## Bin Guo

## List of Publications by Year in descending order

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132	2,580	28 h-index	43
papers	citations		g-index
132	132	132	2114
all docs	docs citations	times ranked	citing authors

#	Article	lF	CITATIONS
1	Local softening deformation and phase transformation induced by electric current in electrically-assisted micro-compression of Ti–6Al–4V alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 831, 142262.	2.6	9
2	Grain size and specimen thickness effects on twinning behaviors in high strain rate deformation of ultra-thin pure titanium sheet. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 832, 142417.	2.6	8
3	Nature-inspired micro/nanomotors. Nanoscale, 2022, 14, 219-238.	2.8	11
4	Removal mechanisms of nanosecond pulsed laser cleaning of blue and red polyurethane paint. Applied Physics A: Materials Science and Processing, 2022, 128, 1.	1.1	11
5	Removal mechanism of blue paint on aluminum alloy substrate during surface cleaning using nanosecond pulsed laser. Optics and Laser Technology, 2022, 149, 107882.	2.2	29
6	Multifunctionally wearable monitoring with gelatin hydrogel electronics of liquid metals. Materials Horizons, 2022, 9, 961-972.	6.4	26
7	The Effects of Geometry Size and Initial Microstructure on Deformation Behavior of Electrically-Assisted Micro-Compression in Ti-6Al-4V Alloy. Materials, 2022, 15, 1656.	1.3	1
8	Microstructure and High-Temperature Properties of TC31 Alloy Manufactured by Laser Melting Deposition. Crystals, 2022, 12, 475.	1.0	1
9	Liquid Metal Swimming Nanorobots. Accounts of Materials Research, 2022, 3, 122-132.	5.9	18
10	Micro-extrusion process and microstructure evolution of miniature heat pipe in 6063 aluminum alloy. International Journal of Advanced Manufacturing Technology, 2022, 120, 6463-6480.	1.5	7
11	Improvement of multi-functional properties by fabricating micro-pillar arrays structures on zirconium alloy surface. Science China Technological Sciences, 2022, 65, 1243-1252.	2.0	7
12	Mechanism and application of laser cleaning: A review. Optics and Lasers in Engineering, 2022, 157, 107130.	2.0	49
13	Formation mechanism and optimization strategy of surface back-end defects in miniature complex hollow extruded profile. Journal of Materials Processing Technology, 2022, 308, 117726.	3.1	5
14	An energy based modeling for the acoustic softening effect on the Hall-Petch behavior of pure titanium in ultrasonic vibration assisted micro-tension. International Journal of Plasticity, 2021, 136, 102879.	4.1	46
15	A Review on Micro/Nanoforming to Fabricate 3D Metallic Structures. Advanced Materials, 2021, 33, e2000893.	11.1	25
16	3D Metallic Structures: A Review on Micro/Nanoforming to Fabricate 3D Metallic Structures (Adv.) Tj ETQq0 0 0	rgBT./Ove	erlogk 10 Tf 50
17	Design of high-resolution flow sensor used in cold gas micro propulsion system. International Journal of Modern Physics A, 2021, 36, 2140018.	0.5	1
18	Removal mechanism of surface cleaning on TA15 titanium alloy using nanosecond pulsed laser. Optics and Laser Technology, 2021, 139, 106998.	2.2	36

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19	Deformation Behavior and Microstructural Evolution of T-Shape Upsetting Test in Ultrafine-Grained Pure Copper. Materials, 2021, 14, 4869.	1.3	0
20	A ratiometric dual luciferase reporter for quantitative monitoring of pre-mRNA splicing efficiency inÂvivo. Journal of Biological Chemistry, 2021, 297, 100933.	1.6	1
21	High-Temperature Oxidation Behaviors of TA15 Titanium Alloy after Mechanical Grinding and Laser Cleaning. Coatings, 2021, 11, 1090.	1.2	3
