Hong Wu

List of Publications by Year
in descending order

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113 papers	3,090 citations	126907 33 h-index	197818 49 g-index
115 all docs	115 docs citations	115 times ranked	3443 citing authors

#	Article	IF	Citations
1	Interfacial Thermal Conductance of a Silicene/Graphene Bilayer Heterostructure and the Effect of Hydrogenation. ACS Applied Materials & Interfaces, 2014, 6, 18180-18188.	8.0	123
2	Tannic acid-based metal phenolic networks for bio-applications: a review. Journal of Materials Chemistry B, 2021, 9, 4098-4110.	5.8	118
3	Engineering Biosynthesis Mechanisms for Diversifying Polyhydroxyalkanoates. Trends in Biotechnology, 2015, 33, 565-574.	9.3	115
4	Activating macrophages for enhanced osteogenic and bactericidal performance by Cu ion release from micro/nano-topographical coating on a titanium substrate. Acta Biomaterialia, 2019, 100, 415-426.	8.3	111
5	Construction of Z-Scheme System for Enhanced Photocatalytic H₂ Evolution Based on CdS Quantum Dots/CeO₂ Nanorods Heterojunction. ACS Sustainable Chemistry and Engineering, 2018, 6, 2552-2562.	6.7	105
6	Elastic modulus of phases in Tiâ€“Mo alloys. Materials Characterization, 2015, 106, 302-307.	4.4	103
7	Study of nanoindentation mechanical response of nanocrystalline structures using molecular dynamics simulations. Applied Surface Science, 2016, 364, 190-200.	6.1	94
8	Molecular dynamics study of pressure-driven water transport through graphene bilayers. Physical Chemistry Chemical Physics, 2016, 18, 1886-1896.	2.8	86
9	Powder metallurgical low-modulus Tiâ€“Mg alloys for biomedical applications. Materials Science and Engineering C, 2015, 56, 241-250.	7.3	79
10	InÂvitro degradation behavior and cytocompatibility of ZK30/bioactive glass composites fabricated by selective laser melting for biomedical applications. Journal of Alloys and Compounds, 2019, 785, 38-45.	5.5	67
11	The Cu-containing TiO2 coatings with modulatory effects on macrophage polarization and bactericidal capacity prepared by micro-arc oxidation on titanium substrates. Colloids and Surfaces B: Biointerfaces, 2018, 170, 242-250.	5.0	66
12	Synthesis of Tiâ€“Ta alloys with dual structure by incomplete diffusion between elemental powders. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 51, 302-312.	3.1	57
13	Amorphous TiCu-Based Additives for Improving Hydrogen Storage Properties of Magnesium Hydride. ACS Applied Materials & Interfaces, 2019, 11, 38868-38879.	8.0	54
14	Selective laser melted AlSi10Mg alloy under melting mode transition: Microstructure evolution, nanomechanical behaviors and tensile properties. Journal of Alloys and Compounds, 2021, 873, 159823.	5.5	54
15	A four-gene signature-derived risk score for glioblastoma: prospects for prognostic and response predictive analyses. Cancer Biology and Medicine, 2019, 16, 595-605.	3.0	53
16	Novel Mg-based alloys by selective laser melting for biomedical applications: microstructure evolution, microhardness and in vitro degradation behaviour. Virtual and Physical Prototyping, 2018, 13, 71-81.	10.4	52
17	The Enhancement of Mg Corrosion Resistance by Alloying Mn and Laser-Melting. Materials, 2016, 9, 216.	2.9	48
18	Effects of environment on the sliding tribological behaviors of Zr-based bulk metallic glass. Intermetallics, 2012, 25, 115-125.	3.9	46

