Zhang Qiaoxin

List of Publications by Citations

82 papers	1,327 citations	20 h-index	33 g-index
83 ext. papers	1,630 ext. citations	3 avg, IF	4.83 L-index

#	Paper	IF	Citations
82	A liquid phosphorus-containing imidazole derivative as flame-retardant curing agent for epoxy resin with enhanced thermal latency, mechanical, and flame-retardant performances. *Journal of Hazardous Materials*, **2020**, 386, 121984	12.8	155
81	Subtractive manufacturing of stable hierarchical micro-nano structures on AA5052 sheet with enhanced water repellence and durable corrosion resistance. *Materials and Design*, **2019**, 183, 108152	8.1	121
80	Fabrication of superhydrophobic surface with improved corrosion inhibition on 6061 aluminum alloy substrate. *Applied Surface Science*, **2015**, 342, 76-83	6.7	72
79	Bioinspired multifunctional hetero-hierarchical micro/nanostructure tetragonal array with self-cleaning, anticorrosion, and concentrators for the SERS detection. *ACS Applied Materials & Interfaces*, **2013**, 5, 10633-42	9.5	71
78	Effects of ZnO and MoS2 Solid Lubricants on Mechanical and Tribological Properties of M50-Steel-Based Composites at High Temperatures: Experimental and Simulation Study. *Tribology Letters*, **2017**, 65, 1	2.8	43
77	A Liquid Phosphaphenanthrene-Derived Imidazole for Improved Flame Retardancy and Smoke Suppression of Epoxy Resin. *ACS Applied Polymer Materials*, **2020**, 2, 3566-3575	4.3	43
76	Effect of Ag and Ti3SiC2 on Tribological Properties of TiAl Matrix Self-lubricating Composites at Room and Increased Temperatures. *Tribology Letters*, **2014**, 53, 617-629	2.8	41
75	A DOPO based reactive flame retardant constructed by multiple heteroaromatic groups and its application on epoxy resin: curing behavior, thermal degradation and flame retardancy. *Polymer Degradation and Stability*, **2019**, 167, 10-20	4.7	37
74	Effect of Sliding Speed and Applied Load on Dry Sliding Tribological Performance of TiAl Matrix Self-lubricating Composites. *Tribology Letters*, **2014**, 55, 393-404	2.8	31
73	Synthesis of a phosphorus–nitrogen-containing flame retardant and its application in epoxy resin. *High Performance Polymers*, **2019**, 31, 186-196	1.6	29
72	An approximate model for the migration of solid lubricant on metal matrix self-lubricating composites. *Tribology International*, **2016**, 93, 104-114	4.9	28
71	Comparison of Tribological Properties of NiAl Matrix Composites Containing Graphite, Carbon Nanotubes, or Graphene. *Journal of Materials Engineering and Performance*, **2015**, 24, 1926-1936	1.6	26
70	Low-cost and large-scale fabrication of a superhydrophobic 5052 aluminum alloy surface with enhanced corrosion resistance. *RSC Advances*, **2015**, 5, 29639-29646	3.7	26
69	Tribological performance of Ni3Al–15 wt% Ti3SiC2 composites against Al2O3, Si3N4 and WC-6Co from 25 to 800 °C. *Wear*, **2013**, 303, 244-254	3.5	25
68	High-Temperature Tribological Performance of TiAl Matrix Composites Reinforced by Multilayer Graphene. *Tribology Letters*, **2015**, 58, 1	2.8	23
67	Preparation and investigation of flame-retardant epoxy resin modified with a novel halogen-free flame retardant containing phosphaphenanthrene, triazine-trione, and organoboron units. *Journal of Applied Polymer Science*, **2017**, 134, 45291	2.9	21
66	Improved Friction and Wear of M50 Steel Composites Incorporated with ZnO as a Solid Lubricant with Different Concentrations Under Different Loads. *Journal of Materials Engineering and Performance*, **2017**, 26, 4855-4866	1.6	21

