

# Carlos Frontera

## List of Publications by Citations

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198  
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215  
ext. papers

6,354  
ext. citations

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L-index

#	Paper	IF	Citations
198	Towards a calcium-based rechargeable battery. <i>Nature Materials</i> , <b>2016</b> , 15, 169-72	27	451
197	Room-temperature antiferromagnetic memory resistor. <i>Nature Materials</i> , <b>2014</b> , 13, 367-74	27	435
196	Selective spin-state switch and metal-insulator transition in GdBaCo <sub>2</sub> O <sub>5.5</sub> . <i>Physical Review B</i> , <b>2002</b> , 65,	3.3	227
195	Raising the Curie temperature in Sr <sub>2</sub> FeMoO <sub>6</sub> double perovskites by electron doping. <i>Physical Review B</i> , <b>2001</b> , 64,	3.3	223
194	Towards Oxide Electronics: a Roadmap. <i>Applied Surface Science</i> , <b>2019</b> , 482, 1-93	6.7	160
193	High-temperature orbital and charge ordering in Bi <sub>1/2</sub> Sr <sub>1/2</sub> MnO <sub>3</sub> . <i>Physical Review B</i> , <b>2001</b> , 63,	3.3	131
192	Magnetic and magnetotransport properties of GdBaCo <sub>2</sub> O <sub>5+<math>\delta</math></sub> : A high magnetic-field study. <i>Physical Review B</i> , <b>2001</b> , 64,	3.3	127
191	Tailoring Oxygen Content on PrBaCo <sub>2</sub> O <sub>5+<math>\delta</math></sub> Layered Cobaltites. <i>Chemistry of Materials</i> , <b>2005</b> , 17, 5439-5445	4.5	126
190	High- and Low-Temperature Crystal and Magnetic Structures of $\delta$ -Fe <sub>2</sub> O <sub>3</sub> and Their Correlation to Its Magnetic Properties. <i>Chemistry of Materials</i> , <b>2006</b> , 18, 3889-3897	9.6	124
189	Barocaloric and magnetocaloric effects in Fe <sub>49</sub> Rh <sub>51</sub> . <i>Physical Review B</i> , <b>2014</b> , 89,	3.3	111
188	Structure, Atomistic Simulations, and Phase Transition of Stoichiometric Yeelimite. <i>Chemistry of Materials</i> , <b>2013</b> , 25, 1680-1687	9.6	104
187	New crystal structure and characterization of lanthanum tungstate "La <sub>6</sub> WO <sub>12</sub> " prepared by freeze-drying synthesis. <i>Dalton Transactions</i> , <b>2009</b> , 10273-83	4.3	92
186	Elastocaloric and magnetocaloric effects in Ni-Mn-Sn(Cu) shape-memory alloy. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 053506	2.5	90
185	Nonzero orbital moment in high coercivity $\delta$ -Fe <sub>2</sub> O <sub>3</sub> and low-temperature collapse of the magnetocrystalline anisotropy. <i>Physical Review B</i> , <b>2009</b> , 79,	3.3	88
184	Large coercivity and low-temperature magnetic reorientation in $\delta$ -Fe <sub>2</sub> O <sub>3</sub> nanoparticles. <i>Journal of Applied Physics</i> , <b>2005</b> , 98, 044307	2.5	85
183	Magnetoelectric coupling in $\delta$ -Fe <sub>2</sub> O <sub>3</sub> nanoparticles. <i>Nanotechnology</i> , <b>2006</b> , 17, 687-691	3.4	84
182	Complete structural model for lanthanum tungstate: a chemically stable high temperature proton conductor by means of intrinsic defects. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 1762-1764		83

181	FullProf as a new tool for flipping ratio analysis. <i>Physica B: Condensed Matter</i> , <b>2003</b> , 335, 219-222	2.8	83
180	Electrochemical Intercalation of Calcium and Magnesium in TiS <sub>2</sub> : Fundamental Studies Related to Multivalent Battery Applications. <i>Chemistry of Materials</i> , <b>2018</b> , 30, 847-856	9.6	77
