

Stephan Rosenkranz

List of Publications by Year in descending order

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papers

7,046
citations

66343

42
h-index

58581

82
g-index

149
all docs

149
docs citations

149
times ranked

6266
citing authors

#	ARTICLE	IF	CITATIONS
1	Geometric Frustration Suppresses Long-Range Structural Distortions in NbV_2O_7 . <i>Journal of Physical Chemistry C</i> , 2022, 126, 2049-2061.	3.1	2
2	Order-Disorder Transitions in $\text{Ca}_2\text{Mg}_2\text{X}_2$. <i>Review Letters</i> , 2022, 128, 095701.	7.8	17
3	Competing Charge/Spin-Stripe and Correlated Metal Phases in Trilayer Nickelates ($\text{Pr}_4\text{Ni}_3\text{O}_8$). <i>Chemistry of Materials</i> , 2022, 34, 4560-4567.	6.7	4
4	Harnessing interpretable and unsupervised machine learning to address big data from modern X-ray diffraction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	7.1	14
5	Multiple magnetic orders in $\text{LaFeAs}_{1-x}\text{PxO}$ uncover universality of iron-pnictide superconductors. <i>Communications Physics</i> , 2022, 5, .	5.3	5
6	PIONEER, a high-resolution single-crystal polarized neutron diffractometer. <i>Review of Scientific Instruments</i> , 2022, 93, .	1.3	7
7	Two-dimensional overdamped fluctuations of the soft perovskite lattice in CsPbBr_3 . <i>Nature Materials</i> , 2021, 20, 977-983.	27.5	89
8	Large intrinsic anomalous Hall effect in SrIrO_3 induced by magnetic proximity effect. <i>Nature Communications</i> , 2021, 12, 3283.	12.8	34
9	A two-dimensional type I superionic conductor. <i>Nature Materials</i> , 2021, 20, 1683-1688.	27.5	15
10	Fragile 3D Order in V_2O_3 . <i>Physical Review Letters</i> , 2021, 127, 125501.	7.8	5
11	The 23 rd National School on Neutron & X-Ray Scattering 2021 "Virtual School with Remote Experiments. <i>Neutron News</i> , 2021, 32, 12-16.	0.2	0
12	Reciprocal space imaging of ionic correlations in intercalation compounds. <i>Nature Materials</i> , 2020, 19, 63-68.	27.5	34
13	Intertwined density waves in a metallic nickelate. <i>Nature Communications</i> , 2020, 11, 6003.	12.8	24
14	Soft elastic constants from phonon spectroscopy in hole-doped BaMnO_3 . <i>Physical Review B</i> , 2020, 102, .	3.2	6
15	$\text{Cs}_3\text{V}_3\text{O}_{10}$: A Z_2 Anomalous Metal. <i>Physical Review Letters</i> , 2020, 125, 247002.	7.8	468
16	The Subchalcogenides $\text{Ir}_2\text{In}_8\text{Q}$ (Q = S, Se, Te): Dirac Semimetal Candidates with Re-entrant Structural Modulation. <i>Journal of the American Chemical Society</i> , 2020, 142, 6312-6323.	13.7	11
17	Oxygen Inhomogeneity and Reversibility in Single Crystal LaNiO_3 . <i>Crystals</i> , 2020, 10, 557.	2.2	6
18	Synthesis and characterization of bulk Nd_2O_3 and Nd_2O_3 . <i>Physical Review Materials</i> , 2020, 4, .	2.4	87

