Zheng Lou

List of Publications by Year
in descending order

66	6,302	61945 43	102432 66
papers	citations	h-index	g-index

67	67	67	7418
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	In-Hand Object Localization Using a Novel High-Resolution Visuotactile Sensor. IEEE Transactions on Industrial Electronics, 2022, 69, 6015-6025.	5.2	33
2	<scp>Highâ€performance</scp> optical noncontact controlling system based on broadband <scp>PtTe_x</scp>/Si heterojunction photodetectors for <scp>humanâ€“machine</scp> interaction. InformaÄnÃ-MateriÃ¡ly, 2022, 4, .	8.5	13
3	Multimodal Unknown Surface Material Classification and Its Application to Physical Reasoning. IEEE Transactions on Industrial Informatics, 2022, 18, 4406-4416.	7.2	6
4	Allâ€Flexible Artificial Reflex Arc Based on Thresholdâ€Switching Memristor. Advanced Functional Materials, 2022, 32, .	7.8	30
5	Flexible Sensors Based on Organicâ€“Inorganic Hybrid Materials. Advanced Materials Technologies, 2021, 6, 2000889.	3.0	43
6	Modify Cd3As2 nanowires with sulfur to fabricate self-powered NIR photodetectors with enhanced performance. Nano Research, 2021, 14, 3379-3385.	5.8	8
7	Flexible Image Sensors with Semiconducting Nanowires for Biomimic Visual Applications. Small Structures, 2021, 2, 2000152.	6.9	29
8	Artificial Optoelectronic Synapses Based on TiN_xO_{2â€“}_x/MoS₂ Heterojunction for Neuromorphic Computing and Visual System. Advanced Functional Materials, 2021, 31, 2101201.	7.8	92
9	Recent advanced applications of ion-gel in ionic-gated transistor. Npj Flexible Electronics, 2021, 5, .	5.1	54
10	Microâ€Nano Processing of Active Layers in Flexible Tactile Sensors via Template Methods: A Review. Small, 2021, 17, e2100804.	5.2	82
11	Wearable Sensorsâ€Enabled Humanâ€“Machine Interaction Systems: From Design to Application. Advanced Functional Materials, 2021, 31, 2008936.	7.8	322
12	Integrated polarization-sensitive amplification system for digital information transmission. Nature Communications, 2021, 12, 6476.	5.8	53
13	Reviews of wearable healthcare systems: Materials, devices and system integration. Materials Science and Engineering Reports, 2020, 140, 100523.	14.8	215
14	Recent advances in lowâ€dimensional semiconductor nanomaterials and their applications in highâ€performance photodetectors. InformaÄnÃ-MateriÃ¡ly, 2020, 2, 291-317.	8.5	103
15	Biomimetic, biocompatible and robust silk Fibroin-MXene film with stable 3D cross-link structure for flexible pressure sensors. Nano Energy, 2020, 78, 105252.	8.2	153
16	An integrated flexible multifunctional sensing system for simultaneous monitoring of environment signals. Science China Materials, 2020, 63, 2560-2569.	3.5	14
17	2D Nanomaterials with Hierarchical Architecture for Flexible Sensor Application. ACS Symposium Series, 2020, , 93-116.	0.5	5
18	A Self-Healable Bifunctional Electronic Skin. ACS Applied Materials & Interfaces, 2020, 12, 24339-24347.	4.0	58

