

Ligang Sun

List of Publications by Year in descending order

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Version: 2024-02-01

31
papers

1,451
citations

516561

16
h-index

454834

30
g-index

31
all docs

31
docs citations

31
times ranked

1502
citing authors

#	ARTICLE	IF	CITATIONS
1	Dual-phase nanostructuring as a route to high-strength magnesium alloys. <i>Nature</i> , 2017, 545, 80-83.	13.7	458
2	A Novel Multinary Intermetallic as an Active Electrocatalyst for Hydrogen Evolution. <i>Advanced Materials</i> , 2020, 32, e2000385.	11.1	169
3	Nanotwinned and hierarchical nanotwinned metals: a review of experimental, computational and theoretical efforts. <i>Npj Computational Materials</i> , 2018, 4, .	3.5	109
4	Hierarchical nanostructured aluminum alloy with ultrahigh strength and large plasticity. <i>Nature Communications</i> , 2019, 10, 5099.	5.8	97
5	A Self-Supported High-Entropy Metallic Glass with a Nanosponge Architecture for Efficient Hydrogen Evolution under Alkaline and Acidic Conditions. <i>Advanced Functional Materials</i> , 2021, 31, 2101586.	7.8	89
6	High-order hierarchical nanotwins with superior strength and ductility. <i>Acta Materialia</i> , 2018, 149, 397-406.	3.8	85
7	Attractive In Situ Self-Reconstructed Hierarchical Gradient Structure of Metallic Glass for High Efficiency and Remarkable Stability in Catalytic Performance. <i>Advanced Functional Materials</i> , 2019, 29, 1807857.	7.8	74
8	UiO-66-NO ₂ as an Oxygen Pump for Enhancing Oxygen Reduction Reaction Performance. <i>Chemistry of Materials</i> , 2019, 31, 1646-1654.	3.2	33
9	An ordinary state-based peridynamic model for the fracture of zigzag graphene sheets. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2018, 474, 20180019.	1.0	30
10	Scale law of complex deformation transitions of nanotwins in stainless steel. <i>Nature Communications</i> , 2019, 10, 1403.	5.8	29
11	Role of Boron in Enhancing Electron Delocalization to Improve Catalytic Activity of Fe-Based Metallic Glasses for Persulfate-Based Advanced Oxidation. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 44789-44797.	4.0	25
12	Two softening stages in nanotwinned Cu. <i>Philosophical Magazine</i> , 2014, 94, 4037-4052.	0.7	21
13	Deformation and failure mechanisms of nanotwinned copper films with a pre-existing crack. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 606, 334-345.	2.6	21
14	Size-dependent formation and thermal stability of high-order twins in hierarchical nanotwinned metals. <i>International Journal of Plasticity</i> , 2020, 128, 102685.	4.1	21
15	Understanding the mechanical characteristics of nanotwinned diamond by atomistic simulations. <i>Carbon</i> , 2018, 127, 320-328.	5.4	20
16	Super square carbon nanotube network: a new promising water desalination membrane. <i>Npj Computational Materials</i> , 2016, 2, .	3.5	18
17	Nanoscale Heterogeneities of Non-Noble Iron-Based Metallic Glasses toward Efficient Water Oxidation at Industrial-Level Current Densities. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 10288-10297.	4.0	18
18	Inclusion of arbitrary polygon with graded eigenstrain in an anisotropic piezoelectric full plane. <i>International Journal of Solids and Structures</i> , 2012, 49, 1773-1785.	1.3	17

#	ARTICLE	IF	CITATIONS
19	An Ultrafast and Stable High-Entropy Metallic Glass Electrode for Alkaline Hydrogen Evolution Reaction. , 2022, 4, 1389-1396.		17
20	Atomistic simulation study on twin orientation and spacing distribution effects on nanotwinned Cu films. Philosophical Magazine, 2015, 95, 3467-3485.	0.7	15
21	Investigation on fracture of pre-cracked single-layer graphene sheets. Computational Materials Science, 2019, 159, 365-375.	1.4	15
22	A chirality-dependent peridynamic model for the fracture analysis of graphene sheets. Mechanics of Materials, 2020, 149, 103535.	1.7	14
23	Near-ideal strength and large compressive deformability of a nano-dual-phase glass-crystal alloy in sub-micron. Scripta Materialia, 2020, 188, 290-295.	2.6	10
24	Constitutive modeling of size-dependent deformation behavior in nano-dual-phase glass-crystal alloys. International Journal of Plasticity, 2021, 137, 102918.	4.1	10
25	Tunable ultrathin dual-phase P-doped Bi ₂ MoO ₆ nanosheets for advanced lithium and sodium storage. Nano Research, 2022, 15, 6128-6137.	5.8	8
26	Irregular Inhomogeneities in an Anisotropic Piezoelectric Plane. Journal of Applied Mechanics, Transactions ASME, 2012, 79, .	1.1	7
27	Hierarchical-structure induced adjustable deformation of super carbon nanotubes with radial shrinkage up to 66%. Carbon, 2017, 125, 289-298.	5.4	7
28	Water Splitting: A Novel Multinary Intermetallic as an Active Electrocatalyst for Hydrogen Evolution (Adv. Mater. 21/2020). Advanced Materials, 2020, 32, 2070166.	11.1	6
29	Investigation on crack propagation in single crystal Ag with temperature dependence. Journal of Materials Research, 2015, 30, 3553-3563.	1.2	4
30	Tailored tensile properties of CoCrNi medium entropy alloy by tuning the elemental distribution. Journal of Alloys and Compounds, 2022, 897, 163171.	2.8	3
31	Metallic Glass Catalysts: Attractive In Situ Self-Reconstructed Hierarchical Gradient Structure of Metallic Glass for High Efficiency and Remarkable Stability in Catalytic Performance (Adv. Funct. Mater.)	11.1	3