

John Singleton

List of Publications by Year in descending order

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94
papers

2,498
citations

236925

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all docs

98
docs citations

98
times ranked

2373
citing authors

#	ARTICLE	IF	CITATIONS
1	Studies of quasi-two-dimensional organic conductors based on BEDT-TTF using high magnetic fields. Reports on Progress in Physics, 2000, 63, 1111-1207.	20.1	273
2	Magnetic Ordering-Induced Multiferroic Behavior in $[\text{CH}_3\text{NH}_3]_3[\text{Co}(\text{HCOO})_3]$ Metal-Organic Framework. Journal of the American Chemical Society, 2016, 138, 1122-1125.	13.7	170
3	Quasi-two-dimensional organic superconductors: A review. Contemporary Physics, 2002, 43, 63-96.	1.8	169
4	Experimental Electronic Heat Capacities of \pm - and γ -Plutonium: Heavy-Fermion Physics in an Element. Physical Review Letters, 2003, 91, 205901.	7.8	106
5	Experimentally determining the exchange parameters of quasi-two-dimensional Heisenberg magnets. New Journal of Physics, 2008, 10, 083025.	2.9	106
6	Test for Interlayer Coherence in a Quasi-Two-Dimensional Superconductor. Physical Review Letters, 2002, 88, 037001.	7.8	84
7	Quantum oscillations of electrical resistivity in an insulator. Science, 2018, 362, 65-69.	12.6	79
8	Strong $\text{H}\cdots\text{F}$ 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 $[\text{CuAg}(\text{H}_3\text{F}_4)(\text{pyrazine})_5](\text{SbF}_6)_2$. Journal of the American Chemical Society, 2009, 131, 6733-6747.	13.7	76
9	Fermi surface reconstruction and multiple quantum phase transitions in the antiferromagnet CeRhIn_5 . Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 673-678.	7.1	67
10	Superconducting properties and Fermi-surface topology of the quasi-two-dimensional organic superconductor $\text{A}^+\text{-(BETS)}_2\text{GaCl}_4\text{(BETS)}_2\text{bis(ethylene-dithio)tetraselenafulvalene}$. Journal of Physics Condensed Matter, 2001, 13, 8325-8345.	1.8	64
11	Millimeter-Wave Magneto-optical Determination of the Anisotropy of the Superconducting Order Parameter in the Molecular Superconductor $\text{-(BEDT-TTF)}_2\text{Cu(NCS)}_2$. Physical Review Letters, 1999, 83, 3041-3044.	7.8	60
12	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. Chemistry of Materials, 2008, 20, 7408-7416.	6.7	59
13	Angle-dependent magnetoresistance of the layered organic superconductor $\text{(ET)}_2\text{Cu(NCS)}_2$: Simulation and experiment. Physical Review B, 2004, 69, .	3.2	58
14	Nonmonotonic field dependence of the N_{el} temperature in the quasi-two-dimensional magnet $\text{Cu}_2(\text{H}_2\text{O})_2(\text{pyz})$ (pyz = pyrazine). Physical Review B, 2009, 79, .	3.2	52
15	The National High Magnetic Field Laboratory Pulsed-Field Facility at Los Alamos National Laboratory. Physica B: Condensed Matter, 2004, 346-347, 614-617.	2.7	47
16	Dimensionality Selection in a Molecule-Based Magnet. Physical Review Letters, 2012, 108, 077208.	7.8	45
17	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
18	Quantized Hall Currents in the High Field Phase of $\text{-(BEDT-TTF)}_2\text{THg(SCN)}_4$. Physical Review Letters, 1996, 77, 1576-1579.	7.8	39

