

Jia Yan Law

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3080691/publications.pdf>

Version: 2024-02-01

48
papers

2,582
citations

304743

22
h-index

223800

46
g-index

48
all docs

48
docs citations

48
times ranked

1913
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnetocaloric effect: From materials research to refrigeration devices. <i>Progress in Materials Science</i> , 2018, 93, 112-232.	32.8	1,031
2	A quantitative criterion for determining the order of magnetic phase transitions using the magnetocaloric effect. <i>Nature Communications</i> , 2018, 9, 2680.	12.8	273
3	Nanoporous Thermo-chromic VO ₂ (M) Thin Films: Controlled Porosity, Largely Enhanced Luminous Transmittance and Solar Modulating Ability. <i>Langmuir</i> , 2014, 30, 1710-1715.	3.5	134
4	Tunable Curie temperatures in Gd alloyed Fe-Ba-Cr magnetocaloric materials. <i>Journal of Alloys and Compounds</i> , 2010, 508, 14-19.	5.5	98
5	VO ₂ /Si-Al gel nanocomposite thermo-chromic smart foils: Largely enhanced luminous transmittance and solar modulation. <i>Journal of Colloid and Interface Science</i> , 2014, 427, 49-53.	9.4	83
6	First- and second-order phase transitions in RE ₆ Co ₂ Ga (RE = Ho, Dy or Gd) cryogenic magnetocaloric materials. <i>Science China Materials</i> , 2021, 64, 2846-2857.	6.3	62
7	Influence of La and Ce additions on the magnetocaloric effect of Fe-Ba-Cr-based amorphous alloys. <i>Applied Physics Letters</i> , 2011, 98, .	3.3	57
8	Pushing the limits of magnetocaloric high-entropy alloys. <i>APL Materials</i> , 2021, 9, .	5.1	53
9	Increased magnetocaloric response of FeMnNiGeSi high-entropy alloys. <i>Acta Materialia</i> , 2021, 212, 116931.	7.9	48
10	Preparation, characterization and properties of polycaprolactone diol-functionalized multi-walled carbon nanotube/thermoplastic polyurethane composite. <i>Composites Part A: Applied Science and Manufacturing</i> , 2015, 70, 8-15.	7.6	47
11	The role of Ni in modifying the order of the phase transition of La(Fe,Ni,Si) ₁₃ . <i>Acta Materialia</i> , 2018, 160, 137-146.	7.9	45
12	Tunable first order transition in La(Fe,Cr,Si) ₁₃ compounds: Retaining magnetocaloric response despite a magnetic moment reduction. <i>Acta Materialia</i> , 2019, 175, 406-414.	7.9	45
13	MnFeNiGeSi high-entropy alloy with large magnetocaloric effect. <i>Journal of Alloys and Compounds</i> , 2021, 855, 157424.	5.5	44
14	Predicting the tricritical point composition of a series of LaFeSi magnetocaloric alloys via universal scaling. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 414004.	2.8	38
15	Gd+GdZn biphasic magnetic composites synthesized in a single preparation step: Increasing refrigerant capacity without decreasing magnetic entropy change. <i>Journal of Alloys and Compounds</i> , 2016, 675, 244-247.	5.5	29
16	Magnetocaloric effect in Fe-Tm-Ba-Nb metallic glasses near room temperature. <i>Journal of Non-Crystalline Solids</i> , 2015, 425, 114-117.	3.1	27
17	Study of phases evolution in high-coercive MnAl powders obtained through short milling time of gas-atomized particles. <i>Journal of Alloys and Compounds</i> , 2017, 712, 373-378.	5.5	27
18	How concurrent thermomagnetic transitions can affect magnetocaloric effect: The Ni _{49+x} Mn _{36-x} In ₁₅ Heusler alloy case. <i>Acta Materialia</i> , 2019, 166, 459-465.	7.9	27

