Wei Zhou

List of Publications by Year
in descending order

116 papers	2,994 citations	168829 31 h-index	252626 46 g-index
116 all docs	116 docs citations	116 times ranked	2664 citing authors

#	Article	IF	Citations
1	Facile fabrication of a fast-response flexible temperature sensor via laser reduced graphene oxide for contactless human-machine interface. Carbon, 2022, 187, 35-46.	5.4	52
2	Laser Direct Writing of Highly Ordered Twoâ€Level Hierarchical Microstructures for Flexible Piezoresistive Sensor with Enhanced Sensitivity. Advanced Materials Interfaces, 2022, 9, .	1.9	25
3	Trapezoidal cavity for high reforming temperature performance of auto-thermal methanol steam reforming micro-reactor for hydrogen production. International Journal of Hydrogen Energy, 2022, 47, 5053-5063.	3.8	11
4	3D-Printed Regular-Porous Structure with Trapezoidal Multiple Microchannels as Combustion Reaction Support for the Autothermal Methanol Steam Reforming Microreactor for Hydrogen Production. Industrial & Engineering Chemistry Research, 2022, 61, 2443-2454.	1.8	4
5	A columnar regular-porous stainless steel reaction support with high superficial area for hydrogen production. International Journal of Hydrogen Energy, 2022, 47, 10204-10204.	3.8	1
6	Tunable Wide Range and High Sensitivity Flexible Pressure Sensors with Ordered Multilevel Microstructures. Advanced Materials Technologies, 2022, 7, .	3.0	22
7	Preparation and performance of a self-humidifying fuel cell using a fiber sintered sheet as flow field. Journal of Power Sources, 2022, 536, 231513.	4.0	5
8	Fabrication and characteristic of flexible dry bioelectrodes with microstructures inspired by golden margined century plant leaf. Sensors and Actuators A: Physical, 2021, 321, 112397.	2.0	4
9	Iontophoresis-driven porous microneedle array patch for active transdermal drug delivery. Acta Biomaterialia, 2021, 121, 349-358.	4.1	51
10	Effective Diffusion in Fibrous Porous Media: A Comparison Study between Lattice Boltzmann and Pore Network Modeling Methods. Materials, 2021, 14, 756.	1.3	14
11	Performance optimization of ultra-low platinum loading membrane electrode assembly prepared by electrostatic spraying. International Journal of Hydrogen Energy, 2021, 46, 10457-10467.	3.8	9
12	Modeling of a Rope-Driven Piezoelectric Vibration Energy Harvester for Low-Frequency and Wideband Energy Harvesting. Micromachines, 2021, 12, 305.	1.4	3
13	Thermal performance of flexible branch heat pipe. Applied Thermal Engineering, 2021, 186, 116532.	3.0	21
14	Regulating Intrinsic Electronic Structures of Transition-Metal-Based Catalysts and the Potential Applications for Electrocatalytic Water Splitting. , 2021, 3, 752-780.		62
15	Experimental investigation of loop heat pipe with novel interlaced microchannel condenser. International Communications in Heat and Mass Transfer, 2021, 125, 105292.	2.9	4
16	Novel Nickel Foam with Multiple Microchannels as Combustion Reaction Support for the Self-Heating Methanol Steam Reforming Microreactor. Energy & Fuels, 2021, 35, 2815-2825.	2.5	9
17	The Impacts of Surface Microchannels on the Transport Properties of Porous Fibrous Media Using Stochastic Pore Network Modeling. Materials, 2021, 14, 7546.	1.3	2
18	Heat Transfer Performance of a Novel Microchannel Embedded with Connected Grooves. Chinese Journal of Mechanical Engineering (English Edition), 2021, 34, .	1.9	2