22	Dilatometric Analysis and Kinetics Research of Martensitic Transformation under a Temperature Gradient and Stress. Materials, 2021, 14, 7271.	1.3	2
23	Finite-Elements Modeling and Simulation of Electrically-Assisted Rotary-Draw Bending Process for 6063 Aluminum Alloy Micro-Tube. Metals, 2021, 11, 1956.	1.0	1
24	Investigation of PtSGT1 and PtSGT4 Function in Cellulose Biosynthesis in Populus tomentosa Using CRISPR/Cas9 Technology. International Journal of Molecular Sciences, 2021, 22, 13200.	1.8	4
25	Mechanical behavior and shear banding of electropulsing-assisted micro-scale shear-compression in Ti-6Al-4V alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 771, 138647.	2.6	13
26	Microstructural Evolution and Mechanical Behavior of Cu/Nb Multilayer Composites Processed by Accumulative Roll Bonding. Advanced Engineering Materials, 2020, 22, 1900702.	1.6	26
27	Deformation Behavior and Dynamic Recrystallization of Ti–22Al–25Nb Alloy at 750–990 °C. Advanced Engineering Materials, 2020, 22, 1901231.	d <sub>1.6</sub>	7
28	Ultraviolet laser cleaning and surface characterization of AH36 steel for rust removal. Journal of Laser Applications, 2020, 32, .	0.8	15
29	Microstructural Evolution and Microhardness Variations in Pure Titanium Processed by Highâ€Pressure Torsion. Advanced Engineering Materials, 2020, 22, 1901462.	1.6	14
30	Interactive effects of specimen size and current density on tribological behavior of electrically-assisted micro-forming in TC4 titanium alloy. Tribology International, 2020, 151, 106457.	3.0	5
31	Bio-Inspired Functional Surface Fabricated by Electrically Assisted Micro-Embossing of AZ31 Magnesium Alloy. Materials, 2020, 13, 412.	1.3	10
32	Size Effect in the Uniaxial Compression of Polycrystalline Ni Nanopillars with Small Number of Grains. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 4462-4479.	1,1	4
33	Effect of Grain Size on Formability and Deformation Mechanism of Highâ€Purity Aluminum during Microâ€Embossing Process at Elevated Temperature. Advanced Engineering Materials, 2019, 21, 1900690.	1.6	10
34	Atomistic simulation of the stacking fault energy and grain shape on strain hardening behaviours of FCC nanocrystalline metals. Philosophical Magazine, 2019, 99, 2818-2840.	0.7	8
35	Ultrafast Growth of Uniform Multi-Layer Graphene Films Directly on Silicon Dioxide Substrates. Nanomaterials, 2019, 9, 964.	1.9	10
36	Effects of ultrasonic vibration on filling behaviours in micro-embossing processes. Ferroelectrics, 2019, 546, 25-32.	0.3	2

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37	Paint Removal on the 5A06 Aluminum Alloy Using a Continuous Wave Fiber Laser. Coatings, 2019, 9, 488.	1.2	25
38	Deformation path and springback behavior in double-curved bending at high temperature. Journal of Mechanical Science and Technology, 2019, 33, 4361-4370.	0.7	6
39	Current-Induced Ductility Enhancement of a Magnesium Alloy AZ31 in Uniaxial Micro-Tension Below 373 K. Materials, 2019, 12, 111.	1.3	13
40	Sustainable micro-manufacturing of superhydrophobic surface onÂultrafine-grained pure aluminum substrate combining micro-embossing and surface modification. Journal of Cleaner Production, 2019, 232, 705-712.	4.6	26
41	A Review of Point Set Registration: From Pairwise Registration to Groupwise Registration. Sensors, 2019, 19, 1191.	2.1	60
42	Effect of different initiators on temperatureâ€sensitive monolithic columns and application in online enrichment of βâ€sitosterol. Journal of Applied Polymer Science, 2019, 136, 47683.	1.3	1
43	Microâ€Embossing Formability of a Superlight Dualâ€Phase Mg–Li Alloy Processed by Highâ€Pressure Torsion. Advanced Engineering Materials, 2019, 21, 1800961.	1.6	10
