Mohamed Balli

List of Publications by Year
in descending order

74	2,182	230014	263392
papers	citations	27 h-index	45 g-index

74	74	74	1627
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A theoretical study of the electronic, magnetic and magnetocaloric properties of the TbMnO3 multiferroic. Journal of Magnetism and Magnetic Materials, 2022, 543, 168397.	1.0	4
2	Assessment of near Pr2/3Sr1/3MnO3 oxide in magnetic cooling. International Journal of Refrigeration, 2022, 133, 302-312.	1.8	5
3	Electric field and strain induced gap modifications in multilayered GaN. Applied Surface Science, 2022, 578, 151970.	3.1	4
4	Janus transition-metal dichalcogenides heterostructures for highly efficient excitonic solar cells. Applied Surface Science, 2022, 598, 153835.	3.1	11
5	A study of structural, magnetic and magnetocaloric properties of (1â^'x)La0.6Ca0.4MnO3/xMn2O3 composite materials. Journal of Alloys and Compounds, 2021, 859, 158392.	2.8	8
6	Theoretical study of the electronic structure, magnetic and magnetocaloric properties of the DyMn2O5 multiferroic. Journal of Magnetism and Magnetic Materials, 2021, 530, 167890.	1.0	5
7	Prediction of optoelectronic features and efficiency for CuMX2 (M=Ga, In; X=S, Se) semiconductors using mbj+U approximation. Current Applied Physics, 2021, 32, 11-23.	1.1	1
8	Revisiting the magnetic and magnetocaloric properties of bulk gadolinium: A combined DFT and Monte Carlo simulations. Physica Scripta, 2021, 96, 015808.	1.2	9
9	Effect of lattice deformation on electronic and optical properties of CuGaSe2: Ab-initio calculations. Thin Solid Films, 2020, 696, 137783.	0.8	9
10	Enlarging the magnetocaloric operating window of the Dy₂NiMnO₆double perovskite by lanthanum doping. Journal Physics D: Applied Physics, 2020, 53, 095001.	1.3	6
11	A study of magnetic and magnetocaloric properties of 0.95 (La0.45Nd0.25Sr0.3MnO3)/0.05CuO composites prepared by spray drying. Inorganic Chemistry Communication, 2020, 119, 108129.	1.8	3
12	Engineering the magnetocaloric properties of PrVO3 epitaxial oxide thin films by strain effects. Applied Physics Letters, 2020, 117, .	1.5	10
13	Electronic and magnetic properties of the multiferroic TbMn2O5. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	1.1	1
14	Analysis of the magnetic and magnetocaloric properties of ALaFeMnO6 (Aâ€‰=â€‰Sr, Ba, and Ca) double perovskites. Journal of Applied Physics, 2020, 127, .	1.1	14
15	Strong conventional and rotating magnetocaloric effects in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>TbV</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:mrow></mml:math> crystals over a wide cryogenic temperature range. Physical Review Materials, 2020, 4, .	0.9	5
16	Origin of the enhanced ferroelectricity in multiferroic SmMn2O5. Physical Review B, 2019, 100, .	1.1	7
17	On the origin of the giant magnetocaloric effect in HoMn2O5 single crystals: First principles study and Monte Carlo simulations. Materials Chemistry and Physics, 2019, 231, 366-371.	2.0	9
18	Magnetocaloric and cooling properties of the intermetallic compound AlFe2B2 in an AMR cycle system. Intermetallics, 2019, 104, 84-89.	1.8	17