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19	Measurement of magnetic susceptibility in pulsed magnetic fields using a proximity detector oscillator. Review of Scientific Instruments, 2011, 82, 113902.	1.3	39
20	Importance of Halogen-Halogen Contacts for the Structural and Magnetic Properties of $\text{CuX}_2(\text{pyrazine-}N,N\text{-}dioxide)(\text{H}_2\text{O})_2$ (X = Cl and Br). Inorganic Chemistry, 2012, 51, 2121-2129.	4.0	38
21	Unconventional thermal metallic state of charge-neutral fermions in an insulator. Nature Physics, 2019, 15, 954-959.	16.7	35
22	Suppression of the \pm structural phase transition in $\text{Ce}_{0.8}\text{La}_{0.1}\text{Th}_{0.1}$ by large magnetic fields. Journal of Physics Condensed Matter, 2005, 17, L77-L83.	1.8	33
23	Structural, Electronic, and Magnetic Properties of Quasi-1D Quantum Magnets $[\text{Ni}(\text{HF}_6)(\text{pyz})_2\text{X}]$ (pyz = pyrazine; X = PF_6 , ClO_4 , NO_3 , SO_4 , BO_4 , MoO_4 , VO_4 , WO_4 , AsO_4 , SbO_4 , TaO_4 , NbO_4 , MnO_4 , PO_4 , VO_4 , WO_4 , AsO_4 , SbO_4 , TaO_4 , NbO_4 , MnO_4 , PO_4). Chemistry, 2011, 50, 5990-6009.	4.0	30
24	Magnetoelectric behavior via a spin state transition. Nature Communications, 2019, 10, 4043.	12.8	29
25	Electric polarization observed in single crystals of multiferroic $\text{Lu}_2\text{V}_2\text{O}_7$. Physical Review B, 2016, 93, .	8.2	28
26	Controlling Magnetic Order and Quantum Disorder in Molecule-Based Magnets. Physical Review Letters, 2014, 112, .	7.8	24
27	Magnetic field-temperature phase diagram of multiferroic $\text{Lu}_2\text{V}_2\text{O}_7$. Physical Review B, 2017, 96, .	8.2	24
28	Unusual high-field metal in a Kondo insulator. Nature Physics, 2021, 17, 788-793.	16.7	24
29	Collapse of High Field Magnetophonon Resonance in GaAs-GaAlAs Heterojunctions. Physical Review Letters, 1994, 73, 589-592.	7.8	23
30	Antiferromagnetism in a Family of $S = 1$ Square Lattice Coordination Polymers $\text{NiX}_2(\text{pyz})_2$ (X = Cl, Br, I, NCS; pyz = Pyrazine). Inorganic Chemistry, 2016, 55, 3515-3529.	4.0	23
31	Adiabatic physics of an exchange-coupled spin-dimer system: Magnetocaloric effect, zero-point fluctuations, and possible two-dimensional universal behavior. Physical Review B, 2017, 95, .	3.2	23
32	Fermi surface, possible unconventional fermions, and unusually robust resistive critical fields in the chiral-structured superconductor AuBe. Physical Review B, 2019, 99, .	3.2	21
33	Evidence for a delocalization quantum phase transition without symmetry breaking in CeCoIn_5 . Science, 2022, 375, 76-81.	12.6	21
34	Quantum transport in accumulation layers on $\text{Cd}_{0.2}\text{Hg}_{0.8}\text{Te}$. Journal of Physics C: Solid State Physics, 1986, 19, 35-42.	1.5	20
35	Chemistry of naturally layered manganites (invited). Journal of Applied Physics, 1998, 83, 6379-6384.	2.5	20
36	Magnetic Structure and Exchange Interactions in Quasi-One-Dimensional $\text{MnCl}_2(\text{urea})_2$. Inorganic Chemistry, 2015, 54, 11897-11905.	4.0	20