44	Investigation of Electrically-Assisted Rolling Process of Corrugated Surface Microstructure with T2 Copper Foil. Materials, 2019, 12, 4144.	1.3	12
45	A novel poly (NMA-co-DEA-co-EDMA) monolithic column as a sorbent for online solid-phase extraction and its application in the determination of $\hat{I}^2$ -sitosterol in plant oil samples. Food Chemistry, 2019, 278, 594-600.	4.2	8
46	Poly(vinyl alcohol) hydrogels integrated with cuprous oxide–tannic acid submicroparticles for enhanced mechanical properties and synergetic antibiofouling. Journal of Colloid and Interface Science, 2019, 535, 491-498.	5.0	38
47	Graphene oxide-based composite monolith as new sorbent for the on-line solid phase extraction and high performance liquid chromatography determination of AŸ-sitosterol in food samples. Talanta, 2018, 186, 200-205.	2.9	15
48	Microcrack healing in non-ferrous metal tubes through eddy current pulse treatment. Scientific Reports, 2018, 8, 6016.	1.6	13
49	Safe path planning for free-floating space robot to approach noncooperative spacecraft. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2018, 232, 1258-1271.	0.7	1
50	Evolution of spherical nanovoids within copper polycrystals during plastic straining: Atomistic investigation. International Journal of Plasticity, 2018, 100, 122-141.	4.1	32
51	The Instability Criterion for Bicrystal at Nanoscale. Metals, 2018, 8, 986.	1.0	0
52	A Universal Solution of Controlling the Distribution of Multimaterials during Macroscopic Manipulation via a Microtopography-Guided Substrate. Nanomaterials, 2018, 8, 1036.	1.9	0
53	Study on Hot Press Forming Process of Large Curvilinear Generatrix Workpiece of Ti55 High-Temperature Titanium Alloy. Metals, 2018, 8, 827.	1.0	6
54	The Fabrication of Micro-Array Channels with the Ultrafine-Grained LZ91 Mg-Li Alloy by Micro-Embossing. Micromachines, 2018, 9, 55.	1.4	12

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55	Shape-Transformable, Fusible Rodlike Swimming Liquid Metal Nanomachine. ACS Nano, 2018, 12, 10212-10220.	7.3	186
56	Effect of Hydrogen on Phase Transformation, Thermal Deformation Behavior, and Forming Limit of TC2 Alloy. Advanced Engineering Materials, 2018, 20, 1800690.	1.6	1
57	Microstructural Evolution and Mechanical Properties in Superlight Mg-Li Alloy Processed by High-Pressure Torsion. Materials, 2018, 11, 598.	1.3	29
58	High- and Low-Temperature Deformation Behavior of Different Orientation Hot-Rolled Annealed Zircaloy-4. Journal of Materials Engineering and Performance, 2018, 27, 1203-1216.	1.2	0
59	Interactive effects of height-to-diameter ratio and strain on tribological behavior in micro compression of pure nickel cylinder. International Journal of Mechanical Sciences, 2018, 144, 452-460.	3.6	8
60	Shear fracture mechanism in micro-tension of an ultrafine-grained pure copper using synchrotron radiation X-ray tomography. Scripta Materialia, 2017, 132, 25-29.	2.6	20
61	Effects of specimen and grain size on electrically-induced softening behavior in uniaxial micro-tension of AZ31 magnesium alloy: Experiment and modeling. Materials and Design, 2017, 127, 134-143.	3.3	43
62	Hydrogenâ€Induced Improvement of the Cylindrical Drawing Properties of a Ti–22Al–25Nb Alloy. Advanced Engineering Materials, 2017, 19, 1600621.	1.6	10
63	Physiological, elemental, and stable isotope responses of the organs of mungbean to reduced atmospheric pressure. In Vitro Cellular and Developmental Biology - Plant, 2017, 53, 113-121.	0.9	0
64	Softening effect of ultrasonic vibration on microâ€blanking deformation behaviour of titanium foil. Micro and Nano Letters, 2017, 12, 808-812.	0.6	13