#	ARTICLE	IF	CITATIONS
19	APS: High-Energy X-rays Expediting Applied and Fundamental Research. Synchrotron Radiation News, 2020, 33, 44-50.	0.8	4
20	The 22nd National School on Neutron & X-ray Scattering 2020 – Upsides of going virtual. Neutron News, 2020, 31, 4-6.	0.2	1
21	Rosenkranz, Osborn, and Van Wezel Reply.. Physical Review Letters, 2019, 122, 229702.	7.8	3
22	Acoustic phonon dispersion and diffuse scattering across the valence transition of ErTe . Physical Review B, 2019, 99, .	3.2	4
23	Suppression of charge density wave order by disorder in Pd-intercalated ErTe . Physical Review B, 2019, 99, .	3.2	16
24	Spin Stripe Order in a Square Planar Trilayer Nickelate. Physical Review Letters, 2019, 122, 247201.	7.8	48
25	Tunable multiferroic order parameters in Sr-Ba-Mn-Ti-O . Physical Review Materials, 2019, 3, .	2.4	0
26	Using group-subgroup relations to understand the structural instability in rutile VO_2 . Acta Crystallographica Section A: Foundations and Advances, 2019, 75, a112-a112.	0.1	0
27	Spin and charge stripes in trilayer nickelates. Acta Crystallographica Section A: Foundations and Advances, 2019, 75, a374-a374.	0.1	0
28	Recent developments in the use of single-crystal diffuse scattering to study material properties. Acta Crystallographica Section A: Foundations and Advances, 2019, 75, e426-e426.	0.1	0
29	Tunable multiferroic order parameters in Sr-Ba-Mn-Ti-O . Physical Review Materials, 2019, 3, .	2.4	0
30	Coherent band excitations in CePd_3 : A comparison of neutron scattering and ab initio theory. Science, 2018, 359, 186-191.	12.6	36
31	Widespread orthorhombic fluctuations in the $\text{Sr}_2\text{Fe}_8\text{As}_8$ family of superconductors. Physical Review B, 2018, 98, .	3.2	25
32	Competing soft phonon modes at the charge-density-wave transitions in DyT_3O_7 . Physical Review B, 2018, 98, .	3.2	25
33	The relation of local order to material properties in relaxor ferroelectrics. Nature Materials, 2018, 17, 718-724.	27.5	113
34	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
35	Antiferromagnetic defect structure in LaNi_3O_7 single crystals. Physical Review Materials, 2018, 2, .	2.4	30
36	Observation of a Charge Density Wave Incommensuration Near the Superconducting Dome in Cu_xTiSe_2 . Physical Review Letters, 2017, 118, 027002.	7.8	78

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37	Charge Density Wave in the New Polymorphs of $\text{RE}_2\text{Ru}_3\text{Ge}_5$ ($\text{RE} = \text{Pr, Sm, Dy}$). Journal of the American Chemical Society, 2017, 139, 4130-4143.	13.7	33
38	Observation of the magnetic phase in CaMn_4C . Physical Review B, 2017, 95, 080402.	3.2	25
39	Phase of the Hole-Doped Iron-Arsenide Superconductor $\text{Sr}_x\text{Fe}_{1-x}\text{As}_2$. Physical Review B, 2017, 95, 080402.	7.8	28
40	Spectroscopic evidence for temperature-dependent convergence of light- and heavy-hole valence bands of PbQ ($Q = \text{Te, Se, S}$). Europhysics Letters, 2017, 117, 27006.	2.0	11
41	Superconductivity and hybrid soft modes in TiSe_2 . Physical Review B, 2016, 94, .	3.2	26
42	Destroying Coherence in High-Temperature Superconductors with Current Flow. Physical Review X, 2016, 6, .	8.9	11
43	Structural and magnetic phase transitions in CaMn_2As_2 electron-overdoped FeAs layers. Physical Review B, 2016, 93, .	3.2	34
44	Detailed magnetic and structural analysis mapping a robust magnetic in SrMn_2As_2 . Physical Review B, 2016, 93, .	3.2	11
45	Superconducting energy gap of HfTe_2 in phonon spectroscopy. Physical Review B, 2016, 94, .	0.2	0
46	Status and Future of Neutron Scattering in North America. Neutron News, 2016, 27, 2-3.	16.7	101
47	Double-Q spin-density wave in iron arsenide superconductors. Nature Physics, 2016, 12, 493-498.	3.2	54
48	Wave-vector-dependent electron-phonon coupling and the charge-density-wave transition in TbTe_3 .	3.2	6
49	Tetragonal magnetic phase in BaMn_2As_2 .	3.2	5
50	Ferromagnetic domain behavior and phase transition in bilayer manganites investigated at the nanoscale. Physical Review B, 2015, 92, .	1.8	0
51	Evidence of photo-induced dynamic competition of metallic and insulating phase in a layered manganite. Journal of Physics Condensed Matter, 2015, 27, 495602.	12.8	123
52	Emergence of coherence in the charge-density wave state of 2H-NbSe_2 . Nature Communications, 2015, 6, 6313.	3.2	5
53	Long-range two-dimensional superstructure in the superconducting electron-doped cuprate $\text{Pr}_{0.88}\text{LaCe}_{0.12}\text{CuO}_4$. Physical Review B, 2015, 92, .		

