Ze Liu

List of Publications by Year
in descending order

85 papers	2,838 citations	186265 28 h-index	182427 51 g-index
85 all docs	85 docs citations	85 times ranked	2928 citing authors

#	Article	IF	Citations
1	NE-trending transtensional faulting in the Pearl River Mouth basin of the Northern South China Sea margin. Gondwana Research, 2023, 120, 4-19.	6.0	10
2	Three-stage extension in the Cenozoic Pearl River Mouth Basin triggering onset of the South China Sea spreading. Gondwana Research, 2023, 120, 31-46.	6.0	8
3	Deep-shallow coupling response of the Cenozoic Bohai Bay Basin to plate interactions around the Eurasian Plate. Gondwana Research, 2022, 102, 180-199.	6.0	14
4	Earth's surface responses during geodynamic evolution: Numerical insight from the southern East China Sea Continental Shelf Basin, West Pacific. Gondwana Research, 2022, 102, 167-179.	6.0	8
5	Superplastic Nanomolding of Highly Ordered Metallic Subâ€Micrometer Pillars Arrays for Surface Enhanced Raman Scattering. Advanced Materials Technologies, 2022, 7, 2100891.	5.8	8
6	Nanofabrication through molding. Progress in Materials Science, 2022, 125, 100891.	32.8	39
7	Experimental decoding of grain boundary-based plastic deformation. Acta Materialia, 2022, 225, 117534.	7.9	8
8	Flexural subsidence modelling of post-rift paleobathymetry and sedimentary infill in the northern South China Sea margin. Journal of Asian Earth Sciences, 2022, 226, 105076.	2.3	4
9	Dynamic and Reversible Tuning of Particleâ€inâ€Bowl Shaped Plasmonic Resonators for Switchable Surface Enhanced Raman Scattering. Advanced Materials Interfaces, 2022, 9, .	3.7	5
10	Electrochemical Growth of High-Strength Carbon Nanocoils in Molten Carbonates. Nano Letters, 2022, 22, 97-104.	9.1	17
11	Fabrication of 3D metallic glass architectures by a mold-strain-set method. Materials and Design, 2022, 218, 110668.	7.0	4
12	Deep and surface driving forces to shape the Earth: Insights from the evolution of the northern South China Sea margin. Gondwana Research, 2022, , .	6.0	4
13	Thermodynamic model of twisted bilayer graphene: Entropy matters. Journal of the Mechanics and Physics of Solids, 2022, 167, 104972.	4.8	7
14	Peeling mechanics of film-substrate system with mutually embedded nanostructures in the interface. International Journal of Solids and Structures, 2022, 251, 111737.	2.7	1
15	Observation of speeding growth of metal nanowires by ultra-low frequency micro-vibration assisted superplastic nanomolding. Materials Letters, 2021, 283, 128890.	2.6	3
16	Ultrawide bandwidth and sensitive electro-optic modulator based on a graphene nanoelectromechanical system with superlubricity. Carbon, 2021, 176, 228-234.	10.3	21
17	Quantitative characterization of surface wettability by friction force. Applied Surface Science, 2021, 536, 147788.	6.1	16
18	When plateau meets subduction zone: A review of numerical models. Earth-Science Reviews, 2021, 215, 103556.	9.1	25