65	Preparation of Fe3O4-porphyrin nano-composited particles and their optical and magnetic properties. Chemical Research in Chinese Universities, 2017, 33, 530-533.	1.3	2
66	Investigation on effect of ultrasonic vibration on micro-blanking process of copper foil. International Journal of Advanced Manufacturing Technology, 2017, 93, 2243-2249.	1.5	29
67	The formation mechanism of tear strips on stretched Ti-22Al-25Nb alloy sheets. Scientific Reports, 2017, 7, 1645.	1.6	6
68	Changes in endogenous hormones and H2O2 burst during shoot organogenesis in TDZ-treated Saussurea involucrate explants. Plant Cell, Tissue and Organ Culture, 2017, 128, 1-8.	1.2	29
69	Study on Hot Deformation Behavior and Microstructure Evolution of Ti55 High-Temperature Titanium Alloy. Metals, 2017, 7, 319.	1.0	17
70	Healing of Fatigue Crack in 1045 Steel by Using Eddy Current Treatment. Materials, 2016, 9, 641.	1.3	10
71	Plastic deformation behaviour of layer-grained silver polycrystalline from atomistic simulation. Philosophical Magazine, 2016, 96, 2397-2411.	0.7	2
72	Interactive effect of microstructure and cavity dimension on filling behavior in micro coining of pure nickel. Scientific Reports, 2016, 6, 23895.	1.6	23

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73	Size effects on flow stress behavior during electrically-assisted micro-tension in a magnesium alloy AZ31. Materials Science & Department of the AZ31. Mat	2.6	54
74	Microstructural evolution and micro/meso-deformation behavior in pure copper processed by equal-channel angular pressing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 664, 114-125.	2.6	48
75	Modeling of thermal and mechanical behavior of a magnesium alloy AZ31 during electrically-assisted micro-tension. International Journal of Plasticity, 2016, 85, 230-257.	4.1	86
76	Tunable electronic properties of graphene through controlling bonding configurations of doped nitrogen atoms. Scientific Reports, 2016, 6, 28330.	1.6	48
77	Microstructural Evolution and Microâ€Compression in Highâ€Purity Copper Processed by Highâ€Pressure Torsion. Advanced Engineering Materials, 2016, 18, 241-250.	1.6	16
78	Effect of height-to-diameter ratio and lubricant on deformation behavior in micro compression of pure copper. Integrated Ferroelectrics, 2016, 170, 106-111.	0.3	0
79	Evidence for an early softening behavior in pure copper processed by high-pressure torsion. Journal of Materials Science, 2016, 51, 1923-1930.	1.7	14
80	Combination of multi-element and stable isotope analysis improved the traceability of chicken from four provinces of China. CYTA - Journal of Food, 2016, 14, 163-168.	0.9	19
81	Strain softening mechanism at meso scale during micro-compression in an ultrafine-grained pure copper. AIP Advances, 2015, 5, 097147.	0.6	12
82	Microstructural Evolution at Micro/Meso-Scale in an Ultrafine-Grained Pure Aluminum Processed by Equal-Channel Angular Pressing with Subsequent Annealing Treatment. Materials, 2015, 8, 7447-7460.	1.3	9
83	Micro-deformation behavior in micro-compression with high-purity aluminum processed by ECAP. Manufacturing Review, 2015, 2, 1.	0.9	48
84	Effects of temperature, strain rate and specimen size on the deformation behaviors at micro/meso-scale in ultrafine-grained pure Al. Materials Characterization, 2015, 109, 181-188.	1.9	29
85	Micro hot embossing of micro-array channels in ultrafine-grained pure aluminum using a silicon die. Journal of Materials Processing Technology, 2015, 225, 375-384.	3.1	45
86	Plastic deformation size effects in micro-compression of pure nickel with a few grains across diameter. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 636, 352-360.	2.6	36
