Gaowu

List of Publications by Year
in descending order

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82 papers	2,625 citations	218381 26 h-index	205818 48 g-index
86 all docs	86 docs citations	86 times ranked	2755 citing authors

#	Article	IF	Citations
1	Properties and Applications of the Î² Phase Poly(vinylidene fluoride). Polymers, 2018, 10, 228.	2.0	462
2	Antibacterial metals and alloys for potential biomedical implants. Bioactive Materials, 2021, 6, 2569-2612.	8.6	283
3	High-Magnetization FeCo Nanochains with Ultrathin Interfacial Gaps for Broadband Electromagnetic Wave Absorption at Gigahertz. ACS Applied Materials & Interfaces, 2016, 8, 3494-3498.	4.0	152
4	Effect of nano/micro-Ag compound particles on the bio-corrosion, antibacterial properties and cell biocompatibility of Ti-Ag alloys. Materials Science and Engineering C, 2017, 75, 906-917.	3.8	102
5	Gigahertz Dielectric Polarization of Substitutional Single Niobium Atoms in Defective Graphitic Layers. Physical Review Letters, 2015, 115, 147601.	2.9	101
6	A graded nano-TiN coating on biomedical Ti alloy: Low friction coefficient, good bonding and biocompatibility. Materials Science and Engineering C, 2017, 71, 520-528.	3.8	86
7	Electrospinning synthesis of transition metal alloy nanoparticles encapsulated in nitrogen-doped carbon layers as an advanced bifunctional oxygen electrode. Journal of Materials Chemistry A, 2020, 8, 7245-7252.	5.2	66
8	An in situ Bi-decorated BiOBr photocatalyst for synchronously treating multiple antibiotics in water. Nanoscale Advances, 2019, 1, 1124-1129.	2.2	60
9	Quinary Highâ€Entropyâ€Alloy@Graphite Nanocapsules with Tunable Interfacial Impedance Matching for Optimizing Microwave Absorption. Small, 2022, 18, e2107265.	5.2	60
10	In vivo antibacterial property of Ti-Cu sintered alloy implant. Materials Science and Engineering C, 2019, 100, 38-47.	3.8	59
11	What controls the antibacterial activity of Ti-Ag alloy, Ag ion or Ti2Ag particles?. Materials Science and Engineering C, 2020, 109, 110548.	3.8	59
12	Highâ€Entropyâ€Alloy Nanoparticles with Enhanced Interband Transitions for Efficient Photothermal Conversion. Angewandte Chemie - International Edition, 2021, 60, 27113-27118.	7.2	56
13	Optimization of mechanical properties, biocorrosion properties and antibacterial properties of wrought Ti-3Cu alloy by heat treatment. Bioactive Materials, 2018, 3, 28-38.	8.6	55
14	Effect of ultrasonic micro-arc oxidation on the antibacterial properties and cell biocompatibility of Ti-Cu alloy for biomedical application. Materials Science and Engineering C, 2020, 115, 110921.	3.8	48
15	Fabrication of long-range ordered, broccoli-like SERS arrays and application in detecting endocrine disrupting chemicals. Journal of Materials Chemistry C, 2015, 3, 1309-1318.	2.7	45
16	Development of novel lightweight and cost-effective Mgâ€“Ceâ€“Al wrought alloy with high strength. Materials Research Letters, 2021, 9, 329-335.	4.1	41
17	Room temperature magnetoresistance effects in ferroelectric poly(vinylidene fluoride) spin valves. Journal of Materials Chemistry C, 2017, 5, 5055-5062.	2.7	37
18	Anti-bacterium influenced corrosion effect of antibacterial Ti-3Cu alloy in Staphylococcus aureus suspension for biomedical application. Materials Science and Engineering C, 2019, 94, 376-384.	3.8	37