179	Order-disorder transitions of Cu-Al-Mn shape-memory alloys. <i>Physical Review B</i> , <b>1998</b> , 58, 14245-14255	3.3	72
178	Effect of band filling and structural distortions on the Curie temperature of Fe-Mo double perovskites. <i>Physical Review B</i> , <b>2003</b> , 68,	3.3	71
177	Effect of Mesosstructured Layer upon Crystalline Properties and Device Performance on Perovskite Solar Cells. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 1628-37	6.4	69
176	Magnetocaloric effect in the low hysteresis Ni-Mn-In metamagnetic shape-memory Heusler alloy. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 173907	2.5	69
175	Spin state of Co <sup>3+</sup> and magnetic transitions in RBaCo <sub>2</sub> O <sub>5.50</sub> (R=Pr,Gd): Dependence on rare-earth size. <i>Physical Review B</i> , <b>2006</b> , 74,	3.3	69
174	Epitaxy-distorted spin-orbit Mott insulator in Sr <sub>2</sub> IrO <sub>4</sub> thin films. <i>Physical Review B</i> , <b>2013</b> , 87,	3.3	63
173	Tailoring barocaloric and magnetocaloric properties in low-hysteresis magnetic shape memory alloys. <i>Acta Materialia</i> , <b>2015</b> , 96, 324-332	8.4	62
172	Strain-induced nonsymmorphic symmetry breaking and removal of Dirac semimetallic nodal line in an orthoperovskite iridate. <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	60
171	High magnetic field study of charge melting in Bi <sub>1/2</sub> (Sr,Ca) <sub>1/2</sub> MnO <sub>3</sub> perovskites: Unconventional behavior of bismuth charge ordered compounds. <i>Physical Review B</i> , <b>2003</b> , 67,	3.3	52
170	Effect of cation disorder on structural, magnetic and dielectric properties of La <sub>2</sub> MnCoO <sub>6</sub> double perovskite. <i>Journal of Physics Condensed Matter</i> , <b>2011</b> , 23, 496003	1.8	51
169	High magnetic field study of lattice and magnetic effects on the charge-melting transition in L <sub>1/2</sub> Ca <sub>1/2</sub> MnO <sub>3</sub> perovskites. <i>Physical Review B</i> , <b>2000</b> , 61, 9014-9018	3.3	50
168	Low-temperature charge and magnetic order of Bi <sub>0.5</sub> Sr <sub>0.5</sub> MnO <sub>3</sub> . <i>Physical Review B</i> , <b>2001</b> , 64,	3.3	49
167	Absence of ferromagnetism in Fe-doped TiO <sub>2</sub> nanoparticles. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 122501	3.4	47
166	On the strange case of divalent ions intercalation in V <sub>2</sub> O <sub>5</sub> . <i>Journal of Power Sources</i> , <b>2018</b> , 407, 162-172	8.9	45
165	Valence transition in (Pr,Ca)CoO <sub>3</sub> cobaltites: Charge migration at the metal-insulator transition. <i>Physical Review B</i> , <b>2011</b> , 84,	3.3	45
164	Structural and magnetic study of PrBaCo <sub>2</sub> O <sub>5+<math>\delta</math></sub> ( $\delta$ ?0.75) cobaltite. <i>Physical Review B</i> , <b>2004</b> , 70,	3.3	42

163	Valence change of praseodymium in Pr <sub>0.5</sub> Ca <sub>0.5</sub> CoO <sub>3</sub> investigated by x-ray absorption spectroscopy. <i>Physical Review B</i> , <b>2011</b> , 84,	3.3	41
162	Enhanced ferromagnetic interactions in electron doped Nd <sub>x</sub> Sr <sub>2-x</sub> FeMoO <sub>6</sub> double perovskites. <i>Journal of Physics Condensed Matter</i> , <b>2004</b> , 16, 3173-3182	1.8	41
161	Phase coexistence, magnetic inhomogeneity, and disorder in the charge-ordered state of Pr <sub>2/3</sub> Ca <sub>1/3</sub> MnO <sub>3</sub> . <i>Physical Review B</i> , <b>2000</b> , 62, 3381-3388	3.3	40
