

# John Singleton

## List of Publications by Year in descending order

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94  
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236925  
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98  
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98  
times ranked

2373  
citing authors

#	ARTICLE	IF	CITATIONS
1	Evidence for a delocalization quantum phase transition without symmetry breaking in CeColn<sub>5</sub>. Science, 2022, 375, 76-81.	12.6	21
2	Pseudogap in elemental plutonium. Physical Review B, 2022, 105, .	3.2	1
3	Pressure-induced shift of effective Ce valence, Fermi energy and phase boundaries in CeOs<sub>4</sub>Sb<sub>12</sub>. New Journal of Physics, 2022, 24, 043044.	2.9	1
4	Magneto-structural Correlations in Ni<sup>2+</sup>â€“Halideâ€“Halide<sup>2+</sup> Chains. Inorganic Chemistry, 2022, 61, 141-153.	4.0	2
5	Hall Anomaly, Quantum Oscillations and Possible Lifshitz Transitions in Kondo Insulator <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>YbB</mml:mi></mml:mrow><mml:mrow><mml:mn>12</mml:mn></mml:mrow><mml:mi>12</mml:mi></mml:mrow> : Evidence for Unconventional Charge Transport. Physical Review X, 2022, 12, .	8.9	1
6	Resonant torque differential magnetometry with high frequency quartz oscillators. Review of Scientific Instruments, 2022, 93, .	1.3	0
7	Tracking the evolution from isolated dimers to many-body entanglement in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>NaLu</mml:mi></mml:msub><mml:mi>x</mml:mi></mml:msub><mml:mi>x</mml:mi></mml:msub><mml:mi>1</mml:mi></mml:msub><mml:mi>x</mml:mi></mml:msub><mml:mi>x</mml:mi></mml:msub><mml:mi>2</mml:mi></mml:msub></mml:math>. Physical Review B, 2022, 106, .	1	0
8	Composite pressure cell for pulsed magnets. Review of Scientific Instruments, 2021, 92, 023903.	1.3	1
9	Controlling Magnetic Anisotropy in a Zero-Dimensional <i>S</i> = 1 Magnet Using Isotropic Cation Substitution. Journal of the American Chemical Society, 2021, 143, 4633-4638.	13.7	3
10	Observation of cyclotron resonance and measurement of the hole mass in optimally doped <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>La</mml:mi></mml:mrow><mml:mi>12</mml:mi></mml:msub></mml:math>. Physical Review B, 2021, 103, .	1	0
11	Unusual high-field metal in a Kondo insulator. Nature Physics, 2021, 17, 788-793.	16.7	24
12	Topological surface conduction in Kondo insulator YbB<sub>12</sub>. Journal Physics D: Applied Physics, 2021, 54, 404002.	2.8	11
13	Evidence for a delocalization quantum phase transition without symmetry breaking in CeColn. Science, 2021, , eaaz4566.	12.6	0
14	Non-monotonic pressure dependence of high-field nematicity and magnetism in CeRhIn5. Nature Communications, 2020, 11, 3482.	12.8	9
15	Information Carried by Electromagnetic Radiation Launched from Accelerated Polarization Currents. Physical Review Applied, 2020, 14, .	3.8	1
16	Fermi surface topology and nontrivial Berry phase in the flat-band semimetal Pd3Pb. Physical Review B, 2020, 101, .	3.2	1
17	Cryogenic goniometer for measurements in pulsed magnetic fields fabricated via additive manufacturing technique. Review of Scientific Instruments, 2020, 91, 036102.	1.3	5
18	Unusual phase boundary of the magnetic-field-tuned valence transition in CeOs4Sb12. Physical Review B, 2020, 101, .	3.2	7

