Lluis MaÃ±osa

List of Publications by Year
in descending order

210 papers	15,746 citations	19655 61 h-index	17588 121 g-index
218 all docs	218 docs citations	218 times ranked	5001 citing authors

#	Article	IF	Citations
1	Inverse magnetocaloric effect in ferromagnetic Niâ€“Mnâ€“Sn alloys. Nature Materials, 2005, 4, 450-454.	27.5	1,757
2	Magnetocaloric effect and its relation to shape-memory properties in ferromagnetic Heusler alloys. Journal of Physics Condensed Matter, 2009, 21, 233201.	1.8	831
3	Martensitic transitions and the nature of ferromagnetism in the austenitic and martensitic states ofNiâˆ’Mnâˆ’Snalloys. Physical Review B, 2005, 72, .	3.2	653
4	Giant solid-state barocaloric effect in the Niâ€“Mnâ€“In magnetic shape-memory alloy. Nature Materials, 2010, 9, 478-481.	27.5	632
5	Ferromagnetism in the austenitic and martensitic states ofNiâˆ’Mnâˆ’Inalloys. Physical Review B, 2006, 73, .	3.2	570
6	Magnetic superelasticity and inverse magnetocaloric effect in Ni-Mn-In. Physical Review B, 2007, 75, .	3.2	462
7	Giant Electrocaloric Strength in Singleâ€Crystal BaTiO₃. Advanced Materials, 2013, 25, 1360-1365.	21.0	430
8	Elastocaloric Effect Associated with the Martensitic Transition in Shape-Memory Alloys. Physical Review Letters, 2008, 100, 125901.	7.8	421
9	Advanced materials for solid-state refrigeration. Journal of Materials Chemistry A, 2013, 1, 4925.	10.3	320
10	Materials with Giant Mechanocaloric Effects: Cooling by Strength. Advanced Materials, 2017, 29, 1603607.	21.0	304
11	Colossal Elastocaloric Effect in Ferroelastic Ni-Mn-Ti Alloys. Physical Review Letters, 2019, 122, 255703.	7.8	245
12	The Elastocaloric Effect: A Way to Cool Efficiently. Advanced Energy Materials, 2015, 5, 1500361.	19.5	234
13	Magnetic correlations in martensitic Ni-Mn-based Heusler shape-memory alloys: Neutron polarization analysis. Physical Review B, 2009, 79, .	3.2	233
14	Distributions of avalanches in martensitic transformations. Physical Review Letters, 1994, 72, 1694-1697.	7.8	205
15	Premartensitic Transition Driven by Magnetoelastic Interaction in bcc FerromagneticNi2MnGa. Physical Review Letters, 1997, 79, 3926-3929.	7.8	192
16	Large temperature span and giant refrigerant capacity in elastocaloric Cu-Zn-Al shape memory alloys. Applied Physics Letters, 2013, 103, .	3.3	185
17	Inverse barocaloric effect in the giant magnetocaloric Laâ€“Feâ€“Siâ€“Co compound. Nature Communications, 2011, 2, 595.	12.8	175
18	Effect of Co and Fe on the inverse magnetocaloric properties of Ni-Mn-Sn. Journal of Applied Physics, 2007, 102, .	2.5	174

#	Article	IF	Citations
19	Multiscale origin of the magnetocaloric effect in Ni-Mn-Ga shape-memory alloys. Physical Review B, 2003, 68, .	3.2	171
20	Giant barocaloric effects at low pressure in ferrielectric ammonium sulphate. Nature Communications, 2015, 6, 8801.	12.8	160
21	Anomalies related to theTA2-phonon-mode condensation in the HeuslerNi2MnGa alloy. Physical Review B, 1997, 55, 11068-11071.	3.2	158
22	A multicaloric cooling cycle that exploits thermal hysteresis. Nature Materials, 2018, 17, 929-934.	27.5	158
23	Cooling and heating by adiabatic magnetization in theNi50Mn34In16magnetic shape-memory alloy. Physical Review B, 2007, 75, .	3.2	156
24	Barocaloric and magnetocaloric effects in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>Fe</mml:mi><mml:mn>49</mml:mn></mml:msub><mml Physical Review B, 2014, 89, .	3.2	148
