

Stephan Rosenkranz

List of Publications by Year in descending order

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146
papers

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66343

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docs citations

149
times ranked

6266
citing authors

#	ARTICLE	IF	CITATIONS
1	Unconventional superconductivity in Ba _{0.6} K _{0.4} Fe ₂ As ₂ from inelastic neutron scattering. Nature, 2008, 456, 930-932.	27.8	543
2	$V_{\text{Cs}} = A \sqrt{Z} \langle \text{NbSe} \rangle^2$ Physical Review Letters, 2020, 125, 247002.	7.8	468
3	Evolution of the pseudogap from Fermi arcs to the nodal liquid. Nature Physics, 2006, 2, 447-451.	16.7	393
4	High-pressure neutron-diffraction study of the metallization process in PrNiO ₃ . Physical Review B, 1995, 52, 9248-9258.	3.2	281
5	Spontaneous breaking of time-reversal symmetry in the pseudogap state of a high-T _c superconductor. Nature, 2002, 416, 610-613.	27.8	268
6	Extended Phonon Collapse and the Origin of the Charge-Density Wave in $\langle \text{H} \rangle^2$ Physical Review Letters, 2011, 107, 107403.	7.8	264
7	Ising Pyrochlore Magnets: Low-Temperature Properties, ϵ Rules, and Beyond. Physical Review Letters, 1999, 83, 1854-1857.	7.8	218
8	Charge Melting and Polaron Collapse in La _{1.2} Sr _{1.8} Mn ₂ O ₇ . Physical Review Letters, 1999, 83, 4393-4396.	7.8	172
9	Crystal-field interaction in the pyrochlore magnet Ho ₂ Ti ₂ O ₇ . Journal of Applied Physics, 2000, 87, 5914-5916.	2.5	166
10	Phase diagram of Ba $\langle \text{K} \rangle^2$ Physical Review Letters, 2006, 96, 027201.	3.2	157
11	Nanomagnetic Droplets and Implications to Orbital Ordering in La _{1-x} Sr _x CoO ₃ . Physical Review Letters, 2006, 96, 027201.	7.8	149
12	Magnetically driven suppression of nematic order in an iron-based superconductor. Nature Communications, 2014, 5, 3845.	12.8	146
13	Orbital and Spin Chains in ZnV ₂ O ₄ . Physical Review Letters, 2004, 93, 156407.	7.8	144
14	Neutron-diffraction study of the magnetic and orbital ordering in 154SmNiO ₃ and 153EuNiO ₃ . Physical Review B, 1998, 57, 456-464.	3.2	135
15	Emergence of coherence in the charge-density wave state of 2H-NbSe ₂ . Nature Communications, 2015, 6, 6313.	12.8	123
16	The relation of local order to material properties in relaxor ferroelectrics. Nature Materials, 2018, 17, 718-724.	27.5	113
17	Electron-Phonon Coupling and the Soft Phonon Mode in $\langle \text{TiSe} \rangle^2$ Physical Review Letters, 2011, 107, 266401.	7.8	104
18	Double-Q spin-density wave in iron arsenide superconductors. Nature Physics, 2016, 12, 493-498.	16.7	101