160	Room Temperature Structural and Microstructural Study for the Magneto-Conducting La <sub>5/8-x</sub> Pr <sub>x</sub> Ca <sub>3/8</sub> MnO <sub>3</sub> (0 ≤ x ≤ 5/8) Series. <i>Chemistry of Materials</i> , <b>2003</b> , 15, 167-174	9.6	38
159	Taking steps forward in understanding the electrochemical behavior of Na <sub>2</sub> Ti <sub>3</sub> O <sub>7</sub> . <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 22280-22286	13	37
158	Room temperature charge and orbital ordering and phase coexistence in Bi <sub>0.5</sub> Sr <sub>0.5</sub> MnO <sub>3</sub> . <i>Journal of Physics Condensed Matter</i> , <b>2001</b> , 13, 1071-1078	1.8	37
157	Neutron and X-ray diffraction study of ferrite nanocrystals obtained by microwave-assisted growth. A structural comparison with the thermal synthetic route. <i>Journal of Applied Crystallography</i> , <b>2014</b> , 47, 414-420	3.8	36
156	Selective spin-state and metal-insulator transitions in GdBaCo <sub>2</sub> O <sub>5.5</sub> . <i>Journal of Solid State Chemistry</i> , <b>2003</b> , 171, 349-352	3.3	36
155	Assessing Si-based anodes for Ca-ion batteries: Electrochemical decalciation of CaSi <sub>2</sub> . <i>Electrochemistry Communications</i> , <b>2016</b> , 66, 75-78	5.1	36
154	Charge and orbital order in rare-earth and Bi manganites: a comparison. <i>Journal of Solid State Chemistry</i> , <b>2003</b> , 171, 84-89	3.3	35
153	Tetragonal to monoclinic transition in the metallic antiferromagnet Pr <sub>0.5</sub> Sr <sub>0.5</sub> MnO <sub>3</sub> . <i>Physical Review B</i> , <b>1999</b> , 60, R9889-R9892	3.3	35
152	Confinement generates single-crystal aragonite rods at room temperature. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 7670-7675	11.5	35
151	Ferromagnetic coupling in Nd <sub>x</sub> Ca <sub>2-x</sub> FeMoO <sub>6</sub> double perovskites: Dominant band-filling effects. <i>Physical Review B</i> , <b>2004</b> , 70,	3.3	34
150	Role of A-site cations in the metal-insulator transition in Pr <sub>0.5</sub> Ca <sub>0.5</sub> CoO <sub>3</sub> . <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	33
149	Structure, chemical stability and mixed proton-electron conductivity in BaZr <sub>0.9-x</sub> Pr <sub>x</sub> Gd <sub>0.1</sub> O <sub>3</sub> . <i>Journal of Power Sources</i> , <b>2011</b> , 196, 9141-9147	8.9	32
148	Strain-Engineered Ferromagnetism in LaMnO <sub>3</sub> Thin Films. <i>Crystal Growth and Design</i> , <b>2015</b> , 15, 5332-5337	3.5	31
147	DAJUST: a suite of computer programs for pattern matching, space-group determination and intensity extraction from powder diffraction data. <i>Journal of Applied Crystallography</i> , <b>2012</b> , 45, 844-848	3.8	30
146	Avalanches, irreversibility, and phase separation in Co-substituted Pr <sub>0.5</sub> Ca <sub>0.5</sub> Mn <sub>1-x</sub> Co <sub>x</sub> O <sub>3</sub> . <i>Physical Review B</i> , <b>2006</b> , 74,	3.3	30

145	Band filling versus bond bending in substituted $LxSr_{2-x}FeMoO_6$ (L=Ca, La, Nd) compounds. <i>Journal of Applied Physics</i> , <b>2004</b> , 95, 7082-7084	2.5	30
144	New rare earth hafnium oxynitride perovskites with photocatalytic activity in water oxidation and reduction. <i>Chemical Communications</i> , <b>2018</b> , 54, 1525-1528	5.8	28
143	Aging of $Sr_2FeMoO_6$ and related oxides. <i>Materials Research Bulletin</i> , <b>2003</b> , 38, 1477-1486	5.1	27
142	Numerical signs for a transition in the two-dimensional random field Ising model at $T=0$ . <i>Physical Review E</i> , <b>1999</b> , 59, R1295-R1298	2.4	27
