

Jing Liu

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2799191/publications.pdf>

Version: 2024-02-01

273
papers

14,603
citations

13099

68
h-index

29157

104
g-index

279
all docs

279
docs citations

279
times ranked

7382
citing authors

#	ARTICLE	IF	CITATIONS
1	Bismuth Sulfide Nanorods as a Precision Nanomedicine for <i>in Vivo</i> Multimodal Imaging-Guided Photothermal Therapy of Tumor. <i>ACS Nano</i> , 2015, 9, 696-707.	14.6	503
2	Self-Fueled Biomimetic Liquid Metal Mollusk. <i>Advanced Materials</i> , 2015, 27, 2648-2655.	21.0	336
3	Direct Desktop Printed-Circuits-on-Paper Flexible Electronics. <i>Scientific Reports</i> , 2013, 3, .	3.3	295
4	Liquid Metal Composites. <i>Matter</i> , 2020, 2, 1446-1480.	10.0	294
5	Emergence of Liquid Metals in Nanotechnology. <i>ACS Nano</i> , 2019, 13, 7388-7395.	14.6	269
6	Fast Fabrication of Flexible Functional Circuits Based on Liquid Metal Dual-Trans Printing. <i>Advanced Materials</i> , 2015, 27, 7109-7116.	21.0	246
7	Low melting point liquid metal as a new class of phase change material: An emerging frontier in energy area. <i>Renewable and Sustainable Energy Reviews</i> , 2013, 21, 331-346.	16.4	245
8	Gallium-Based Liquid Metal Amalgams: Transitional-State Metallic Mixtures (TransM ² ixes) with Enhanced and Tunable Electrical, Thermal, and Mechanical Properties. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 35977-35987.	8.0	242
9	Diverse Transformations of Liquid Metals Between Different Morphologies. <i>Advanced Materials</i> , 2014, 26, 6036-6042.	21.0	213
10	Thermal management of Li-ion battery with liquid metal. <i>Energy Conversion and Management</i> , 2016, 117, 577-585.	9.2	202
11	Personal electronics printing via tapping mode composite liquid metal ink delivery and adhesion mechanism. <i>Scientific Reports</i> , 2014, 4, 4588.	3.3	188
12	A Highly Stretchable Liquid Metal Polymer as Reversible Transitional Insulator and Conductor. <i>Advanced Materials</i> , 2019, 31, e1901337.	21.0	182
13	Preparations, Characteristics and Applications of the Functional Liquid Metal Materials. <i>Advanced Engineering Materials</i> , 2018, 20, 1700781.	3.5	175
14	Direct Writing of Flexible Electronics through Room Temperature Liquid Metal Ink. <i>PLoS ONE</i> , 2012, 7, e45485.	2.5	164
15	Magnetic Liquid Metal (Fe-GaIn) Based Multifunctional Electronics for Remote Self-Healing Materials, Degradable Electronics, and Thermal Transfer Printing. <i>Advanced Science</i> , 2019, 6, 1901478.	11.2	162
16	Recent Advancements in Liquid Metal Flexible Printed Electronics: Properties, Technologies, and Applications. <i>Micromachines</i> , 2016, 7, 206.	2.9	154
17	Nano liquid-metal fluid as ultimate coolant. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2007, 361, 252-256.	2.1	152
18	A liquid metal cooling system for the thermal management of high power LEDs. <i>International Communications in Heat and Mass Transfer</i> , 2010, 37, 788-791.	5.6	145

#	ARTICLE	IF	CITATIONS
19	Liquid metal cooling in thermal management of computer chips. <i>Frontiers of Energy and Power Engineering in China</i> , 2007, 1, 384-402.	0.4	139
20	Gallium-based thermal interface material with high compliance and wettability. <i>Applied Physics A: Materials Science and Processing</i> , 2012, 107, 701-708.	2.3	136
21	Manipulation of Liquid Metals on a Graphite Surface. <i>Advanced Materials</i> , 2016, 28, 9210-9217.	21.0	135
22	Liquid Metal Phagocytosis: Intermetallic Wetting Induced Particle Internalization. <i>Advanced Science</i> , 2017, 4, 1700024.	11.2	133
23	Transformable soft liquid metal micro/nanomaterials. <i>Materials Science and Engineering Reports</i> , 2019, 138, 1-35.	31.8	128
24	Liquid Metal Based Soft Robotics: Materials, Designs, and Applications. <i>Advanced Materials Technologies</i> , 2019, 4, 1800549.	5.8	126
25	Liquid metal biomaterials: a newly emerging area to tackle modern biomedical challenges. <i>International Materials Reviews</i> , 2017, 62, 415-440.	19.3	124
26	Heat-driven liquid metal cooling device for the thermal management of a computer chip. <i>Journal Physics D: Applied Physics</i> , 2007, 40, 4722-4729.	2.8	123
27	Self-propelled liquid metal motors steered by a magnetic or electrical field for drug delivery. <i>Journal of Materials Chemistry B</i> , 2016, 4, 5349-5357.	5.8	123
28	Soft and Moldable Mg-doped Liquid Metal for Conformable Skin Tumor Photothermal Therapy. <i>Advanced Healthcare Materials</i> , 2018, 7, e1800318.	7.6	116
29	Atomized spraying of liquid metal droplets on desired substrate surfaces as a generalized way for ubiquitous printed electronics. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 116, 1091-1097.	2.3	115
30	Synthetically chemical-electrical mechanism for controlling large scale reversible deformation of liquid metal objects. <i>Scientific Reports</i> , 2014, 4, 7116.	3.3	114
31	Semi-Liquid Metal (Ni-EGaIn)-Based Ultraconformable Electronic Tattoo. <i>Advanced Materials Technologies</i> , 2019, 4, 1900183.	5.8	113
32	Superelastic EGaIn Composite Fibers Sustaining 500% Tensile Strain with Superior Electrical Conductivity for Wearable Electronics. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 6112-6118.	8.0	113
33	One-Step Liquid Metal Transfer Printing: Toward Fabrication of Flexible Electronics on Wide Range of Substrates. <i>Advanced Materials Technologies</i> , 2018, 3, 1800265.	5.8	112
34	Shape tunable gallium nanorods mediated tumor enhanced ablation through near-infrared photothermal therapy. <i>Nanoscale</i> , 2019, 11, 2655-2667.	5.6	112
35	Surface tension of liquid metal: role, mechanism and application. <i>Frontiers in Energy</i> , 2017, 11, 535-567.	2.3	111
36	Biomedical Implementation of Liquid Metal Ink as Drawable ECG Electrode and Skin Circuit. <i>PLoS ONE</i> , 2013, 8, e58771.	2.5	108

