Zhiwu Han

List of Publications by Year
in descending order

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169 papers	5,791 citations	70961 41 h-index	91712 69 g-index
171 all docs	171 docs citations	171 times ranked	5347 citing authors

#	Article	IF	Citations
1	Continuous directional water transport on the peristome surface of Nepenthes alata. Nature, 2016, 532, 85-89.	13.7	834
2	A electro-deposition process for fabrication of biomimetic super-hydrophobic surface and its corrosion resistance on magnesium alloy. Electrochimica Acta, 2014, 125, 395-403.	2.6	242
3	Flourishing Bioinspired Antifogging Materials with Superwettability: Progresses and Challenges. Advanced Materials, 2018, 30, e1704652.	11.1	161
4	Biomimetic multifunctional surfaces inspired from animals. Advances in Colloid and Interface Science, 2016, 234, 27-50.	7.0	130
5	One-step fabrication of biomimetic superhydrophobic surface by electrodeposition on magnesium alloy and its corrosion inhibition. Journal of Colloid and Interface Science, 2017, 491, 313-320.	5.0	120
6	Bioinspired Surface for Surgical Graspers Based on the Strong Wet Friction of Tree Frog Toe Pads. ACS Applied Materials & Interfaces, 2015, 7, 13987-13995.	4.0	119
7	High-performance flexible strain sensor with bio-inspired crack arrays. Nanoscale, 2018, 10, 15178-15186.	2.8	115
8	Excellent Structure-Based Multifunction of Morpho Butterfly Wings: A Review. Journal of Bionic Engineering, 2015, 12, 170-189.	2.7	113
9	Gradient collagen/nanohydroxyapatite composite scaffold: Development and characterization. Acta Biomaterialia, 2009, 5, 661-669.	4.1	104
10	Superfast and high-sensitivity printable strain sensors with bioinspired micron-scale cracks. Nanoscale, 2017, 9, 1166-1173.	2.8	101
11	Fabrication of biomimetic superhydrophobic surface with controlled adhesion by electrodeposition. Chemical Engineering Journal, 2014, 248, 440-447.	6.6	96
12	Biomimetic hydrophobic surface fabricated by chemical etching method from hierarchically structured magnesium alloy substrate. Applied Surface Science, 2013, 280, 845-849.	3.1	95
13	A Novel Bioinspired Continuous Unidirectional Liquid Spreading Surface Structure from the Peristome Surface of Nepenthes alata. Small, 2017, 13, 1601676.	5.2	94
14	Active Antifogging Property of Monolayer SiO₂ Film with Bioinspired Multiscale Hierarchical Pagoda Structures. ACS Nano, 2016, 10, 8591-8602.	7.3	92
15	Effects of non-smooth characteristics on bionic bulldozer blades in resistance reduction against soil. Journal of Terramechanics, 2002, 39, 221-230.	1.4	91
16	Ascendant bioinspired antireflective materials: Opportunities and challenges coexist. Progress in Materials Science, 2019, 103, 1-68.	16.0	89
17	Bioinspired, Superhydrophobic, and Paper-Based Strain Sensors for Wearable and Underwater Applications. ACS Applied Materials & Interfaces, 2021, 13, 1967-1978.	4.0	85
18	Fabrication of a superhydrophobic graphene surface with excellent mechanical abrasion and corrosion resistance on an aluminum alloy substrate. RSC Advances, 2014, 4, 45389-45396.	1.7	80

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19	Superhydrophobic and superoleophobic surface by electrodeposition on magnesium alloy substrate: Wettability and corrosion inhibition. Journal of Colloid and Interface Science, 2016, 478, 164-171.	5.0	78
20	A smart switchable bioinspired copper foam responding to different pH droplets for reversible oilâ€“water separation. Journal of Materials Chemistry A, 2017, 5, 2603-2612.	5.2	78
21	Bioinspired, Omnidirectional, and Hypersensitive Flexible Strain Sensors. Advanced Materials, 2022, 34, e2200823.	11.1	73
22	A Facile Electrodeposition Process for the Fabrication of Superhydrophobic and Superoleophilic Copper Mesh for Efficient Oilâ€“Water Separation. Industrial & Engineering Chemistry Research, 2016, 55, 2704-2712.	1.8	72