141	Exploring a novel preparation method of 1D metal organic frameworks based on supercritical $CO_2$ . <i>Dalton Transactions</i> , <b>2015</b> , 44, 7548-53	4.3	26
140	Electrochemical calcium extraction from 1D-CaCoO. <i>Dalton Transactions</i> , <b>2018</b> , 47, 11298-11302	4.3	26
139	Magnetic properties of $Bi_{0.75}Sr_{0.25}MnO_3$ ( $x=0$ , $T_{CO}=600K$ ): Ferromagnetism and charge order. <i>Physical Review B</i> , <b>2005</b> , 72,	3.3	26
138	Enhanced stability of charge-order in underdoped $Bi_{0.75}Sr_{0.25}MnO_3$ . <i>Solid State Communications</i> , <b>2003</b> , 125, 277-280	1.6	26
137	Charge and Zener polaron order in $Bi_{0.75}Sr_{0.25}MnO_3$ . <i>Physical Review B</i> , <b>2003</b> , 68,	3.3	24
136	Configurational disorder and magnetism in double perovskites: A Monte Carlo simulation study. <i>Physical Review B</i> , <b>2004</b> , 69,	3.3	23
135	Dependence of the physical properties of $Nd_{0.5}Ca_{0.5}MnO_3$ on the oxidation state of Mn. <i>Physical Review B</i> , <b>2000</b> , 62, 3002-3005	3.3	23
134	Monte Carlo study of the growth of L12-ordered domains in fcc A3B binary alloys. <i>Physical Review B</i> , <b>1997</b> , 55, 212-225	3.3	22
133	Self-Arranged Misfit Dislocation Network Formation upon Strain Release in $La_{0.7}Sr_{0.3}MnO_3/LaAlO_3(100)$ Epitaxial Films under Compressive Strain. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 16823-32	9.5	21
132	Hidden Magnetic States Emergent Under Electric Field, In A Room Temperature Composite Magnetolectric Multiferroic. <i>Scientific Reports</i> , <b>2017</b> , 7, 15460	4.9	20
131	Strain-induced perpendicular magnetic anisotropy in $La_2CoMnO_6$ thin films and its dependence on film thickness. <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	19
130	Efficient Algorithm for Finding Ground-States in the Random Field Ising Model with an External Field. <i>Journal of Computational Physics</i> , <b>2000</b> , 160, 117-125	4.1	19
129	Engineering the microstructure and magnetism of $La_2CoMnO_6$ thin films by tailoring oxygen stoichiometry. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 242401	3.4	18
128	TALP: a multisolution direct-space strategy for solving molecular crystals from powder diffraction data based on restrained least squares. <i>Journal of Applied Crystallography</i> , <b>2012</b> , 45, 1270-1277	3.8	18

127	FullProf as a new tool for flipping ratio analysis: further improvements. <i>Physica B: Condensed Matter</i> , <b>2004</b> , 350, E731-E733	2.8	18
126	Monte Carlo study of the relation between vacancy diffusion and domain growth in two-dimensional binary alloys. <i>Physical Review B</i> , <b>1993</b> , 48, 9321-9326	3.3	18
125	Anisotropic sensor and memory device with a ferromagnetic tunnel barrier as the only magnetic element. <i>Scientific Reports</i> , <b>2018</b> , 8, 861	4.9	17
124	Isothermal anisotropic magnetoresistance in antiferromagnetic metallic IrMn. <i>Scientific Reports</i> , <b>2016</b> , 6, 35471	4.9	17
123	Study of sodium manganese fluorides as positive electrodes for Na-ion batteries. <i>Solid State Ionics</i> , <b>2015</b> , 278, 106-113	3.3	16
122	Consequences of embedding Ti <sup>4+</sup> 3d <sup>0</sup> centers in Pr <sub>0.50</sub> Ca <sub>0.50</sub> MnO <sub>3</sub> : Phase competition in Pr <sub>0.50</sub> Ca <sub>0.50</sub> Mn <sub>1-x</sub> Ti <sub>x</sub> O <sub>3</sub> . <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	16
