wave superconducting gap. Physical Review B, 2016, 93, .	1.1	7
97	Unusual phase boundary of the magnetic-field-tuned valence transition in $CeOs_4Sb_{12}$. Physical Review B, 2020, 101, .	1.1	7
98	Resonant Magnetization Tunneling in Single-Molecule Magnets. Molecular Crystals and Liquid Crystals, 1999, 335, 371-389.	0.3	6
99	Thermal and magnetic properties of the low-temperature antiferromagnet Ce_4 . Physical Review B, 2010, 82, .	1.1	6
100	Low-temperature electrical resistivity of praseodymium at pressures up to 120 GPa. Physical Review B, 2011, 84, .	1.1	6
101	Landau Renormalizations of Superfluid Density in the Heavy-Fermion Superconductor $CeCoIn_5$. Physical Review Letters, 2014, 113, 166401.	2.9	6
102	Superconducting and normal state properties of the systems $La_{1-x}M_xPt_4Ge_{12}$ (M = Ce, Th). Physical Review B, 2016, 94, .	1.1	6
103	Temperature versus Sm concentration phase diagram and quantum criticality in the correlated electron system $Ce_{1-x}Sm_x$. Physical Review B, 2018, 97, .	1.1	6
104	Muon spin relaxation in ErRh4B4. Journal of Applied Physics, 1985, 57, 3197-3199.	1.1	5
105	Effects of local reactant concentration perturbations in oscillatory catalysis. Journal of Chemical Physics, 1998, 108, 5565-5570.	1.2	5
106	Signatures of pressure-induced superconductivity in insulating Bi_2 . Physical Review B, 2010, 81, .	1.1	5
107	Pressure effects in the itinerant antiferromagnetic metal TiAu. Physical Review B, 2017, 95, .	1.1	5
108	Measurements of the NMR Knight shift tensor and nonlinear magnetization in URu2Si2. Physical Review B, 2018, 97, .	1.1	5

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109	From hidden order to antiferromagnetism: Electronic structure changes in Fe-doped URu ₂ Si ₂ . Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	5
110	Spectroscopic evidence for the direct involvement of local moments in the pairing process of the heavy-fermion superconductor $CeCoIn_5$. Physical Review B, 2021, 103, .	1.1	5
111	Magnetic Structure of PrFe ₄ As ₁₂ Skutterudite $\hat{a}c$ Polarised Neutron Study. Journal of the Physical Society of Japan, 2011, 80, SA012.	0.7	4
112	Intrinsic dependence of T_c on hydrostatic (He-gas) pressure for superconducting LaFePO, PrFePO, and NdFePO single crystals. Physical Review B, 2012, 86, .	1.1	4
113	Paramagnetic Sb_{12} $Pr_{1-x}Nd_x$ $Os_{4-x}Sb_{12-x}$ $Sb_{12-x}Co_x$: Paramagnetic Sb_{12}	1.1	4
114	Probing strong Kondo disorder with measurements of thermoelectric power. Physical Review B, 2014, 90, .	1.1	4
115	Renormalizations in unconventional superconducting states of Ce _{1-x} Yb _x CoIn ₅ . Physical Review B, 2019, 99, .	1.1	4
116	Origin of gaplike behaviors in URu ₂ Si ₂ : Combined study via quasiparticle scattering spectroscopy and resistivity measurements. Physical Review B, 2020, 102, .	1.1	4
117	Global perspectives of the bulk electronic structure of URu ₂ Si ₂ from angle-resolved photoemission. Electronic Structure, 2022, 4, 013001.	1.0	4
118	Inelastic neutron scattering study of crystal field levels in $Pr_{1-x}Os_x$ $Pr_{1-x}Os_x$ $As_{12-x}Sb_x$.	1.1	3
119	Magnetism of $Pd_{1-x}Ni_x$ near the critical concentration for ferromagnetism. Physical Review B, 2014, 89, .		
120	Correlation of structural, magnetic, and electronic transitions of a novel charge-gradient YBa ₂ X		
121	Rapid suppression of the energy gap and the possibility of a gapless hidden order state in URu _{2-x} RexSi ₂ . Philosophical Magazine, 2019, 99, 1751-1762.	0.7	3
122	Quadrupolar susceptibility and magnetic phase diagram of PrNi ₂ Cd ₂₀ with non-Kramers doublet ground state. Philosophical Magazine, 2020, 100, 1268-1281.	0.7	3
123	Evolution of non-Kramers doublets in magnetic field in $PrNi_2$ and $PrPd_2$. Physical Review B, 2021, 104, .	1.1	3
124	Interaction between TLS and the conduction electrons in actinide arsenoselenides: a high-pressure study. Physica Status Solidi (B): Basic Research, 2003, 236, 351-355.	0.7	2
125	Superconducting and magnetic anisotropy of L_n FePO (T_c)	1.1	2
126	Pressure studies of the quantum critical alloy Ce _{0.93} Yb _{0.07} CoIn ₅ . Physical Review B, 2015, 91, .	1.1	2