#	ARTICLE	IF	CITATIONS
37	Ni-GaN Amalgams Enabled Rapid and Customizable Fabrication of Wearable and Wireless Healthcare Electronics. <i>Advanced Engineering Materials</i> , 2018, 20, 1800054.	3.5	108
38	Multiple-Stimuli-Responsive and Cellulose Conductive Ionic Hydrogel for Smart Wearable Devices and Thermal Actuators. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 1353-1366.	8.0	108
39	Printed Conformable Liquid Metal e-Skin Enabled Spatiotemporally Controlled Bioelectromagnetics for Wireless Multisite Tumor Therapy. <i>Advanced Functional Materials</i> , 2019, 29, 1907063.	14.9	107
40	PLUS-M: a Porous Liquid-metal enabled Ubiquitous Soft Material. <i>Materials Horizons</i> , 2018, 5, 222-229.	12.2	105
41	Numerical investigation of the phase change process of low melting point metal. <i>International Journal of Heat and Mass Transfer</i> , 2016, 100, 899-907.	4.8	102
42	Injectable 3-D Fabrication of Medical Electronics at the Target Biological Tissues. <i>Scientific Reports</i> , 2013, 3, 3442.	3.3	101
43	Metallic Bond-Enabled Wetting Behavior at the Liquid Ga/CuGa ₂ Interfaces. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 9203-9210.	8.0	101
44	Direct Writing and Repairable Paper Flexible Electronics Using Nickel Liquid Metal Ink. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800571.	3.7	101
45	Pervasive liquid metal based direct writing electronics with roller-ball pen. <i>AIP Advances</i> , 2013, 3, .	1.3	100
46	Finned heat pipe assisted low melting point metal PCM heat sink against extremely high power thermal shock. <i>Energy Conversion and Management</i> , 2018, 160, 467-476.	9.2	98
47	Amorphous liquid metal electrodes enabled conformable electrochemical therapy of tumors. <i>Biomaterials</i> , 2017, 146, 156-167.	11.4	97
48	Liquid-solid phase transition alloy as reversible and rapid molding bone cement. <i>Biomaterials</i> , 2014, 35, 9789-9801.	11.4	96
49	Experimental and numerical investigation of low melting point metal based PCM heat sink with internal fins. <i>International Communications in Heat and Mass Transfer</i> , 2017, 87, 118-124.	5.6	96
50	Experimental investigation of galinstan based minichannel cooling for high heat flux and large heat power thermal management. <i>Energy Conversion and Management</i> , 2019, 185, 248-258.	9.2	96
51	Magnetic Liquid Metals Manipulated in the Three-Dimensional Free Space. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 8685-8692.	8.0	95
52	Suspension 3D Printing of Liquid Metal into Self-Healing Hydrogel. <i>Advanced Materials Technologies</i> , 2017, 2, 1700173.	5.8	93
53	Liquid Metal Angiography for Mega Contrast X-Ray Visualization of Vascular Network in Reconstructing <i>In-Vitro</i> Organ Anatomy. <i>IEEE Transactions on Biomedical Engineering</i> , 2014, 61, 2161-2166.	4.2	88
54	Liquid metal activated aluminum-water reaction for direct hydrogen generation at room temperature. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 92, 17-37.	16.4	88

#	ARTICLE	IF	CITATIONS
55	Direct writing of electronics based on alloy and metal (DREAM) ink: A newly emerging area and its impact on energy, environment and health sciences. <i>Frontiers in Energy</i> , 2012, 6, 311-340.	2.3	87
56	Rapidly patterning conductive components on skin substrates as physiological testing devices via liquid metal spraying and pre-designed mask. <i>Journal of Materials Chemistry B</i> , 2014, 2, 5739-5745.	5.8	87
57	Liquid phase 3D printing for quickly manufacturing conductive metal objects with low melting point alloy ink. <i>Science China Technological Sciences</i> , 2014, 57, 1721-1728.	4.0	87
58	Thermally Triggered in Situ Assembly of Gold Nanoparticles for Cancer Multimodal Imaging and Photothermal Therapy. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 10453-10460.	8.0	85
59	Injectable and Radiopaque Liquid Metal/Calcium Alginate Hydrogels for Endovascular Embolization and Tumor Embolotherapy. <i>Small</i> , 2020, 16, e1903421.	10.0	84
60	Thermally Conductive and Highly Electrically Resistive Grease Through Homogeneously Dispersing Liquid Metal Droplets Inside Methyl Silicone Oil. <i>Journal of Electronic Packaging, Transactions of the ASME</i> , 2014, 136, .	1.8	81
61	Channelless Fabrication for Large-scale Preparation of Room Temperature Liquid Metal Droplets. <i>Advanced Engineering Materials</i> , 2014, 16, 255-262.	3.5	81
62	A highly conductive and stretchable wearable liquid metal electronic skin for long-term conformable health monitoring. <i>Science China Technological Sciences</i> , 2018, 61, 1031-1037.	4.0	78
63	Advances in Liquid Metal-Enabled Flexible and Wearable Sensors. <i>Micromachines</i> , 2020, 11, 200.	2.9	78
64	Pressured liquid metal screen printing for rapid manufacture of high resolution electronic patterns. <i>RSC Advances</i> , 2015, 5, 57686-57691.	3.6	77
65	Numerical simulation of selective freezing of target biological tissues following injection of solutions with specific thermal properties. <i>Cryobiology</i> , 2005, 50, 183-192.	0.7	76
66	Keeping Smartphones Cool With Gallium Phase Change Material. <i>Journal of Heat Transfer</i> , 2013, 135, .	2.1	76
67	Nano liquid metal as an emerging functional material in energy management, conversion and storage. <i>Nano Energy</i> , 2013, 2, 863-872.	16.0	76
68	Soft Robotics: Liquid Metal Based Soft Robotics: Materials, Designs, and Applications (<i>Adv. Mater.</i>)	9.8	75
69	Evaluation and optimization of low melting point metal PCM heat sink against ultra-high thermal shock. <i>Applied Thermal Engineering</i> , 2017, 119, 34-41.	6.0	70
70	Liquid Metal Microparticles Phase Change Medicated Mechanical Destruction for Enhanced Tumor Cryoablation and Dual-mode Imaging. <i>Advanced Functional Materials</i> , 2020, 30, 2003359.	14.9	69
71	Semi-liquid metal and adhesion-selection enabled rolling and transfer (SMART) printing: A general method towards fast fabrication of flexible electronics. <i>Science China Materials</i> , 2019, 62, 982-994.	6.3	68
72	Transient State Machine Enabled from the Colliding and Coalescence of a Swarm of Autonomously Running Liquid Metal Motors. <i>Small</i> , 2015, 11, 5253-5261.	10.0	67