121	Dielectric properties of Bi <sub>1-x</sub> Sr <sub>x</sub> MnO <sub>3</sub> (x=0.40,0.50) manganites: Influence of room temperature charge order. <i>Journal of Applied Physics</i> , <b>2009</b> , 105, 084116	2.5	15
120	Magnetoresistive oxides: new developments and applications. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2002</b> , 242-245, 98-104	2.8	15
119	Comment on "Kinetics of spinodal decomposition in the Ising model with vacancy diffusion". <i>Physical Review B</i> , <b>1996</b> , 53, 2886-2889	3.3	15
118	Increasing the Curie temperature of Ca <sub>2</sub> FeMoO <sub>6</sub> double perovskite by introducing near-neighbour antiferromagnetic interactions. <i>Journal of Physics Condensed Matter</i> , <b>2005</b> , 17, 8037-8047	1.8	14
117	A new approach to increase the Curie temperature of FeMo double perovskites. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2006</b> , 126, 139-142	3.1	14
116	On the Study of Ca and Mg Deintercalation from Ternary Tantalum Nitrides. <i>ACS Omega</i> , <b>2019</b> , 4, 8943-8952	3.5	13
115	The instrumental resolution of a moire extensometer in light of its recent automatization. <i>Measurement: Journal of the International Measurement Confederation</i> , <b>2016</b> , 91, 258-265	4.6	13
114	Magnetic anisotropy and valence states in La <sub>2</sub> Co <sub>1-x</sub> Mn <sub>1+x</sub> O <sub>6</sub> (x=0.23) thin films studied by x-ray absorption spectroscopy techniques. <i>Physical Review B</i> , <b>2017</b> , 95,	3.3	13
113	Obtaining the structure factors for an epitaxial film using Cu X-ray radiation. <i>Journal of Applied Crystallography</i> , <b>2013</b> , 46, 1749-1754	3.8	13
112	Simultaneous para-ferrimagnetic, metal-insulator, and orthorhombic-monoclinic transitions in YBaCo <sub>2</sub> O <sub>5.50</sub> . <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	13
111	Cation order enhancement in Sr <sub>2</sub> FeMoO <sub>6</sub> by water-saturated hydrogen reduction. <i>Journal of the European Ceramic Society</i> , <b>2011</b> , 31, 121-127	6	13
110	Effect of cation site-disorder on the structure and magneto-transport properties of Ln <sub>5/8</sub> M <sub>3/8</sub> MnO <sub>3</sub> manganites. <i>Journal of Solid State Chemistry</i> , <b>2005</b> , 178, 1949-1958	3.3	13

109	Electronic self-doping of Mo states in $A_2\text{FeMoO}_6$ ( $A=\text{Ca, Sr, and Ba}$ ) half-metallic ferromagnets: A nuclear magnetic resonance study. <i>Physical Review B</i> , <b>2005</b> , 71,	3.3	13
108	Chemical Heterogeneity in a Single Phase: $\text{Bi}_{0.15}\text{Ca}_{0.85}\text{MnO}_3$ , a Case Example of Macroscopic Phase Segregation. <i>Chemistry of Materials</i> , <b>2000</b> , 12, 3648-3657	9.6	13
107	Band structure of $\text{CuMnAs}$ probed by optical and photoemission spectroscopy. <i>Physical Review B</i> , <b>2018</b> , 97,	3.3	12
106	A new intermediate intercalate in superconducting sodium-doped hafnium nitride chloride. <i>Chemical Communications</i> , <b>2005</b> , 3352-4	5.8	12
105	Spin state transition: the origin of structural, magnetic and metal-insulator transitions in $\text{GdBaCo}_2\text{O}_{5+\delta}$ ( $\delta=0.5$ ). <i>Journal of Magnetism and Magnetic Materials</i> , <b>2002</b> , 242-245, 751-753	2.8	12
104	Neutron-diffraction study of magnetization avalanches in $\text{Pr}_{0.50}\text{Ca}_{0.50}\text{Mn}_{1-x}\text{Ni}_x\text{O}_3$ . <i>Journal of Applied Physics</i> , <b>2005</b> , 97, 10H701	2.5	12