25	Colossal barocaloric effects near room temperature in plastic crystals of neopentylglycol. Nature Communications, 2019, 10, 1803.	12.8	144
26	Coexisting ferro- and antiferromagnetism in Ni2MnAl Heusler alloys. Journal of Applied Physics, 2002, 92, 3867-3871.	2.5	128
27	Magnetic-Field-Induced Effects in Martensitic Heusler-Based Magnetic Shape Memory Alloys. Handbook of Magnetic Materials, 2011, 19, 231-289.	0.6	128
28	Barocaloric effect in the magnetocaloric prototype Gd5Si2Ge2. Applied Physics Letters, 2012, 101, 071906.	3.3	127
29	Effects of hydrostatic pressure on the magnetism and martensitic transition of Niâ€“Mnâ€“In magnetic superelastic alloys. Applied Physics Letters, 2008, 92, .	3.3	126
30	Vibrational properties of shape-memory alloys. Solid State Physics, 2001, , 159-267.	0.5	124
31	Magnetic field induced entropy change and magnetoelasticity in Ni-Mn-Ga alloys. Physical Review B, 2002, 66, .	3.2	124
32	Electronic aspects of the martensitic transition in Niâ€“Mn based Heusler alloys. Journal of Magnetism and Magnetic Materials, 2007, 310, 2788-2789.	2.3	123
33	Combined Experimental and Theoretical Investigation of the Premartensitic Transition in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>Ni</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi>MnGa</mml:mi></mml:math>. Physical Review Letters, 2008, 100, 165703.	7.8	112
34	Tailoring magnetic and magnetocaloric properties of martensitic transitions in ferromagnetic Heusler alloys. Applied Physics Letters, 2007, 91, .	3.3	110
35	Elastocaloric and magnetocaloric effects in Ni-Mn-Sn(Cu) shape-memory alloy. Journal of Applied Physics, 2013, 113, .	2.5	109
36	Elastic constants of bcc austenite and 2H orthorhombic martensite in CuAlNi shape memory alloy. Acta Materialia, 2005, 53, 3643-3661.	7.9	108

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37	Martensitic transition and magnetic properties in Niâ€“Mnâ€“X alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 438-440, 911-915.	5.6	104
38	Premartensitic and martensitic phase transitions in ferromagneticNi2MnGa. Physical Review B, 1999, 60, 7085-7090.	3.2	100
39	Athermal Character of Structural Phase Transitions. Physical Review Letters, 2001, 87, 195701.	7.8	99
40	Metallic state and the metal-insulator transition ofNdNiO3. Physical Review B, 1993, 48, 11666-11672.	3.2	97
41	Giant barocaloric effects over a wide temperature range in superionic conductor AgI. Nature Communications, 2017, 8, 1851.	12.8	95
42	Experimental Evidence for Universality of Acoustic Emission Avalanche Distributions during Structural Transitions. Physical Review Letters, 1998, 81, 1889-1892.	7.8	93
43	Stability of the bcc phase of Cu-Al-Mn shape-memory alloys. Physical Review B, 1997, 56, 20-23.	3.2	92
44	Phonon softening inNiâ^'Mnâ^'Gaalloys. Physical Review B, 2001, 64, .	3.2	92
45	Tailoring barocaloric and magnetocaloric properties in low-hysteresis magnetic shape memory alloys. Acta Materialia, 2015, 96, 324-332.	7.9	89
46	Fe and Co selective substitution in Ni₂MnGa: Effect of magnetism on relative phase stability. Philosophical Magazine, 2010, 90, 2771-2792.	1.6	86
47	Magnetocaloric effect in the low hysteresis Ni-Mn-In metamagnetic shape-memory Heusler alloy. Journal of Applied Physics, 2014, 115, .	2.5	86
48	Hysteresis effects in the inverse magnetocaloric effect in martensitic Ni-Mn-In and Ni-Mn-Sn. Journal of Applied Physics, 2012, 112, .	2.5	85