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19	Electrostatic spraying of membrane electrode for proton exchange membrane fuel cell. Current Applied Physics, 2020, 20, 11-17.	1.1	17
20	A Mini Review of Microneedle Array Electrode for Bio-Signal Recording: A Review. IEEE Sensors Journal, 2020, 20, 577-590.	2.4	39
21	Fabrication of porous metal by selective laser melting as catalyst support for hydrogen production microreactor. International Journal of Hydrogen Energy, 2020, 45, 10-22.	3.8	30
22	Structural design and performance research of methanol steam reforming microchannel for hydrogen production based on mixing effect. International Journal of Hydrogen Energy, 2020, 45, 20859-20874.	3.8	32
23	Design, fabrication and sound absorption performance investigation of porous copper fiber sintered sheets with rough surface. Applied Acoustics, 2020, 170, 107525.	1.7	11
24	Structure and geometric dimension optimization of interlaced microchannel for heat transfer performance enhancement. Applied Thermal Engineering, 2020, 170, 115011.	3.0	31
25	Experimental investigations on cutting force and temperature in milling process of copper foam with high porosity. International Journal of Advanced Manufacturing Technology, 2020, 108, 759-767.	1.5	5
26	In-Plane Tensile Behavior of Sintered Fibrous Copper Systems Using Ball Chain Modeling. Journal of Materials Engineering and Performance, 2020, 29, 2085-2094.	1.2	2
27	Fabrication of porous metal fiber sintered sheet as a flow field for proton exchange membrane fuel cell. Current Applied Physics, 2020, 20, 686-695.	1.1	15
28	Performance improvement of proton exchange membrane fuel cells with compressed nickel foam as flow field structure. International Journal of Hydrogen Energy, 2020, 45, 17833-17843.	3.8	34
29	Structural design of self-thermal methanol steam reforming microreactor with porous combustion reaction support for hydrogen production. International Journal of Hydrogen Energy, 2020, 45, 22437-22447.	3.8	37
30	Experimental and numerical investigation of heat and mass transfer in non-uniform wavy microchannels. International Journal of Thermal Sciences, 2020, 152, 106320.	2.6	47
31	Experimental and numerical studies on heat transfer enhancement of microchannel heat exchanger embedded with different shape micropillars. Applied Thermal Engineering, 2020, 175, 115296.	3.0	52
32	Methanol steam reforming microreactor with novel 3D-Printed porous stainless steel support as catalyst support. International Journal of Hydrogen Energy, 2020, 45, 14006-14016.	3.8	32
33	Development of novel flexible heat pipe with multistage design inspired by structure of human spine. Applied Thermal Engineering, 2020, 175, 115392.	3.0	26
34	Fabrication and Uniaxial Tensile Properties of Soldered Porous Copper Fiber-Sintered Sheets. Advances in Materials Science and Engineering, 2019, 2019, 1-8.	1.0	0
35	Vibration assisted high-speed wire electric discharge machining for machining surface microgrooves. Journal of Manufacturing Processes, 2019, 44, 418-426.	2.8	14
36	Magnetic field assisted laser fabrication and electrical characterizations of metal dry Biolectrode with surface microstructures. Biomedical Microdevices, 2019, 21, 74.	1.4	1