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19	Oxygen vacancy induced superior visible-light-driven photodegradation pollutant performance in BiOCl microflowers. New Journal of Chemistry, 2018, 42, 3614-3618.	1.4	35
20	Abnormal thermal stability of sub-10 nm Au nanoparticles and their high catalytic activity. Journal of Materials Chemistry A, 2019, 7, 10980-10987.	5.2	35
21	In situ synthesis of Ni/NiO composites with defect-rich ultrathin nanosheets for highly efficient biomass-derivative selective hydrogenation. Journal of Materials Chemistry A, 2019, 7, 17834-17841.	5.2	33
22	High-entropy-alloy nanoparticles with 21 ultra-mixed elements for efficient photothermal conversion. National Science Review, 2022, 9, .	4.6	31
23	A synergistic combination of diatomaceous earth with Au nanoparticles as a periodically ordered, button-like substrate for SERS analysis of the chemical composition of eccrine sweat in latent fingerprints. Journal of Materials Chemistry C, 2015, 3, 4933-4944.	2.7	30
24	Position selective dielectric polarization enhancement in CNT based heterostructures for highly efficient microwave absorption. Nanoscale, 2021, 13, 2324-2332.	2.8	30
25	Photocatalytic degradation properties of Î±-Fe ₂ O ₃ nanoparticles for dibutyl phthalate in aqueous solution system. Royal Society Open Science, 2018, 5, 172196.	1.1	29
26	Control of Catalytic Activity of Nanoâ€Au through Tailoring the Fermi Level of Support. Small, 2019, 15, e1901789.	5.2	27
27	4d transition-metal doped hematite for enhancing photoelectrochemical activity: theoretical prediction and experimental confirmation. RSC Advances, 2015, 5, 19353-19361.	1.7	26
28	New Structured Laves Phase in the Mg-In-Ca System with Nontranslational Symmetry and Two Unit Cells. Physical Review Letters, 2018, 120, 085701.	2.9	25
29	Antibacterial effect of Ti Ag alloy motivated by Ag-containing phases. Materials Science and Engineering C, 2021, 128, 112266.	3.8	25
30	Correlating Strength and Hardness of Highâ€Entropy Alloys. Advanced Engineering Materials, 2021, 23, 2001514.	1.6	23
31	Development of a low elastic modulus and antibacterial Ti-13Nb-13Zr-5Cu titanium alloy by microstructure controlling. Materials Science and Engineering C, 2021, 126, 112116.	3.8	23
32	Self-Assembly of Two Unit Cells into a Nanodomain Structure Containing Five-Fold Symmetry. Journal of Physical Chemistry Letters, 2018, 9, 4373-4378.	2.1	22
33	Nanoscale nickelâ€“iron nitride-derived efficient electrochemical oxygen evolution catalysts. Catalysis Science and Technology, 2020, 10, 4458-4466.	2.1	22
34	Synchronous Growth of Porous MgO and Half-Embedded Nano-Ru on a Mg Plate: A Monolithic Catalyst for Fast Hydrogen Production. ACS Sustainable Chemistry and Engineering, 2021, 9, 3616-3623.	3.2	20
35	Carbon-CeO2 interface confinement enhances the chemical stability of Pt nanocatalyst for catalytic oxidation reactions. Science China Materials, 2021, 64, 128-136.	3.5	17
36	Fabrication of tunable Au SERS nanostructures by a versatile technique and application in detecting sodium cyclamate. RSC Advances, 2014, 4, 22660-22668.	1.7	15