#	ARTICLE	IF	CITATIONS
73	3D printing for functional electronics by injection and package of liquid metals into channels of mechanical structures. <i>Materials and Design</i> , 2017, 122, 80-89.	7.0	67
74	Compatible hybrid 3D printing of metal and nonmetal inks for direct manufacture of end functional devices. <i>Science China Technological Sciences</i> , 2014, 57, 2089-2095.	4.0	66
75	Liquid metal spiral coil enabled soft electromagnetic actuator. <i>Science China Technological Sciences</i> , 2018, 61, 516-521.	4.0	66
76	Implantable liquid metal-based flexible neural microelectrode array and its application in recovering animal locomotion functions. <i>Journal of Micromechanics and Microengineering</i> , 2017, 27, 104002.	2.6	65
77	Semiliquid Metal Enabled Highly Conductive Wearable Electronics for Smart Fabrics. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 30019-30027.	8.0	65
78	Liquid-Metal-Painted Stretchable Capacitor Sensors for Wearable Healthcare Electronics. <i>Journal of Medical and Biological Engineering</i> , 2016, 36, 265-272.	1.8	63
79	Progress, Mechanisms and Applications of Liquid-Metal Catalyst Systems. <i>Chemistry - A European Journal</i> , 2018, 24, 17616-17626.	3.3	62
80	Self-Growing and Serpentine Locomotion of Liquid Metal Induced by Copper Ions. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 22889-22895.	8.0	62
81	Cu-EGaIn enabled stretchable e-skin for interactive electronics and CT assistant localization. <i>Materials Horizons</i> , 2020, 7, 1845-1853.	12.2	62
82	Stretchable liquid metal electromagnetic interference shielding coating materials with superior effectiveness. <i>Journal of Materials Chemistry C</i> , 2019, 7, 10331-10337.	5.5	58
83	Nanocryosurgery and its mechanisms for enhancing freezing efficiency of tumor tissues. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2008, 4, 79-87.	3.3	57
84	Fabrication of magnetic nano liquid metal fluid through loading of Ni nanoparticles into gallium or its alloy. <i>Journal of Magnetism and Magnetic Materials</i> , 2014, 354, 279-283.	2.3	56
85	Design and Implementation of a Noncontact Sleep Monitoring System Using Infrared Cameras and Motion Sensor. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2018, 67, 1555-1563.	4.7	56
86	A Liquid Gripper Based on Phase Transitional Metallic Ferrofluid. <i>Advanced Functional Materials</i> , 2021, 31, 2100274.	14.9	56
87	A powerful way of cooling computer chip using liquid metal with low melting point as the cooling fluid. <i>Forschung Im Ingenieurwesen/Engineering Research</i> , 2006, 70, 243-251.	1.6	55
88	Design of Practical Liquid Metal Cooling Device for Heat Dissipation of High Performance CPUs. <i>Journal of Electronic Packaging, Transactions of the ASME</i> , 2010, 132, .	1.8	55
89	Liquid metal as reconnection agent for peripheral nerve injury. <i>Science Bulletin</i> , 2016, 61, 939-947.	9.0	55
90	Low-melting-point liquid metal convective heat transfer: A review. <i>Applied Thermal Engineering</i> , 2021, 193, 117021.	6.0	55