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37	Feasibility of preparing additive manufactured porous stainless steel felts with mathematical micro pore structure as novel catalyst support for hydrogen production via methanol steam reforming. International Journal of Hydrogen Energy, 2019, 44, 24782-24791.	3.8	24
38	Preparing a novel gradient porous metal fiber sintered felt with better manufacturability for hydrogen production via methanol steam reforming. International Journal of Hydrogen Energy, 2019, 44, 23983-23995.	3.8	13
39	Heat transfer characteristics of Cu-based microchannel heat exchanger fabricated by multi-blade milling process. International Journal of Thermal Sciences, 2019, 138, 559-575.	2.6	19
40	Optimal design and fabrication of surface microchannels on copper foam catalyst support in a methanol steam reforming microreactor. Fuel, 2019, 253, 1545-1555.	3.4	30
41	Experimental and simulation investigation of multi-tooth cutting process of long fiber using copper wire continuous feeding. Journal of Materials Processing Technology, 2019, 273, 116252.	3.1	4
42	Novel copper foam with ordered hole arrays as catalyst support for methanol steam reforming microreactor. Applied Energy, 2019, 246, 24-37.	5.1	64
43	Porous copper fiber sintered felts with surface microchannels for methanol steam reforming microreactor for hydrogen production. International Journal of Hydrogen Energy, 2019, 44, 5755-5765.	3.8	51
44	Active Impregnation Method for Copper Foam as Catalyst Support for Methanol Steam Reforming for Hydrogen Production. Industrial & Engineering Chemistry Research, 2019, 58, 4387-4395.	1.8	22
45	Pore network modeling of fibrous porous media of uniform and gradient porosity. Powder Technology, 2019, 343, 350-361.	2.1	19
46	Effects of operation parameters on thermal and hydraulic performances of a novel interlaced microchannel. Applied Thermal Engineering, 2019, 147, 143-154.	3.0	11
47	Methanol steam reforming performance optimisation of cylindrical microreactor for hydrogen production utilising error backpropagation and genetic algorithm. Chemical Engineering Journal, 2019, 357, 641-654.	6.6	39
48	Feasibility investigation of direct laser cutting process of metal foam with high pore density. International Journal of Advanced Manufacturing Technology, 2018, 96, 2803-2814.	1.5	9
49	Optimizing the porosity configuration of porous copper fiber sintered felt for methanol steam reforming micro-reactor based on flow distribution. Applied Energy, 2018, 216, 243-261.	5.1	30
50	Hydrogen production from cylindrical methanol steam reforming microreactor with porous Cu-Al fiber sintered felt. International Journal of Hydrogen Energy, 2018, 43, 3643-3654.	3.8	48
51	Investigation of fluid flow and heat transfer characteristics of parallel flow double-layer microchannel heat exchanger. Applied Thermal Engineering, 2018, 137, 616-631.	3.0	34
52	Electrical impedance performance of metal dry bioelectrode with different surface coatings. Sensors and Actuators A: Physical, 2018, 269, 515-523.	2.0	10
53	Capillary pumping performance of porous copper fiber sintered wicks for loop heat pipes. Applied Thermal Engineering, 2018, 129, 1582-1594.	3.0	34
54	Size effect and series-parallel integration design of laminated methanol steam reforming microreactor for hydrogen production. International Journal of Hydrogen Energy, 2018, 43, 19396-19404.	3.8	33

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55	Impedance and electromyographic properties of metal dry bioelectrode with non-uniform surface microstructure. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	1.1	3
56	Heat transfer performance testing of a new type of phase change heat sink for high power light emitting diode. Journal of Central South University, 2018, 25, 1708-1716.	1.2	5
57	Mechanical properties of surface microstructures of metal dry bioelectrode. Sensors and Actuators A: Physical, 2018, 280, 170-178.	2.0	3
58	Multi-blade milling process of Cu-based microchannel for laminated heat exchanger. International Journal of Advanced Manufacturing Technology, 2018, 95, 2973-2987.	1.5	7
59	Experimental investigation on thermal and hydraulic performance of microchannels with interlaced configuration. Energy Conversion and Management, 2018, 174, 439-452.	4.4	16
60	Fabrication of continuous slim aluminum fibers using a multi-tooth tool. Materials and Manufacturing Processes, 2017, 32, 76-82.	2.7	4
61	Tri-dimensional reticulated porous material sintered by multi-tooth tool cutting-made copper fibers and investigation of its acoustical performances. Materials Letters, 2017, 194, 9-12.	1.3	7
62	Operational characteristics of loop heat pipes with porous copper fiber sintered sheet as wick. Applied Thermal Engineering, 2017, 122, 398-408.	3.0	21
63	Characterization of impedance properties of metal dry bioelectrodes with surface microstructure arrays. Sensors and Actuators A: Physical, 2017, 263, 252-258.	2.0	19
64	A novel structured PdZnAl/Cu fiber catalyst for methanol steam reforming in microreactor. Renewable Energy, 2017, 113, 30-42.	4.3	36
65	Thermal performance of loop heat pipes with smooth and rough porous copper fiber sintered sheets. Energy Conversion and Management, 2017, 153, 323-334.	4.4	40
66	Novel dry metal electrode with tilted microstructure fabricated with laser micromilling process. Sensors and Actuators A: Physical, 2017, 264, 76-83.	2.0	3
67	3D stochastic modeling, simulation and analysis of effective thermal conductivity in fibrous media. Powder Technology, 2017, 320, 397-404.	2.1	23
68	Investigation of transport property of fibrous media: 3D virtual modeling and permeability calculation. Engineering With Computers, 2017, 33, 997-1005.	3.5	4
69	Development of cylindrical laminated methanol steam reforming microreactor with cascading metal foams as catalyst support. Fuel, 2017, 191, 46-53.	3.4	71
70	Fabrication of Micro-Needle Electrodes for Bio-Signal Recording by a Magnetization-Induced Self-Assembly Method. Sensors, 2016, 16, 1533.	2.1	54
71	A Novel Ropes-Driven Wideband Piezoelectric Vibration Energy Harvester. Applied Sciences (Switzerland), 2016, 6, 402.	1.3	11
72	Thermal performance of loop heat pipe with porous copper fiber sintered sheet as wick structure. Applied Thermal Engineering, 2016, 108, 251-260.	3.0	47

