Dewei Zhao

List of Publications by Year
in descending order

31 papers	2,494 citations	430874 18 h-index	434195 31 g-index
31 all docs	31 docs citations	31 times ranked	1667 citing authors

#	Article	IF	Citations
1	Key Role of Lorentz Excitation in the Electromagnetic-Enhanced Hydrogen Evolution Reaction. ACS Applied Materials & Interfaces, 2022, 14, 15243-15249.	8.0	21
2	Large barocaloric effect in intermetallic La1.2Ce0.8Fe11Si2H1.86 materials driven by low pressure. NPG Asia Materials, 2022, 14, .	7.9	6
3	Multicaloric effect in synergic magnetostructural phase transformation Ni-Mn-Ga-In alloys. Physical Review Materials, 2022, 6, .	2.4	6
4	High-throughput characterization of the adiabatic temperature change for magnetocaloric materials. Journal of Materials Science, 2021, 56, 2332-2340.	3.7	9
5	Martensitic transformation and elastocaloric effect of Co51.5+V31.5-Ga17 (x = 0.1, 0.2, 0.3) alloys. Intermetallics, 2021, 139, 107348.	3.9	5
6	Low-pressure-induced giant barocaloric effect in an all-d-metal Heusler Ni35.5Co14.5Mn35Ti15 magnetic shape memory alloy. APL Materials, 2020, 8, .	5.1	40
7	Large elastocaloric effect in directionally solidified all-d-metal Heusler metamagnetic shape memory alloys. Acta Materialia, 2020, 188, 677-685.	7.9	85
8	Enhanced barocaloric effect for Pdâ€“Inâ€“Fe shape memory alloys with hydrostatic-pressure training. Journal of Applied Physics, 2020, 127, 055109.	2.5	2
9	Enhancement of rotating magnetocaloric effect by Fe substitution in NdCo5-Fe alloys. Intermetallics, 2020, 118, 106676.	3.9	5
10	Crystal structure, spin reorientation, and rotating magnetocaloric properties of NdCo5-xSix compounds. Journal of Applied Physics, 2019, 125, 243901.	2.5	12
11	Elastocaloric effect of all-d-metal Heusler NiMnTi(Co) magnetic shape memory alloys by digital image correlation and infrared thermography. Applied Physics Letters, 2019, 114, .	3.3	62
12	Orientation dependent elastocaloric effect in directionally solidified Ni-Mn-Sn alloys. Scripta Materialia, 2019, 163, 14-18.	5.2	56
13	Highly undercooled Pd59.3In23.2Fe17.5 alloy: Shape memory effect, linear superelasticity and elastocaloric property. Scripta Materialia, 2019, 160, 58-61.	5.2	10
14	An X-ray absorption spectroscopy study of La-Fe-Si-(H) magnetocaloric alloys. Acta Materialia, 2018, 150, 206-212.	7.9	20
15	The influence of Ce on microstructure, phase formation and magnetocaloric properties in off-stoichiometric La2-xCexFe11Si2 alloys. Intermetallics, 2018, 103, 97-100.	3.9	12
16	Orientation dependent cyclic stability of the elastocaloric effect in textured Ni-Mn-Ga alloys. AIP Advances, 2018, 8, .	1.3	44
17	Energy-Efficient Elastocaloric Cooling by Flexibly and Reversibly Transferring Interface in Magnetic Shape-Memory Alloys. ACS Applied Materials & Interfaces, 2018, 10, 25438-25445.	8.0	28
18	Giant elastocaloric effect and its irreversibility in [001]-oriented Ni45Mn36.5In13.5Co5 meta-magnetic shape memory alloys. Applied Physics Letters, 2017, 110, .	3.3	54

#	Article	IF	Citations
19	Combined caloric effects in a multiferroic Niâ€“Mnâ€“Ga alloy with broad refrigeration temperature region. APL Materials, 2017, 5, .	5.1	53
20	Exploring Magnetic Elastocaloric Materials for Solid-State Cooling. Shape Memory and Superelasticity, 2017, 3, 192-198.	2.2	20
21	Giant and reversible room-temperature elastocaloric effect in a single-crystalline Ni-Fe-Ga magnetic shape memory alloy. Scientific Reports, 2016, 6, 25500.	3.3	62
22	Large elastocaloric effect at small transformation strain in Ni45Mn44Sn11 metamagnetic shape memory alloys. Scripta Materialia, 2016, 114, 1-4.	5.2	101
23	Elastocaloric effect in Ni50Fe19Ga27Co4 single crystals. Acta Materialia, 2015, 96, 292-300.	7.9	149
24	Large and reversible elastocaloric effect in dual-phase Ni54Fe19Ga27 superelastic alloys. Applied Physics Letters, 2015, 106, .	3.3	94
25	An in-situ study of magnetic domain structures in undercooled Fe-29.5 at. %Pd magnetostrictive alloys by Lorentz microscopy and electron holography. Journal of Applied Physics, 2015, 117, 163909.	2.5	5
26	Elastocaloric effect in Ni45Mn36.4In13.6Co5 metamagnetic shape memory alloys under mechanical cycling. Materials Letters, 2015, 148, 110-113.	2.6	68
27	Elastocaloric effect in a textured polycrystalline Ni-Mn-In-Co metamagnetic shape memory alloy. Applied Physics Letters, 2014, 105, .	3.3	108
28	Novel microstructure and large magnetocaloric effect in La 2 Fe 11 Si 2 magnetic refrigerant. Materials Letters, 2014, 134, 87-90.	2.6	13
29	Giant magnetocaloric effect driven by structural transitions. Nature Materials, 2012, 11, 620-626.	27.5	1,266
30	A novel route for growing single-crystal and internal-stress-induced martensitic transformation of ferromagnetic shape memory alloys Co50Ni20Ga30. Journal of Alloys and Compounds, 2011, 509, 6777-6780.	5.5	4
31	Large magnetostrain in polycrystalline Niâ€“Mnâ€“Inâ€“Co. Applied Physics Letters, 2009, 95, .	3.3	74