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127	EXAFS investigation of the local structure in URu ₂ xFeSi ₂ : Evidence for distortions below 100 K. Physical Review B, 2020, 102, .	1.1	2
128	Anomalous Pressure Dependences of the Superconducting Transition Temperature of Graphite Intercalation Compounds. Materials Research Society Symposia Proceedings, 1982, 20, 195.	0.1	1
129	Summary Abstract: Electron spin resonance studies of electron transport across the metal-silicon interface. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1987, 5, 985.	1.6	1
130	Oxygen dependence of the magnetic rare-earth ordering in SmBa ₂ Cu ₃ O _x . European Physical Journal D, 1996, 46, 2103-2104.	0.4	1
131	Quadrupole Effect in the Filled Skutterudite Compound PrOs ₄ As ₁₂ . Journal of the Physical Society of Japan, 2008, 77, 225-228.	0.7	1
132	Local distortions about Nd in NdOs ₄ Sb ₁₂ . Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 250-253.	0.8	1
133	Crystalline Electric Field and Kondo Effect in SmOs ₄ Sb ₁₂ . Journal of the Physical Society of Japan, 2016, 85, 043704.	0.7	1
134	Examination of the Thermal Annealing Process in Producing YBa ₂ Cu ₃ O _x Films and Characterization of Pressure Stabilized Oxygen Chain States. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.1	1
135	Emergence of higher order rotational symmetry in the hidden order phase of URuSi. Philosophical Magazine, 2017, 97, 144-154.	0.7	1
136	Quasiparticle relaxation dynamics in URu ₂ xFeSi ₂ single crystals. Physical Review B, 2019, 99, .		
137	Ungapped magnetic excitations beyond Hidden Order in URu ₂ xReSi ₂ . Philosophical Magazine, 2020, 100, 1282-1288.	0.7	1
138	Pressure-induced shift of effective Ce valence, Fermi energy and phase boundaries in CeOs ₄ Sb ₁₂ . New Journal of Physics, 2022, 24, 043044.	1.2	1
139	Interactions of heavy electrons. Nature, 1987, 328, 200-201.	13.7	0
140	Evolution from a Fermi towards a non-Fermi-liquid ground state in U _{1-x} Th _x Pd ₂ Al ₃ investigated by optical methods. Ferroelectrics, 1996, 176, 361-369.	0.3	0
141	Unconventional flux dynamics in the low-field superconducting phases of UPt ₃ . European Physical Journal D, 1996, 46, 771-772.	0.4	0
142	Modification of Magnesium Diboride Properties Using Shock Loading and Hot Isostatic Pressing. AIP Conference Proceedings, 2004, , .	0.3	0
143	Anomalous Resistivity of CeCoIn ₅ Single Crystals. AIP Conference Proceedings, 2006, , .	0.3	0
144	Scaling of Conductivity through the Critical Temperature in Y _{0.54} Pr _{0.46} Ba ₂ Cu ₃ O ₇ . AIP Conference Proceedings, 2006, , .	0.3	0

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145	Angular Resistivity Study in CeCoIn ₅ Single Crystals. AIP Conference Proceedings, 2006, , .	0.3	0
146	Hidden low-temperature instability in PrOs ₄ Sb ₁₂ . Physica Status Solidi (B): Basic Research, 2010, 247, 571-573.	0.7	0
147	The pressure-temperature phase diagram of URu ₂ Si ₂ under hydrostatic conditions. Materials Research Society Symposia Proceedings, 2010, 1264, 1.	0.1	0
148	Comment on "Details of Sample Dependence and Transport Properties of URu ₂ Si ₂ ". Journal of the Physical Society of Japan, 2012, 81, 056001.	0.7	0
149	Simultaneous Measurements of Elastic Constant and Resistivity near the T_c of Non-BCS-Type Superconductor PrOs ₄ Sb ₁₂ . , 2014, , .		0