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19	3D Dielectric Layer Enabled Highly Sensitive Capacitive Pressure Sensors for Wearable Electronics. ACS Applied Materials & Interfaces, 2020, 12, 32023-32030.	4.0	85
20	Threshold switching synaptic device with tactile memory function. Nano Energy, 2020, 76, 105109.	8.2	22
21	An Integrated Flexible Allâ€Nanowire Infrared Sensing System with Record Photosensitivity. Advanced Materials, 2020, 32, e1908419.	11.1	56
22	Non-layered ZnSb nanoplates for room temperature infrared polarized photodetectors. Journal of Materials Chemistry C, 2020, 8, 6388-6395.	2.7	24
23	Infrared Imaging Sensors: An Integrated Flexible Allâ€Nanowire Infrared Sensing System with Record Photosensitivity (Adv. Mater. 16/2020). Advanced Materials, 2020, 32, 2070126.	11.1	0
24	Biocompatible and Biodegradable Functional Polysaccharides for Flexible Humidity Sensors. Research, 2020, 2020, 8716847.	2.8	46
25	Bioâ€Multifunctional Smart Wearable Sensors for Medical Devices. Advanced Intelligent Systems, 2019, 1, 1900040.	3.3	115
26	Flexible Smart Noncontact Control Systems with Ultrasensitive Humidity Sensors. Small, 2019, 15, e1902801.	5.2	110
27	Mixedâ€Valenceâ€Driven Quasiâ€1D Sn^{II}Sn^{IV}S₃ with Highly Polarizationâ€Sensitive UVâ€“visâ€“NIR Photoresponse. Advanced Functional Materials, 2019, 29, 1904416.	7.8	39
28	Water-proof and thermally inert flexible pressure sensors based on zero temperature coefficient of resistance hybrid films. Journal of Materials Chemistry C, 2019, 7, 9648-9654.	2.7	20
29	Bioinspired Interlocked Structure-Induced High Deformability for Two-Dimensional Titanium Carbide (MXene)/Natural Microcapsule-Based Flexible Pressure Sensors. ACS Nano, 2019, 13, 9139-9147.	7.3	308
30	Highly flexible self-powered photodetectors based on coreâ€“shell Sb/CdS nanowires. Journal of Materials Chemistry C, 2019, 7, 4581-4586.	2.7	20
31	Programmable three-dimensional advanced materials based on nanostructures as building blocks for flexible sensors. Nano Today, 2019, 26, 176-198.	6.2	60
32	1D/2D heterostructure nanofiber flexible sensing device with efficient gas detectivity. Applied Surface Science, 2019, 479, 209-215.	3.1	28
33	Magnetic and transport properties of a ferromagnetic layered semiconductor MnIn2Se4. Applied Physics Letters, 2019, 115, .	1.5	8
34	Grainâ€Boundaryâ€Induced Drastic Sensing Performance Enhancement of Polycrystallineâ€Microwire Printed Gas Sensors. Advanced Materials, 2019, 31, e1804583.	11.1	110
35	Printable Zn₂GeO₄ Microwires Based Flexible Photodetectors with Tunable Photoresponses. Advanced Materials Technologies, 2018, 3, 1800050.	3.0	14
36	Recent Developments in Grapheneâ€Based Tactile Sensors and Eâ€Skins. Advanced Materials Technologies, 2018, 3, 1700248.	3.0	153