#	ARTICLE	IF	CITATIONS
91	Printable tiny thermocouple by liquid metal gallium and its matching metal. <i>Applied Physics Letters</i> , 2012, 101, 073511.	3.3	53
92	Fluorescent Liquid Metal As a Transformable Biomimetic Chameleon. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 1589-1596.	8.0	53
93	A Fast and Cost-Effective Transfer Printing of Liquid Metal Inks for Three-Dimensional Wiring in Flexible Electronics. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 36723-36730.	8.0	53
94	Generalized way to make temperature tunable conductor-insulator transition liquid metal composites in a diverse range. <i>Materials Horizons</i> , 2019, 6, 1854-1861.	12.2	52
95	Liquid Metal Hybrid Platform-Mediated Ice-Fire Dual Noninvasive Conformable Melanoma Therapy. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 27984-27993.	8.0	51
96	Lightweight Liquid Metal Entity. <i>Advanced Functional Materials</i> , 2020, 30, 1910709.	14.9	51
97	Comparative study on activation of aluminum with four liquid metals to generate hydrogen in alkaline solution. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 22663-22667.	7.1	49
98	Coloration of Liquid-Metal Soft Robots: From Silver-White to Iridescent. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 41627-41636.	8.0	49
99	Liquid metal enabled injectable biomedical technologies and applications. <i>Applied Materials Today</i> , 2020, 20, 100722.	4.3	49
100	Phase transition science and engineering of gallium-based liquid metal. <i>Matter</i> , 2022, 5, 2054-2085.	10.0	49
101	Electro-hydrodynamic shooting phenomenon of liquid metal stream. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	48
102	Microribbons composed of directionally self-assembled nanoflakes as highly stretchable ionic neural electrodes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 14667-14675.	7.1	48
103	Selective freezing of target biological tissues after injection of solutions with specific thermal properties. <i>Cryobiology</i> , 2005, 50, 174-182.	0.7	47
104	Directly Writing Resistor, Inductor and Capacitor to Composite Functional Circuits: A Super-Simple Way for Alternative Electronics. <i>PLoS ONE</i> , 2013, 8, e69761.	2.5	47
105	Self-powered macroscopic Brownian motion of spontaneously running liquid metal motors. <i>Science Bulletin</i> , 2015, 60, 1203-1210.	9.0	46
106	Liquid Metal Machine Triggered Violin-Like Wire Oscillator. <i>Advanced Science</i> , 2016, 3, 1600212.	11.2	46
107	Liquid metal wheeled small vehicle for cargo delivery. <i>RSC Advances</i> , 2016, 6, 56482-56488.	3.6	46
108	Dynamic hydrogen generation phenomenon of aluminum fed liquid phase Ga-In alloy inside NaOH electrolyte. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 1453-1459.	7.1	45

#	ARTICLE	IF	CITATIONS
109	Revolutionizing heat transport enhancement with liquid metals: Proposal of a new industry of water-free heat exchangers. <i>Frontiers in Energy</i> , 2011, 5, 20-42.	2.3	44
110	Alternating electric field actuated oscillating behavior of liquid metal and its application. <i>Science China Technological Sciences</i> , 2016, 59, 597-603.	4.0	43
111	Liquid metal enabled combinatorial heat transfer science: toward unconventional extreme cooling. <i>Frontiers in Energy</i> , 2018, 12, 259-275.	2.3	43
112	Soft liquid metal nanoparticles achieve reduced crystal nucleation and ultrarapid rewarming for human bone marrow stromal cell and blood vessel cryopreservation. <i>Acta Biomaterialia</i> , 2020, 102, 403-415.	8.3	43
113	High performance liquid metal thermal interface materials. <i>Nanotechnology</i> , 2021, 32, 092001.	2.6	43
114	Large-Magnitude Transformable Liquid-Metal Composites. <i>ACS Omega</i> , 2019, 4, 2311-2319.	3.5	41
115	Magnetically tightened form-stable phase change materials with modular assembly and geometric conformality features. <i>Nature Communications</i> , 2022, 13, 1397.	12.8	41
116	Nanoparticle-mediated cryosurgery for tumor therapy. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2018, 14, 493-506.	3.3	40
117	Advances in Liquid Metal Science and Technology in Chip Cooling and Thermal Management. <i>Advances in Heat Transfer</i> , 2018, , 187-300.	0.9	40
118	Study on the nucleating agents for gallium to reduce its supercooling. <i>International Journal of Heat and Mass Transfer</i> , 2020, 148, 119055.	4.8	40
119	Nano-Cryosurgery: Advances and Challenges. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 4521-4542.	0.9	38
120	Electrical method to control the running direction and speed of self-powered tiny liquid metal motors. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2015, 471, 20150297.	2.1	38
121	Autonomous convergence and divergence of the self-powered soft liquid metal vehicles. <i>Science Bulletin</i> , 2015, 60, 943-951.	9.0	38
122	Liquid metal amoeba with spontaneous pseudopodia formation and motion capability. <i>Scientific Reports</i> , 2017, 7, 7256.	3.3	38
123	Low Melting Point Alloys Enabled Stiffness Tunable Advanced Materials. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	38
124	Liquid Metal Fibers. <i>Advanced Fiber Materials</i> , 2022, 4, 987-1004.	16.1	38
125	Harvesting human kinematical energy based on liquid metal magnetohydrodynamics. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2009, 373, 1305-1309.	2.1	37
126	Breathing to harvest energy as a mechanism towards making a liquid metal beating heart. <i>RSC Advances</i> , 2016, 6, 94692-94698.	3.6	37