23	Biomimetic Superhydrophobic Surface of High Adhesion Fabricated with Micronano Binary Structure on Aluminum Alloy. ACS Applied Materials & Interfaces, 2013, 5, 8907-8914.	4.0	70
24	Bioâ€Inspired Soft Grippers Based on Impactive Gripping. Advanced Science, 2021, 8, 2002017.	5.6	68
25	Temperature-tunable wettability on a bioinspired structured graphene surface for fog collection and unidirectional transport. Nanoscale, 2018, 10, 3813-3822.	2.8	67
26	Flexible Self-Cleaning Broadband Antireflective Film Inspired by the Transparent Cicada Wings. ACS Applied Materials & Interfaces, 2019, 11, 17019-17027.	4.0	67
27	Erosion Resistance of Bionic Functional Surfaces Inspired from Desert Scorpions. Langmuir, 2012, 28, 2914-2921.	1.6	65
28	Review and Classification of Bio-inspired Algorithms and Their Applications. Journal of Bionic Engineering, 2020, 17, 611-631.	2.7	62
29	Artificial Hair-Like Sensors Inspired from Nature: A Review. Journal of Bionic Engineering, 2018, 15, 409-434.	2.7	55
30	Light trapping structures in wing scales of butterfly Trogonoptera brookiana. Nanoscale, 2012, 4, 2879.	2.8	54
31	Bio-inspired micro-nano structured surface with structural color and anisotropic wettability on Cu substrate. Applied Surface Science, 2016, 379, 230-237.	3.1	54
32	The mechanism of drag reduction around bodies of revolution using bionic non-smooth surfaces. Journal of Bionic Engineering, 2007, 4, 109-116.	2.7	53
33	A bioinspired structured graphene surface with tunable wetting and high wearable properties for efficient fog collection. Nanoscale, 2018, 10, 16127-16137.	2.8	51
34	Energyâ€Efficient Oilâ€“Water Separation of Biomimetic Copper Membrane with Multiscale Hierarchical Dendritic Structures. Small, 2017, 13, 1701121.	5.2	49
35	Robust superhydrophobic attapulgite meshes for effective separation of water-in-oil emulsions. Journal of Colloid and Interface Science, 2019, 557, 84-93.	5.0	49
36	Non-smooth morphologies of typical plant leaf surfaces and their anti-adhesion effects. Journal of Bionic Engineering, 2007, 4, 33-40.	2.7	48

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37	Switchable Wettability Surface with Chemical Stability and Antifouling Properties for Controllable Oilâ€“Water Separation. Langmuir, 2019, 35, 4498-4508.	1.6	48
38	Erosion-Resistant Surfaces Inspired by Tamarisk. Journal of Bionic Engineering, 2013, 10, 479-487.	2.7	46
39	A Highâ€Transmission, Multiple Antireflective Surface Inspired from Bilayer 3D Ultrafine Hierarchical Structures in Butterfly Wing Scales. Small, 2016, 12, 713-720.	5.2	46
40	Fabrication of biomimetic super-hydrophobic surface on aluminum alloy. Journal of Materials Science, 2014, 49, 1624-1629.	1.7	42
41	Fabrication of bioinspired structured superhydrophobic and superoleophilic copper mesh for efficient oil-water separation. Journal of Bionic Engineering, 2017, 14, 497-505.	2.7	41
42	Anti-Erosion Function in Animals and its Biomimetic Application. Journal of Bionic Engineering, 2010, 7, S50-S58.	2.7	38
43	Biological coupling anti-wear properties of three typical molluscan shellsâ€”Scapharca subcrenata, Rapana venosa and Acanthochiton rubrolineatus. Science China Technological Sciences, 2010, 53, 2905-2913.	2.0	37
44	Controlling Wettability for Improved Corrosion Inhibition on Magnesium Alloy as Biomedical Implant Materials. Advanced Materials Interfaces, 2016, 3, 1500723.	1.9	36
45	A biomimetic surface with switchable contact angle and adhesion for transfer and storage of microdroplets. Nanoscale, 2018, 10, 15393-15401.	2.8	36
46	Long-term durability of superhydrophobic properties of butterfly wing scales after continuous contact with water. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 518, 139-144.	2.3	35
47	An ingenious replica templated from the light trapping structure in butterfly wing scales. Nanoscale, 2013, 5, 8500.	2.8	34
48	Design Principles of the Non-smooth Surface of Bionic Plow Moldboard. Journal of Bionic Engineering, 2004, 1, 9-19.	2.7	32