103	Structural, spin state, and magnetic transitions in $\text{GdBaCo}_2\text{O}_{5+\delta}$ ( $\delta=0.5$ ). <i>Journal of Alloys and Compounds</i> , <b>2001</b> , 323-324, 468-471	5.7	12
102	Antiphase domain growth in BCC metallic alloys via vacancies. <i>European Physical Journal B</i> , <b>1994</b> , 96, 79-86	1.2	12
101	Topochemical synthesis of cation ordered double perovskite oxynitrides. <i>Dalton Transactions</i> , <b>2017</b> , 46, 5128-5132	4.3	11
100	Effect of the vacancy interaction on antiphase domain growth in a two-dimensional binary alloy. <i>Physical Review B</i> , <b>1997</b> , 56, 5261-5270	3.3	11
99	Short- and Long-Range Orbital Order in Phase Separated $\text{Pr}_{0.50}\text{Ca}_{0.50}\text{Mn}_{0.99}\text{Ti}_{0.01}\text{O}_3$ : Its Role in Thermal Hysteresis. <i>Chemistry of Materials</i> , <b>2008</b> , 20, 3068-3075	9.6	11
98	Relevance of solid solution randomness for long-range phase separation in highly correlated oxides. <i>Europhysics Letters</i> , <b>2008</b> , 84, 67011	1.6	11
97	Influence of R-ion size on spin state of Co and magnetic properties of $\text{RBaCo}_2\text{O}_{5.50}$ cobaltites. <i>Journal of Applied Physics</i> , <b>2008</b> , 103, 07F713	2.5	11
96	High magnetic field study of $\text{HoBaCo}_2\text{O}_{5.5}$ and $\text{GdBaCo}_2\text{O}_{5.5}$ layered cobaltites: the effect of rare-earth size. <i>Physica B: Condensed Matter</i> , <b>2004</b> , 346-347, 246-249	2.8	11
95	Studying avalanches in the ground state of the two-dimensional random-field ising model driven by an external field. <i>Physical Review E</i> , <b>2000</b> , 62, 7470-3	2.4	11
94	Application of synchrotron through-the-substrate microdiffraction to crystals in polished thin sections. <i>IUCrJ</i> , <b>2015</b> , 2, 452-63	4.7	11
93	Structure of epitaxial $\text{SrIrO}_3$ perovskite studied by interference between X-ray waves diffracted by the substrate and the thin film. <i>Journal of Applied Crystallography</i> , <b>2017</b> , 50, 385-398	3.8	10
92	Spontaneous cationic ordering in chemical-solution-grown $\text{La}_2\text{CoMnO}_6$ double perovskite thin films. <i>NPG Asia Materials</i> , <b>2019</b> , 11,	10.3	10

91	Capabilities of through-the-substrate microdiffraction: application of Patterson-function direct methods to synchrotron data from polished thin sections. <i>Journal of Synchrotron Radiation</i> , <b>2011</b> , 18, 891-8	2.4	10
90	Neutron Powder Diffraction Studies of Magnetic Quasi-degenerated Oxides with Competing Degrees of Freedom. <i>Neutron News</i> , <b>2010</b> , 21, 15-19	0.4	10
89	Study of the oxygen-deficient double perovskite PrBaCo <sub>2</sub> O <sub>5.75</sub> . <i>Physica B: Condensed Matter</i> , <b>2004</b> , 350, E277-E279	2.8	10
88	Electronic and magnetic transitions in Bi <sub>2</sub> RnMnO oxides: high temperature charge-ordering. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2002</b> , 242-245, 645-647	2.8	10
87	Avalanches in the ground state of the 3D Gaussian random field Ising model driven by an external field. <i>Computer Physics Communications</i> , <b>2002</b> , 147, 455-458	4.2	10
86	Calculating flux to predict future cave radon concentrations. <i>Journal of Environmental Radioactivity</i> , <b>2016</b> , 157, 16-26	2.4	10