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19	Enhancing easy-plane anisotropy in bespoke Ni(II) quantum magnets. <i>Polyhedron</i> , 2020, 180, 114379.	2.2	10
20	Temperature scaling behavior of the linear magnetoresistance observed in high-temperature superconductors. <i>Physical Review Materials</i> , 2020, 4, .	2.4	7
21	Near-ideal molecule-based Haldane spin chain. <i>Physical Review Research</i> , 2020, 2, .	3.6	9
22	Half-magnetization plateau and the origin of threefold symmetry breaking in an electrically switchable triangular antiferromagnet. <i>Physical Review Research</i> , 2020, 2, .	3.6	14
23	Spin-lattice and electron-phonon coupling in 3d/5d hybrid Sr <sub>3</sub> NiIrO <sub>6</sub> . <i>Npj Quantum Materials</i> , 2019, 4, .	5.2	6
24	Unconventional thermal metallic state of charge-neutral fermions in an insulator. <i>Nature Physics</i> , 2019, 15, 954-959.	16.7	35
25	Determining the anisotropy and exchange parameters of polycrystalline spin-1 magnets. <i>New Journal of Physics</i> , 2019, 21, 093025.	2.9	7
26	Magnetic field-temperature phase diagram of multiferroic (NH <sub>4</sub> ) <sub>2</sub> FeCl <sub>5</sub> ·H <sub>2</sub> O. <i>Npj Quantum Materials</i> , 2019, 4, .	5.2	10
27	Magnetoelectric behavior via a spin state transition. <i>Nature Communications</i> , 2019, 10, 4043.	12.8	29
28	Fermi surface, possible unconventional fermions, and unusually robust resistive critical fields in the chiral-structured superconductor AuBe. <i>Physical Review B</i> , 2019, 99, .	3.2	21
29	Enhancement of the effective mass at high magnetic fields in CeRhIn <sub>5</sub> . <i>Physical Review B</i> , 2019, 99, .	15	15
30	Steplike metamagnetic transitions in a honeycomb lattice antiferromagnet Tb <sub>2</sub> Mn <sub>15</sub> O <sub>32</sub> . <i>Physical Review Materials</i> , 2019, 3, .	15	15
31	Implications of bond disorder in a S=1 kagome lattice. <i>Scientific Reports</i> , 2018, 8, 4745.	3.3	5
32	Frustration and Glasslike Character in RIn <sub>1-x</sub> Mn <sub>x</sub> O <sub>3</sub> (R = Tb, Dy, Gd). <i>Inorganic Chemistry</i> , 2018, 57, 12501-12508.	4.0	8
33	Quantum oscillations of electrical resistivity in an insulator. <i>Science</i> , 2018, 362, 65-69.	12.6	79
34	Adiabatic physics of an exchange-coupled spin-dimer system: Magnetocaloric effect, zero-point fluctuations, and possible two-dimensional universal behavior. <i>Physical Review B</i> , 2017, 95, .	3.2	23
35	Magnetic field-temperature phase diagram of multiferroic CeRhIn <sub>5</sub> . <i>Physical Review B</i> , 2017, 96, .	15	15
36	Combining microscopic and macroscopic probes to untangle the single-ion anisotropy and exchange energies in an S<sub>1/2</sub> quantum antiferromagnet. <i>Physical Review B</i> , 2017, 95, .	3.2	15