ARTICLE magnetic and nematic phase transitions in BaF_2 IF CITATIONS

55

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73	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
74	Extended X-ray Absorption Fine Structure spectroscopy in Co _{0.013} NbSe ₂ . Journal of Physics: Conference Series, 2010, 200, 012224.	0.4	4
75	Observation of a d-wave nodal liquid in highly underdoped Bi ₂ Sr ₂ CaCu ₂ O _{8+δ} . Nature Physics, 2010, 6, 99-103.	16.7	71
76	$\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{d} \langle \text{mml:mi} \rangle \langle \text{mml:mtext} \rangle \hat{\alpha} \langle \text{mml:mi} \rangle \text{d} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle \text{excited}$ in bilayer manganites probed by resonant inelastic x-ray scattering. Physical Review B, 2010, 82, .	3.2	19
77	Comment on "Circular Dichroism in the Angle-Resolved Photoemission Spectrum of the High-Temperature Bi ₂ Sr ₂ CaCu ₂ O _{8+δ} Superconductor: Can These Measurements Be Interpreted as Evidence for Time-Reversal Symmetry Breaking?". Physical Review Letters, 2010, 105, 189701; author reply 189702.	7.8	4
78	Incommensurate spin-density wave and magnetic lock-in transition in $\text{CaFe}_{1-x}\text{Mn}_x$. Physical Review B, 2010, 81, .	3.2	21
79	Neutron scattering study of the competing magnetic correlations in $\text{La}_{1-x}\text{Mn}_x$. Physical Review B, 2009, 79, .	3.2	8
80	Spectroscopic evidence for preformed Cooper pairs in the pseudogap phase of cuprates. Europhysics Letters, 2009, 88, 27008.	2.0	22
81	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
82	Corelli: Efficient single crystal diffraction with elastic discrimination. Pramana - Journal of Physics, 2008, 71, 705-711.	1.8	32
83	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
84	Dynamic spin-response function of the high-temperature Bi ₂ Sr ₂ CaCu ₂ O _{8+δ} superconductor from angle-resolved photoemission spectra. Physical Review B, 2007, 75, .	3.2	15
85	Reentrant Orbital Order and the True Ground State of LaSr ₂ Mn ₂ O ₇ . Physical Review Letters, 2007, 98, 167201.	7.8	31
86	Anomalous dispersion in the autocorrelation of angle-resolved photoemission spectra of high-temperature $\text{Bi}_{1-x}\text{Mn}_x\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$	3.2	14
87	Microscopic annealing process and its impact on superconductivity in T _d -structure electron-doped copper oxides. Nature Materials, 2007, 6, 224-229.	27.5	97
88	Nondispersive Fermi Arcs and the Absence of Charge Ordering in the Pseudogap Phase of Bi ₂ Sr ₂ CaCu ₂ O _{8+δ} . Physical Review Letters, 2006, 96, 107006.	7.8	75
89	Evolution of the pseudogap from Fermi arcs to the nodal liquid. Nature Physics, 2006, 2, 447-451.	16.7	393
90	First-Order Metal-Insulator Transitions in Manganites: Are They Universal?. Physical Review Letters, 2006, 96, 087201.	7.8	11

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91	Change of Fermi-surface topology in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$ with doping. <i>Physical Review B</i> , 2006, 73, .	3.2	72
92	Nanomagnetic Droplets and Implications to Orbital Ordering in $\text{La}_{1-x}\text{Sr}_x\text{CoO}_3$. <i>Physical Review Letters</i> , 2006, 96, 027201.	7.8	149
93	Spin Incommensurability and Two Phase Competition in Cobaltites. <i>Physical Review Letters</i> , 2006, 97, 235501.	7.8	79
94	Momentum anisotropy of the scattering rate in cuprate superconductors. <i>Physical Review B</i> , 2005, 71, .	3.2	84
95	Charge disproportionation and search for orbital ordering in NdNiO_3 by use of resonant x-ray diffraction. <i>Physical Review B</i> , 2005, 72, .	3.2	58
96	Identifying the background signal in angle-resolved photoemission spectra of high-temperature cuprate superconductors. <i>Physical Review B</i> , 2004, 69, .	3.2	31
97	Orbital and Spin Chains in ZnV_2O_4 . <i>Physical Review Letters</i> , 2004, 93, 156407.	7.8	144
98	Time-reversal symmetry breaking? (reply). <i>Nature</i> , 2004, 431, 2-3.	27.8	6
99	Scientific Review: Prospects and Challenges in Single Crystal Diffuse Scattering. <i>Neutron News</i> , 2004, 15, 21-24.	0.2	8
100	Polaronic orbital polarization in a layered colossal magnetoresistive manganite. <i>Physical Review B</i> , 2003, 67, .	3.2	23
101	Crossover from Coherent to Incoherent Electronic Excitations in the Normal State of $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$. <i>Physical Review Letters</i> , 2003, 90, 207003.	7.8	78
102	Spin correlations and magnetoresistance in the bilayer manganite $\text{La}_{1.2}\text{Sr}_{1.8}\text{Mn}_2\text{O}_7$. <i>Physica B: Condensed Matter</i> , 2002, 312-313, 763-765.	2.7	4
103	Spontaneous breaking of time-reversal symmetry in the pseudogap state of a high- T_c superconductor. <i>Nature</i> , 2002, 416, 610-613.	27.8	268
104	Neutron and x-ray evidence of charge melting in ferromagnetic layered colossal magnetoresistance manganites (invited). <i>Journal of Applied Physics</i> , 2001, 89, 6840-6845.	2.5	4
105	Magnetic excitations in tetragonal HoCr_2Si_2 . <i>Journal of Applied Physics</i> , 2000, 87, 6283-6285.	2.5	5
106	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
107	Low-energy spin-wave excitations in the bilayer manganite $\text{La}_{1.2}\text{Sr}_{1.8}\text{Mn}_2\text{O}_7$. <i>Journal of Applied Physics</i> , 2000, 87, 5816-5818.	2.5	16
108	Crystal-field interaction in the pyrochlore magnet $\text{Ho}_2\text{Ti}_2\text{O}_7$. <i>Journal of Applied Physics</i> , 2000, 87, 5914-5916.	2.5	166