65	Sliding Speed and Load Dependence of Tribological Properties of Ti3SiC2/TiAl Composite. *Tribology Transactions*, **2015**, 58, 87-96	1.8	21
64	Wear and Friction of TiAl Matrix Self-Lubricating Composites against Si3N4 in Air at Room and Elevated Temperatures. *Tribology Transactions*, **2014**, 57, 1017-1027	1.8	21
63	Fabrication of superhydrophobic surface with enhanced corrosion resistance on H62 brass substrate. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2020**, 589, 124475	5.1	20
62	Friction and Wear Properties of TiAl-Ti3SiC2-MoS2 Composites Prepared by Spark Plasma Sintering. *Tribology Transactions*, **2014**, 57, 416-424	1.8	19
61	Formation of Friction Layers in Graphene-Reinforced TiAl Matrix Self-Lubricating Composites. *Tribology Transactions*, **2015**, 58, 668-678	1.8	19
60	Tribological behavior of TiAl matrix self-lubricating composites reinforced by multilayer graphene. *RSC Advances*, **2015**, 5, 44618-44625	3.7	18
59	Tribological properties of TiAl matrix self-lubricating composites incorporated with tungsten disulfide and zinc oxide. *RSC Advances*, **2015**, 5, 45044-45052	3.7	17
58	Multifunctional substrate of Al alloy based on general hierarchical micro/nanostructures: superamphiphobicity and enhanced corrosion resistance. *Scientific Reports*, **2016**, 6, 35940	4.9	16
57	Mechanical and tribological properties of polyamide-based composites modified by thermoplastic polyurethane. *Journal of Thermoplastic Composite Materials*, **2014**, 27, 18-34	1.9	16
56	Effect of counterface balls on the friction layer of Ni3Al matrix composites with 1.5 wt% graphene nanoplatelets. *Tribology Letters*, **2014**, 55, 343-352	2.8	16
55	Molecular dynamics simulation of crack propagation behaviors at the Ni/Ni3Al grain boundary. *RSC Advances*, **2014**, 4, 32749	3.7	16
54	The Enhanced Tribological Properties of NiAl Intermetallics: Combined Lubrication of Multilayer Graphene and WS2. *Tribology Letters*, **2014**, 56, 573-582	2.8	16
53	Design of superhydrophobic pillars with robustness. *Surface and Coatings Technology*, **2019**, 361, 342-348	4.4	16
52	Tribological Properties of TiAl Matrix Self-Lubricating Composites Containing Multilayer Graphene and Ti3SiC2 at High Temperatures. *Tribology Transactions*, **2015**, 58, 1131-1141	1.8	15
51	Enhancing the tribological and mechanical properties of M50 steel using solid lubricants □A detailed review. *Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology*, **2018**, 232, 619-642	1.4	15
50	Tribological Behavior of NiAl□1.5 wt% Graphene Composite Under Different Velocities. *Tribology Transactions*, **2014**, 57, 1044-1050	1.8	15
49	Effect of TiB2 on Tribological Properties of TiAl Self-lubricating Composites Containing Ag at Elevated Temperature. *Journal of Materials Engineering and Performance*, **2015**, 24, 307-318	1.6	13
48	Tribological Behaviors of NiAl-Ti3SiC2 Self-Lubricating Composites at Elevated Temperatures. *Tribology Transactions*, **2014**, 57, 589-602	1.8	12