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37	Fermi-surface topologies and low-temperature phases of the filled skutterudite compounds $\text{Ce}_{\text{Os}}_{3.2} \text{Mn}_7$ . Physical Review B, 2016, 94, .		3.2	7
38	Magnetic properties of $\text{Sr}_3\text{NiIrO}_6$ and $\text{Sr}_3\text{CoIrO}_6$ : Magnetic hysteresis with coercive fields of up to 55 T. Physical Review B, 2016, 94, .		3.2	20
39	Control of the third dimension in copper-based square-lattice antiferromagnets. Physical Review B, 2016, 93, .		3.2	18
40	Electric polarization observed in single crystals of multiferroic $\text{Lu}_{32}\text{Mn}_{16}$ . Physical Review B, 2016, 93, .			
41	Antiferromagnetism in a Family of $\text{S} = 1$ Square Lattice Coordination Polymers $\text{NiX}_2(\text{pyz})_2$ ( $\text{X} = \text{Cl}, \text{Br}, \text{I}, \text{NCS}$ ; pyz = Pyrazine). Inorganic Chemistry, 2016, 55, 3515-3529.		4.0	23
42	Experimental and Theoretical Electron Density Analysis of Copper Pyrazine Nitrate Quasi-Low-Dimensional Quantum Magnets. Journal of the American Chemical Society, 2016, 138, 2280-2291.		13.7	42
43	Magnetic Ordering-Induced Multiferroic Behavior in $[\text{CH}_3\text{NH}_3][\text{Co}(\text{HCOO})_3]$ Metal-Organic Framework. Journal of the American Chemical Society, 2016, 138, 1122-1125.		13.7	170
44	Magnetic ground state of the two isostructural polymeric quantum magnets $\text{Cu}_2(\text{HCOO})_2\text{Mn}_2$ . Physical Review B, 2015, 92, .			
45	Magnetic Structure and Exchange Interactions in Quasi-One-Dimensional $\text{MnCl}_2(\text{urea})_2$ . Inorganic Chemistry, 2015, 54, 11897-11905.		4.0	20
46	Fermi surface reconstruction and multiple quantum phase transitions in the antiferromagnet $\text{CeRhIn}_5$ . Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 673-678.		7.1	67
47	Controlling Magnetic Order and Quantum Disorder in Molecule-Based Magnets. Physical Review Letters, 2014, 112, .		7.8	24
48	Dimensionality Selection in a Molecule-Based Magnet. Physical Review Letters, 2012, 108, 077208.		7.8	45
49	Magnetoelastic coupling in $[\text{Ru}_2(\text{O}_2\text{CMe})_4]_3[\text{Cr}(\text{CN})_6]$ molecule-based magnet. Physical Review B, 2012, 86, .		3.2	14
50	Importance of Halogen-Halogen Contacts for the Structural and Magnetic Properties of $\text{CuX}_2(\text{pyrazine}-\text{N}-\text{N})\text{O}_2$ ( $\text{X} = \text{Cl}$ and $\text{Br}$ ). Inorganic Chemistry, 2012, 51, 2121-2129.		4.0	38
51	$[\text{Ni}(\text{HF})_2(3-\text{Clpy})_4]\text{BF}_4$ (py = pyridine): Evidence for Spin Exchange Along Strongly Distorted $\text{F}-\text{A}-\text{H}-\text{A}-\text{F}$ Bridges in a One-Dimensional Polymeric Chain. Inorganic Chemistry, 2012, 51, 7520-7528.		4.0	19
52	Measurement of magnetic susceptibility in pulsed magnetic fields using a proximity detector oscillator. Review of Scientific Instruments, 2011, 82, 113902.		1.3	39
53	Structural, Electronic, and Magnetic Properties of Quasi-1D Quantum Magnets $[\text{Ni}(\text{HF})_2(\text{pyz})_2]\text{X}$ (pyz = pyrazine; $\text{X} = \text{PF}_6^-$ , $\text{Tj ETQq1 } 1.0784314 \text{ rgBT}/\text{Overloc}$ , $\text{Chemistry}$ , 2011, 50, 5990-6009).		4.0	30
54	Nonmonotonic field dependence of the Néel temperature in the quasi-two-dimensional magnet $\text{Ce}_{\text{Os}}_{3.2} \text{Mn}_5$ . Physical Review B, 2009, 79, .		3.2	52