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109	POLARON ORDERING IN FERROMAGNETIC COLOSSAL MAGNETORESISTIVE OXIDES. International Journal of Modern Physics B, 2000, 14, 3711-3718.	2.0	2
110	SPIN CORRELATIONS OF THE MAGNETORESISTIVE BILAYER MANGANITE La _{1.2} Sr _{1.8} Mn ₂ O ₇ . International Journal of Modern Physics B, 1999, 13, 3820-3822.	2.0	0
111	Vibrational entropy of La _{1.2} Cu ₃ A measured by inelastic neutron scattering. Physical Review B, 1999, 60, 3976-3981.	3.2	40
112	Specific heat of La _{1.2} Sr _{1.8} Mn ₂ O ₇ . Physical Review B, 1999, 60, 6258-6261.	3.2	21
113	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
114	Crystalline electric field of the rare-earth nickelates RNiO ₃ (R=Pr, Nd, Sm, Eu). Journal of Applied Physics, 1999, 83, 14857-14867.	3.2	29
115	Ising Pyrochlore Magnets: Low-Temperature Properties, Selection Rules, and Beyond. Physical Review Letters, 1999, 83, 1854-1857.	7.8	218
116	Magnetic correlations in the bilayer manganite La _{1.2} Sr _{1.8} Mn ₂ O ₇ . Journal of Applied Physics, 1998, 83, 7348-7350.	2.5	25
117	Neutron spectroscopic studies of the crystal field in : evidence for a percolative metal-insulator transition. Journal of Physics Condensed Matter, 1998, 10, 7369-7382.	1.8	1
118	Neutron Scattering Investigation of Magnetic Bilayer Correlations in La _{1.2} Sr _{1.8} Mn ₂ O ₇ : Evidence of Canting above T _C . Physical Review Letters, 1998, 81, 3964-3967.	7.8	99
119	Two-dimensional ferromagnetic correlations above T _C in the naturally layered CMR manganite La _{2-x} Sr _{1+2x} Mn ₂ O ₇ (x=0.3-0.4) (invited). Journal of Applied Physics, 1998, 83, 6374-6378.	2.5	21
120	Neutron-diffraction study of the magnetic and orbital ordering in SmNiO ₃ and EuNiO ₃ . Physical Review B, 1998, 57, 456-464.	3.2	135
121	Intermultiplet crystal field transitions in EuNiO ₃ . Journal of Alloys and Compounds, 1997, 250, 577-580.	5.5	7
122	Neutron crystal-field spectroscopy of RNi ₂ B ₂ C (R = Ho, Er, Tm). Zeitschrift für Physik B-Condensed Matter, 1997, 101, 345-352.	1.1	71
123	Quasi two-dimensional magnetic order of Tb ³⁺ spins in Pb ₂ Sr ₂ Tb _{1-x} Ca _x Cu ₃ O ₈ (x = 0 and 0.5). Zeitschrift für Physik B-Condensed Matter, 1997, 104, 37-43.	1.1	10
124	Pressure-induced orthorhombic-rhombohedral phase transition in NdNiO ₃ . Physica B: Condensed Matter, 1997, 234-236, 15-17.	2.7	32
125	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
126	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