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19	Reduced inflammatory response by incorporating magnesium into porous TiO2 coating on titanium substrate. Colloids and Surfaces B: Biointerfaces, 2018, 171, 276-284.	5.0	46
20	Microstructures and tribological properties of laser cladded Ti-based metallic glass composite coatings. Materials Characterization, 2016, 120, 82-89.	4.4	45
21	Fabrication, tribological and corrosion behaviors of detonation gun sprayed Fe-based metallic glass coating. Transactions of Nonferrous Metals Society of China, 2016, 26, 1629-1637.	4.2	45
22	Tribological studies of a Zr-based bulk metallic glass. Intermetallics, 2013, 35, 25-32.	3.9	44
23	Effects of titanium surface roughness on the mediation of osteogenesis via modulating the immune response of macrophages. Biomedical Materials (Bristol), 2018, 13, 045013.	3.3	44
24	Galvanic replacement reaction for in situ fabrication of litchi-shaped heterogeneous liquid metal-Au nano-composite for radio-photothermal cancer therapy. Bioactive Materials, 2021, 6, 602-612.	15.6	43
25	The microstructure, mechanical properties and degradation behavior of laser-melted Mg Sn alloys. Journal of Alloys and Compounds, 2016, 687, 109-114.	5.5	42
26	Tuning the mechanical behavior of high-entropy alloys via controlling cooling rates. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 760, 359-365.	5.6	41
27	Effects of Environmental pH on Macrophage Polarization and Osteoimmunomodulation. ACS Biomaterials Science and Engineering, 2019, 5, 5548-5557.	5.2	39
28	Effect of laser parameters on microstructure, metallurgical defects and property of AlSi10Mg printed by selective laser melting. Journal of Micromechanics and Molecular Physics, 2017, 02, 1750017.	1.2	38
29	Effect of melting modes on microstructure and tribological properties of selective laser melted AlSi10Mg alloy. Virtual and Physical Prototyping, 2020, 15, 570-582.	10.4	38
30	Experimental study and numerical simulation of dynamic recrystallization for a FGH96 superalloy during isothermal compression. Journal of Materials Research and Technology, 2020, 9, 5090-5104.	5.8	38
31	Stimulation of in vitro and in vivo osteogenesis by Ti-Mg alloys with the sustained-release function of magnesium ions. Colloids and Surfaces B: Biointerfaces, 2021, 197, 111360.	5.0	37
32	Effect of environmental hydrogen atoms on the tribological behaviors of diamond-like carbon films. Tribology International, 2016, 99, 258-266.	5.9	36
33	Investigation on tensile behaviors of diamond-like carbon films. Journal of Non-Crystalline Solids, 2016, 443, 8-16.	3.1	35
34	Enhanced SaOS-2 cell adhesion, proliferation and differentiation on Mg-incorporated micro/nano-topographical TiO2 coatings. Applied Surface Science, 2018, 447, 767-776.	6.1	35
35	Microstructure evolution and deformation mechanism of amorphous/crystalline high-entropy-alloy composites. Journal of Materials Science and Technology, 2020, 54, 14-19.	10.7	35
36	Topical Application of Keratinocyte Growth Factor Conjugated Gold Nanoparticles Accelerate Wound Healing. Nanomedicine: Nanotechnology, Biology, and Medicine, 2018, 14, 1619-1628.	3.3	34

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37	Is CD133 Expression a Prognostic Biomarker of Non-Small-Cell Lung Cancer? A Systematic Review and Meta-Analysis. PLoS ONE, 2014, 9, e100168.	2.5	30
38	Physical factors controlling the ductility of bulk metallic glasses. Applied Physics Letters, 2008, 93, .	3.3	29
39	Dry sliding tribological behavior of Zr-based bulk metallic glass. Transactions of Nonferrous Metals Society of China, 2012, 22, 585-589.	4.2	29
40	The osteogenic, inflammatory and osteo-immunomodulatory performances of biomedical Ti-Ta metalâ€“metal composite with Ca- and Si-containing bioceramic coatings. Colloids and Surfaces B: Biointerfaces, 2018, 169, 49-59.	5.0	27
41	Effect of volumetric energy density on microstructure and tribological properties of FeCoNiCuAl high-entropy alloy produced by laser powder bed fusion. Virtual and Physical Prototyping, 2020, 15, 543-554.	10.4	26
42	Microstructures and Tribological Properties of TiC Reinforced FeCoNiCuAl High-Entropy Alloy at Normal and Elevated Temperature. Metals, 2020, 10, 387.	2.3	26
43	Investigation into diffusion induced plastic deformation behavior in hollow lithium ion battery electrode revealed by analytical model and atomistic simulation. Electrochimica Acta, 2015, 178, 597-607.	5.2	25
44	Tribological and biological behaviors of laser cladded Ti-based metallic glass composite coatings. Applied Surface Science, 2020, 507, 145104.	6.1	25
45	Mechanical properties and corrosion resistance of powder metallurgical Mg-Zn-Ca/Fe bulk metal glass composites for biomedical application. Journal of Materials Science and Technology, 2022, 103, 73-83.	10.7	25
46	Room temperature creep behavior of Tiâ€“Nbâ€“Taâ€“Zrâ€“O alloy. Materials Characterization, 2016, 118, 29-36.	4.4	24
47	Strengthening mechanism of gradient nanostructured body-centred cubic iron film: From inverse Hall-Petch to classic Hall-Petch. Computational Materials Science, 2018, 152, 236-242.	3.0	21
48	MPC1 deficiency accelerates lung adenocarcinoma progression through the STAT3 pathway. Cell Death and Disease, 2019, 10, 148.	6.3	21
49	Microstructure and properties of FeCoCrNiMoSix high-entropy alloys fabricated by spark plasma sintering. Journal of Alloys and Compounds, 2021, 884, 161070.	5.5	20
50	Microstructure and tribological behaviors of FeCoCrNiMoSix high-entropy alloy coatings prepared by laser cladding. Surface and Coatings Technology, 2022, 432, 128009.	4.8	20
51	Preparation and characterization of laser-melted Mgâ€“Snâ€“Zn alloys for biomedical application. Journal of Materials Science: Materials in Medicine, 2017, 28, 13.	3.6	19
52	Sequential activation of M1Âand M2 phenotypes in macrophages by Mg degradation from Ti-Mg alloy for enhanced osteogenesis. Biomaterials Research, 2022, 26, 17.	6.9	19
53	The microstructure of near-equiatomic B2/f.c.c. FeNiMnAl alloys. Materials Characterization, 2011, 62, 952-958.	4.4	18
54	Rubidium Chloride Targets Jnk/p38-Mediated NF-ÎºB Activation to Attenuate Osteoclastogenesis and Facilitate Osteoblastogenesis. Frontiers in Pharmacology, 2019, 10, 584.	3.5	18