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19	Study of crystal-field excitations and infrared active phonons in TbMnO3. Journal of Physics Condensed Matter, 2018, 30, 175602.	0.7	8
20	Composite (La0.45Nd0.25)Sr0.3MnO3/5CuO materials for magnetic refrigeration applications. Journal of Magnetism and Magnetic Materials, 2018, 449, 25-32.	1.0	17
21	Probing the role of Nd3+ ions in the weak multiferroic character of NdMn2O5 by optical spectroscopies. Physical Review B, 2018, 98, .	1.1	6
22	Unusual rotating magnetocaloric effect in the hexagonal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>ErMn</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> single crystal. Physical Review B, 2018, 98, .	1.1	30
23	Investigation of the magnetocaloric effect in candidate magnetocaloric material double perovskites <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>La</mml:mi><mml:mn>2</mml:mn></mml:mr , <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>La</mml:mi><mml:mn>2</mml:mn></mml:mr Physical Review B, 2018, 98, .	1.1	21
24	Tailoring the Magnetocaloric Effect in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>La</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow Thin Films. Physical Review Applied, 2018, 9, .	1.5	38
25	Advanced materials for magnetic cooling: Fundamentals and practical aspects. Applied Physics Reviews, 2017, 4, .	5.5	200
26	Comment on â€œGiant anisotropy of magnetocaloric effect in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>TbMn</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> single crystalsâ€• Physical Review B, 2017, 96, .	1.1	29
27	Analysis of the Anisotropic Magnetocaloric Effect in RMn2O5 Single Crystals. Magnetochemistry, 2017, 3, 36.	1.0	9
28	Review of the Magnetocaloric Effect in RMnO3 and RMn2O5 Multiferroic Crystals. Crystals, 2017, 7, 44.	1.0	67
29	Numerical Optimization of the Energetic Performance of a Near Room Temperature Magnetic Refrigerator. , 2017, , .		1
30	Giant rotating magnetocaloric effect at low magnetic fields in multiferroic TbMn2O5 single crystals. Applied Physics Letters, 2016, 108, .	1.5	81
31	Large rotating magnetocaloric effect in the orthorhombic DyMnO3 single crystal. Solid State Communications, 2016, 239, 9-13.	0.9	52
32	Raman and crystal field studies of Tb-O bonds inTbMn2O5. Physical Review B, 2016, 94, .	1.1	19
33	Raman and infrared study of 4f electronâ€“phonon coupling in HoVO₃. Journal of Physics Condensed Matter, 2016, 28, 435401.	0.7	3
34	First-principles study of electronic, electrical and optical properties of HoMn2O5. Journal of Physics: Conference Series, 2016, 758, 012009.	0.3	3
35	Micro-Raman and infrared studies of multiferroic TbMn₂O₅. Journal of Physics Condensed Matter, 2016, 28, 055901.	0.7	9
36	Observation of large refrigerant capacity in the HoVO3 vanadate single crystal. Journal of Applied Physics, 2015, 118, .	1.1	26

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37	Magnetocaloric properties of the hexagonal HoMnO3 single crystal revisited. Physica B: Condensed Matter, 2015, 478, 77-83.	1.3	37
38	On the magnetocaloric effect in the multiferroic hexagonal DyMnO3 single crystals. Journal of Magnetism and Magnetic Materials, 2015, 374, 252-257.	1.0	50
39	A study of the phase transition and magnetocaloric effect in multiferroic La2MnNiO6 single crystals. Journal of Applied Physics, 2014, 115, .	1.1	39
40	Analysis of the phase transition and magneto-thermal properties in La2CoMnO6 single crystals. Journal of Applied Physics, 2014, 116, .	1.1	37
41	Negative and conventional magnetocaloric effects of a MnRhAs single crystal. Journal of Applied Physics, 2014, 115, .	1.1	16
42	Thermal investigations of an experimental active magnetic regenerative refrigerator operating near room temperature. International Journal of Refrigeration, 2014, 37, 36-42.	1.8	25
43	Corrosion behavior of gadolinium and Laâ€“Feâ€“Coâ€“Si compounds in various heat conducting fluids. International Journal of Refrigeration, 2014, 37, 307-313.	1.8	26
44	From conventional to magnetic refrigerator technology. International Journal of Refrigeration, 2014, 37, 8-15.	1.8	82
45	Structural, magnetic and magnetocaloric properties of La0.6Ca0.4Mn1â^'xFexO3 (x=0, 0.05, 0.1, 0.15 and) Tj ETQq1 1 0.784314 rgB	0.9	10
46	Anisotropy-enhanced giant reversible rotating magnetocaloric effect in HoMn2O5 single crystals. Applied Physics Letters, 2014, 104, .	1.5	154
47	1D model of an active magnetic regenerator. International Journal of Refrigeration, 2014, 37, 43-50.	1.8	18
48	Influence of the materials magnetic state on the accurate determination of the magnetocaloric effect. EPJ Web of Conferences, 2012, 29, 00005.	0.1	12
49	Magnetocaloric effect and magnetic refrigeration in La0.7Ca0.15Sr0.15Mn1-xGaxO3(0 â‰¤xâ‰¤ 0.1). EPJ Web of Conferences, 2012, 29, 00049.	0.1	1
50	A pre-industrial magnetic cooling system for room temperature application. Applied Energy, 2012, 98, 556-561.	5.1	74
51	Effect of Ga doping on the physical properties of La0.7(CaSr)0.3Mn1â^'xGaxO3(x= 0, 0.025, 0.05, 0.075 and) Tj ETQq1 1 0.784314 rg	0.3	0
52	Implementation of La(Fe, Co)13â^'xSix materials in magnetic refrigerators: Practical aspects. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2012, 177, 629-634.	1.7	44
53	Magnetic behaviour and experimental study of the magnetocaloric effect in the pseudobinary Laves phase Er1â^'xDyxCo2. Journal of Alloys and Compounds, 2011, 509, 3907-3912.	2.8	39
54	On the Magnetic Forces in Magnetic Cooling Machines: Numerical Calculations and Experimental Investigations. IEEE Transactions on Magnetics, 2011, 47, 3383-3386.	1.2	15