47	High-Temperature Tribological Performance of Ti3SiC2/TiAl Self-Lubricating Composite Against Si3N4 in Air. *Journal of Materials Engineering and Performance*, **2014**, 23, 2255-2264	1.6	11
46	Wear and friction behaviour of TiAl matrix self-lubricating composites filled with WS2, MoO3 or multilayer graphene. *RSC Advances*, **2015**, 5, 93554-93562	3.7	11
45	Fabrication and characterization of nano silver powder prepared by spray pyrolysis. *Journal Wuhan University of Technology, Materials Science Edition*, **2009**, 24, 871-874	1	11
44	Analytical model and experimental validation of the local damage mechanism of solid lubricant films for metal matrix self-lubricating composites. *RSC Advances*, **2015**, 5, 74850-74857	3.7	10
43	Tribological Performance of Ni3Al Self-Lubricating Composites with Different Content of TiC at Elevated Temperature. *Tribology Transactions*, **2015**, 58, 365-373	1.8	9
42	Influence of Subsurface Micro/Nano-Structural Evolution on Macroscopic Tribological Behavior of Ni3Al Matrix Composites. *Tribology Letters*, **2015**, 57, 1	2.8	9
41	Tensile mechanical properties of Ni3Al nanowires at intermediate temperature. *RSC Advances*, **2014**, 4, 20789-20796	3.7	8
40	Photocatalytic degradation of rhodamine B dye with MWCNT/TiO2/C60 composites by a hydrothermal method. *Journal Wuhan University of Technology, Materials Science Edition*, **2011**, 26, 65-69	1	8
39	Microstructure and properties of W-15Cu alloys prepared by mechanical alloying and spark plasma sintering process. *Journal Wuhan University of Technology, Materials Science Edition*, **2008**, 23, 399-402	1	8
38	A universal laser marking approach for treating aluminum alloy surfaces with enhanced anticorrosion, hardness and reduced friction. *RSC Advances*, **2015**, 5, 18057-18066	3.7	7
37	Preparation of the Multi-Walled Carbon Nanotubes/Nickel Composite Coating with Superior Wear and Corrosion Resistance. *Journal of Materials Engineering and Performance*, **2015**, 24, 4656-4663	1.6	7
36	Simulation study and experiment verification of the creep mechanism of a nickel-based single crystal superalloy obtained from microstructural evolution. *RSC Advances*, **2016**, 6, 107748-107758	3.7	7
35	Friction and wear behaviors of polyamide-based composites blended with polyphenylene sulfide. *Journal of Thermoplastic Composite Materials*, **2014**, 27, 977-991	1.9	7
34	Photocatalytic degradation of rhodamine B Dye with high purity anatase nano-TiO2 synthesized by a hydrothermal method. *Journal Wuhan University of Technology, Materials Science Edition*, **2011**, 26, 600-605	1	7
33	The Effect of Textured Surfaces with Different Roughness Structures on the Tribological Properties of Al Alloy. *Journal of Materials Engineering and Performance*, **2016**, 25, 4115-4125	1.6	7
32	Tribological Behavior of TiAl Multilayer Graphene Ag Composites at Different Temperatures and Sliding Speeds. *Acta Metallurgica Sinica (English Letters)*, **2017**, 30, 193-200	2.5	6
31	Research on a reversible superwetting behavior and its corrosion resistance. *Applied Surface Science*, **2020**, 517, 146145	6.7	6
30	Influence of Lubricants on Wear and Self-Lubricating Mechanisms of Ni3Al Matrix Self-Lubricating Composites. *Journal of Materials Engineering and Performance*, **2015**, 24, 280-295	1.6	6