#	ARTICLE	IF	CITATIONS
127	Interfacial Engineering of Room Temperature Liquid Metals. <i>Advanced Materials Interfaces</i> , 2021, 8, 2001936.	3.7	37
128	Electrically driven chip cooling device using hybrid coolants of liquid metal and aqueous solution. <i>Science China Technological Sciences</i> , 2016, 59, 301-308.	4.0	36
129	Electrical stimulation towards melanoma therapy via liquid metal printed electronics on skin. <i>Clinical and Translational Medicine</i> , 2016, 5, 21.	4.0	36
130	Printing of Quasi-2D Semiconducting In_2O_3 in Constructing Electronic Devices via Room-Temperature Liquid Metal Oxide Skin. <i>Physica Status Solidi - Rapid Research Letters</i> , 2019, 13, 1900271.	2.4	36
131	Liquid Metal Foaming via Decomposition Agents. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 17093-17103.	8.0	36
132	Electromagnetic rotation of a liquid metal sphere or pool within a solution. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2015, 471, 20150177.	2.1	35
133	A polarized liquid metal worm squeezing across a localized irregular gap. <i>RSC Advances</i> , 2017, 7, 11049-11056.	3.6	35
134	Spraying printing of liquid metal electronics on various clothes to compose wearable functional device. <i>Science China Technological Sciences</i> , 2017, 60, 306-316.	4.0	35
135	Liquid metal technology in solar power generation - Basics and applications. <i>Solar Energy Materials and Solar Cells</i> , 2021, 222, 110925.	6.2	33
136	Liquid Metal Transformable Machines. <i>Accounts of Materials Research</i> , 2021, 2, 1227-1238.	11.7	33
137	Endosomal escapable cryo-treatment-driven membrane-encapsulated Ga liquid-metal transformer to facilitate intracellular therapy. <i>Matter</i> , 2022, 5, 219-236.	10.0	33
138	Room temperature liquid metal: its melting point, dominating mechanism and applications. <i>Frontiers in Energy</i> , 2020, 14, 81-104.	2.3	32
139	Galvanic corrosion couple-induced Marangoni flow of liquid metal. <i>Soft Matter</i> , 2017, 13, 2309-2314.	2.7	31
140	Conformable liquid metal printed epidermal electronics for smart physiological monitoring and simulation treatment. <i>Journal of Micromechanics and Microengineering</i> , 2018, 28, 034003.	2.6	31
141	Advances in the Development of Liquid Metal-Based Printed Electronic Inks. <i>Frontiers in Materials</i> , 2019, 6, .	2.4	31
142	Additive manufacture of low melting point metal porous materials: Capabilities, potential applications and challenges. <i>Materials Today</i> , 2021, 49, 201-230.	14.2	31
143	Splashing phenomena of room temperature liquid metal droplet striking on the pool of the same liquid under ambient air environment. <i>International Journal of Heat and Fluid Flow</i> , 2014, 47, 1-8.	2.4	30
144	Magnetic trap effect to restrict motion of self-powered tiny liquid metal motors. <i>Applied Physics Letters</i> , 2015, 107, .	3.3	30

#	ARTICLE	IF	CITATIONS
145	Liquid Metal Enabled Flexible Electronic System for Eye Movement Tracking. <i>IEEE Sensors Journal</i> , 2018, 18, 2592-2598.	4.7	30
146	Liquid metal activated hydrogen production from waste aluminum for power supply and its life cycle assessment. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 17505-17514.	7.1	30
147	LM-Jelly: Liquid Metal Enabled Biomimetic Robotic Jellyfish. <i>Soft Robotics</i> , 2022, 9, 1098-1107.	8.0	30
148	Metal substrate enhanced hydrogen production of aluminum fed liquid phase Ga-In alloy inside aqueous solution. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 6193-6199.	7.1	29
149	Controlled hydrogen generation using interaction of artificial seawater with aluminum plates activated by liquid Ga-In alloy. <i>RSC Advances</i> , 2017, 7, 30839-30844.	3.6	29
150	Liquid metal-enabled cybernetic electronics. <i>Materials Today Physics</i> , 2020, 14, 100245.	6.0	29
151	Gas-mediated liquid metal printing toward large-scale 2D semiconductors and ultraviolet photodetector. <i>Npj 2D Materials and Applications</i> , 2021, 5, .	7.9	29
152	Liquid metal biomaterials for biomedical imaging. <i>Journal of Materials Chemistry B</i> , 2022, 10, 829-842.	5.8	29
153	Jumping liquid metal droplet in electrolyte triggered by solid metal particles. <i>Applied Physics Letters</i> , 2016, 108, .	3.3	28
154	Liquid metal fractals induced by synergistic oxidation. <i>Science Bulletin</i> , 2018, 63, 1513-1520.	9.0	28
155	Discoloration Effect and One-Step Synthesis of Hydrogen Tungsten and Molybdenum Bronze (H ₂ WO ₃) using Liquid Metal at Room Temperature. <i>ACS Omega</i> , 2019, 4, 7428-7435.	3.5	28
156	Metal-based direct hydrogen generation as unconventional high density energy. <i>Frontiers in Energy</i> , 2019, 13, 27-53.	2.3	28
157	Low-Temperature Triggered Shape Transformation of Liquid Metal Microdroplets. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 38386-38396.	8.0	28
158	Liquid metal spring: oscillating coalescence and ejection of contacting liquid metal droplets. <i>Science Bulletin</i> , 2015, 60, 648-653.	9.0	27
159	Interfacial wetting behaviors of liquid Ga alloys/FeGa ₃ based on metallic bond interaction. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2019, 569, 102-109.	4.7	27
160	Graphite induced periodical self-actuation of liquid metal. <i>RSC Advances</i> , 2016, 6, 60729-60735.	3.6	26
161	Smart semiliquid metal fibers with designed mechanical properties for room temperature stimulus response and liquid welding. <i>Applied Materials Today</i> , 2020, 20, 100738.	4.3	26
162	Pervasive liquid metal printed electronics: From concept incubation to industry. <i>IScience</i> , 2021, 24, 102026.	4.1	26