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55	Strong H-·-F Hydrogen Bonds as Synthons in Polymeric Quantum Magnets: Structural, Magnetic, and Theoretical Characterization of $[\text{Cu}(\text{HF}_2)(\text{pyrazine})_2]\text{SbF}_6$ , $[\text{Cu}_2\text{F}(\text{HF})(\text{HF}_2)(\text{pyrazine})_4](\text{SbF}_6)_2$ , and $[\text{CuAg}(\text{H}_3\text{F}_4)(\text{pyrazine})_5](\text{SbF}_6)_2$ . <i>Journal of the American Chemical Society</i> , 2009, 131, 6733-6747.	13.7	76
56	Fermi-surface topology and field-dependent effective masses of the filled skutterudite compound $\text{PrOs}_4\text{As}_{12}$ . <i>Physica B: Condensed Matter</i> , 2008, 403, 758-760.	2.7	1
57	Experimental and Theoretical Characterization of the Magnetic Properties of $\text{CuF}_2\text{H}_2\text{O}_2\text{(pyz)}$ (pyz = pyrazine): A Two-Dimensional Quantum Magnet Arising from Supersuperexchange Interactions through Hydrogen Bonded Paths. <i>Chemistry of Materials</i> , 2008, 20, 7408-7416.	6.7	59
58	Experimentally determining the exchange parameters of quasi-two-dimensional Heisenberg magnets. <i>New Journal of Physics</i> , 2008, 10, 083025.	2.9	106
59	A de Haas-van Alphen study of the filled skutterudite compounds $\text{PrOs}_4\text{As}_{12}$ and $\text{LaOs}_4\text{As}_{12}$ . <i>New Journal of Physics</i> , 2007, 9, 269-269.	2.9	19
60	Separation of energy scales in the kagome antiferromagnet $\text{TmAgGe}$ : A magnetic-field-orientation study up to 55T. <i>Physical Review B</i> , 2007, 75, .	3.2	13
61	Angle-dependent magnetoresistance oscillations due to magnetic breakdown orbits. <i>Physical Review B</i> , 2007, 76, .	3.2	18
62	A photonic band-gap resonator to facilitate GHz-frequency conductivity experiments in pulsed magnetic fields. <i>Review of Scientific Instruments</i> , 2006, 77, 084702.	1.3	4
63	Suppression of the $\hat{\beta}\pm$ structural phase transition in $\text{Ce}_0.8\text{La}_0.1\text{Th}_{0.1}\text{by}$ large magnetic fields. <i>Journal of Physics Condensed Matter</i> , 2005, 17, L77-L83.	1.8	33
64	Angle-dependent magnetoresistance of the layered organic superconductor $(\text{ET})_2\text{Cu}(\text{NCS})_2$ : Simulation and experiment. <i>Physical Review B</i> , 2004, 69, .	3.2	58
65	Unconventional quantum fluid at high magnetic fields in the marginal charge-density-wave system $\text{K}(\text{BEDT-TTF})_2\text{Mg}(\text{SCN})_4$ ( $\text{M}=\text{K}$ and $\text{Rb}$ ). <i>Physical Review B</i> , 2004, 69, .	3.2	14
66	Experimental observation of nonspherically-decaying radiation from a rotating superluminal source. <i>Journal of Applied Physics</i> , 2004, 96, 4614-4631.	2.5	11
67	de Haas-van Alphen spectra of the shape-memory alloy $\text{AuZn}$ . <i>Journal of Magnetism and Magnetic Materials</i> , 2004, 272-276, E1681-E1683.	2.3	0
68	The National High Magnetic Field Laboratory Pulsed-Field Facility at Los Alamos National Laboratory. <i>Physica B: Condensed Matter</i> , 2004, 346-347, 614-617.	2.7	47
69	The intrinsically broad superconducting to normal transition in organic superconductors. <i>Synthetic Metals</i> , 2003, 133-134, 241-243.	3.9	2
70	Experimental Electronic Heat Capacities of $\pm$ - and $\gamma$ -Plutonium: Heavy-Fermion Physics in an Element. <i>Physical Review Letters</i> , 2003, 91, 205901.	7.8	106
71	RECENT STUDIES OF QUASI-TWO-DIMENSIONAL ORGANIC METALS INVOLVING HIGH MAGNETIC FIELDS. , 2003, , 85-110.	1	
72	Test for Interlayer Coherence in a Quasi-Two-Dimensional Superconductor. <i>Physical Review Letters</i> , 2002, 88, 037001.	7.8	84