49	Mechanical characteristics of typical plant leaves. Journal of Bionic Engineering, 2010, 7, 294-300.	2.7	32
50	Preparation of PAN-based carbon fiber@MnO2 composite as an anode material for structural lithium-ion batteries. Journal of Materials Science, 2019, 54, 11972-11982.	1.7	30
51	Bionic design of tools in cutting: Reducing adhesion, abrasion or friction. Wear, 2021, 482-483, 203955.	1.5	30
52	Fabrication of the replica templated from butterfly wing scales with complex light trapping structures. Applied Surface Science, 2015, 355, 290-297.	3.1	28
53	Water-trapping and drag-reduction effects of fish Ctenopharyngodon idellus scales and their simulations. Science China Technological Sciences, 2017, 60, 1111-1117.	2.0	28
54	Characterization of Multi-scale Morphology and Superhydrophobicity of Water Bamboo Leaves and Biomimetic Polydimethylsiloxane (PDMS) Replicas. Journal of Bionic Engineering, 2015, 12, 624-633.	2.7	27

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55	Carbon fiber@ pore-ZnO composite as anode materials for structural lithium-ion batteries. Journal of Electroanalytical Chemistry, 2019, 833, 39-46.	1.9	27
56	Biomimetic metal surfaces inspired by lotus and reed leaves for manipulation of microdroplets or fluids. Applied Surface Science, 2020, 519, 146052.	3.1	27
57	Rapid Fabrication of Bio-inspired Antireflection Film Replicating From Cicada Wings. Journal of Bionic Engineering, 2020, 17, 34-44.	2.7	27
58	An Efficient Bionic Anti-Erosion Functional Surface Inspired by Desert Scorpion Carapace. Tribology Transactions, 2015, 58, 357-364.	1.1	26
59	Integrated super-hydrophobic and antireflective PDMS bio-templated from nano-conical structures of cicada wings. RSC Advances, 2016, 6, 108974-108980.	1.7	26
60	Fabrication of biomimetic hydrophobic films with corrosion resistance on magnesium alloy by immersion process. Applied Surface Science, 2013, 264, 527-532.	3.1	25
61	Bionic anti-adhesive electrode coupled with maize leaf microstructures and TiO₂ coating. RSC Advances, 2017, 7, 45287-45293.	1.7	25
62	Unparalleled sensitivity of photonic structures in butterfly wings. RSC Advances, 2014, 4, 45214-45219.	1.7	24
63	Underwater writable and heat-insulated paper with robust fluorine-free superhydrophobic coatings. Nanoscale, 2020, 12, 8536-8545.	2.8	24
64	Study on the thermal stability of heterogeneous nucleation effect of polypropylene nucleated by different nucleating agents. Journal of Applied Polymer Science, 2002, 83, 1643-1650.	1.3	23
65	Light Trapping Effect in Wing Scales of Butterfly Papilio peranthus and Its Simulations. Journal of Bionic Engineering, 2013, 10, 162-169.	2.7	23
66	Active Anti-erosion Protection Strategy in Tamarisk (Tamarix aphylla). Scientific Reports, 2013, 3, 3429.	1.6	23
67	Ultrasensitive, Highly Stable, and Flexible Strain Sensor Inspired by Nature. ACS Applied Materials & Interfaces, 2022, 14, 16885-16893.	4.0	23
68	Effect of thermal fatigue loading on tensile behavior of H13 die steel with biomimetic surface. Journal of Bionic Engineering, 2010, 7, 390-396.	2.7	22
69	The effect of the micro-structures on the scorpion surface for improving the anti-erosion performance. Surface and Coatings Technology, 2017, 313, 143-150.	2.2	22
70	A Selective-Response Bioinspired Strain Sensor Using Viscoelastic Material as Middle Layer. ACS Nano, 2021, 15, 19629-19639.	7.3	22
71	Bioinspired Fabrication of one dimensional graphene fiber with collection of droplets application. Scientific Reports, 2017, 7, 12056.	1.6	21
72	Highly Efficient Mechanoelectrical Energy Conversion Based on the Nearâ€Tip Stress Field of an Antifracture Slit Observed in Scorpions. Advanced Functional Materials, 2019, 29, 1807693.	7.8	21

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73	Large-Scale Bio-Inspired Flexible Antireflective Film with Scale-Insensitivity Arrays. ACS Applied Materials & Interfaces, 2021, 13, 23103-23112.	4.0	21