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37	Wood-Derived Porous Carbon/Iron Oxide Nanoparticle Composites for Enhanced Electromagnetic Interference Shielding. ACS Applied Nano Materials, 2022, 5, 8537-8545.	2.4	15
38	Formation of profuse <c+a> dislocations in deformed calcium-containing magnesium alloys. Philosophical Magazine Letters, 2016, 96, 249-255.	0.5	14
39	Orientation modulated charge transport in hematite for photoelectrochemical water splitting. Functional Materials Letters, 2016, 09, 1650047.	0.7	14
40	Magnetoresistance Effect and the Applications for Organic Spin Valves Using Molecular Spacers. Materials, 2018, 11, 721.	1.3	14
41	Magnesium Alloys Strengthened by Nanosaucer Precipitates with Confined New Topologically Close-Packed Structure. Crystal Growth and Design, 2018, 18, 5866-5873.	1.4	14
42	Shear-induced hexagonal close-packed to face-centered cubic phase transition in pure titanium processed by equal channel angular drawing. Journal of Materials Science, 2019, 54, 7953-7960.	1.7	14
43	Microstructure and wear resistance of Tiâ€“Cuâ€“N composite coating prepared via laser cladding/laser nitriding technology on Tiâ€“6Alâ€“4V alloy. Applied Physics A: Materials Science and Processing, 2017, 123, 1.	1.1	12
44	Unexpected magnetic coupling oscillations for <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>L</mml:mi><mml:msub><mml:mn>1</mml:mn> films induced by quantum wells. Physical Review B, 2018, 97, .	1.4	12 <mml:mr
45	A novel Ti-Au alloy with strong antibacterial properties and excellent biocompatibility for biomedical application. Materials Science and Engineering C, 2022, 133, 112653.	3.8	12
46	BiOCl Hierarchical Nanoflowers with Superior Mixed-dye Photodegradation Activity. Chemistry Letters, 2015, 44, 1306-1308.	0.7	11
47	Effect of Cu/Zn on microstructure and mechanical properties of extruded Mgâ€“Sn alloys. Materials Science and Technology, 2016, 32, 1240-1248.	0.8	11
48	Magnesium in Combinatorial With Valproic Acid Suppressed the Proliferation and Migration of Human Bladder Cancer Cells. Frontiers in Oncology, 2020, 10, 589112.	1.3	11
49	Highâ€Entropyâ€Alloy Nanoparticles with Enhanced Interband Transitions for Efficient Photothermal Conversion. Angewandte Chemie, 2021, 133, 27319-27324.	1.6	11
50	Low-cost and high-strength Mg-Al-Ca-Zn-Mn wrought alloy with balanced ductility. International Journal of Minerals, Metallurgy and Materials, 2022, 29, 1396-1405.	2.4	11
51	High and reversible spin polarization in a collinear antiferromagnet. Applied Physics Reviews, 2020, 7, .	5.5	10
52	Self-adapted clustering of solute atoms into a confined two-dimensional prismatic platelet with an ellipse-like quasi-unit cell. IUCrJ, 2018, 5, 823-829.	1.0	10
53	Microstructure and Mechanical Properties of 6061 Al/AZ31 Mg Joints Friction Stir Lap Welded by a Tool with Variable-Pitch Thread Pin. Metals, 2021, 11, 34.	1.0	10
54	Confining Gold Nanoclusters in Highly Defective Graphitic Layers To Enhance the Methanol Electrooxidation Reaction. ChemCatChem, 2018, 10, 141-147.	1.8	9