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55	The response of macrophages and their osteogenic potential modulated by micro/nano-structured Ti surfaces. Colloids and Surfaces B: Biointerfaces, 2021, 205, 111848.	5.0	18
56	Interface-governed nanometric machining behaviour of Cu/Ag bilayers using molecular dynamics simulation. RSC Advances, 2019, 9, 1341-1353.	3.6	17
57	Ferrous ions doped layered double hydroxide: smart 2D nanotheranostic platform with imaging-guided synergistic chemo/photothermal therapy for breast cancer. Biomaterials Science, 2021, 9, 5928-5938.	5.4	17
58	Microstructures and wear properties of surface treated Tiâ€“36Nbâ€“2Taâ€“3Zrâ€“0.35O alloy by electron beam melting (EBM). Applied Surface Science, 2015, 357, 2347-2354.	6.1	16
59	Micro-cracking, microstructure and mechanical properties of Hastelloy-X alloy printed by laser powder bed fusion: As-built, annealed and hot-isostatic pressed. Additive Manufacturing, 2021, 39, 101853.	3.0	16
60	Viscous flow activation energy adaptation by isothermal spark plasma sintering applied with different current mode. Scripta Materialia, 2018, 149, 125-128.	5.2	15
61	Microstructure and nanomechanical properties of Zr-based bulk metallic glass composites fabricated by laser rapid prototyping. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 765, 138306.	5.6	15
62	Goldâ€“iron selenide nanocomposites for amplified tumor oxidative stress-augmented photo-radiotherapy. Biomaterials Science, 2021, 9, 3979-3988.	5.4	15
63	Microstructural evolution during hot and cold deformation of Tiâ€“36Nbâ€“2Taâ€“3Zrâ€“0.35O alloy. Transactions of Nonferrous Metals Society of China, 2016, 26, 1310-1316.	4.2	14
64	A new titanium matrix composite reinforced with Ti-36Nb-2Ta-3Zr-0.35O wire. Materials and Design, 2017, 117, 289-297.	7.0	14
65	Metalâ€“organic framework-driven copper/carbon polyhedron: synthesis, characterization and the role of copper in electrochemistry properties. Journal of Materials Science, 2018, 53, 7755-7766.	3.7	13
66	A good combination of strength and ductility of ultra-coarse-grained Cu-Al alloy with coarse-grained surface layer via pre-torsional treatment. Micron, 2020, 129, 102783.	2.2	13
67	Evaluating the osteoimmunomodulatory properties of micro-arc oxidized titanium surface at two different biological stages using an optimized in vitro cell culture strategy. Materials Science and Engineering C, 2020, 110, 110722.	7.3	13
68	MgO Nanoparticles Protect against Titanium Particle-Induced Osteolysis in a Mouse Model Because of Their Positive Immunomodulatory Effect. ACS Biomaterials Science and Engineering, 2020, 6, 3005-3014.	5.2	13
69	Using MgO nanoparticles as a potential platform to precisely load and steadily release Ag ions for enhanced osteogenesis and bacterial killing. Materials Science and Engineering C, 2021, 119, 111399.	7.3	13
70	Producing nanostructured Coâ€“Crâ€“W alloy surface layer by laser cladding and friction stir processing. Journal of Materials Research, 2015, 30, 717-726.	2.6	12
71	A Series of Zr-Based Bulk Metallic Glasses with Room Temperature Plasticity. Materials, 2016, 9, 408.	2.9	12
72	Origin of strengthening-softening trade-off in gradient nanostructured body-centred cubic alloys. Journal of Alloys and Compounds, 2019, 775, 270-280.	5.5	12