49	Reversible and irreversible colossal barocaloric effects in plastic crystals. Journal of Materials Chemistry A, 2020, 8, 639-647.	10.3	85
50	Large entropy change associated with the elastocaloric effect in polycrystalline Ni-Mn-Sb-Co magnetic shape memory alloys. Applied Physics Letters, 2014, 105, .	3.3	82
51	Order-disorder transitions of Cu-Al-Mn shape-memory alloys. Physical Review B, 1998, 58, 14245-14255.	3.2	81
52	Reversible adiabatic temperature changes at the magnetocaloric and barocaloric effects in Fe49Rh51. Applied Physics Letters, 2015, 107, .	3.3	80
53	Multicaloric materials and effects. MRS Bulletin, 2018, 43, 295-299.	3.5	76
54	Entropy change and magnetocaloric effect inGd5(SixGe1â^'x)4. Physical Review B, 2002, 66, .	3.2	75

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55	Driving Rate Effects in Avalanche-Mediated First-Order Phase Transitions. Physical Review Letters, 2004, 93, 195701.	7.8	75
56	Large reversible entropy change at the inverse magnetocaloric effect in Ni-Co-Mn-Ga-In magnetic shape memory alloys. Journal of Applied Physics, 2013, 113, .	2.5	71
57	Scaling of the entropy change at the magnetoelastic transition inGd5(SixGe1âˆ’x)4. Physical Review B, 2002, 66, .	3.2	70
58	Caloric effects induced by magnetic and mechanical fields in a Ni<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mn>50</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>Mn<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mn>25</mml:mn><mml:mo>	3.2	70
59	Understanding the Thermodynamic Properties of the Elastocaloric Effect Through Experimentation and Modelling. Shape Memory and Superelasticity, 2016, 2, 317-329.	2.2	70
60	Magnetocaloric effect in Heusler shape-memory alloys. Journal of Magnetism and Magnetic Materials, 2007, 310, 2767-2769.	2.3	68
61	Inverse barocaloric effects in ferroelectric BaTiO3 ceramics. APL Materials, 2016, 4, .	5.1	64
62	A high-sensitivity differential scanning calorimeter with magnetic field for magnetostructural transitions. Review of Scientific Instruments, 2003, 74, 4768-4771.	1.3	61
63	Martensitic transformation of Cu-based shape-memory alloys: Elastic anisotropy and entropy change. Physical Review B, 1992, 45, 7633-7639.	3.2	60
64	Giant multicaloric response of bulk <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Fe</mml:mi><mml:mn>49</mml:mn></mml:msub></mml:mrow></mml:math>Rh<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Physical Review B, 2017, 95, .	3.2	60
65	Elastic constants ofNiâˆ’Mnâˆ’Gamagnetic shape memory alloys. Physical Review B, 2004, 70, .	3.2	59
66	Phase diagram of Fe-doped Ni-Mn-Ga ferromagnetic shape-memory alloys. Physical Review B, 2008, 77, .	3.2	59
67	THE USE OF SHAPE-MEMORY ALLOYS FOR MECHANICAL REFRIGERATION. Functional Materials Letters, 2009, 02, 73-78.	1.2	59
68	Kinetics of martensitic transitions in Cu-Al-Mn under thermal cycling: Analysis at multiple length scales. Physical Review B, 2004, 69, .	3.2	58
69	Calorimetric study of the inverse magnetocaloric effect in ferromagnetic Niâ€“Mnâ€“Sn. Journal of Magnetism and Magnetic Materials, 2007, 316, e572-e574.	2.3	58
70	Giant and Reversible Barocaloric Effect in Trinuclear Spinâ€Crossover Complex Fe₃(bntrz)₆(tcnset)₆. Advanced Materials, 2021, 33, e2008076.	21.0	58
71	Magnetic properties and martensitic transition in annealed Ni50Mn30Al20. Journal of Applied Physics, 2003, 93, 8498-8500.	2.5	55