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19	ANOX: A robust computational model for predicting the antioxidant proteins based on multiple features. Analytical Biochemistry, 2021, 631, 114257.	2.4	2
20	Structural and kinematic analysis of Cenozoic rift basins in South China Sea: A synthesis. Earth-Science Reviews, 2021, 216, 103522.	9.1	38
21	Computational Prediction of Superlubric Layered Heterojunctions. ACS Applied Materials & Interfaces, 2021, 13, 33600-33608.	8.0	11
22	One-dimensional Sb2Se3 enabling ultra-flexible solar cells and mini-modules for IoT applications. Nano Energy, 2021, 86, 106101.	16.0	30
23	Nanomolding of Gold and Goldâ€"Silicon Heterostructures at Room Temperature. ACS Nano, 2021, 15, 14275-14284.	14.6	8
24	Mechanical design of an asymmetric-deformation-driven rotating machinery. Mechanics Research Communications, 2021, 117, 103772.	1.8	0
25	Extraordinary Electromechanical Actuation of Ti2C MXene. Journal of Physical Chemistry C, 2021, 125, 1060-1068.	3.1	13
26	Dynamic and reversible tuning of pixelated plasmonic cluster arrays. Journal of Materials Chemistry C, 2021, 9, 15927-15931.	5.5	6
27	Ordered Hierarchical Ag Nanostructures as Surface-Enhanced Raman Scattering Platforms for (Bio)chemical Sensing and Pollutant Monitoring. ACS Applied Nano Materials, 2021, 4, 11644-11650.	5.0	11
28	Electromechanically Actuated MXene Nanotubes for Tunable Mass Transport. Journal of Physical Chemistry C, 2021, 125, 25275-25283.	3.1	1
29	Tuning the Nonlinear Mechanical Anisotropy of Layered Crystals via Interlayer Twist. Journal of Applied Mechanics, Transactions ASME, 2021, 88, .	2.2	1
30	Arbitrarily Patterned Active Wrinkles in Highly Stretched Substrate-Free Dielectric Elastic Membrane. Journal of Applied Mechanics, Transactions ASME, 2021, 88, .	2.2	2
31	Generation of buckling and wrinkling in elastic films: The effect of initial imperfection. Physical Review E, 2021, 104, 055002.	2.1	1
32	Joining mechanism of bulk metallic glasses in their supercooled liquid region. Journal of Materials Processing Technology, 2020, 279, 116583.	6.3	10
33	One-Dimensional Sb₂Se₃ Enabling a Highly Flexible Photodiode for Light-Source-Free Heart Rate Detection. ACS Photonics, 2020, 7, 352-360.	6.6	53
34	Controlled fabrication of gold nanotip arrays by nanomolding-necking technology. Nanotechnology, 2020, 31, 144001.	2.6	1
35	Accretion of oceanic plateaus at continental margins: Numerical modeling. Gondwana Research, 2020, 81, 390-402.	6.0	30
36	Elastic anisotropy measure for two-dimensional crystals. Extreme Mechanics Letters, 2020, 34, 100615.	4.1	54

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37	m7GPredictor: An improved machine learning-based model for predicting internal m7G modifications using sequence properties. Analytical Biochemistry, 2020, 609, 113905.	2.4	18
38	Spatio-temporally modulated composite metamaterials by using switchable mesostructural topology. Composite Structures, 2020, 251, 112601.	5.8	0
39	High-performance phosphorene electromechanical actuators. Npj Computational Materials, 2020, 6, .	8.7	13
40	Rapid and continuous regulating adhesion strength by mechanical micro-vibration. Nature Communications, 2020, 11, 1583.	12.8	23
41	Robust and reproducible fabrication of large area aluminum (Al) micro/nanorods arrays by superplastic nanomolding at room temperature. Applied Physics Express, 2020, 13, 036503.	2.4	8
42	Bio-inspired self-folding strategy to break the trade-off between strength and ductility in carbon-nanoarchitected materials. Npj Computational Materials, 2020, 6, .	8.7	14
43	General Nanomolding of Ordered Phases. Physical Review Letters, 2020, 124, 036102.	7.8	21
44	A new method for fabrication and electrical characterization of nanosized molten metals. Nanotechnology, 2020, 31, 445705.	2.6	2
45	Superflexible C₆₈-graphyne as a promising anode material for lithium-ion batteries. Journal of Materials Chemistry A, 2019, 7, 17357-17365.	10.3	19
46	Investigation of Temperature and Feature Size Effects on Deformation of Metals by Superplastic Nanomolding. Physical Review Letters, 2019, 122, 016101.	7.8	13
47	Nanomolding of Crystalline Metals: The Smaller the Easier. Physical Review Letters, 2019, 122, 036101.	7.8	30
48	Controlled fabrication of hierarchical metal nanostructures. Materials Letters, 2019, 241, 160-163.	2.6	3
49	Eastward tectonic migration and transition of the Jurassic-Cretaceous Andean-type continental margin along Southeast China. Earth-Science Reviews, 2019, 196, 102884.	9.1	93
50	Mesozoic magmatic activity and tectonic evolution in the southern East China Sea Continental Shelf Basin: Thermoâ€mechanical modelling. Geological Journal, 2018, 53, 240-251.	1.3	10
51	Dynamic mechanism of tectonic inversion and implications for oilâ€“gas accumulation in the Xihu Sag, East China Sea Shelf Basin: Insights from numerical modelling. Geological Journal, 2018, 53, 225-239.	1.3	3
52	Test sample geometry for fracture toughness measurements of bulk metallic glasses. Acta Materialia, 2018, 145, 477-487.	7.9	43
53	Lightweight Ti-based bulk metallic glasses with superior thermoplastic formability. Intermetallics, 2018, 98, 54-59.	3.9	23
54	Spatially heterogeneous dynamics in a metallic glass forming liquid imaged by electron correlation microscopy. Nature Communications, 2018, 9, 1129.	12.8	73