74	Effect of Cu content in Cuâ€“Tiâ€“B4C system on fabricating TiC/TiB2 particulates locally reinforced steel matrix composites. Materials & Design, 2012, 40, 64-69.	5.1	20
75	Bio-inspired antifogging PDMS coupled micro-pillared superhydrophobic arrays and SiO₂ coatings. RSC Advances, 2018, 8, 26497-26505.	1.7	20
76	Crack-based and Hair-like Sensors Inspired from Arthropods: A Review. Journal of Bionic Engineering, 2020, 17, 867-898.	2.7	20
77	Bioinspired Superhydrophobic Cilia for Droplets Transportation and Microchemical Reaction. Advanced Materials Interfaces, 2021, 8, .	1.9	20
78	An Ingenious Super Light Trapping Surface Templated from Butterfly Wing Scales. Nanoscale Research Letters, 2015, 10, 1052.	3.1	19
79	Microstructure and structural color in wing scales of butterfly Thaumantis diores. Science Bulletin, 2009, 54, 535-540.	1.7	18
80	Preparation of PAN-based carbon fiber/Co3O4 composite and potential application in structural lithium-ion battery anodes. Ionics, 2019, 25, 5333-5340.	1.2	18
81	Nonwet Kingfisher Flying in the Rain: The Tumble of Droplets on Moving Oriented Anisotropic Superhydrophobic Substrates. ACS Applied Materials & Interfaces, 2020, 12, 35707-35715.	4.0	18
82	Interaction of self-nucleation and the addition of a nucleating agent on the crystallization behavior of isotactic polypropylene. Journal of Applied Polymer Science, 2001, 81, 78-84.	1.3	17
83	Optimization of Laser Processing Parameters and Their Effect on Penetration Depth and Surface Roughness of Biomimetic Units on the Surface of 3Cr2W8V Steel. Journal of Bionic Engineering, 2010, 7, S67-S76.	2.7	16
84	Bioinspired Omnidirectional Self-Stable Reflectors with Multiscale Hierarchical Structures. ACS Applied Materials & Interfaces, 2017, 9, 29285-29294.	4.0	16
85	Flexible and highly sensitive pressure sensors based on microcrack arrays inspired by scorpions. RSC Advances, 2019, 9, 22740-22748.	1.7	16
86	Janus Soft Actuators with Onâ€“Off Switchable Behaviors for Controllable Manipulation Driven by Oil. ACS Applied Materials & Interfaces, 2019, 11, 13742-13751.	4.0	16
87	Bioinspired Strategies for Excellent Mechanical Properties of Composites. Journal of Bionic Engineering, 2022, 19, 1203-1228.	2.7	16
88	Reconfigurable Fiber Triboelectric Nanogenerator for Self-Powered Defect Detection. ACS Nano, 2022, 16, 7721-7731.	7.3	15
89	Numerical experiment of the solid particle erosion of bionic configuration blade of centrifugal fan. Acta Metallurgica Sinica (English Letters), 2013, 26, 16-24.	1.5	14
90	Anti-adhesive property of maize leaf surface related with temperature and humidity. Journal of Bionic Engineering, 2017, 14, 540-548.	2.7	14

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91	The Ingenious Structure of Scorpion Armor Inspires Sand-Resistant Surfaces. Tribology Letters, 2017, 65, 1.	1.2	14
92	Smart Bionic Surfaces with Switchable Wettability and Applications. Journal of Bionic Engineering, 2021, 18, 473-500.	2.7	14
93	Engineered Mechanosensors Inspired by Biological Mechanosensilla. Advanced Materials Technologies, 2021, 6, 2100352.	3.0	14
94	Ligand-Assisted Solid-State Transformation of Nanoparticles. Chemistry of Materials, 2020, 32, 3271-3277.	3.2	13
95	Experiment about drag reduction of bionic non-smooth surface in low speed wind tunnel. Journal of Bionic Engineering, 2005, 2, 15-24.	2.7	12
96	The microstructures of butterfly wing scales in northeast of China. Journal of Bionic Engineering, 2007, 4, 47-52.	2.7	12
97	Numerical modelling of electroosmotic driven flow in nanoporous media by lattice Boltzmann method. Journal of Bionic Engineering, 2013, 10, 90-99.	2.7	12
98	Impact resistance of oil-immersed lignum vitae. Scientific Reports, 2016, 6, 30090.	1.6	12
99	Gasâ€“Solid Erosive Wear of Biomimetic Pattern Surface Inspired from Plant. Tribology Transactions, 2017, 60, 159-165.	1.1	12