#	ARTICLE	IF	CITATIONS
19	Neutron Scattering Investigation of Magnetic Bilayer Correlations in $\text{La}_{1.2}\text{Sr}_{1.8}\text{Mn}_2\text{O}_7$: Evidence of Canting above T_C . Physical Review Letters, 1998, 81, 3964-3967.	7.8	99
20	Microscopic annealing process and its impact on superconductivity in Tâ€^2 -structure electron-doped copper oxides. Nature Materials, 2007, 6, 224-229.	27.5	97
21	High Contrast X-ray Speckle from Atomic-Scale Order in Liquids and Glasses. Physical Review Letters, 2012, 109, 185502.	7.8	97
22	Two-dimensional overdamped fluctuations of the soft perovskite lattice in CsPbBr_3 . Nature Materials, 2021, 20, 977-983.	27.5	89
23	Synthesis and characterization of bulk $\text{Nd}_{1-x}\text{O}_2$ and Magnetoelastic coupling in the phase diagram of $\text{Ba}_{1-x}\text{Nd}_x\text{Fe}_2\text{As}_2$.	2.4	87
24	Momentum anisotropy of the scattering rate in cuprate superconductors. Physical Review B, 2005, 71, .	3.2	84
25	Implementation of cross correlation for energy discrimination on the time-of-flight spectrometer CORELLI. Journal of Applied Crystallography, 2018, 51, 315-322.	4.5	80
27	Spin Incommensurability and Two Phase Competition in Cobaltites. Physical Review Letters, 2006, 97, 235501.	7.8	79
28	Crossover from Coherent to Incoherent Electronic Excitations in the Normal State of $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8+\hat{1}$. Physical Review Letters, 2003, 90, 207003.	7.8	78
29	Observation of a Charge Density Wave Incommensuration Near the Superconducting Dome in Cu_xTiSe_2 . Physical Review Letters, 2017, 118, 027002.	7.8	78
30	Nondispersive Fermi Arcs and the Absence of Charge Ordering in the Pseudogap Phase of $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8+\hat{1}$. Physical Review Letters, 2006, 96, 107006.	7.8	75
31	Change of Fermi-surface topology in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8+\hat{1}$ with doping. Physical Review B, 2006, 73, .	3.2	72
32	Neutron crystal-field spectroscopy of $\text{RNi}_2\text{B}_2\text{C}$ ($R = \text{Ho, Er, Tm}$). Zeitschrift für Physik B-Condensed Matter, 1997, 101, 345-352.	1.1	71
33	Observation of a d-wave nodal liquid in highly underdoped $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8+\hat{1}$. Nature Physics, 2010, 6, 99-103.	16.7	71
34	Effect of Fermi Surface Nesting on Resonant Spin Excitations in $\text{Ba}_{1-x}\text{K}_x\text{Fe}_2\text{As}_2$. Physical Review Letters, 2011, 107, 177003.	7.8	65
35	Electronic phase diagram of high-temperature copper oxide superconductors. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 9346-9349.	7.1	64
36	Structural, magnetic, and superconducting properties of $\text{Ba}_{1-x}\text{Na}_x\text{Fe}_2\text{As}_2$.	3.2	62

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37	Charge disproportionation and search for orbital ordering in NdNiO ₃ by use of resonant x-ray diffraction. Physical Review B, 2005, 72, .	3.2	58
38	Wave-vector-dependent electron-phonon coupling and the charge-density-wave transition in $TbTi_3$. Physical Review B, 2015, 91, .	3.2	54
39	Tetragonal magnetic phase in $BaFe_2$. Physical Review B, 2015, 92, .	3.2	51
40	Chiral Phase Transition in Charge Ordered $TiSe_2$. Physical Review Letters, 2013, 110, 196404.	7.8	49
41	Optical phonons and the soft mode in $NbSe_2$. Physical Review B, 2013, 87, .	3.2	48
42	Spin Stripe Order in a Square Planar Trilayer Nickelate. Physical Review Letters, 2019, 122, 247201.	7.8	48
43	Crystal-field and magnetic properties of the distorted perovskite NdGaO ₃ . Journal of Physics Condensed Matter, 1993, 5, 8973-8982.	1.8	40
44	Vibrational entropy of $L_{12}Cu_3A$ measured by inelastic neutron scattering. Physical Review B, 1999, 60, 3976-3981.	3.2	40
45	Coherent band excitations in $CePd_3$: A comparison of neutron scattering and ab initio theory. Science, 2018, 359, 186-191.	12.6	36
46	Coincident structural and magnetic order in $BaFe_2$ by high-resolution neu. Physical Review B, 2014, 90, .	3.2	34
47	Structural and magnetic phase transitions in $Ca_{1-x}Ru_x$ electron-overdoped FeAs layers. Physical Review B, 2016, 93, .	3.2	34
48	Detailed magnetic and structural analysis mapping a robust magnetic order in C_4 . Physical Review B, 2016, 93, .	3.2	34
49	Reciprocal space imaging of ionic correlations in intercalation compounds. Nature Materials, 2020, 19, 63-68.	27.5	34
50	Large intrinsic anomalous Hall effect in SrIrO ₃ induced by magnetic proximity effect. Nature Communications, 2021, 12, 3283.	12.8	34
51	Charge Density Wave in the New Polymorphs of $RE_2Ru_3Ge_5$ ($RE = Pr, Sm, Dy$). Journal of the American Chemical Society, 2017, 139, 4130-4143.	13.7	33
52	Hyperfine-enhanced nuclear polarization in NdGaO ₃ . Physical Review B, 1995, 52, 4275-4283.	3.2	32
53	Pressure-induced orthorhombic-rhombohedral phase transition in NdNiO ₃ . Physica B: Condensed Matter, 1997, 234-236, 15-17.	2.7	32
54	Corelli: Efficient single crystal diffraction with elastic discrimination. Pramana - Journal of Physics, 2008, 71, 705-711.	1.8	32