#	ARTICLE	IF	CITATIONS
163	Injectable Affinity and Remote Magnetothermal Effects of Bi-Based Alloy for Long-Term Bone Defect Repair and Analgesia. <i>Advanced Science</i> , 2021, 8, e2100719.	11.2	26
164	Flexible Mechanical Joint as Human Exoskeleton Using Low-Melting-Point Alloy. <i>Journal of Medical Devices, Transactions of the ASME</i> , 2014, 8, .	0.7	25
165	Mussel-Inspired Multifunctional Integrated Liquid Metal-Based Magnetic Suspensions with Rheological, Magnetic, Electrical, and Thermal Reinforcement. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 5256-5265.	8.0	25
166	Nano-Biomedicine based on Liquid Metal Particles and Allied Materials. <i>Advanced NanoBiomed Research</i> , 2021, 1, 2000086.	3.6	25
167	Self-fueled liquid metal motors. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 353002.	2.8	24
168	Injectable liquid alkali alloy based-tumor thermal ablation therapy. <i>Minimally Invasive Therapy and Allied Technologies</i> , 2009, 18, 30-35.	1.2	23
169	Surface effects of liquid metal amoeba. <i>Science Bulletin</i> , 2017, 62, 700-706.	9.0	23
170	Thin, Porous, and Conductive Networks of Metal Nanoparticles through Electrochemical Welding on a Liquid Metal Template. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800406.	3.7	23
171	Stretchable electronics based on Nano-Fe Galn amalgams for smart flexible pneumatic actuator. <i>Smart Materials and Structures</i> , 2018, 27, 085022.	3.5	23
172	Controllable dispersion and reunion of liquid metal droplets. <i>Science China Materials</i> , 2019, 62, 407-415.	6.3	23
173	Effect of Electric Field on the Wetting Behavior of Eutectic Gallium-Indium Alloys in Aqueous Environment. <i>Journal of Electronic Materials</i> , 2018, 47, 2782-2790.	2.2	22
174	Injectable Liquid Metal- and Methotrexate-Loaded Microsphere for Cancer Chemophotothermal Synergistic Therapy. <i>ACS Applied Bio Materials</i> , 2020, 3, 3553-3559.	4.6	22
175	Multi-Substrate Liquid Metal Circuits Printing via Superhydrophobic Coating and Adhesive Patterning. <i>Advanced Engineering Materials</i> , 2019, 21, 1801363.	3.5	21
176	Semisolid Al-Ga composites fabricated at room temperature for hydrogen generation. <i>RSC Advances</i> , 2020, 10, 10076-10081.	3.6	21
177	Spatially selective adhesion enabled transfer printing of liquid metal for 3D electronic circuits. <i>Applied Materials Today</i> , 2021, 25, 101236.	4.3	21
178	Perspective on gallium-based room temperature liquid metal batteries. <i>Frontiers in Energy</i> , 2022, 16, 23-48.	2.3	21
179	Triggering and Tracing Electro-Hydrodynamic Liquid-Metal Surface Convection with a Particle Raft. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700939.	3.7	20
180	Colorful liquid metal printed electronics. <i>Science China Technological Sciences</i> , 2018, 61, 110-116.	4.0	20

#	ARTICLE	IF	CITATIONS
181	Spontaneous Dispersion and Large-Scale Deformation of Gallium-Based Liquid Metal Induced by Ferric Ions. <i>Journal of Physical Chemistry B</i> , 2019, 123, 2439-2447.	2.6	20
182	Instant hydrogen production using Ga-In-Sn-Bi alloy-activated Al-water reaction for hydrogen fuel cells. <i>Journal of Renewable and Sustainable Energy</i> , 2020, 12, .	2.0	20
183	Superhydrophobic E-textile with an Ag-EGaIn Conductive Layer for Motion Detection and Electromagnetic Interference Shielding. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 33650-33661.	8.0	20
184	Unconventional hydrodynamics of hybrid fluid made of liquid metals and aqueous solution under applied fields. <i>Frontiers in Energy</i> , 2018, 12, 276-296.	2.3	19
185	Fabrication of High-Resolution Flexible Circuits and Sensors Based on Liquid Metal Inks by Spraying and Wiping Processing. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2019, 13, 1545-1551.	4.0	19
186	A new hydrodynamic interpretation of liquid metal droplet motion induced by an electrocapillary phenomenon. <i>Soft Matter</i> , 2021, 17, 7835-7843.	2.7	19
187	Liquid Metal Biomaterials. <i>Springer Series in Biomaterials Science and Engineering</i> , 2018, , .	1.0	19
188	Liquid Metal Based Stretchable Radiation-Shielding Film. <i>Journal of Medical Devices, Transactions of the ASME</i> , 2015, 9, .	0.7	18
189	A volatile fluid assisted thermo-pneumatic liquid metal energy harvester. <i>Applied Physics Letters</i> , 2016, 108, .	3.3	18
190	NIR laser-responsive liquid metal-loaded polymeric hydrogels for controlled release of doxorubicin. <i>RSC Advances</i> , 2019, 9, 13026-13032.	3.6	18
191	Electrically switchable surface waves and bouncing droplets excited on a liquid metal bath. <i>Physical Review Fluids</i> , 2018, 3, .	2.5	18
192	Al-assisted high frequency self-powered oscillations of liquid metal droplets. <i>Soft Matter</i> , 2019, 15, 8971-8975.	2.7	17
193	Shape Control of Lotus Leaf Induced by Surface Submillimeter Texture. <i>Advanced Materials Interfaces</i> , 2020, 7, 2000040.	3.7	16
194	Development of three-dimension microelectrode array for bioelectric measurement using the liquidmetal-micromolding technique. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	15
195	Biomimetic Microfluidic Device for in Vitro Antihypertensive Drug Evaluation. <i>Molecular Pharmaceutics</i> , 2014, 11, 2009-2015.	4.6	15
196	Liquid Metal Ink Enabled Rapid Prototyping of Electrochemical Sensor for Wireless Glucose Detection on the Platform of Mobile Phone. <i>Journal of Medical Devices, Transactions of the ASME</i> , 2015, 9, .	0.7	15
197	Liquid metal machine is evolving to soft robotics. <i>Science China Technological Sciences</i> , 2016, 59, 1793-1794.	4.0	15
198	Enhanced adhesion between liquid metal ink and the wetted printer paper for direct writing electronic circuits. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2019, 95, 202-207.	5.3	15