85	Emission colour tuning through coupled N/La introduction in Sr <sub>2</sub> SiO <sub>4</sub> :Eu <sup>2+</sup> . <i>Journal of Materials Chemistry C</i> , <b>2015</b> , 3, 11471-11477	7.1	9
84	Application of the constrained S-FFT direct-phasing method to powder diffraction data. XIII. <i>Journal of Applied Crystallography</i> , <b>2007</b> , 40, 1035-1038	3.8	9
83	Magnetic and electronic properties of the oxygen-deficient PrBaCo <sub>2</sub> O <sub>5+<math>\delta</math></sub> ( $\delta > 0.50$ ). <i>Journal of Magnetism and Magnetic Materials</i> , <b>2004</b> , 272-276, 1762-1763	2.8	9
82	Appraisal of calcium ferrites as cathodes for calcium rechargeable batteries: DFT, synthesis, characterization and electrochemistry of CaFeO. <i>Dalton Transactions</i> , <b>2020</b> , 49, 2671-2679	4.3	9
81	Nonstoichiometry Driven Ferromagnetism in Double Perovskite La <sub>2</sub> Ni <sub>1-x</sub> Mn <sub>1+x</sub> O <sub>6</sub> Insulating Thin Films. <i>Crystal Growth and Design</i> , <b>2019</b> , 19, 2765-2771	3.5	8
80	Synthesis of dry SmCl <sub>3</sub> from Sm <sub>2</sub> O <sub>3</sub> revisited. Implications for the encapsulation of samarium compounds into carbon nanotubes. <i>Polyhedron</i> , <b>2016</b> , 116, 116-121	2.7	8
79	On the viability of Mg extraction in MgMoN: a combined experimental and theoretical approach. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 26435-26441	3.6	8
78	The effect of oxygen disorder on magnetic properties of PrBaCo <sub>2</sub> O <sub>5.50</sub> layered cobaltite. <i>Journal of Physics Condensed Matter</i> , <b>2008</b> , 20, 104228	1.8	8
77	Effects of d <sub>0</sub> substitution on phase competition in Pr <sub>0.50</sub> Ca <sub>0.50</sub> Mn <sub>1-x</sub> Ti <sub>x</sub> O <sub>3</sub> . <i>Journal of Applied Physics</i> , <b>2008</b> , 103, 07F719	2.5	8
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75	H <sub>2</sub> diagrams of Ln <sub>1-x</sub> CaxMnO <sub>3</sub> (x=1/2, 1/3) in pulsed fields up to 50 T. <i>Journal of Applied Physics</i> , <b>1999</b> , 85, 5570-5572	2.5	8
74	Aqueous Chemical Solution Deposition of Functional Double Perovskite Epitaxial Thin Films. <i>Chemistry - A European Journal</i> , <b>2020</b> , 26, 9338-9347	4.8	7



73	Comparison of the local and the average crystal structure of proton conducting lanthanum tungstate and the influence of molybdenum substitution. <i>Dalton Transactions</i> , <b>2016</b> , 45, 3791-7	4.3	7
72	A contactless positioning system for monitoring discontinuities in three dimensions with geological and geotechnical applications. <i>Review of Scientific Instruments</i> , <b>2017</b> , 88, 074501	1.7	7
71	Magnetic, structural properties and B-site order of two epitaxial La <sub>2</sub> CoMnO <sub>6</sub> films with perpendicular out-of-plane orientation. <i>Journal of Physics: Conference Series</i> , <b>2010</b> , 200, 092002	0.3	7
70	Ferromagnetic coupling strength and electron-doping effects in double perovskites. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2005</b> , 290-291, 974-980	2.8	7
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67	Computer studies of the 2D random field Ising model at T=0. <i>Computer Physics Communications</i> , <b>1999</b> , 121-122, 188-190	4.2	7
66	Sequential partitioning: An alternative to understanding size distributions of avalanches in first-order phase transitions. <i>Physical Review E</i> , <b>1995</b> , 52, 5671-5674	2.4	7
65	Nitride tuning of lanthanide chromites. <i>Chemical Communications</i> , <b>2016</b> , 52, 4317-20	5.8	6