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55	Identifying the background signal in angle-resolved photoemission spectra of high-temperature cuprate superconductors. Physical Review B, 2004, 69, .	3.2	31
56	Reentrant Orbital Order and the True Ground State of LaSr ₂ Mn ₂ O ₇ . Physical Review Letters, 2007, 98, 167201.	7.8	31
57	Antiferromagnetic defect structure in LaNiO_3 single crystals. Physical Review Materials, 2018, 2, .	2.4	30
58	Crystalline electric field of the rare-earth nickelates RNiO_3 (R=Pr, Nd, Sm, Eu). Physical Review B, 2017, 95, 14857-14867.	3.2	29
59	Symmetry of reentrant tetragonal phase in BaBiO_3 . Physical Review B, 2014, 90, .	3.2	28
60	Magnetic versus orbital ordering mechanism. Physical Review B, 2014, 90, .	7.8	28
61	Phase of the Hole-Doped Iron-Arsenide Superconductor FeAs . Journal of Physics Condensed Matter, 1994, 6, 4099-4106.	1.8	27
62	Crystal-field levels in the distorted perovskite PrGaO_3 . Journal of Physics Condensed Matter, 1994, 6, 4099-4106.	1.8	27
63	Superconductivity and hybrid soft modes in TiC . Physical Review B, 2016, 94, .	3.2	26
64	Magnetic correlations in the bilayer manganite $\text{La}_{1.2}\text{Sr}_{1.8}\text{Mn}_2\text{O}_7$. Journal of Applied Physics, 1998, 83, 7348-7350.	2.5	25
65	Electron-Phonon Coupling in the Conventional Superconductor $\text{YNi}_2\text{B}_2\text{C}$. Physical Review Letters, 2012, 109, 057001.	7.8	25
66	Observation of the magnetic phase in CaMnO_3 . Physical Review B, 2017, 95, .	3.2	25
67	Neutron spectroscopy of CaMnO_3 at High Phonon Energies Studied by Time-of-Flight. Physical Review Letters, 2012, 109, 057001.	3.2	25
68	Competing soft phonon modes at the charge-density-wave transitions in DyTmO_3 . Physical Review B, 2018, 98, .	3.2	25
69	Intertwined density waves in a metallic nickelate. Nature Communications, 2020, 11, 6003.	12.8	24
70	Polaronic orbital polarization in a layered colossal magnetoresistive manganite. Physical Review B, 2003, 67, .	3.2	23
71	Neutron spectroscopy in $\text{RBa}_2\text{Cu}_3\text{O}_x$ (R=rare earth; $6 \leq x \leq 7$) and $\text{R}_{2-x}\text{Ce}_x\text{CuO}_4$ ($0 \leq x \leq 0.2$) compounds: charge transfer, cluster formation, percolative superconductivity, charge fluctuations. Physica C: Superconductivity and Its Applications, 1994, 235-240, 261-264.	1.2	22
72	Spectroscopic evidence for preformed Cooper pairs in the pseudogap phase of cuprates. Europhysics Letters, 2009, 88, 27008.	2.0	22
73	Two-dimensional ferromagnetic correlations above T_C in the naturally layered CMR manganite $\text{La}_{2-x}\text{Sr}_{1+2x}\text{Mn}_2\text{O}_7$ ($x=0.3 \leq 0.4$) (invited). Journal of Applied Physics, 1998, 83, 6374-6378.	2.5	21
74	Specific heat of $\text{La}_{1.2}\text{Sr}_{1.8}\text{Mn}_2\text{O}_7$. Physical Review B, 1999, 60, 6258-6261.	3.2	21