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73	Skeleton-based tracing of curved fibers from 3D X-ray microtomographic imaging. Results in Physics, 2016, 6, 170-177.	2.0	18
74	Experimental investigation on surface wettability of copper-based dry bioelectrodes. Sensors and Actuators A: Physical, 2016, 244, 237-242.	2.0	7
75	Development and tests of loop heat pipe with multi-layer metal foams as wick structure. Applied Thermal Engineering, 2016, 94, 324-330.	3.0	53
76	Investigations on laser micromilling of circular micro pin fins for heat sink cooling systems. International Journal of Advanced Manufacturing Technology, 2016, 87, 151-164.	1.5	18
77	Effect of thermal annealing on the structural, electrical and optical properties of Alâ€“Ni co-doped ZnO thin films prepared using a solâ€“gel method. Surface and Coatings Technology, 2015, 261, 149-155.	2.2	27
78	Heat and mass transfer characterization of porous copper fiber sintered felt as catalyst support for methanol steam reforming. Fuel, 2015, 145, 136-142.	3.4	32
79	Microstructure and electro-optical properties of Cuâ€“Ni co-doped AZO transparent conducting thin films by solâ€“gel method. Journal of Materials Science: Materials in Electronics, 2015, 26, 1151-1158.	1.1	3
80	Morphology and transport properties of fibrous porous media. Powder Technology, 2015, 283, 618-626.	2.1	34
81	Laser direct micromilling of copper-based bioelectrode with surface microstructure array. Optics and Lasers in Engineering, 2015, 73, 7-15.	2.0	24
82	Hydrogen production from methanol steam reforming using porous copper fiber sintered felt with gradient porosity. International Journal of Hydrogen Energy, 2015, 40, 244-255.	3.8	57
83	Fiber laser carving under ice layer without laser energy attenuation. Journal of Materials Processing Technology, 2015, 216, 278-286.	3.1	15
84	Design and fabrication of sintered wick for miniature cylindrical heat pipe. Transactions of Nonferrous Metals Society of China, 2014, 24, 292-301.	1.7	21
85	Green synthesis of dimension-controlled silver nanoparticleâ€“graphene oxide with in situ ultrasonication. Acta Materialia, 2014, 64, 326-332.	3.8	119
86	Green synthesis of high conductivity silver nanoparticle-reduced graphene oxide composite films. Applied Surface Science, 2014, 298, 62-67.	3.1	76
87	Laser micro-milling of microchannel on copper sheet as catalyst support used in microreactor for hydrogen production. International Journal of Hydrogen Energy, 2014, 39, 4884-4894.	3.8	72
88	Fabrication and thermal performance of porous crack composite wick flattened heat pipe. Applied Thermal Engineering, 2014, 66, 140-147.	3.0	25
89	Thermal performance of a novel porous crack composite wick heat pipe. Energy Conversion and Management, 2014, 81, 10-18.	4.4	55
90	Characterization of three- and four-point bending properties of porous metal fiber sintered sheet. Materials & Design, 2014, 56, 522-527.	5.1	18