#	ARTICLE	IF	CITATIONS
199	Liquid Metal-Enabled Soft Logic Devices. <i>Advanced Intelligent Systems</i> , 2021, 3, 2000246.	6.1	15
200	Surfing liquid metal droplet on the same metal bath via electrolyte interface. <i>Applied Physics Letters</i> , 2017, 111, .	3.3	14
201	Liquid Metal-Enhanced Wire Mesh as a Stiffness Variable Material for Making Soft Robotics. <i>Advanced Engineering Materials</i> , 2019, 21, 1900530.	3.5	14
202	Novel contrast media based on the liquid metal gallium for in vivo digestive tract radiography: a feasibility study. <i>BioMetals</i> , 2019, 32, 795-801.	4.1	14
203	Numerical investigation on integrated thermal management via liquid convection and phase change in packed bed of spherical low melting point metal macrocapsules. <i>International Journal of Heat and Mass Transfer</i> , 2020, 150, 119366.	4.8	14
204	The Design and Manufacturing Process of an Electrolyte-Free Liquid Metal Frequency-Reconfigurable Antenna. <i>Sensors</i> , 2021, 21, 1793.	3.8	14
205	EGaIn Fiber Enabled Highly Flexible Supercapacitors. <i>ACS Omega</i> , 2021, 6, 24444-24449.	3.5	14
206	Liquid metal bath as conformable soft electrodes for target tissue ablation in radio-frequency ablation therapy. <i>Minimally Invasive Therapy and Allied Technologies</i> , 2018, 27, 233-241.	1.2	13
207	Multiple Electrohydrodynamic Effects on the Morphology and Running Behavior of Tiny Liquid Metal Motors. <i>Micromachines</i> , 2018, 9, 192.	2.9	13
208	Printed flexible thin-film transistors based on different types of modified liquid metal with good mobility. <i>Science China Information Sciences</i> , 2019, 62, 1.	4.3	13
209	Liquid Metal Printed Optoelectronics Toward Fast Fabrication of Customized and Erasable Patterned Displays. <i>Advanced Materials Technologies</i> , 2022, 7, 2101010.	5.8	13
210	Heat Spreader Based on Room-Temperature Liquid Metal. <i>Journal of Thermal Science and Engineering Applications</i> , 2012, 4, .	1.5	12
211	Biodegradable magnesium nanoparticle-enhanced laser hyperthermia therapy. <i>International Journal of Nanomedicine</i> , 2012, 7, 4715.	6.7	12
212	The Rebound Motion of Liquid Metal Droplet on Flexible Micro/Nano Needle Forest. <i>Advanced Materials Interfaces</i> , 2016, 3, 1600008.	3.7	12
213	Investigation on the Optimized Binary and Ternary Gallium Alloy as Thermal Interface Materials. <i>Journal of Electronic Packaging, Transactions of the ASME</i> , 2017, 139, .	1.8	12
214	Liquid-Metal Enabled Droplet Circuits. <i>Micromachines</i> , 2018, 9, 218.	2.9	12
215	Self-Powered Gallium-Based Liquid-Metal Beating Heart. <i>Journal of Physical Chemistry A</i> , 2019, 123, 9268-9273.	2.5	12
216	Design of flexible multi-level topography for enhancing mechanical property. <i>Nano Select</i> , 2021, 2, 541-548.	3.7	12

#	ARTICLE	IF	CITATIONS
217	All-in-One ENERGISER design: Smart liquid metal-air battery. <i>Chemical Engineering Journal</i> , 2021, 409, 128160.	12.7	12
218	Liquid Metal Soft Machines. <i>Topics in Mining, Metallurgy and Materials Engineering</i> , 2019, , .	1.6	12
219	A Personal Desktop Liquid-Metal Printer as a Pervasive Electronics Manufacturing Tool for Society in the Near Future. <i>Engineering</i> , 2015, 1, 506-512.	6.7	11
220	Water film coated composite liquid metal marble and its fluidic impact dynamics phenomenon. <i>Frontiers in Energy</i> , 2016, 10, 29-36.	2.3	11
221	Bulk Expansion Effect of Gallium-Based Thermal Interface Material. <i>International Journal of Thermophysics</i> , 2017, 38, 1.	2.1	11
222	Liquid Metal Enabled Electrobiolgy: A New Frontier to Tackle Disease Challenges. <i>Micromachines</i> , 2018, 9, 360.	2.9	11
223	Intelligent Liquid Integrated Functional Entity: A Basic Way to Innovate Future Advanced Biomimetic Soft Robotics. <i>Advanced Intelligent Systems</i> , 2019, 1, 1900017.	6.1	11
224	Self-encapsulation liquid metal materials for flexible and stretchable electrical conductors. <i>RSC Advances</i> , 2019, 9, 35102-35108.	3.6	11
225	Gas eruption phenomenon happening from Ga-In alloy in NaOH electrolyte. <i>Applied Physics Letters</i> , 2017, 111, .	3.3	10
226	Supermetallophobic Functional Coatings Based on Silicate Clays and a Method To Pattern Liquid Metals. <i>ACS Applied Electronic Materials</i> , 2020, 2, 2229-2241.	4.3	10
227	Formation of Multiphase Soft Metal from Compositing GaInSn and BiInSn Alloy Systems. <i>ACS Applied Electronic Materials</i> , 2022, 4, 112-123.	4.3	10
228	Liquidâ€Metalâ€Enhanced Wire Mesh as a Stiffness Variable Material for Making Soft Robotics. <i>Advanced Engineering Materials</i> , 2019, 21, 1970033.	3.5	9
229	Noncoalescent liquid metal droplets sustained on a magnetic field-circulated liquid metal bath surface. <i>Applied Physics Letters</i> , 2019, 115, .	3.3	9
230	Cellulose Nanocrystals Facilitate Needle-like Ice Crystal Growth and Modulate Molecular Targeted Ice Crystal Nucleation. <i>Nano Letters</i> , 2021, 21, 4868-4877.	9.1	9
231	Liquid metal slingshot. <i>Physical Review Fluids</i> , 2020, 5, .	2.5	9
232	Liquid metal corrosion sculpture to fabricate quickly complex patterns on aluminum. <i>Science China Technological Sciences</i> , 2017, 60, 65-70.	4.0	8
233	Liquid Metal-Based Magnetorheological Fluid with a Large Magnetocaloric Effect. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 48748-48755.	8.0	8
234	Liquid metal bubbles. <i>Applied Materials Today</i> , 2021, 24, 101151.	4.3	8