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37	Magnetic properties of Sr ₃ NiIrO ₆ and Sr ₃ CoIrO ₆ : Magnetic hysteresis with coercive fields of up to 55 T. Physical Review B, 2016, 94, .	3.2	20
38	A de Haas-van Alphen study of the filled skutterudite compounds PrOs ₄ As ₁₂ and LaOs ₄ As ₁₂ . New Journal of Physics, 2007, 9, 269-269.	2.9	19
39	[Ni(HF ₂)(3-Clpy) ₄ BF ₄] (py = pyridine): Evidence for Spin Exchange Along Strongly Distorted F ₄ A ₂ H ₂ F ₂ Bridges in a One-Dimensional Polymeric Chain. Inorganic Chemistry, 2012, 51, 7520-7528.	4.0	19
40	Angle-dependent magnetoresistance oscillations due to magnetic breakdown orbits. Physical Review B, 2007, 76, .	3.2	18
41	Control of the third dimension in copper-based square-lattice antiferromagnets. Physical Review B, 2016, 93, .	3.2	18
42	A New Organic Conductor and a Novel Structural Phase Transition in the BEDT-TTF Trihalide Family. Advanced Materials, 2000, 12, 1205-1210.	21.0	17
43	Combining microscopic and macroscopic probes to untangle the single-ion anisotropy and exchange energies in an quantum antiferromagnet. Physical Review B, 2017, 95, .	3.2	15
44	Enhancement of the effective mass at high magnetic fields in CeRhIn ₅ . Physical Review B, 2019, 99, .	3.2	15
45	Unconventional quantum fluid at high magnetic fields in the marginal charge-density-wave system (BEDT-TTF) ₂ MHg(SCN) ₄ (M=K and Rb). Physical Review B, 2004, 69, .	3.2	14
46	Magnetoelastic coupling in [Ru ₂ (O ₂ CMe) ₄] ₃ [Cr(CN) ₆] molecule-based magnet. Physical Review B, 2012, 86, .	3.2	14
47	Half-magnetization plateau and the origin of threefold symmetry breaking in an electrically switchable triangular antiferromagnet. Physical Review Research, 2020, 2, .	3.6	14
48	Separation of energy scales in the kagome antiferromagnet TmAgGe: A magnetic-field-orientation study up to 55T. Physical Review B, 2007, 75, .	3.2	13
49	On the de Haas-van Alphen effect in inhomogeneous alloys. Journal of Physics Condensed Matter, 2001, 13, L463-L467.	1.8	11
50	Experimental observation of nonspherically-decaying radiation from a rotating superluminal source. Journal of Applied Physics, 2004, 96, 4614-4631.	2.5	11
51	Magnetic ground state of the two isostructural polymeric quantum magnets Cu ₂ [M(CN) ₄] _n . Physical Review B, 2015, 92, .	3.2	11
52	Observation of cyclotron resonance and measurement of the hole mass in optimally doped La ₂ OPrO ₇ . Physical Review B, 2021, 103, .	3.2	11
53	Topological surface conduction in Kondo insulator Yb ₁₂ . Journal Physics D: Applied Physics, 2021, 54, 404002.	2.8	11
54	Magnetic field-temperature phase diagram of multiferroic (NH ₄) ₂ FeCl ₅ ·H ₂ O. Npj Quantum Materials, 2019, 4, .	5.2	10

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55	Enhancing easy-plane anisotropy in bespoke Ni(II) quantum magnets. <i>Polyhedron</i> , 2020, 180, 114379.	2.2	10
56	Halides of BET-TTF: Novel Hydrated Molecular Metals. <i>Advanced Materials</i> , 2000, 12, 54-58.	21.0	9
57	Superconductivity, incoherence and Anderson localization in the crystalline organic conductor (BEDT-TTF) $3\text{Cl}_2 \cdot 2\text{H}_2\text{O}$ at high pressures. <i>Journal of Physics Condensed Matter</i> , 2002, 14, 7345-7361.	1.8	9
58	Non-monotonic pressure dependence of high-field nematicity and magnetism in CeRhIn5. <i>Nature Communications</i> , 2020, 11, 3482.	12.8	9
59	Steplike metamagnetic transitions in a honeycomb lattice antiferromagnet $\text{TbMn}_2\text{P}_2\text{O}_{14}$. <i>Physical Review Materials</i> , 2019, 3, .		
60	Near-ideal molecule-based Haldane spin chain. <i>Physical Review Research</i> , 2020, 2, .	3.6	9
61	Frustration and Glasslike Character in $\text{RIn}_2\text{Mn}_3\text{O}_{12}$ (R = Tb, Dy, Gd). <i>Inorganic Chemistry</i> , 2018, 57, 12501-12508.	4.0	8
62	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
63	Fermi-surface topologies and low-temperature phases of the filled skutterudite compounds CeOs_4 and NdOs_4 . <i>Physical Review B</i> , 2016, 94, .		
64	Determining the anisotropy and exchange parameters of polycrystalline spin-1 magnets. <i>New Journal of Physics</i> , 2019, 21, 093025.	2.9	7
65	Unusual phase boundary of the magnetic-field-tuned valence transition in $\text{CeOs}_4\text{Sb}_{12}$. <i>Physical Review B</i> , 2020, 101, .	3.2	7
66	Temperature scaling behavior of the linear magnetoresistance observed in high-temperature superconductors. <i>Physical Review Materials</i> , 2020, 4, .	2.4	7
67	Hall Anomaly, Quantum Oscillations and Possible Lifshitz Transitions in Kondo Insulator YbB_{12} : Evidence for Unconventional Charge Transport. <i>Physical Review X</i> , 2022, 12, .	8.9	7
68	Unconventional field and angle dependences of the Shubnikov-de Haas oscillations spectra in the quasi two-dimensional organic superconductor (BEDO-TTF) $2\text{ReO}_4 \cdot 2\text{H}_2\text{O}$. <i>European Physical Journal B</i> , 2001, 21, 31-37.	1.5	6
69	Spin-lattice and electron-phonon coupling in 3d/5d hybrid $\text{Sr}_3\text{NiIrO}_6$. <i>Npj Quantum Materials</i> , 2019, 4, .	5.2	6
70	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
71	Implications of bond disorder in a S=1 kagome lattice. <i>Scientific Reports</i> , 2018, 8, 4745.	3.3	5
72	Cryogenic goniometer for measurements in pulsed magnetic fields fabricated via additive manufacturing technique. <i>Review of Scientific Instruments</i> , 2020, 91, 036102.	1.3	5