72	Temperature contour maps at the strain-induced martensitic transition of a Cuâ€“Znâ€“Al shape-memory single crystal. Applied Physics Letters, 2011, 98, .	3.3	55

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73	Acoustic emission in martensitic transformations. Journal of Alloys and Compounds, 2013, 577, S699-S704.	5.5	55
74	Giant barocaloric effect in all- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>d</mml:mi></mml:math> -metal Heusler shape memory alloys. Physical Review Materials, 2019, 3, .	2.4	55
75	Acoustic-mode vibrational anharmonicity related to the anomalous thermal expansion of Invar iron alloys. Physical Review B, 1992, 45, 2224-2236.	3.2	54
76	Direct observation of the magnetic-field-induced entropy change in Gd5(SixGe1âˆ'x)4 giant magnetocaloric alloys. Applied Physics Letters, 2005, 86, 262504.	3.3	53
77	Structural properties and magnetic interactions in martensitic Ni-Mn-Sb alloys. Philosophical Magazine, 2009, 89, 2093-2109.	1.6	53
78	Elastocaloric effect in Ti-Ni shape-memory wires associated with the B2 â†" B19' and B2 â†" R structural transitions. Applied Physics Letters, 2016, 108, .	3.3	53
79	Magnetization easy axis in martensitic Heusler alloys estimated by strain measurements under magnetic field. Applied Physics Letters, 2007, 91, 251915.	3.3	49
80	A comparative study of the post-quench behaviour of Cuâ€"Alâ€"Be and Cuâ€"Znâ€"Al shape memory alloys. Acta Materialia, 1998, 46, 1045-1053.	7.9	44
81	Effect of a magnetic field on the magnetostructural phase transition inGd5(SixGe1âˆ'x)4. Physical Review B, 2004, 69, .	3.2	44
82	Niâ€"Mn-based magnetic shape memory alloys: Magnetic properties and martensitic transition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 481-482, 49-56.	5.6	44
83	Outstanding caloric performances for energy-efficient multicaloric cooling in a Ni-Mn-based multifunctional alloy. Acta Materialia, 2019, 177, 46-55.	7.9	44
84	Entropy change of martensitic transformations in Cu-based shape-memory alloys. Physical Review B, 1993, 48, 3611-3619.	3.2	43
85	Kinetics of martensitic transitions in shape-memory alloys. Scripta Materialia, 2004, 50, 181-186.	5.2	43
86	Stress- and magnetic field-induced entropy changes in Fe-doped Niâ€"Mnâ€"Ga shape-memory alloys. Applied Physics Letters, 2010, 96, .	3.3	43
87	Solid-state cooling by stress: A perspective. Applied Physics Letters, 2020, 116, .	3.3	43
88	Lattice dynamics in magnetic superelastic Ni-Mn-In alloys: Neutron scattering and ultrasonic experiments. Physical Review B, 2009, 79, .	3.2	42
89	Reversibility of minor hysteresis loops in magnetocaloric Heusler alloys. Applied Physics Letters, 2017, 110, .	3.3	42
90	Selective spin-state and metalâ€"insulator transitions in GdBaCo 2 O 5.5. Journal of Solid State Chemistry, 2003, 171, 349-352.	2.9	40

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91	Statistics of avalanches in martensitic transformations. I. Acoustic emission experiments. Physical Review B, 1995, 52, 12644-12650.	3.2	39
92	Study of the order-disorder phase transitions in Cu-Al-Be shape memory alloys. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1997, 75, 1237-1250.	0.6	39
93	Vibrational behavior of bcc Cu-based shape-memory alloys close to the martensitic transition. Physical Review B, 1996, 53, 3039-3046.	3.2	38
94	Neutron diffraction study of long-range atomic order in Cu-Zn-Al shape memory alloys. Journal of Physics Condensed Matter, 1992, 4, 553-559.	1.8	37
95	Elastic constants of bcc Cu-Al-Ni alloys. Physical Review B, 1994, 49, 9969-9972.	3.2	37