#	ARTICLE	IF	CITATIONS
235	Electrical control of liquid metal amoeba with directional extension formation. RSC Advances, 2019, 9, 2353-2359.	3.6	7
236	A Gravity-Triggered Liquid Metal Patch Antenna with Reconfigurable Frequency. Micromachines, 2021, 12, 701.	2.9	7
237	An Integrated Soft Jumping Robotic Module Based on Liquid Metals. Advanced Engineering Materials, 2021, 23, 2100515.	3.5	7
238	Quantized orbital-chasing liquid metal heterodimers directed by an integrated pilot-wave field. Physical Review Fluids, 2020, 5, .	2.5	7
239	Characterization of the nanocryosurgical freezing process through modifying Mazur's model. Journal of Applied Physics, 2008, 103, 084311.	2.5	6
240	Self-Fueled Motors: Self-Fueled Biomimetic Liquid Metal Mollusk (Adv. Mater. 16/2015). Advanced Materials, 2015, 27, 2550-2550.	21.0	6
241	Al-NaOH-Composited Liquid Metal: A Fast-Response Water-Triggered Material with Thermal and Pneumatic Properties. Engineering, 2020, 6, 1454-1462.	6.7	6
242	Fabrication of BiInSn alloy powder via the combination of ultrasonic crushing with dispersants. Powder Technology, 2020, 373, 614-619.	4.2	6
243	Responsive Liquid Metal Droplets: From Bulk to Nano. Nanomaterials, 2022, 12, 1289.	4.1	6
244	A tunable liquid metal electronic oscillator as a DC-AC converter. Soft Matter, 2022, 18, 5185-5193.	2.7	6
245	Room-Temperature Printing of Ultrathin Quasi-2D GaN Semiconductor via Liquid Metal Gallium Surface Confined Nitridation Reaction. Advanced Materials Technologies, 2022, 7, .	5.8	6
246	Pressure sensing of liquid metal-based fiber arrays. AIP Advances, 2021, 11, .	1.3	5
247	Electrically induced reorganization phenomena of liquid metal film printed on biological skin. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	4
248	A stomata-inspired superhydrophobic portable filter system. RSC Advances, 2021, 11, 18783-18786.	3.6	4
249	Liquid Metal Enabled Unconventional Heat and Flow Transfer. ES Energy & Environments, 2019, , .	1.1	4
250	Liquid Helium Enhanced Vitrification Efficiency of Human Bone-Derived Mesenchymal Stem Cells and Human Embryonic Stem Cells. Bioengineering, 2021, 8, 162.	3.5	4
251	Liquid metal hydraulics paradigm: Transmission medium and actuation of bimodal signals. Science China Technological Sciences, 2022, 65, 77-86.	4.0	4
252	Unique and Excellent Paintable Liquid Metal for Fluorescent Displays. ACS Applied Materials & Interfaces, 2022, 14, 23951-23963.	8.0	4

#	ARTICLE	IF	CITATIONS
253	Liquid Metal Vacuoles. <i>Advanced Materials Interfaces</i> , 2022, 9, .	3.7	4
254	Enhanced Thermographic Detection of Skin Cancer Through Combining Laser Scanning and Biodegradable Nanoparticles. <i>Journal of Nanotechnology in Engineering and Medicine</i> , 2013, 4, .	0.8	3
255	An Improved Liquid Metal Mask Printing enabled Fast Fabrication of Wearable Electronics on Fabrics. , 2019, 2019, 1761-1764.		3
256	Hydrochromic Visualization of a Keggin-Type Structure Triggered by Metallic Fluids for Liquid Displays, Reversible Writing, and Acidic Environment Detection. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 36445-36454.	8.0	3
257	Printed Transformable Liquid-Metal Metamaterials and Their Application in Biomedical Sensing. <i>Sensors</i> , 2021, 21, 6329.	3.8	3
258	Liquid metal printed electronics towards ubiquitous electrical engineering. <i>Japanese Journal of Applied Physics</i> , 2022, 61, SE0801.	1.5	3
259	Sequential Oxidation Strategy for the Fabrication of Liquid Metal Electrothermal Thin Film with Desired Printing and Functional Property. <i>Micromachines</i> , 2021, 12, 1539.	2.9	3
260	Transient State Machines: Transient State Machine Enabled from the Colliding and Coalescence of a Swarm of Autonomously Running Liquid Metal Motors (Small 39/2015). <i>Small</i> , 2015, 11, 5178-5178.	10.0	2
261	Preparations and Characterizations of Functional Liquid Metal Materials. <i>Springer Series in Biomaterials Science and Engineering</i> , 2018, , 95-115.	1.0	2
262	Optimal design of micro-topography on natural leaf surface. <i>AIP Advances</i> , 2021, 11, 095019.	1.3	2
263	A U-Shaped Dual-Frequency-Reconfigurable Monopole Antenna Based on Liquid Metal. <i>Materials</i> , 2022, 15, 1599.	2.9	2
264	Liquid Metal Printing for Manufacturing Large-Scale Flexible Electronic Circuits. , 2014, , .		1
265	Extreme Wetting Properties of Liquid Metal. , 2021, , 195-208.		1
266	Quantifying the Growth Rate and Morphology of Ice Crystals Growing in Cryoprotectants via High-Speed Camera and Cryo-Microscope. , 2013, , .		1
267	Insights into fluidic endogenous magnetism and magnetic monopoles from a liquid metal droplet machine. , 0, , .		1
268	Electrolytic water technology based on transformable and amorphous liquid metal electrodes. , 2022, 1, .		1
269	Liquid Metal Enabled Skin Electronics. <i>Springer Series in Biomaterials Science and Engineering</i> , 2018, , 255-323.	1.0	0
270	Liquid Metal Printed Biosensor. <i>Springer Series in Biomaterials Science and Engineering</i> , 2018, , 325-367.	1.0	0

#	ARTICLE	IF	CITATIONS
271	Paint release control of brush. AIP Advances, 2021, 11, 015115.	1.3	0
272	10.1063/1.5113529.2., 2019,,.		0
273	Liquid Metal Enabled Flexible Sensors for Biomedical Applications. , 2021,,.		0