100	Vibrational Receptor of Scorpion (Heterometrus petersii): The Basitarsal Compound Slit Sensilla. Journal of Bionic Engineering, 2019, 16, 76-87.	2.7	12
101	Micro/nano-scale Characterization and Fatigue Fracture Resistance of Mechanoreceptor with Crack-shaped Slit Arrays in Scorpion. Journal of Bionic Engineering, 2019, 16, 410-422.	2.7	12
102	Study of Solid Particle Erosion on Helicopter Rotor Blades Surfaces. Applied Sciences (Switzerland), 2020, 10, 977.	1.3	12
103	Broader-Band and Flexible Antireflective Films with the Window-like Structures Inspired by the Backside of Butterfly Wing Scales. ACS Applied Materials & Interfaces, 2021, 13, 19450-19459.	4.0	12
104	Experimental investigation on color variation mechanisms of structural light in Papilio maackii mÃ©nÃ©triÃ¨s butterfly wings. Science in China Series D: Earth Sciences, 2007, 50, 430-436.	0.9	11
105	Surface wettability and chemistry of ozone perfusion processed porous collagen scaffold. Journal of Bionic Engineering, 2011, 8, 223-233.	2.7	11
106	Angle-dependent discoloration structures in wing scales of Morpho menelaus butterfly. Science China Technological Sciences, 2016, 59, 749-755.	2.0	11
107	Preparation of carbon cloth supported Sn thin film for structural lithium-ion battery anodes. Journal of Electroanalytical Chemistry, 2018, 822, 17-22.	1.9	11
108	Superfast Liquid Transfer Strategy Through Sliding on a Liquid Membrane Inspired from Scorpion Setae. Advanced Materials Interfaces, 2018, 5, 1800802.	1.9	11

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109	A Novel Icephobic Strategy: The Fabrication of Biomimetic Coupling Micropatterns of Superwetting Surface. Advanced Materials Interfaces, 2019, 6, 1900864.	1.9	11
110	Gas-solid erosion on bionic configuration surface. Journal Wuhan University of Technology, Materials Science Edition, 2011, 26, 305-310.	0.4	10
111	High light absorption properties and optical structures in butterfly Heliophorus ila Lvcaenidae wing scales. RSC Advances, 2015, 5, 46011-46016.	1.7	10
112	High-aspect-ratio deflection transducers inspired by the ultra-sensitive cantilever configuration of scorpion trichobothria. Journal of Materials Chemistry C, 2020, 8, 6093-6101.	2.7	10
113	Chaotic Neural Network-Based Hysteresis Modeling With Dynamic Operator for Magnetic Shape Memory Alloy Actuator. IEEE Transactions on Magnetics, 2021, 57, 1-4.	1.2	10
114	Bending Resistance and Anisotropy of Basalt Fibers Laminate Composite with Bionic Helical Structure. Journal of Bionic Engineering, 2022, 19, 799-815.	2.7	10
115	Large-scale preparation of a versatile bioinspired sponge with physic-mechanochemical robustness for multitasking separation. Journal of Hazardous Materials, 2022, 435, 128902.	6.5	10
116	Scorpion back inspiring sand-resistant surfaces. Journal of Central South University, 2013, 20, 877-888.	1.2	9
117	Antifogging properties and mechanism of micron structure in Ephemera pictiventris McLachlan compound eyes. Science Bulletin, 2014, 59, 2039-2044.	1.7	9
118	Excellent Color Sensitivity of Butterfly Wing Scales to Liquid Mediums. Journal of Bionic Engineering, 2016, 13, 355-363.	2.7	9
119	Bio-mesopores structure functional composites by mushroom-derived carbon/NiO for lithium-ion batteries. Journal of Alloys and Compounds, 2020, 848, 156477.	2.8	9
120	The study of the efficiency enhancement of bionic coupling centrifugal pumps. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2013, 35, 517-524.	0.8	8
121	Microstructures and Wear Behavior of the TiC Ceramic Particulate Locally Reinforced Steel Matrix Composites from a Cuâ€“Tiâ€“C System. ISIJ International, 2015, 55, 319-325.	0.6	8
122	Toward the Burgeoning Optical Sensors with Ultraâ€Precision Hierarchical Structures Inspired by Butterflies. Advanced Materials Interfaces, 2021, 8, 2100142.	1.9	8