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127	Neutron spectroscopic studies of crystalline electric field in infinite-layer $\text{Sr}_{1-x}\text{Nd}_x\text{CuO}_2$. Physica B: Condensed Matter, 1997, 234-236, 794-796.	2.7	0
128	Neutron investigation of $\text{Nd}_{2-x}y\text{Ce}_x\text{La}_y\text{CuO}_4$ ($0 \leq x \leq 0.2$; $y = 0.5, 1$). Physica B: Condensed Matter, 1997, 234-236, 812-814.	2.7	2
129	Spin fluctuations at magnetic phase transitions in CMR manganites. Physica B: Condensed Matter, 1997, 241-243, 448-450.	2.7	5
130	Evidence for electron-lattice coupling in RNiO_3 perovskites. Physica B: Condensed Matter, 1997, 241-243, 751-757.	2.7	8
131	Crystal structure and inelastic neutron scattering in the infinite-layer compounds $\text{Sr}_{1-x}\text{Nd}_x\text{CuO}_2$. European Physical Journal D, 1996, 46, 1411-1412.	0.4	0
132	Neutron crystal-field spectroscopy of $\text{RNi}_2\text{B}_2\text{C}$ ($\text{R}=\text{Ho}, \text{Er}, \text{Tm}$). European Physical Journal D, 1996, 46, 821-822.	0.4	2
133	New elaboration technique, structure and physical properties of infinite-layer $\text{Sr}_{1-x}\text{Ln}_x\text{CuO}_2$ ($\text{Ln} = \text{Nd}$). <i>Tj ETQq1</i> 1.0, 784314 <i>rgBT / Ove</i> 16	1.2	16
134	Neutron investigation of $\text{Nd}_{2-x}y\text{Ce}_x\text{La}_y\text{CuO}_4$ ($0 \leq x \leq 0.2$; $y=0.5,1$). Journal of Low Temperature Physics, 1996, 105, 1487-1492.	1.4	4
135	Tb spin correlations in $\text{Pb}_{2-x}\text{Sr}_x\text{Tb}_{0.5}\text{Ca}_{0.5}\text{Cu}_3\text{O}_8$. Europhysics Letters, 1996, 34, 447-452.	2.0	10
136	Neutron spectroscopy in $\text{ErBa}_2\text{Cu}_3\text{O}_x$ ($6 \leq x \leq 7$) and $\text{Pr}_{2-x}\text{Ce}_x\text{CuO}_4$ ($0 \leq x \leq 0.2$): Charge transfer, cluster formation and percolative superconductivity. Physica B: Condensed Matter, 1995, 213-214, 78-80.	2.7	4
137	Pressure dependence (internal and external) of the metallization process and the magnetic ordering of PrNiO_3 : A neutron powder diffraction study. Physica B: Condensed Matter, 1995, 213-214, 1025-1027.	2.7	1
138	Hyperfine-enhanced nuclear polarization in NdGaO_3 . Physical Review B, 1995, 52, 4275-4283.	3.2	32
139	Neutron diffraction study of the metal insulator transition in PrNiO_3 . High Pressure Research, 1995, 14, 35-40.	1.2	5
140	High-pressure neutron-diffraction study of the metallization process in PrNiO_3 . Physical Review B, 1995, 52, 9248-9258.	3.2	281
141	Crystallographic and magnetic study of $\text{Nd}_{0.7}\text{La}_{0.3}\text{NiO}_3$. Physica B: Condensed Matter, 1994, 194-196, 367-368.	2.7	4
142	Synthesis, crystal structure and inelastic neutron scattering in the infinite-layer compounds $\text{Sr}_{1-x}\text{Nd}_x\text{CuO}_2$. Physica C: Superconductivity and Its Applications, 1994, 230, 311-317.	1.2	4
143	Neutron spectroscopy in $\text{RBa}_2\text{Cu}_3\text{O}_x$ ($\text{R}=\text{rare earth}$; $6 \leq x \leq 7$) 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
144	Synthesis, crystal structure and inelastic neutron scattering in the infinite-layer compounds $\text{Sr}_{1-x}\text{Nd}_x\text{CuO}_2$. Physica C: Superconductivity and Its Applications, 1994, 235-240, 1001-1002.	1.2	0

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145	Crystal-field levels in the distorted perovskite PrGaO ₃ . Journal of Physics Condensed Matter, 1994, 6, 4099-4106.	1.8	27
146	Crystal-field and magnetic properties of the distorted perovskite NdGaO ₃ . Journal of Physics Condensed Matter, 1993, 5, 8973-8982.	1.8	40