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73	The design, development, and in vivo performance of intestinal anastomosis ring fabricated by magnesiumâ€'zincâ€'strontium alloy. Materials Science and Engineering C, 2020, 106, 110158.	7.3	12
74	Engineering nano-structures with controllable dimensional features on micro-topographical titanium surfaces to modulate the activation degree of M1 macrophages and their osteogenic potential. Journal of Materials Science and Technology, 2022, 96, 167-178.	10.7	12
75	Dry sliding wear of nanostructured Fe30Ni20Mn20Al30. Intermetallics, 2012, 23, 116-127.	3.9	11
76	Photoactivation-triggered in situ self-supplied H2O2 for boosting chemodynamic therapy via layered double Hydroxide-mediated catalytic cascade reaction. Chemical Engineering Journal, 2022, 446, 137310.	12.7	11
77	Casting effect on compressive brittleness of bulk metallic glass. Transactions of Nonferrous Metals Society of China, 2014, 24, 385-392.	4.2	10
78	Revealing the deformation mechanism of amorphous polyethylene subjected to cycle loadingviamolecular dynamics simulations. RSC Advances, 2018, 8, 32377-32386.	3.6	10
79	Effect of zinc powder content on tribological behaviors of brake friction materials. Transactions of Nonferrous Metals Society of China, 2020, 30, 3078-3092.	4.2	10
80	Preparation of ultra-fine grain Niâ€"Alâ€"WC coating with interlocking bonding on austenitic stainless steel by laser clad and friction stir processing. Transactions of Nonferrous Metals Society of China, 2015, 25, 3685-3693.	4.2	9
81	Highly efficient adsorption/photodegradation of organic pollutants using Sn1â^'0.25xCuxS2 flower-like as a novel photocatalyst. Journal of Alloys and Compounds, 2017, 702, 489-498.	5.5	9
82	Study on the microstructure and wear behavior of Mg-containing Alâ€"12Snâ€"4Si alloys. Journal of Materials Research and Technology, 2022, 18, 338-351.	5.8	9
83	Effect of Zr on glass-forming ability and crystallization kinetics of Y56Al24Co20 metallic glass. Journal of Materials Processing Technology, 2008, 204, 179-183.	6.3	8
84	Microstructural evolution and sintering kinetics during spark plasma sintering of Fe and Al blended powder. Transactions of Nonferrous Metals Society of China, 2017, 27, 1594-1601.	4.2	8
85	Wear properties of high-manganese steel strengthened with nano-sized V2C precipitates. Wear, 2021, 482-483, 203922.	3.1	8
86	Facile synthesis of multi-functional nano-composites by precise loading of Cu2+ onto MgO nano-particles for enhanced osteoblast differentiation, inhibited osteoclast formation and effective bacterial killing. Materials Science and Engineering C, 2021, 130, 112442.	7.3	8
87	Diffusion-induced stress and strain energy affected by dislocation mechanisms in a cylindrical nanoanode. Solid State Ionics, 2015, 281, 21-28.	2.7	7
88	Preparation and characterization of nanostructured titanate bioceramic coating by anodizationâ€"hydrothermal method. Applied Surface Science, 2015, 328, 279-286.	6.1	7
89	Effects of aspect ratio and loading rate on room-temperature mechanical properties of Cu-based bulk metallic glasses. Transactions of Nonferrous Metals Society of China, 2016, 26, 2617-2632.	4.2	7
90	Nanoscale amorphization effect on dislocation emission from an elliptical blunt crack tip in deformed nanocrystalline and ultrafine-grained materials. Mechanics of Materials, 2019, 134, 98-105.	3.2	7