123	Anti-wear properties on 20CrMnTi steel surfaces with biomimetic non-smooth units. Science China Technological Sciences, 2010, 53, 2920-2924.	2.0	7
124	Metallic Sb nanoparticles embedded into a yolkâ€“shell Sb₂O₃@TiO₂ composite as anode materials for lithium ion batteries. New Journal of Chemistry, 2020, 44, 13430-13438.	1.4	7
125	Biomimetic Slippery PDMS Film with Papillae-Like Microstructures for Antifogging and Self-Cleaning. Coatings, 2021, 11, 238.	1.2	7
126	Study on preparation and mechanical properties of bionic carbon fiber reinforced epoxy resin composite with eagle feather structure. Materials Research Express, 2021, 8, 065301.	0.8	7

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127	Wettability and soil friction of the wollastonite fiber filled UHMWPE composites. Journal of Materials Science, 2005, 40, 1823-1825.	1.7	6
128	Phragmites Communis Leaves with Anisotropy, Superhydrophobicity and Self-Cleaning Effect and Biomimetic Polydimethylsiloxane (PDMS) Replicas. Coatings, 2019, 9, 541.	1.2	6
129	Mechanical properties of a novel dactyl-inspired green-composite sandwich structures with basalt fiber. Journal of Sandwich Structures and Materials, 2021, 23, 803-813.	2.0	6
130	Synthesis of one-dimensional PAN-based carbon fiber/NiO composite as an anode material for structural lithium-ion batteries. Ionics, 2020, 26, 5935-5940.	1.2	6
131	An effective model for mechanical properties of nacre-inspired continuous fiber-reinforced laminated composites. Mechanics of Advanced Materials and Structures, 2021, 28, 1849-1857.	1.5	6
132	pH-responsive smart superwetting Fe foam for efficient in situ on-demand oil/water separation. Journal of Materials Science, 2021, 56, 13372.	1.7	6
133	Bionic Design and 3D Printing of Continuous Carbon Fiber-Reinforced Polylactic Acid Composite with Barbicel Structure of Eagle-Owl Feather. Materials, 2021, 14, 3618.	1.3	6
134	Cross-Scale Biological Models of Species for Future Biomimetic Composite Design: A Review. Coatings, 2021, 11, 1297.	1.2	6
135	Interfacial reinforced carbon fiber composites inspired by biological interlocking structure. IScience, 2022, 25, 104066.	1.9	6
136	Nanowires in Flexible Sensors: Structure is Becoming a Key in Controlling the Sensing Performance. Advanced Materials Technologies, 2022, 7, .	3.0	6
137	Investigation of Micro-wear and Micro-friction properties for bionic non-smooth concave components. Journal of Bionic Engineering, 2005, 2, 63-67.	2.7	5
138	Tangent resistance of soil on moldboard and the mechanism of resistance reduction of bionic moldboard. Journal of Bionic Engineering, 2005, 2, 33-46.	2.7	5
139	Replication of Papilio maackii MÃ©nÃ©triÃ©s butterfly scale structural color using a magnetron sputtering method. Science Bulletin, 2012, 57, 4525-4528.	1.7	5
140	Dry Sliding Friction and Wear Mechanism of TiC-TiB2Particulate Locally Reinforced Mn-Steel Matrix Composite from a Cu-Ti-B4C System via a Self-Propagating High-Temperature Synthesis (SHS) Casting Route. Tribology Transactions, 2015, 58, 567-575.	1.1	5
141	Influence of water and oil immersion on the tribological properties of Excentrodendron hsienmu. Science China Technological Sciences, 2016, 59, 1673-1679.	2.0	5
142	Optimum Anti-erosion Structures and Anti-erosion Mechanism for Rotatory Samples Inspired by Scorpion Armor of Parabuthus transvaalicus. Journal of Bionic Engineering, 2021, 18, 92-102.	2.7	5
143	Microstructure and inâ€situ tensile strength of propodus of mantis shrimp. Microscopy Research and Technique, 2021, 84, 415-421.	1.2	4
144	Hysteresis Modeling of Magnetic Shape Memory Alloy Actuator Based on Volterra Series. IEEE Transactions on Magnetics, 2021, 57, 1-4.	1.2	4

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145	Flexible Equivalent Strain Sensor with Ordered Concentric Circular Curved Cracks Inspired by Scorpion. ACS Applied Materials & Interfaces, 2022, 14, 29441-29450.	4.0	4