96	Acoustic emission and energy dissipation during front propagation in a stress-driven martensitic transition. Physical Review B, 2008, 78, .	3.2	37
97	Quenched-in defects and martensitic transformation in Cuî—¸Alî—¸Be shape memory alloys. Acta Materialia, 1997, 45, 2101-2107.	7.9	34
98	Hysteresis effects in the magnetic-field-induced reverse martensitic transition in magnetic shape-memory alloys. Journal of Applied Physics, 2010, 108, 043914.	2.5	34
99	Tuning avalanche criticality: Acoustic emission during the martensitic transformation of a compressed Ni-Mn-Ga single crystal. Physical Review B, 2012, 86, .	3.2	34
100	Localizing sources of acoustic emission during the martensitic transformation. Physical Review B, 2014, 89, .	3.2	34
101	Reversible colossal barocaloric effects near room temperature in 1-X-adamantane (X=Cl, Br) plastic crystals. Applied Materials Today, 2021, 23, 101023.	4.3	33
102	Acoustic emission in the fcc-fct martensitic transition of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Fe</mml:mtext></mml:mrow><mml:mrow><mml:mn>68.8</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>Physical Review B, 2008, 78, .	3.2	32
103	Reversible barocaloric effects over a large temperature span in fullerite C₆₀. Journal of Materials Chemistry A, 2020, 8, 20354-20362.	10.3	32
104	Barocaloric effect in metamagnetic shape memory alloys. Physica Status Solidi (B): Basic Research, 2014, 251, 2114-2119.	1.5	31
105	Mechanocaloric effects in shape memory alloys. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20150310.	3.4	31
106	Lattice dynamics and phonon softening inNiâ˜'Mnâ˜'AlHeusler alloys. Physical Review B, 2006, 73, .	3.2	30
107	Effect of Î³ precipitates on the martensitic transformation of Î² Cuî—¸Znî—¸Al studied by calorimetry. Scripta Metallurgica, 1989, 23, 579-583.	1.2	29
108	Multicaloric effects in metamagnetic Heusler Ni-Mn-In under uniaxial stress and magnetic field. Applied Physics Reviews, 2020, 7, .	11.3	29

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109	Charge and Zener polaron order inBi0.75Sr0.25MnO3. Physical Review B, 2003, 68, .	3.2	28
110	Hysteresis in a system driven by either generalized force or displacement variables: Martensitic phase transition in single-crystallineCuâˆ’Znâˆ’Al. Physical Review B, 2007, 76, .	3.2	28
111	Enhanced stability of charge-order in underdoped Bi0.75Sr0.25MnO3. Solid State Communications, 2003, 125, 277-280.	1.9	27
112	Magnetostrain in Multifunctional Ni-Mn Based Magnetic Shape Memory Alloys. Materials Science Forum, 0, 583, 111-117.	0.3	26
113	Acoustic emission in martensitic transformations. Acta Metallurgica Et Materialia, 1990, 38, 1635-1642.	1.8	25
114	Calorimetric measurements on the Î²â‡ŒÎ³' and Î²â‡ŒÎ²' martensitic transformations in a cu-al-ni single crystal subjected to uniaxial tensile stress. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1992, 65, 461-475.	0.6	25
115	Lattice-dynamical study of the premartensitic state of the Cu-Al-Be alloys. Physical Review B, 1993, 48, 15708-15711.	3.2	25
116	Martensitic transition and magnetoresistance in a Cu-Al-Mn shape-memory alloy: Influence of ageing. Physical Review B, 2002, 66, .	3.2	25
117	Driving-induced crossover in the avalanche criticality of martensitic transitions. Physical Review B, 2009, 80, .	3.2	25
118	Longitudinal acoustic mode softening and Invar behaviour in Fe72Pt28. Journal of Physics Condensed Matter, 1991, 3, 2273-2278.	1.8	24