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55	Mechanical performance and biocompatibility assessment of <scp>Zn</scp>â€0.05wt%<scp>Mg</scp>â€(0.5, 1 wt%) <scp>Ag</scp> alloys. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2020, 108, 2925-2936.	1.6	9
56	A potential strategy for in-stent restenosis: Inhibition of migration and proliferation of vascular smooth muscle cells by Cu ion. Materials Science and Engineering C, 2020, 115, 111090.	3.8	9
57	Achieving high strength above 400 MPa in conventionally extruded Mg-Ca-Zn ternary alloys. Science China Technological Sciences, 2022, 65, 519-528.	2.0	9
58	Tribocorrosion Behavior of Tiâ€“Cu Alloy in Hankâ€™s Solution for Biomedical Application. Journal of Bio- and Tribo-Corrosion, 2018, 4, 1.	1.2	8
59	Magnetic Modification and the Mechanism of Tbâ€Phthalocyanine Single Molecule Magnets Prepared by a High Yield Method. European Journal of Inorganic Chemistry, 2020, 2020, 2112-2117.	1.0	8
60	Microstructural evolution of equal channel angular drawn purity titanium at room temperature. Journal of Alloys and Compounds, 2019, 811, 152002.	2.8	7
61	Enhanced high-frequency microwave absorption in core-shell nanocapsules with atomic-scale oxygen substitutions. Journal of Applied Physics, 2020, 127, .	1.1	7
62	Full-Electrical Writing and Reading of Magnetization States in a Magnetic Junction with Symmetrical Structure and Antiparallel Magnetic Configuration. ACS Nano, 2021, 15, 12213-12221.	7.3	7
63	Interfacial antiferromagnetic coupling and high spin polarization in metallic phthalocyanines. Physical Review B, 2021, 103, .	1.1	7
64	Redetermination of the Feâ€“Pt phase diagram by using diffusion couple technique combined with key alloys. International Journal of Materials Research, 2022, 113, 428-439.	0.1	7
65	Magnetic relaxation dependences on the central ions for Ln (Ln = Tb, Dy, Er) phthalocyanines. Applied Physics Letters, 2020, 117, .	1.5	6
66	Sulfur-doped wood-derived porous carbon for optimizing electromagnetic response performance. Nanoscale, 2021, 13, 16084-16093.	2.8	6
67	Effect of heat treatment on the bio-corrosion properties and wear resistance of antibacterial Co-29Cr-6Mo-xCu alloys. Journal of Materials Science: Materials in Medicine, 2019, 30, 112.	1.7	5
68	Floating Grain Formation and Macrosegregation in a 2024 Al Alloy Prepared by Hot-Top DC Casting with a 2024 Al Alloy Insert. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 3342-3352.	1.1	5
69	Facile fabrication of Î±-Fe2O3/Ag2S heterojunction with enhanced photoelectrochemical water splitting property. Journal of Nanoparticle Research, 2018, 20, 1.	0.8	4
70	The osteoimmunomodulatory effect of nanostructured TiF _x /TiO _x coating on osteogenesis induction. Biomedical Materials (Bristol), 2021, 16, 045041.	1.7	4
71	Synthesis of small Fe2O3 nanocubes and their enhanced water vapour adsorptionâ€“desorption properties. RSC Advances, 2015, 5, 84587-84591.	1.7	3
72	Structural and morphological modulation of BiOCl visible-light photocatalyst prepared via an in situ oxidation synthesis. Chemical Research in Chinese Universities, 2016, 32, 338-342.	1.3	3

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73	In vitro bioactivity, tribological property, and antibacterial ability of Caâ€“Si-based coatings doped with cu particles in-situ fabricated by laser cladding. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	1.1	3
74	Effect of Post-Fabricated Aging on Microstructure and Mechanical Properties in Underwater Friction Stir Additive Manufacturing of Alâ€“Znâ€“Mgâ€“Cu Alloy. Materials, 2022, 15, 3368.	1.3	3
75	Effect of extrusion temperature on mechanical properties of as-extruded Znâ€“22Al alloys. Materials Science and Technology, 2020, 36, 805-810.	0.8	2
76	Organic spin valves with poly(vinylidene fluoride) barriers. , 2016, , .		1
77	Structure and electrochemical properties of copper wires with seamless 1D nanostructures. Data in Brief, 2018, 17, 747-752.	0.5	1
78	Screening alloy electrocatalysts by combining magnetron sputtering and scanning electrochemical microscopy. Philosophical Magazine Letters, 2019, 99, 185-191.	0.5	1
79	Synergistic effects of carbon-encapsulated cobalt/tricobalt tetroxide nanocapsules on hydrogenation of 4-nitrophenol. Functional Materials Letters, 2019, 12, 1950059.	0.7	1
80	Investigation of interdiffusion behavior in the Tiâ€“Zrâ€“Cu ternary system. International Journal of Materials Research, 2022, 113, 381-390.	0.1	1
81	Organic-inorganic hybrid spin valves with different organic spacers. , 2016, , .		0
82	Effects of Pre-Tensile Deformation on the Fatigue Fracture Behavior of Annealed 7005 Aluminum Alloy Plate. Materials, 2022, 15, 623.	1.3	0