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60	Local manipulation of metamagnetism by strain nanopatterning. <i>Materials Horizons</i> , <b>2020</b> , 7, 2056-2062	14.4	5
59	Crystal Growth Mechanisms of BiFeO Nanoparticles. <i>Inorganic Chemistry</i> , <b>2019</b> , 58, 11364-11371	5.1	5
58	Growth kinetics engineered magnetoresistance response in La <sub>2/3</sub> Sr <sub>1/3</sub> MnO <sub>3</sub> thin films. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 152406	3.4	5
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50	Charge and Zener polaron order in Bi <sub>0.75</sub> Sr <sub>0.25</sub> MnO <sub>3</sub> : a comparison with Bi <sub>0.75</sub> Ca <sub>0.25</sub> MnO <sub>3</sub> . <i>Physica B: Condensed Matter</i> , <b>2004</b> , 350, 48-50	2.8	4
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46	Monte Carlo simulation of interface alloying. <i>Physical Review B</i> , <b>1995</b> , 51, 11369-11375	3.3	4
45	Possible scale invariant linear magnetoresistance in pyrochlore iridates Bi <sub>2</sub> Ir <sub>2</sub> O <sub>7</sub> . <i>New Journal of Physics</i> , <b>2019</b> , 21, 113041	2.9	4
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41	Improving the direct-methods sign-unconstrained S-FFT algorithm. XV. <i>Acta Crystallographica Section A: Foundations and Advances</i> , <b>2009</b> , 65, 528-31		3
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30	Magnetic and electronic properties of Bi(0.75)Ca(0.25)MnO <sub>3</sub> . <i>Journal of Physics Condensed Matter</i> , <b>2007</b> , 19, 406212	1.8	2
29	Magnetism of Bi <sub>0.75</sub> Sr <sub>0.25</sub> MnO <sub>3</sub> and its dependence on bismuth concentration. <i>Journal of Magnetism and Magnetic Materials</i> , <b>2004</b> , 272-276, 1734-1735	2.8	2
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24	Comparison between molecular dynamics and Monte Carlo simulations of an ordering process in a binary alloy. <i>Physical Review B</i> , <b>1999</b> , 59, 11121-11124	3.3	2
23	Structural instability vs. bandwidth-controlled charge ordering in x = manganites. <i>Journal of Magnetism and Magnetic Materials</i> , <b>1999</b> , 196-197, 549-551	2.8	2
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13	Charge localization and magnetic dynamics in manganites. <i>Journal of Magnetism and Magnetic Materials</i> , <b>1999</b> , 196-197, 477-478	2.8	1
12	Rapid Thermal Annealing of Double Perovskite Thin Films Formed by Polymer Assisted Deposition. <i>Materials</i> , <b>2020</b> , 13,	3.5	1
11	Engineering Polar Oxynitrides: Hexagonal Perovskite BaWON <sub>2</sub> . <i>Angewandte Chemie</i> , <b>2020</b> , 132, 18553-18557	3.5	1
10	High-Temperature Synthesis and Dielectric Properties of LaTaON. <i>Inorganic Chemistry</i> , <b>2021</b> , 60, 16484-16491	5.4	0
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3	Ordering Processes in FCC and BCC Binary Alloys: A Comparative Study. <i>Materials Science Forum</i> , <b>1998</b> , 269-272, 675-680	0.4	
2	Structural, magnetic and electronic properties of EuTi <sub>0.5</sub> W <sub>0.5</sub> O <sub>3-x</sub> N <sub>x</sub> perovskite oxynitrides. <i>Journal of Solid State Chemistry</i> , <b>2020</b> , 286, 121274	3.3	

- 1 Fractal polymer islands on top of ferromagnetic  $\text{La}_2\text{Ni}_{0.6}\text{Mn}_{1.4}\text{O}_6$  thin films. *Journal of Magnetism and Magnetic Materials*, **2021**, 537, 168203 2.8