119	Simultaneous detection of acoustic emission and Barkhausen noise during the martensitic transition of a Ni-Mn-Ga magnetic shape-memory alloy. Physical Review B, 2013, 88, .	3.2	24
120	The Giant Elastocaloric Effect in a Cuâ€“Znâ€“Al Shapeâ€Memory Alloy: a Calorimetric Study. Physica Status Solidi (B): Basic Research, 2018, 255, 1700422.	1.5	24
121	Dynamics of the first-order magnetostructural transition in Gd5(Si x Ge1-x)4. European Physical Journal B, 2004, 40, 427-431.	1.5	23
122	Systematic study of the martensitic transformation in a Cu-Zn-Al alloy. reversibility versus irreversibility via acoustic emission. Thermochimica Acta, 1987, 116, 195-208.	2.7	22
123	Temperature and magnetic-field dependence of the elastic constants of Ni-Mn-Al magnetic Heusler alloys. Physical Review B, 2006, 74, .	3.2	22
124	Caloric and Multicaloric Effects in Shape Memory Alloys. Materials Today: Proceedings, 2015, 2, S477-S484.	1.8	22
125	An acoustic emission study of the effect of a magnetic field on the martensitic transition in Ni2MnGa. Applied Physics Letters, 2009, 94, .	3.3	21
126	A calorimetric investigation of the Î²â‡ŒÎ³1 and Î²â‡ŒÎ²1 martensitic transformations in Cuî—¸Alî—¸Ni single crystals. Scripta Metallurgica Et Materialia, 1990, 24, 1641-1645.	1.0	20

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127	Third-order elastic constants of bcc Cu-Al-Ni. Physical Review B, 1996, 54, 6007-6010.	3.2	20
128	Ferromagnetic Shape-Memory Alloys. Materials Science Forum, 2006, 512, 145-152.	0.3	20
129	Acoustic emission across the magnetostructural transition of the giant magnetocaloricGd5Si2Ge2. Physical Review B, 2006, 73, .	3.2	20
130	The influence of gallium on the magnetocaloric properties of Gd5Si2Ge2. Journal of Alloys and Compounds, 2008, 460, 94-98.	5.5	20
131	Imaging the dynamics of martensitic transitions using acoustic emission. Physical Review B, 2011, 84, .	3.2	20
132	Systematic study of the martensitic transformation in a Cu-Zn-Al alloy. Reproducibility of the thermal energy results and cycling effects. Thermochimica Acta, 1986, 106, 209-217.	2.7	19
133	Acoustic emission field during thermoelastic martensitic transformations. Applied Physics Letters, 1989, 54, 2574-2576.	3.3	19
134	Change in entropy at a first-order magnetoelastic phase transition: Case study of Gd5(SixGe1â^'x)4 giant magnetocaloric alloys. Journal of Applied Physics, 2003, 93, 8313-8315.	2.5	19
135	Caloric response of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Fe</mml:mi><mml:mn>49</mml:mn></mml:msub></mml:mrow></mml:math> subjected to uniaxial load and magnetic field. Physical Review Materials, 2018, 2, .	2.4	19
136	Comment on â€œThe Magnetocaloric Effect of LaFe_{11.6}Si_{1.4}, La_{0.8}Nd_{0.2}Fe_{11.5}Si_{1.5}, and Ni₄₃Mn₄₆Sn₁₁ Compounds in the Vicinity of the Firstâ€Order Phase Transitionâ€. Advanced Materials, 2009, 21, 3725-3726.	21.0	18
137	Influence of microstructure on the application of Ni-Mn-In Heusler compounds for multicaloric cooling using magnetic field and uniaxial stress. Acta Materialia, 2021, 217, 117157.	7.9	18
138	Calorimetric study of the influence of thermal cycling on the martensitic transformation of Cu-Zn-Al alloys. Journal Physics D: Applied Physics, 1989, 22, 1712-1720.	2.8	17
139	Disorder-induced critical phenomena in magnetically glassy Cu-Al-Mn alloys. Physical Review B, 2003, 67, .	3.2	17