#	ARTICLE	IF	CITATIONS
19	Preparation, Characterization of Sulfur-Doped Nanosized TiO ₂ and Photocatalytic Degradation of Methylene Blue Under Visible Light. <i>Catalysis Letters</i> , 2010, 139, 77-84.	2.6	24
20	Direct magnetocaloric measurements of Fe-B-Cr-X (X = La, Ce) amorphous ribbons. <i>Journal of Applied Physics</i> , 2011, 110, 023907.	2.5	24
21	Design of Fe-containing GdTbCoAl high-entropy-metallic-glass composite microwires with tunable Curie temperatures and enhanced cooling efficiency. <i>Materials and Design</i> , 2021, 206, 109824.	7.0	24
22	Enhancing the magnetocaloric response of high-entropy metallic-glass by microstructural control. <i>Science China Materials</i> , 2022, 65, 1134-1142.	6.3	24
23	The magnetocaloric effect of partially crystalline Fe-B-Cr-Gd alloys. <i>Journal of Applied Physics</i> , 2012, 111, .	2.5	23
24	Comparison of the Crystallization Behavior of Fe-Si-B-Cu and Fe-Si-B-Cu-Nb-Based Amorphous Soft Magnetic Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014, 45, 2998-3009.	2.2	23
25	Possible half-metallic behavior of $\text{Co}_{1-x}\text{Mn}_x$ Heusler alloys: Theory and experiment. <i>Physical Review B</i> , 2021, 104, .	2.1	21
26	Magnetocaloric response of binary Gd-Pd and ternary Gd-(Mn,Pd) alloys. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 500, 166175.	2.3	19
27	Phase Deconvolution of Multiphasic Materials by the Universal Scaling of the Magnetocaloric Effect. <i>Jom</i> , 2020, 72, 2845-2852.	1.9	19
28	Influence of Cr-substitution on the structural, magnetic, electron transport, and mechanical properties of Fe ₃ Cr Ge Heusler alloys. <i>Journal of Magnetism and Magnetic Materials</i> , 2021, 521, 167398.	2.3	17
29	Characterization of thermal hysteresis in magnetocaloric NiMnIn Heusler alloys by Temperature First Order Reversal Curves (TFORC). <i>Journal of Alloys and Compounds</i> , 2021, 867, 159184.	5.5	17
30	Magnetocaloric effect of Fe-RE-B-Nb (RE = Tb, Ho or Tm) bulk metallic glasses with high glass-forming ability. <i>Journal of Alloys and Compounds</i> , 2015, 644, 346-349.	5.5	16
31	Novel procedure for laboratory scale production of composite functional filaments for additive manufacturing. <i>Materials Today Communications</i> , 2020, 24, 101049.	1.9	16
32	Magnetocaloric effect in heavy rare-earth elements doped Fe-based bulk metallic glasses with tunable Curie temperature. <i>Journal of Applied Physics</i> , 2014, 116, .	2.5	14
33	Modification of the order of the magnetic phase transition in cobaltites without changing their crystal space group. <i>Journal of Alloys and Compounds</i> , 2019, 777, 1080-1086.	5.5	14
34	Magnetic phase transitions and magnetocaloric effect in ternary rhombohedral Laves phases of Gd ₂ Rh ₃ Ge and Er ₂ Rh ₃ Ge. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 514, 166988.	2.3	14
35	Analysis of the magnetic field dependence of the isothermal entropy change of inverse magnetocaloric materials. <i>Results in Physics</i> , 2021, 22, 103933.	4.1	14
36	Hysteresis, latent heat and cycling effects on the magnetocaloric response of (NiMnSi) _{0.66} (Fe ₂ Ge) _{0.34} alloy. <i>Intermetallics</i> , 2021, 131, 107083.	3.9	12

#	ARTICLE	IF	CITATIONS
37	Deconvolution of overlapping first and second order phase transitions in a NiMnIn Heusler alloy using the scaling laws of the magnetocaloric effect. Journal of Alloys and Compounds, 2021, 871, 510621.	5.5	12
38	Structural, electronic, magnetic, transport and mechanical properties of the half-metal-type quaternary Heusler alloy Co_2VFeSi	2.4	4
39	Functional, thermal and rheological properties of polymer-based magnetic composite filaments for additive manufacturing. Materials and Design, 2022, 219, 110806.	7.0	11
40	Active transient cooling by magnetocaloric materials. Applied Thermal Engineering, 2013, 52, 17-23.	6.0	10
41	Magnetocaloric Composite Materials. , 2021, , 461-472.		9
42	Optimal temperature range for determining magnetocaloric magnitudes from heat capacity. Journal Physics D: Applied Physics, 2016, 49, 495001.	2.8	7
43	Influence of Thermal and Magnetic History on Direct \hat{T} ad Measurements of Ni _{49+x} Mn ₃₆ In ₁₅ Heusler Alloys. Metals, 2019, 9, 1144.	2.3	5
44	Controlling In-Ga-Zn-O thin films transport properties through density changes. Thin Solid Films, 2016, 608, 57-61.	1.8	4
45	Structural, Electronic, Magnetic, and Mechanical Properties of Co_2VFeSi Heusler Alloys. IEEE Transactions on Magnetics, 2022, 58, 1-5.	2.1	4
46	Effect of mixing the low-valence transition metal atoms Y, Co, Fe, Mn, Cr, V, Ti, or Sc on the properties of quaternary Heusler compounds Co_2VFeSi	2.4	4
47	Modification of the field dependence and scaling of the magnetocaloric effect in LaFeSi across the tricritical point. 2017.		1
48	Structural, electronic, magnetic, transport and mechanical properties of the half-metal-type quaternary Heusler alloy Co_2VGeSi	7.9	1