29	One-pot synthesized polyurethane-based nanocomposites filled by original rectorite with enhanced strength and elongation. *Journal Wuhan University of Technology, Materials Science Edition*, **2011**, 26, 483-490	1	6
28	Mechanical behaviour and microstructural evolution of Ni-based single crystal alloys under shock loading.. *RSC Advances*, **2018**, 8, 22127-22135	3.7	5
27	Tribological properties of TiAl-Ti3SiC2 composites. *Journal Wuhan University of Technology, Materials Science Edition*, **2014**, 29, 256-263	1	4
26	Effect of Hardness Ratio on the Wear Performance and Subsurface Evolution of Ni3Al Matrix Composites. *Tribology Transactions*, **2017**, 60, 902-912	1.8	4
25	Preparation and Structure of FeNi Nanoparticles Coated with Ag and its Microwave-Absorption Properties. *Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry*, **2012**, 42, 1030-1035		4
24	Structure and Properties of Microwave Absorption Ag/Fe3O4 Nanoparticles. *Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry*, **2012**, 42, 392-397		4
23	Simple Fabrication of Hierarchical Micro/Nanostructure Superhydrophobic Surface with Stable and Superior Anticorrosion Silicon Steel via Laser Marking Treatment. *Journal Wuhan University of Technology, Materials Science Edition*, **2020**, 35, 411-417	1	4
22	Microstructures and electrochemical behaviors of as-cast magnesium alloys with enhanced compressive strengths and corrosion decomposition. *Materials and Corrosion - Werkstoffe Und Korrosion*, **2020**, 71, 1989-1998	1.6	4
21	Investigation of mechanical and tribological properties of tribo-layer of Ni3Al matrix composites. *Lubrication Science*, **2016**, 28, 407-422	1.3	4
20	One-Step Preparation of Super-Hydrophobic Micro-Nano Dendrites on Al Alloy for Enhanced Corrosion Resistance. *Metals*, **2018**, 8, 960	2.3	4
19	Adverse effects of post-heat treatment on the interfacial bonding strength of direct laser deposition Inconel 625/1045 composites.. *RSC Advances*, **2019**, 9, 10064-10071	3.7	3
18	Nano-cutting mechanical properties and microstructure evolution mechanism of amorphous/single crystal alloy interface. *Computational Materials Science*, **2020**, 184, 109915	3.2	3
17	One-Step Potentiostatic Deposition of Micro-Particles on Al Alloy as Superhydrophobic Surface for Enhanced Corrosion Resistance by Reducing Interfacial Interactions. *Coatings*, **2018**, 8, 392	2.9	3
16	Influence of temperature and chloride ion concentration on the corrosion behaviour of Mg□Al□Ca□.5RE alloy. *Materials and Corrosion - Werkstoffe Und Korrosion*, **2019**, 70, 1214-1221	1.6	2
15	Effects of acrylamide on mechanical and tribological properties of carbon fiber-reinforced epoxy composites. *Journal of Composite Materials*, **2015**, 49, 1461-1469	2.7	2
14	Microwave sintering of W-15Cu ultrafine composite powder prepared by spray drying & calcining-continuous reduction technology. *Journal Wuhan University of Technology, Materials Science Edition*, **2011**, 26, 280-283	1	2
13	Effects of activated sintering process on properties and microstructure of W-15Cu alloy. *Journal Wuhan University of Technology, Materials Science Edition*, **2010**, 25, 909-913	1	2
12	A Study of the Tribological Behavior of TiAl-10 wt.%Ag Composite Based on the Contact Stress Evolution. *Journal of Materials Engineering and Performance*, **2017**, 26, 1251-1261	1.6	1

11	Research on the interaction between surface laser-pit of Ni-based single crystal alloy and lamb wave under micro-conditions. *Applied Surface Science*, **2019**, 483, 840-848	6.7	1
10	Corrosion decomposition and mechanical behaviors of As-cast Mg□Zn□r alloys. *Materials and Corrosion - Werkstoffe Und Korrosion*, **2020**, 71, 1453-1461	1.6	1
9	Study on the Antifriction and Antiwear Mechanisms of MoO3 Tabular Crystal in TiAl Matrix Composites. *Journal of Materials Engineering and Performance*, **2016**, 25, 5374-5381	1.6	1
8	Research on the relationship between early surface deformation and microstructure evolution of Ni-based single crystal alloy. *Journal of Alloys and Compounds*, **2019**, 807, 151646	5.7	1
7	Tribological Behavior of Ni-based Self-lubricating Composites with the Addition of Ti3SiC2 and Ag2W2O7. *Journal Wuhan University of Technology, Materials Science Edition*, **2019**, 34, 698-706	1	1
6	Microrod-Structured Co-Mn Compound and Its Magnetic Property. *Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry*, **2012**, 42, 88-91		1
5	Optimization analysis of track comprehensive quality in micro-plasma cladding process. *Journal of Central South University*, **2018**, 25, 2309-2319	2.1	1
4	In Situ Synthesis of One-Dimensional Nanocrystalline Iron Materials by Electrodeposition Under Magnetic Field. *Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry*, **2012**, 42, 1211-1216		
3	Preparation and Magnetic Property of KGM/Fe3O4 Nanocomposites. *Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry*, **2011**, 41, 635-638		
2	Research on trapezoidal shape optimization of laser remanufacturing heterogeneous interface under fatigue load. *International Journal of Fatigue*, **2022**, 157, 106715	5	
1	Study on preparation and durability of surface microstructure of copper alloy. *Micro and Nano Letters*,	0.9	