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91	Microstructure and Corrosion Behavior of Ti-Nb Coatings on NiTi Substrate Fabricated by Laser Cladding. Coatings, 2021, 11, 597.	2.6	7
92	Microstructure, mechanical properties and biocompatibility of laser metal deposited Tiâ€“23Nb coatings on a NiTi substrate. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 848, 143402.	5.6	7
93	Thermal Stability and Crystallization Kinetics in Y-Based Metallic Glasses. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2008, 39, 1797-1803.	2.2	6
94	Magnetically-triggered heating of Feâ€“Al powders. Intermetallics, 2011, 19, 1517-1525.	3.9	6
95	Effects of TiC and residual austenite synergistic strengthening mechanism on impact-abrasive wear behavior of bainite steel. Wear, 2021, 486-487, 204088.	3.1	6
96	Using hierarchical mesoporous Mgâ€“Al LDH as a potential model to precisely load BSA for biological application. Journal of Micromechanics and Molecular Physics, 2020, 05, 2050012.	1.2	6
97	Accelerated precipitation due to mechanical milling of two-phase B2/L21 Fe30Ni20Mn20Al30. Journal of Alloys and Compounds, 2013, 559, 97-100.	5.5	5
98	Microstructure and mechanical behavior of directionally solidified Fe35Ni15Mn25Al25. Intermetallics, 2013, 32, 413-422.	3.9	5
99	Analytical Model for Sandwich-Lithiation in Hollow Amorphous Silicon Nano-Anodes Coated on Carbon Nanofibers. Journal of the Electrochemical Society, 2016, 163, A163-A170.	2.9	5
100	Effect of multi-component carbides on the mechanical behavior of a multi-element alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 758, 99-102.	5.6	5
101	Rate-dependent inhomogeneous creep behavior in metallic glasses. Transactions of Nonferrous Metals Society of China, 2021, 31, 1758-1765.	4.2	5
102	Phase formation, glass forming ability, mechanical and thermal properties of Cu50Zr50â^'x Al x (0â©½xâ©½11.0) glass forming alloys. Science China Materials, 2015, 58, 584-594.	6.3	4
103	Misfit dislocations induced by lithium-ion diffusion in a thin film anode. Journal of Solid State Electrochemistry, 2017, 21, 419-427.	2.5	4
104	Feâ€“C micro-alloying effect on properties of Zr53Al11.6Ni11.7Cu23.7 bulk metallic glass. Transactions of Nonferrous Metals Society of China, 2021, 31, 2750-2761.	4.2	4
105	A novel FeCrMoCSi metallic glass with excellent corrosion resistance and in vitro cellular response for biomedical applications. Journal of Materials Science, 2022, 57, 618-632.	3.7	4
106	Bi-modal microstructure in a powder metallurgical ferritic steel. Transactions of Nonferrous Metals Society of China, 2012, 22, 330-334.	4.2	3
107	Synergetic Enhancement of Mechanical Properties for Silk Fibers by a Green Feeding Approach with Nano-hydroxyapatite/collagen Composite Additive. Journal of Natural Fibers, 2022, 19, 5310-5320.	3.1	3
108	Casting effect on softening of metallic glasses. Journal of Alloys and Compounds, 2009, 483, 82-85.	5.5	2

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109	Microstructure and mechanical properties of two-phase Fe30Ni20Mn20Al30: part II mechanical properties. Journal of Materials Science, 2013, 48, 6535-6541.	3.7	2
110	Laser solid forming assisted by friction stir processing for preparation of Niâ€“16Crâ€“8Fe alloys: Crack repairing and grain refinement. Journal of Materials Research, 2018, 33, 3521-3529.	2.6	2
111	Effect of yttrium addition on the glass forming ability of Co-based alloys. International Journal of Materials Research, 2008, 99, 689-692.	0.3	2
112	Wear Estimation of DLC Films Based on Energy-Dissipation Analysis: A Molecular Dynamics Study. Materials, 2022, 15, 893.	2.9	2
113	An Overview of Dry Sliding Wear of Two-Phase FeNiMnAl Alloys. Materials Research Society Symposia Proceedings, 2012, 1516, 103-108.	0.1	1