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73	Quasi-two-dimensional organic superconductors: A review. <i>Contemporary Physics</i> , 2002, 43, 63-96.	1.8	169
74	THE MILLIMETRE-WAVE MAGNETO-OPTICAL RESPONSE OF Sr <sub>2</sub> RuO <sub>4</sub> . <i>International Journal of Modern Physics B</i> , 2002, 16, 3238-3243.	2.0	1
75	Superconductivity, incoherence and Anderson localization in the crystalline organic conductor (BEDT-TTF)3Cl <sub>2</sub> ·2H <sub>2</sub> O at high pressures. <i>Journal of Physics Condensed Matter</i> , 2002, 14, 7345-7361.	1.8	9
76	THE MILLIMETRE-WAVE MAGNETO-OPTICAL RESPONSE OF Sr <sub>2</sub> RuO <sub>4</sub> . , 2002, , .		0
77	Synthesis, structural chemistry and magnetic properties of La <sub>1+x</sub> Al <sub>x</sub> InMnO <sub>6</sub> : A = Ba, Sr; x = 0, 0.2. <i>Journal of Materials Chemistry</i> , 2001, 11, 1656-1661.	6.7	1
78	Unconventional field and angle dependences of the Shubnikov-de Haas oscillations spectra in the quasi two-dimensional organic superconductor (BEDO-TTF) 2ReO 4H 2O. <i>European Physical Journal B</i> , 2001, 21, 31-37.	1.5	6
79	Superconducting properties and Fermi-surface topology of the quasi-two-dimensional organic superconductor $\text{b}^{\text{z}}\text{-}(\text{BETS})_2\text{GaCl}_4$ (BETS: bis(ethylene-dithio)tetrathiafulvalene). <i>Journal of Physics Condensed Matter</i> , 2001, 13, 8325-8345.	1.8	64
80	On the de Haas-van Alphen effect in inhomogeneous alloys. <i>Journal of Physics Condensed Matter</i> , 2001, 13, L463-L467.	1.8	11
81	A statistical model for the intrinsically broad superconducting-to-normal transition in quasi-two-dimensional crystalline organic metals. <i>Journal of Physics Condensed Matter</i> , 2001, 13, L899-L904.	1.8	7
82	Halides of BET-TTF: Novel Hydrated Molecular Metals. <i>Advanced Materials</i> , 2000, 12, 54-58.	21.0	9
83	A New Organic Conductor and a Novel Structural Phase Transition in the BEDT-TTF Trihalide Family. <i>Advanced Materials</i> , 2000, 12, 1205-1210.	21.0	17
84	Studies of quasi-two-dimensional organic conductors based on BEDT-TTF using high magnetic fields. <i>Reports on Progress in Physics</i> , 2000, 63, 1111-1207.	20.1	273
85	Millimeter-Wave Magneto-optical Determination of the Anisotropy of the Superconducting Order Parameter in the Molecular Superconductor $\text{b}^{\text{z}}\text{-}(\text{BEDT-TTF})_2\text{Cu}(\text{NCS})_2$ . <i>Physical Review Letters</i> , 1999, 83, 3041-3044.	7.8	60
86	Shubnikovâ€“de Haas effect and persistent photoconductivity in In <sub>0.52</sub> Al <sub>0.48</sub> As. <i>Journal of Applied Physics</i> , 1999, 86, 6593-6595.	2.5	3
87	Chemistry of naturally layered manganites (invited). <i>Journal of Applied Physics</i> , 1998, 83, 6379-6384.	2.5	20
88	Crystal Chemistry and Electronic Properties of the N = 2 Ruddlesden-Popper Manganates: Unconventional CMR Materials. <i>Materials Research Society Symposia Proceedings</i> , 1996, 453, 331.	0.1	5
89	Quantized Hall Currents in the High Field Phase of $\text{b}^{\pm}\text{-}(\text{BEDT-TTF})_2\text{TiHg}(\text{SCN})_4$ . <i>Physical Review Letters</i> , 1996, 77, 1576-1579.	7.8	39
90	High Field Magnetotransport of the Pressure Induced Organic Superconductor (BEDT-TTF)3Cl <sub>2</sub> 2H <sub>2</sub> O. <i>Acta Physica Polonica A</i> , 1995, 87, 777-779.	0.5	0

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91	De HAAS-VAN alphen effect in the vortex state of the organic superconductor /spl kappa/-( <i>BEDT-TTF</i> )/sub 2/ <i>Cu(NCS)</i> /sub 2/. , 1994, , .	0	
92	High pressure studies of the relationship between carrier effective mass and superconducting critical temperature in <i>k</i> -( <i>BEDT-TTF</i> )/sub 2/ <i>Co(NCS)</i> /sub 2/. , 1994, , .	0	
93	Collapse of High Field Magnetophonon Resonance in GaAs-GaAlAs Heterojunctions. Physical Review Letters, 1994, 73, 589-592.	7.8	23
94	Quantum transport in accumulation layers on Cd0.2Hg0.8Te. Journal of Physics C: Solid State Physics, 1986, 19, 35-42.	1.5	20