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73	Incommensurate spin-density wave and magnetic lock-in transition in CaFe_4As_2 . Physical Review B, 2010, 81, .	3.2	21
74	Neutron diffraction study of the magnetic ordered Nd^{3+} in NdCoO_3 and NdInO_3 below 1 K. Physica B: Condensed Matter, 1997, 234-236, 632-634.	2.7	18
75	Inelastic neutron scattering studies of the spin and lattice dynamics in iron arsenide compounds. Physica C: Superconductivity and Its Applications, 2009, 469, 498-506.	1.2	18
76	New elaboration technique, structure and physical properties of infinite-layer $\text{Sr}_{1-x}\text{Ln}_x\text{CuO}_2$ ($\text{Ln} = \text{Nd}$). Physical Review B, 2009, 80, 040401.	1.2	16
77	Low-energy spin-wave excitations in the bilayer manganite $\text{La}_{1.2}\text{Sr}_{1.8}\text{Mn}_2\text{O}_7$. Journal of Applied Physics, 2000, 87, 5816-5818.	2.5	16
78	Suppression of charge density wave order by disorder in Pd-intercalated ErTe_3 . Physical Review B, 2019, 99, .	3.2	16
79	Dynamic spin-response function of the high-temperature $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$ superconductor from angle-resolved photoemission spectra. Physical Review B, 2007, 75, .	3.2	15
80	Widespread orthorhombic fluctuations in the family of superconductors. Physical Review B, 2018, 98, .	3.2	15
81	A two-dimensional type I superionic conductor. Nature Materials, 2021, 20, 1683-1688.	27.5	15
82	Anomalous dispersion in the autocorrelation of angle-resolved photoemission spectra of high-temperature $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$. Physical Review B, 2019, 99, .	3.2	14
83	Harnessing interpretable and unsupervised machine learning to address big data from modern X-ray diffraction. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	14
84	Universal features in the photoemission spectroscopy of high-temperature superconductors. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 17774-17777.	7.1	12
85	Neutron diffraction study of NdScO_3 below 1 K magnetic structure and hyperfine enhanced polarization of Nd. Physica B: Condensed Matter, 1997, 234-236, 635-636.	2.7	11
86	First-Order Metal-Insulator Transitions in Manganites: Are They Universal?. Physical Review Letters, 2006, 96, 087201.	7.8	11
87	Destroying Coherence in High-Temperature Superconductors with Current Flow. Physical Review X, 2016, 6, .	8.9	11
88	Superconducting energy gap of H_2CuO_4 in phonon spectroscopy. Physical Review B, 2016, 94, .	3.2	11
89	Spectroscopic evidence for temperature-dependent convergence of light- and heavy-hole valence bands of PbQ ($\text{Q} = \text{Te}, \text{Se}, \text{S}$). Europhysics Letters, 2017, 117, 27006.	2.0	11
90	The Subchalcogenides $\text{Ir}_2\text{In}_8\text{Q}$ ($\text{Q} = \text{S}, \text{Se}, \text{Te}$): Dirac Semimetal Candidates with Re-entrant Structural Modulation. Journal of the American Chemical Society, 2020, 142, 6312-6323.	13.7	11

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91	Tb spin correlations in $\text{Pb}_{2-x}\text{Sr}_{2-x}\text{Tb}_{0.5}\text{Ca}_{0.5}\text{Cu}_3\text{O}_8$. Europhysics Letters, 1996, 34, 447-452.	2.0	10
92	Quasi two-dimensional magnetic order of Tb^{3+} spins in $\text{Pb}_{2-x}\text{Sr}_x\text{Tb}_{1-x}\text{Ca}_x\text{Cu}_3\text{O}_8$ ($x = 0$ and 0.5). Zeitschrift für Physik B-Condensed Matter, 1997, 104, 37-43.	1.1	10
93	Neutron scattering study of the competing magnetic correlations in $\text{La}_{1-x}\text{Pr}_x\text{Cu}_3\text{O}_8$. Physical Review B, 2009, 79, .	3.2	8
94	Excitonic magnetic order in bilayer manganites probed by resonant inelastic x-ray scattering. Physical Review B, 2010, 82, .	3.2	9
95	Response of Acoustic Phonons to Charge and Orbital Order in the 50% Doped Bilayer Manganite $\text{LaSr}_2\text{Mn}_2\text{O}_7$. Physical Review Letters, 2011, 107, 207202.	7.8	9
96	Evidence for electron-lattice coupling in RNiO_3 perovskites. Physica B: Condensed Matter, 1997, 241-243, 751-757.	2.7	8
97	Scientific Review: Prospects and Challenges in Single Crystal Diffuse Scattering. Neutron News, 2004, 15, 21-24. Antiferromagnetic and nematic phase transitions in BaF_2 .	0.2	8
98			