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73	A photonic band-gap resonator to facilitate GHz-frequency conductivity experiments in pulsed magnetic fields. Review of Scientific Instruments, 2006, 77, 084702.	1.3	4
74	Shubnikovâ€™de Haas effect and persistent photoconductivity in In _{0.52} Al _{0.48} As. Journal of Applied Physics, 1999, 86, 6593-6595.	2.5	3
75	Controlling Magnetic Anisotropy in a Zero-Dimensional $S = 1$ Magnet Using Isotropic Cation Substitution. Journal of the American Chemical Society, 2021, 143, 4633-4638.	13.7	3
76	The intrinsically broad superconducting to normal transition in organic superconductors. Synthetic Metals, 2003, 133-134, 241-243.	3.9	2
77	Magneto-structural Correlations in Ni ²⁺ â€™Halideâ€™Halideâ€™Ni ²⁺ Chains. Inorganic Chemistry, 2022, 61, 141-153.	4.0	2
78	Tracking the evolution from isolated dimers to many-body entanglement in $\text{NaLu}_x\text{Yb}_{1-x}\text{Se}_2$. Physical Review B, 2022, 106, .	3.2	2
79	Synthesis, structural chemistry and magnetic properties of $\text{La}_{1-x}\text{A}_x\text{InMnO}_6$: A = Ba, Sr; x = 0, 0.2. Journal of Materials Chemistry, 2001, 11, 1656-1661.	6.7	1
80	THE MILLIMETRE-WAVE MAGNETO-OPTICAL RESPONSE OF Sr ₂ RuO ₄ . International Journal of Modern Physics B, 2002, 16, 3238-3243.	2.0	1
81	Fermi-surface topology and field-dependent effective masses of the filled skutterudite compound PrOs ₄ As ₁₂ . Physica B: Condensed Matter, 2008, 403, 758-760.	2.7	1
82	Information Carried by Electromagnetic Radiation Launched from Accelerated Polarization Currents. Physical Review Applied, 2020, 14, .	3.8	1
83	Fermi surface topology and nontrivial Berry phase in the flat-band semimetal Pd ₃ Pb. Physical Review B, 2020, 101, .	3.2	1
84	Composite pressure cell for pulsed magnets. Review of Scientific Instruments, 2021, 92, 023903.	1.3	1
85	RECENT STUDIES OF QUASI-TWO-DIMENSIONAL ORGANIC METALS INVOLVING HIGH MAGNETIC FIELDS. , 2003, , 85-110.		1
86	Pseudogap in elemental plutonium. Physical Review B, 2022, 105, .	3.2	1
87	Pressure-induced shift of effective Ce valence, Fermi energy and phase boundaries in CeOs ₄ Sb ₁₂ . New Journal of Physics, 2022, 24, 043044.	2.9	1
88	De HAAS-VAN ALPHEN effect in the vortex state of the organic superconductor $\kappa\text{-}(\text{BEDT-TTF})_2/\text{Cu}(\text{NCS})_2$. , 1994, , .		0
89	High pressure studies of the relationship between carrier effective mass and superconducting critical temperature in $\kappa\text{-}(\text{BEDT-TTF})_2/\text{Co}(\text{NCS})_2$. , 1994, , .		0
90	de Haasâ€™van Alphen spectra of the shape-memory alloy AuZn. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E1681-E1683.	2.3	0

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91	THE MILLIMETRE-WAVE MAGNETO-OPTICAL RESPONSE OF Sr ₂ RuO ₄ . , 2002, , .		0
92	High Field Magnetotransport of the Pressure Induced Organic Superconductor (BEDT-TTF) ₃ Cl ₂ H ₂ O. Acta Physica Polonica A, 1995, 87, 777-779.	0.5	0
93	Evidence for a delocalization quantum phase transition without symmetry breaking in CeCoIn. Science, 2021, , eaaz4566.	12.6	0
94	Resonant torque differential magnetometry with high frequency quartz oscillators. Review of Scientific Instruments, 2022, 93, .	1.3	0