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55	Bulk Transition Elements Based Materials for Magnetic Cooling Application. Solid State Phenomena, 2011, 170, 248-252.	0.3	4
56	Refrigerant capacity and direct measurements of the magnetocaloric effect on LaFe11.2Co0.7Si1.1Cx materials. Journal of Applied Physics, 2010, 107, 09A933.	1.1	12
57	Neutron diffraction study of LaFe11.31Si1.69 and LaFe11.31Si1.69H1.45 compounds. Journal of Alloys and Compounds, 2010, 490, 50-55.	2.8	56
58	The â€œcolossalâ€•magnetocaloric effect in Mn1âˆ’xFexAs: What are we really measuring?. Applied Physics Letters, 2009, 95, .	1.5	139
59	Effect of interstitial nitrogen on magnetism and entropy change of LaFe11.7Si1.3 compound. Journal of Magnetism and Magnetic Materials, 2009, 321, 123-125.	1.0	57
60	Direct measurement of the magnetocaloric effect on La(Fe13âˆ’xâˆ’yCoy)Six compounds near room temperature. Journal of Applied Physics, 2009, 106, 023902.	1.1	25
61	The influence of gadolinium on magnetism and magnetocaloric properties of HoCo2 alloy. Journal of Alloys and Compounds, 2008, 455, 73-76.	2.8	22
62	The LaFe11.2Co0.7Si1.1Cx carbides for magnetic refrigeration close to room temperature. Applied Physics Letters, 2008, 92, .	1.5	52
63	Giant magnetocaloric effect in Mn1âˆ’x(Ti0.5V0.5)xAs: Experiments and calculations. Journal of Applied Physics, 2008, 103, .	1.1	29
64	Gd1âˆ’xTbx alloys for Ericsson-like magnetic refrigeration cycles. Journal of Alloys and Compounds, 2007, 442, 129-131.	2.8	33
65	Large magnetic entropy change at room temperature in La0.7Ca0.3âˆ’xKxMnO3. Journal of Alloys and Compounds, 2007, 442, 136-138.	2.8	44
66	Optimization of La(Fe,Co)13âˆ’xSix based compounds for magnetic refrigeration. Journal of Physics Condensed Matter, 2007, 19, 236230.	0.7	74
67	Effect of Ni substitution on the magnetic and magnetocaloric properties of the Dy(Co_{1âˆ’x}Ni_x)₂Laves phase. Journal Physics D: Applied Physics, 2007, 40, 7601-7605.	1.3	19
68	Magnetic and magnetocaloric properties of La1âˆ’xErxFe11.44Si1.56 compounds. Journal of Magnetism and Magnetic Materials, 2007, 313, 43-46.	1.0	38
69	A study of magnetism and magnetocaloric effect in Ho1âˆ’xTbxCo2 compounds. Journal of Magnetism and Magnetic Materials, 2007, 314, 16-20.	1.0	42
70	Magnetocaloric effect in ternary metal phosphides (Fe1âˆ’xNix)2P. Journal of Magnetism and Magnetic Materials, 2007, 316, 358-360.	1.0	34
71	Modelling of the magnetocaloric effect in Gd1âˆ’xTbx and MnAs compounds. Journal of Magnetism and Magnetic Materials, 2007, 316, e558-e561.	1.0	25
72	Effects of substituting divalent by monovalent ion on the physical properties of La0.7Ca0.3âˆ’xKxMnO3 compounds. Journal of Magnetism and Magnetic Materials, 2007, 316, e707-e709.	1.0	17

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73	On the magnetocaloric effect in d-metal pnictides. Physica A: Statistical Mechanics and Its Applications, 2005, 358, 123-135.	1.2	33
74	Magnetic Properties and Magnetocaloric Effect in Selected MMâ€™X-Type (M, Mâ€™ = 3d or 4d Metal, X = As,) Tj ETQq0 0 0 rgBT /Ove Solid State Phenomena, 0, 170, 180-184.	0.3	1