140	Magnetic shape memory in Niâ€“Mnâ€“Ga and Niâ€“Mnâ€“Al. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 2090-2092.	2.3	17
141	Influence of configurational atomic order on the relative stability of bcc and close-packed structures in Cu-based alloys. Physical Review B, 1993, 48, 3540-3543.	3.2	16
142	Lowâ€cost differential scanning calorimeter. American Journal of Physics, 1996, 64, 283-287.	0.7	16
143	Temperature dependence of the second-order elastic constants of Cu-Zn-Al shape-memory alloy in its martensitic andβ'phases. Physical Review B, 1997, 56, 5200-5206.	3.2	16
144	Low-temperature entropy in Cu-based shape-memory alloys and the boson peak. Physical Review B, 2003, 68, .	3.2	16

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145	Magnetoelastic behavior of the Heusler Ni2MnGa alloy. Journal of Applied Physics, 1998, 83, 7300-7302.	2.5	15
146	Kinetics of the phase separation in Cuâ€“Alâ€“Mn alloys and the influence on martensitic transformations. Philosophical Magazine, 2004, 84, 45-90.	1.6	15
147	Premartensitic transition in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Ni</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msub> alloys: Acoustic emission study. Physical Review B, 2009, 80, .	3.2	14
148	Contribution of low-frequency modes to the specific heat of Cu-Zn-Al shape-memory alloys. Physical Review B, 2007, 75, .	3.2	13
149	Expanding the magnetocaloric operation range in Niâ€“Mnâ€“In Heusler alloys by Cu-doping. Journal Physics D: Applied Physics, 2016, 49, 125006.	2.8	13
150	Anharmonicity of Cu-based shape-memory alloys in the vicinity of their martensitic transition. Physical Review B, 1999, 59, 246-250.	3.2	12
151	Magnetoelasticity in the Heusler Ni2MnGa alloy. Journal of Magnetism and Magnetic Materials, 1999, 196-197, 637-638.	2.3	12
152	Calorimetric and acoustic emission study of the premartensitic and martensitic transitions in Niâ€“Mnâ€“Ga. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 378, 353-356.	5.6	12
153	Magnetocaloric and Shape-Memory Properties in Magnetic Heusler Alloys. Advanced Materials Research, 2008, 52, 221-228.	0.3	12
154	Recent Progress and Future Perspectives in Magnetic and Metamagnetic Shape-Memory Heusler Alloys. Materials Science Forum, 0, 738-739, 391-399.	0.3	12
155	Structural and magnetic phase transitions in Niâ€™Mnâ€™Ga shape-memory alloys. , 2000, , 361-374.		11
156	Acoustic emission amplitude distribution during the martensitic transformation of Cu-Zn-Al alloys. Journal Physics D: Applied Physics, 1989, 22, 977-982.	2.8	10
157	High-pressure ultrasonic study of vibrational anharmonicity in bcc Cu-Al-Be alloys. Physical Review B, 1992, 46, 14174-14177.	3.2	10
158	A comparative study of the high-Tcelectron superconductor Nd1.85Ce0.15CuO4-yand its parent compound Nd2CuO4-y. Superconductor Science and Technology, 1990, 3, 422-428.	3.5	9
159	Nanoscale oxides shape up. Nature Materials, 2014, 13, 6-8.	27.5	9
160	Tracking the dynamics of power sources and sinks during the martensitic transformation of a Cuâ€“Alâ€“Ni single crystal. Applied Physics Letters, 2020, 116, .	3.3	9
161	Low-lying phonon dispersion curves ofD03Cu3Al(+Be). Physical Review B, 1999, 59, 9239-9242.	3.2	8
162	Effect of low temperature annealing on magneto-caloric effect of Niâ€“Mnâ€“Snâ€“Al ferromagnetic shape memory alloy. Journal of Alloys and Compounds, 2015, 641, 244-248.	5.5	8

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