146	In situ fabrication of TiCâ€“TiB2 precipitates in Mn-steel using thermal explosion (TE) casting. Journal of Materials Research, 2015, 30, 1019-1028.	1.2	3
147	Fine Structure of Scorpion Pectines for Odor Capture. Journal of Bionic Engineering, 2017, 14, 589-599.	2.7	3
148	Mechanoelectrical Energy Conversion: Highly Efficient Mechanoelectrical Energy Conversion Based on the Nearâ€Tip Stress Field of an Antifracture Slit Observed in Scorpions (Adv. Funct. Mater. 22/2019). Advanced Functional Materials, 2019, 29, 1970147.	7.8	3
149	A Bionic Vibration Source Localization Device Inspired by the Hunting Localization Mechanism of Scorpions. Journal of Bionic Engineering, 2019, 16, 1019-1029.	2.7	3
150	Hydrodynamic Perception Using an Artificial Lateral Line Device with an Optimized Constriction Canal. Journal of Bionic Engineering, 2020, 17, 909-919.	2.7	3
151	Preparation of shape-controlled electric-eel-inspired SnO2@C anode materials via SnC2O4 precursor approach for energy storage. Journal of Materials Science, 2020, 55, 11524-11534.	1.7	3
152	Durable and Superhydrophobic Aluminium Alloy with Microscale Hierarchical Structures and Anti-Drag Function Inspired by Diving Bell Spider. Coatings, 2021, 11, 1146.	1.2	3
153	Integration 3D printing of bionic continuous carbon fiber reinforced resin composite. Materials Research Express, 2021, 8, 095602.	0.8	3
154	Musculoskeletal computational analysis on muscle mechanical characteristics of driversâ€™ lumbar vertebras and legs in different sitting postures. Revista Da AssociaÃ§Ã£o MÃ©dica Brasileira, 2020, 66, 637-642.	0.3	3
155	A multifunctional flexible sensor with coupling bionic microstructures inspired by nature. Journal of Materials Chemistry C, 2022, 10, 11296-11306.	2.7	3
156	Free radical scavenging abilities of polypeptide fromChlamys farreri. Chinese Journal of Oceanology and Limnology, 2006, 24, 325-328.	0.7	2
157	An effective route for manufacturing a mushroom-derived carbon/SnO₂/C functional composite. New Journal of Chemistry, 2019, 43, 12503-12510.	1.4	2
158	Large Curvature Folding Strategies of Butterfly Proboscis. Journal of Bionic Engineering, 2020, 17, 1239-1250.	2.7	2
159	Target-oriented Passive Localization Techniques Inspired by Terrestrial Arthropods: A Review. Journal of Bionic Engineering, 2022, 19, 571-589.	2.7	2
160	Mechanoâ€Sensor for Proprioception Inspired by Ultrasensitive Slitâ€Based Mechanosensilla. Advanced Materials Technologies, 2022, 7, .	3.0	2
161	Design of a flexible bio-inspired stretch-forming machine for the fabrication of large radius bends parts. International Journal of Advanced Manufacturing Technology, 2020, 108, 3571-3578.	1.5	1
162	Study on the heterogeneous material coupling connection characteristics and mechanical strength of Oratosquilla oratoria mantis shrimp saddle. Microscopy (Oxford, England), 2021, 70, 361-367.	0.7	1

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163	Development of a mechanical decoupling surgical scissors for robot-assisted minimally invasive surgery. Robotica, 0, , 1-13.	1.3	1
164	Investigation of microstructure and dissimilar materials connection patterns of mantis shrimp saddle. Microscopy Research and Technique, 2021, 84, 2075-2081.	1.2	1
165	A Mathematical Model Including Mechanical Structure, Hydraulic and Control of LHDS. Robotica, 2021, 39, 1328-1343.	1.3	1
166	The optimization design and FEA analysis in car sunroof design. , 2011, , .		0
167	Wettability Control: Controlling Wettability for Improved Corrosion Inhibition on Magnesium Alloy as Biomedical Implant Materials (Adv. Mater. Interfaces 8/2016). Advanced Materials Interfaces, 2016, 3, .	1.9	0
168	Experimental Optimization of Bionic Dimpled Surfaces on Axisymmetric Bluff Bodies for Drag Reduction. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2008, , 399-403.	0.1	0
169	A Novel Manual Training Platform for Single-Port Laparoscopic Surgery. Machines, 2022, 10, 343.	1.2	0