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55	Atomic imprinting into metallic glasses. Communications Physics, 2018, 1, .	5.3	28
56	Transition From Lowâ€K to Highâ€K Calcâ€Alkaline Magmatism at Approximately 84ÂMa in the Eastern Pontides (NE Turkey): Magmatic Response to Slab Rollback of the Black Sea. Journal of Geophysical Research: Solid Earth, 2018, 123, 7604-7628.	3.4	34
57	Mechanical glass transition revealed by the fracture toughness of metallic glasses. Nature Communications, 2018, 9, 3271.	12.8	103
58	Novel single-host Al1â˜'xSixCxN1â˜'x: Mn2+ white phosphors for field emission displays. Journal of Materials Science: Materials in Electronics, 2017, 28, 8405-8413.	2.2	2
59	One-step fabrication of crystalline metal nanostructures by direct nanoimprinting below melting temperatures. Nature Communications, 2017, 8, 14910.	12.8	55
60	Vibration-accelerated activation of flow units in a Pd-based bulk metallic glass. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 692, 62-66.	5.6	13
61	Processing effects on fracture toughness of metallic glasses. Scripta Materialia, 2017, 130, 152-156.	5.2	38
62	Applications and limitations of electron correlation microscopy to study relaxation dynamics in supercooled liquids. Ultramicroscopy, 2017, 178, 125-130.	1.9	11
63	Tuning apparent friction coefficient by controlled patterning bulk metallic glasses surfaces. Scientific Reports, 2016, 6, 39388.	3.3	33
64	Flaw tolerance of metallic glasses. Acta Materialia, 2016, 107, 220-228.	7.9	61
65	3D metallic glass cellular structures. Acta Materialia, 2016, 105, 35-43.	7.9	69
66	Mechanical buckling induced periodic kinking/stripe microstructures in mechanically peeled graphite flakes from HOPG. Acta Mechanica Sinica/Lixue Xuebao, 2015, 31, 494-499.	3.4	4
67	Does the fracture toughness of bulk metallic glasses scatter?. Scripta Materialia, 2015, 107, 1-4.	5.2	44
68	Critical Crystallization for Embrittlement in Metallic Glasses. Physical Review Letters, 2015, 115, 265502.	7.8	48
69	Shear-accelerated crystallization in a supercooled atomic liquid. Physical Review E, 2015, 91, 020301.	2.1	28
70	Protocols for multi-step thermoplastic processing of metallic glasses. Scripta Materialia, 2015, 104, 56-59.	5.2	12
71	General nanomoulding with bulk metallic glasses. Nanotechnology, 2015, 26, 145301.	2.6	37
72	Computational Nanocharacterization for Combinatorially Developed Bulk Metallic Glass. International Journal of High Speed Electronics and Systems, 2015, 24, 1520012.	0.7	0

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73	Combinatorial development of bulk metallic glasses. Nature Materials, 2014, 13, 494-500.	27.5	196
74	The diversity of friction behavior between bi-layer graphenes. Nanotechnology, 2014, 25, 075703.	2.6	24
75	Joining of bulk metallic glasses in air. Acta Materialia, 2014, 62, 49-57.	7.9	74
76	Experimental advances in superlubricity. Friction, 2014, 2, 182-192.	6.4	57
77	Flaw tolerance vs. performance: A tradeoff in metallic glass cellular structures. Acta Materialia, 2014, 73, 259-274.	7.9	55
78	Observation of High-Speed Microscale Superlubricity in Graphite. Physical Review Letters, 2013, 110, 255504.	7.8	131
79	Mechanics and Multidisciplinary Study for Creating Graphene-Based van der Waals Nano/Microscale Devices. , 2013, , 87-104.		0
80	Binding and interlayer force in the near-contact region of two graphite slabs: Experiment and theory. Journal of Chemical Physics, 2013, 139, 224704.	3.0	21
81	Observation of Microscale Superlubricity in Graphite. Physical Review Letters, 2012, 108, 205503.	7.8	431
82	Interlayer shear strength of single crystalline graphite. Acta Mechanica Sinica/Lixue Xuebao, 2012, 28, 978-982.	3.4	86
83	Interlayer binding energy of graphite: A mesoscopic determination from deformation. Physical Review B, 2012, 85, .	3.2	203
84	A graphite nanoeraser. Nanotechnology, 2011, 22, 265706.	2.6	38
85	Stripe/kink microstructures formed in mechanical peeling of highly orientated pyrolytic graphite. Applied Physics Letters, 2010, 96, .	3.3	19