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127	Neutron investigation of $\text{Nd}_{2-x}\text{Ce}_x\text{LaCuO}_4$ ($0 \leq x \leq 1$; $y = 0.5, 1$). <i>Physica B: Condensed Matter</i> , 1997, 234-236, 812-814.	2.7	2
128	PROXIMITY OF THE METAL-INSULATOR/MAGNETIC TRANSITION AND ITS IMPACT ON THE ONE-ELECTRON SPECTRAL FUNCTION: A DOPING-DEPENDENT ARPES STUDY. <i>International Journal of Modern Physics B</i> , 2000, 14, 3596-3601.	2.0	2
129	POLARON ORDERING IN FERROMAGNETIC COLOSSAL MAGNETORESISTIVE OXIDES. <i>International Journal of Modern Physics B</i> , 2000, 14, 3711-3718.	2.0	2
130	Geometric Frustration Suppresses Long-Range Structural Distortions in NbVO_2 . <i>Journal of Physical Chemistry C</i> , 2022, 126, 2049-2061.	3.1	2
131	Pressure dependence (internal and external) of the metallization process and the magnetic ordering of PrNiO_3 : A neutron powder diffraction study. <i>Physica B: Condensed Matter</i> , 1995, 213-214, 1025-1027.	2.7	1
132	Neutron spectroscopic studies of the crystal field in : evidence for a percolative metal-insulator transition. <i>Journal of Physics Condensed Matter</i> , 1998, 10, 7369-7382.	1.8	1
133	Prediction and Experimental Evidence for Thermodynamically Stable Charged Orbital Domain Walls. <i>Physical Review X</i> , 2014, 4, .	8.9	1
134	The 22nd National School on Neutron & X-ray Scattering 2020 – Upsides of going virtual. <i>Neutron News</i> , 2020, 31, 4-6.	0.2	1
135	Synthesis, crystal structure and inelastic neutron scattering in the infinite-layer compounds $\text{Sr}_{1-x}\text{Nd}_x\text{CuO}_2$. <i>Physica C: Superconductivity and Its Applications</i> , 1994, 235-240, 1001-1002.	1.2	0
136	Crystal structure and inelastic neutron scattering in the infinite-layer compounds $\text{Sr}_{1-x}\text{Nd}_x\text{CuO}_2$. <i>European Physical Journal D</i> , 1996, 46, 1411-1412.	0.4	0
137	Neutron spectroscopic studies of crystalline electric field in infinite-layer $\text{Sr}_{1-x}\text{Nd}_x\text{CuO}_2$. <i>Physica B: Condensed Matter</i> , 1997, 234-236, 794-796.	2.7	0
138	SPIN CORRELATIONS OF THE MAGNETORESISTIVE BILAYER MANGANITE $\text{La}_{1.2}\text{Sr}_{1.8}\text{Mn}_2\text{O}_7$. <i>International Journal of Modern Physics B</i> , 1999, 13, 3820-3822.	2.0	0
139	Photo-modulated dynamic competition between metallic and insulating phases in a layered manganite. <i>Materials Research Society Symposia Proceedings</i> , 2014, 1636, 1.	0.1	0
140	Evidence of photo-induced dynamic competition of metallic and insulating phase in a layered manganite. <i>Journal of Physics Condensed Matter</i> , 2015, 27, 495602.	1.8	0
141	Status and Future of Neutron Scattering in North America. <i>Neutron News</i> , 2016, 27, 2-3.	0.2	0
142	Using group-subgroup relations to understand the structural instability in rutile VO_2 . <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2019, 75, a112-a112.	0.1	0
143	Spin and charge stripes in trilayer nickelates. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2019, 75, a374-a374.	0.1	0
144	Recent developments in the use of single-crystal diffuse scattering to study material properties. <i>Acta Crystallographica Section A: Foundations and Advances</i> , 2019, 75, e426-e426.	0.1	0

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145	Tunable multiferroic order parameters in Sr- Ba Mn- Ti O. Physical Review Materials, 2019, 3, .	2.4	0
146	The 23 rd National School on Neutron & X-Ray Scattering 2021â€”Virtual School with Remote Experiments. Neutron News, 2021, 32, 12-16.	0.2	0