87	Molecular Design of a Porphyrin Dimer with Features of P-Type and N-Type Heterojunctions by Chiral <scp>I</scp> -Glutamic Acid Induced Action. Journal of Physical Chemistry C, 2015, 119, 8591-8595.	1.5	2
88	Effects of interfacial contact states on tribological behaviour in micro-sheet forming. International Journal of Mechanical Sciences, 2015, 101-102, 81-88.	3.6	11
89	Effect of grain size and specimen dimensions on micro-forming of high purity aluminum. Materials Science & Description A: Structural Materials: Properties, Microstructure and Processing, 2015, 646, 207-217.	2.6	52
90	Microhardness, microstructure and tensile behavior of an AZ31 magnesium alloy processed by high-pressure torsion. Journal of Materials Science, 2015, 50, 7424-7436.	1.7	60

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91	Springback evaluation in hot v-bending of Ti-6Al-4V alloy sheets. International Journal of Advanced Manufacturing Technology, 2015, 76, 577-585.	1.5	50
92	In vitro propagation of a poisonous plant Oxytropis glabra (Lam.) DC. Plant Cell, Tissue and Organ Culture, 2015, 120, 49-55.	1.2	3
93	Manufacturing High Aspect Ratio Microturbine by Isothermal Microforging Process. Materials and Manufacturing Processes, 2014, 29, 42-45.	2.7	16
94	Effect of Surface Nanocrystals on the Plastic Deformation Behavior in Micro Compression. Integrated Ferroelectrics, 2014, 153, 87-91.	0.3	0
95	Micro-punching process of stainless steel foil with micro-die fabricated by micro-EDM. Microsystem Technologies, 2014, 20, 83-89.	1.2	17
96	Effects of tribological behavior of DLC film on micro-deep drawing processes. Transactions of Nonferrous Metals Society of China, 2014, 24, 2877-2882.	1.7	14
97	Experimental research on micro-deep drawing processes of pure gold thin sheet using DLC-coated female die. International Journal of Advanced Manufacturing Technology, 2013, 67, 2477-2487.	1.5	20
98	Mechanism of size effects in microcylindrical compression of pure copper considering grain orientation distribution. Rare Metals, 2013, 32, 18-24.	3.6	9
99	Dry sliding wear of an AZ31 magnesium alloy processed by equal-channel angular pressing. Journal of Materials Science, 2013, 48, 4117-4127.	1.7	33
100	Hardness homogeneity and micro-tensile behavior in a magnesium AZ31 alloy processed by equal-channel angular pressing. Materials Science & Department of the Structural Materials: Properties, Microstructure and Processing, 2013, 586, 108-114.	2.6	49
101	Surface quality improvements of WC–Co micro-punch finished by ion beam irradiation for micro-punching process of metal foil. Surface and Coatings Technology, 2013, 235, 803-810.	2.2	13
102	Plasma choline-containing phospholipids: potential biomarkers for colorectal cancer progression. Metabolomics, 2013, 9, 202-212.	1.4	19
103	Size effect on flow stress in uniaxial compression of pure nickel cylinders with a few grains across thickness. Materials Letters, 2013, 106, 294-296.	1.3	33
104	Effects of solid lubrication film on SKD11 in micro sheet forming. Surface and Coatings Technology, 2013, 232, 814-820.	2.2	8
105	Size effects on plastic deformation behavior in micro radial compression of pure copper. Transactions of Nonferrous Metals Society of China, 2013, 23, 2686-2691.	1.7	15
106	Atomistic simulation of the strain-hardening behavior of bicrystal Cu nanowires. Journal of Materials Research, 2013, 28, 3339-3346.	1.2	0
107	Specimen Dimension and Grain Size Effects on Deformation Behavior in Micro Tensile of SUS304 Stainless Steel Foil. Materials Transactions, 2013, 54, 984-989.	0.4	24
108	Properties of DLC Film Deposited on Mould with Micro-Cavity Used in Microforming. Integrated Ferroelectrics, 2012, 136, 35-42.	0.3	3