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91	Myoelectrically controlled wrist robot for stroke rehabilitation. Journal of NeuroEngineering and Rehabilitation, 2013, 10, 52.	2.4	84
92	Characterization of alternating current impedance properties of biomedical electrodes. Journal of Central South University, 2013, 20, 1254-1258.	1.2	5
93	Fabrication of flatten grooved-sintered wick heat pipe. Transactions of Nonferrous Metals Society of China, 2013, 23, 2714-2725.	1.7	10
94	Optimization of Catalyst Loading for Porous Copper Fiber Sintered Felts Used in Methanol Steam Reforming Microreactors. Chemical Engineering and Technology, 2013, 36, 307-314.	0.9	17
95	A simple fracture energy prediction method for fiber network based on its morphological features extracted by X-ray tomography. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 585, 297-303.	2.6	12
96	Three-dimensional reconstruction and morphologic characteristics of porous metal fiber sintered sheet. Materials Characterization, 2013, 86, 49-58.	1.9	24
97	Fabrication and impedance measurement of novel metal dry bioelectrode. Sensors and Actuators A: Physical, 2013, 201, 127-133.	2.0	51
98	Comparison of static contact angle of various metal foams and porous copper fiber sintered sheet. Applied Surface Science, 2013, 276, 377-382.	3.1	41
99	Chemical etching process of copper electrode for bioelectrical impedance technology. Transactions of Nonferrous Metals Society of China, 2012, 22, 1501-1506.	1.7	3
100	Adsorption of basic yellow 87 from aqueous solution onto two different mesoporous adsorbents. Chemical Engineering Journal, 2012, 180, 91-98.	6.6	64
101	Compressive properties of porous metal fiber sintered sheet produced by solid-state sintering process. Materials & Design, 2012, 35, 414-418.	5.1	32
102	Characterization of electrical conductivity of porous metal fiber sintered sheet using four-point probe method. Materials & Design, 2012, 37, 161-165.	5.1	46
103	Experimental study on shear properties of porous metal fiber sintered sheet. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 544, 33-37.	2.6	14
104	Phase change flattening process for axial grooved heat pipe. Journal of Materials Processing Technology, 2012, 212, 331-338.	3.1	20
105	Forming technology of boiling structure on evaporation surface of phase-change heat sink for high-power light emitting diode. Central South University, 2010, 17, 544-548.	0.5	5
106	A novel miniaturized loop heat pipe. Applied Thermal Engineering, 2010, 30, 1152-1158.	3.0	31
107	An Innovative Fabrication Process of Porous Metal Fiber Sintered Felts with Three-Dimensional Reticulated Structure. Materials and Manufacturing Processes, 2010, 25, 565-571.	2.7	44
108	A new kind of microstructures applied to Closed Loop Thermosyphons. , 2009, , .		1

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109	Effect of heating temperature on microstructure and mechanical properties of continuous copper fiber. , 2009, , .		1
110	Experimental investigation on uniaxial tensile properties of high-porosity metal fiber sintered sheet. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 525, 133-137.	2.6	56
111	A performance study of methanol steam reforming microreactor with porous copper fiber sintered felt as catalyst support for fuel cells. International Journal of Hydrogen Energy, 2009, 34, 9745-9753.	3.8	61
112	Compound forming technology of outside 3D integral fin of copper tubes. Transactions of Nonferrous Metals Society of China, 2009, 19, 335-340.	1.7	12
113	Porous copper fiber sintered felts: An innovative catalyst support of methanol steam reformer for hydrogen production. International Journal of Hydrogen Energy, 2008, 33, 2950-2956.	3.8	71
114	Preparation of oriented linear copper fiber sintered felt and its performance. Transactions of Nonferrous Metals Society of China, 2007, 17, 1028-1033.	1.7	20
115	Numerical Simulation of Transport Characteristics of Porous Metal Fiber Sintered Felts Used in Microreactor for Hydrogen Energy. Advanced Materials Research, 0, 228-229, 490-495.	0.3	1
116	Thermal Conductivity Measurements of Novel Porous Copper Fiber Sintered Sheet. Materials Science Forum, 0, 933, 159-168.	0.3	0