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109	Dynamic simulation and analysis for bolt and nut mating of dual arm robot., 2012,,.		2
110	Development of a micro-forming system for micro-punching process of micro-hole arrays in brass foil. Journal of Materials Processing Technology, 2012, 212, 2238-2246.	3.1	55
111	Short Communication: Organogenesis and somatic embryogenesis in callus derived from HBsAg-transgenic tomato mutant. Canadian Journal of Plant Science, 2012, 92, 747-756.	0.3	3
112	Aromatic C–N bond formation via simultaneous activation of C–H and N–H bonds: direct oxyamination of benzene to aniline. Green Chemistry, 2012, 14, 1880.	4.6	21
113	Effect of Lanthanum on Rooting of In Vitro Regenerated Shoots of Saussurea involucrata Kar. et Kir. Biological Trace Element Research, 2012, 147, 334-340.	1.9	21
114	Simulation and discussion on the decreasing flow stress scale effect. Journal of Shanghai Jiaotong University (Science), 2012, 17, 306-311.	0.5	0
115	Blanking clearance and grain size effects on micro deformation behavior and fracture in micro-blanking of brass foil. International Journal of Machine Tools and Manufacture, 2012, 60, 27-34.	6.2	89
116	Nature of vanadium species on vanadium silicalite-1 zeolite and their stability in hydroxylation reaction of benzene to phenol. Catalysis Science and Technology, 2011, 1, 1060.	2.1	50
117	Micro deep drawing of micro cups by using DLC film coated blank holders and dies. Diamond and Related Materials, 2011, 20, 196-200.	1.8	52
118	Dynamic Separation of a Sphere from a Flat or Sphere in the Presence of a Liquid Meniscus. Tribology Transactions, 2011, 54, 542-547.	1.1	6
119	A One-Pot Two-Step Approach for the Catalytic Conversion of Glucose into 2,5-Diformylfuran. Catalysis Letters, 2011, 141, 735-741.	1.4	67
120	Size effects in micro blanking of metal foil with miniaturization. International Journal of Advanced Manufacturing Technology, 2011, 56, 515-522.	1.5	38
121	Preparation of Novel Silica Nanoparticles with Controllable Fluorescence Intensity from Porphyrinâ€Bridged Silsesquioxane. Chinese Journal of Chemistry, 2011, 29, 363-368.	2.6	4
122	Effects of lubrication conditions on micro deep drawing. Microsystem Technologies, 2010, 16, 1741-1747.	1.2	25
123	Size effect on friction in scaled down strip drawing. Journal of Materials Science, 2010, 45, 4067-4072.	1.7	28
124	Size Effect on Friction of C3602 in Cylinder Compression. Tribology Transactions, 2010, 53, 244-248.	1.1	11
125	Size effects on flow stress of C3602 in cylinder compression with different lubricants. Rare Metals, 2009, 28, 528-532.	3.6	3
126	Research on elevated temperature deformation behavior of Ti-6Al-4V sheets. Rare Metals, 2009, 28, 550-553.	3.6	8

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127	SIZE EFFECT OF FLOW STRESS IN ISOTHERMAL UPSETTING DEFORMATION. International Journal of Modern Physics B, 2009, 23, 1745-1750.	1.0	0
128	Flow stress and tribology size effects in scaled down cylinder compression. Transactions of Nonferrous Metals Society of China, 2009, 19, s516-s520.	1.7	27
129	Surface finish of micro punch with ion beam irradiation. Transactions of Nonferrous Metals Society of China, 2009, 19, s526-s530.	1.7	13
130	Altered circadian rhythm of pulp sensibility in elderly diabetic and hypertensive patients. Chinese Medical Journal, 2007, 120, 1024-6.	0.9	3
131	Innovative Applications of Ultrafine-Grained Materials., 0,,.		3
132	Micro-Embossing Process in Ultrafine-Grained Pure Aluminum Processed by Equal-Channel Angular Pressing with Elevated Temperature. Key Engineering Materials, 0, 821, 244-249.	0.4	0