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37	An Artificial Flexible Visual Memory System Based on an UVâ€Motivated Memristor. Advanced Materials, 2018, 30, 1705400.	11.1	299
38	Flexible and transparent capacitive pressure sensor with patterned microstructured composite rubber dielectric for wearable touch keyboard application. Science China Materials, 2018, 61, 1587-1595.	3.5	122
39	Recent Advances in Flexible/Stretchable Supercapacitors for Wearable Electronics. Small, 2018, 14, e1702829.	5.2	208
40	Highly sensitive hybrid nanofiber-based room-temperature CO sensors: Experiments and density functional theory simulations. Nano Research, 2018, 11, 1029-1037.	5.8	44
41	Recent Advances in Smart Wearable Sensing Systems. Advanced Materials Technologies, 2018, 3, 1800444.	3.0	128
42	Plantâ€Based Modular Building Blocks for â€œGreenâ€•Electronic Skins. Advanced Functional Materials, 2018, 28, 1804510.	7.8	97
43	Ultrasensitive and ultraflexible e-skins with dual functionalities for wearable electronics. Nano Energy, 2017, 38, 28-35.	8.2	194
44	Fabrication of porous SnO2 nanowires gas sensors with enhanced sensitivity. Sensors and Actuators B: Chemical, 2017, 252, 79-85.	4.0	89
45	All rGO-on-PVDF-nanofibers based self-powered electronic skins. Nano Energy, 2017, 35, 121-127.	8.2	132
46	Recent Progress of Selfâ€Powered Sensing Systems for Wearable Electronics. Small, 2017, 13, 1701791.	5.2	223
47	Metersâ€Long Flexible CoNiO₂â€Nanowires@Carbonâ€Fibers Based Wireâ€Supercapacitors for Wearable Electronics. Advanced Materials Technologies, 2016, 1, 1600142.	3.0	69
48	Polymerâ€Enhanced Highly Stretchable Conductive Fiber Strain Sensor Used for Electronic Data Gloves. Advanced Materials Technologies, 2016, 1, 1600136.	3.0	122
49	An ultra-sensitive and rapid response speed graphene pressure sensors for electronic skin and health monitoring. Nano Energy, 2016, 23, 7-14.	8.2	467
50	CuCo₂O₄ Nanowires Grown on a Ni Wire for Highâ€Performance, Flexible Fiber Supercapacitors. ChemElectroChem, 2015, 2, 1042-1047.	1.7	93
51	Electrical transport and photoresponse properties of single-crystalline p-type Cd3As2 nanowires. Science China: Physics, Mechanics and Astronomy, 2015, 58, 1-6.	2.0	5
52	Rational Synthesis of Branched CoMoO₄@CoNiO₂ Core/Shell Nanowire Arrays for All-Solid-State Supercapacitors with Improved Performance. ACS Applied Materials & Interfaces, 2015, 7, 24204-24211.	4.0	79
53	Design of CuOâ€“TiO₂ heterostructure nanofibers and their sensing performance. Journal of Materials Chemistry A, 2014, 2, 9030-9034.	5.2	94
54	Cross-linked p-type Co3O4 octahedral nanoparticles in 1D n-type TiO2 nanofibers for high-performance sensing devices. Journal of Materials Chemistry A, 2014, 2, 10022.	5.2	135

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55	Fast response/recovery performance of comb-like Co3O4 nanostructure. RSC Advances, 2014, 4, 21115.	1.7	14
56	Fabrication of flower-like ZnO nanosheet and nanorod-assembled hierarchical structures and their enhanced performance in gas sensors. New Journal of Chemistry, 2014, 38, 84-89.	1.4	62
57	Branch-like Hierarchical Heterostructure (Î±-Fe₂O₃/TiO₂): A Novel Sensing Material for Trimethylamine Gas Sensor. ACS Applied Materials & Interfaces, 2013, 5, 12310-12316.	4.0	230
58	Encapsuled nanoreactors (Au@SnO2): a new sensing material for chemical sensors. Nanoscale, 2013, 5, 2686.	2.8	243
59	A class of hierarchical nanostructures: ZnO surface-functionalized TiO2 with enhanced sensing properties. RSC Advances, 2013, 3, 3131.	1.7	49
60	ACETONE SENSING PROPERTIES OF HIERARCHICAL ZnO URCHINLIKE STRUCTURES BY HYDROTHERMAL PROCESS. Biomedical Engineering - Applications, Basis and Communications, 2012, 24, 99-103.	0.3	7
61	Synthesis of rattle-type SnO2 structures with porous shells. Journal of Materials Chemistry, 2012, 22, 18111.	6.7	51
62	Ring-like PdOâ€“NiO with lamellar structure for gas sensor application. Journal of Materials Chemistry, 2012, 22, 12453.	6.7	48
63	Templating synthesis of ZnO hollow nanospheres loaded with Au nanoparticles and their enhanced gas sensing properties. Journal of Materials Chemistry, 2012, 22, 4767.	6.7	115
64	Enhanced ethanol sensing properties of NiO-doped SnO2 polyhedra. New Journal of Chemistry, 2012, 36, 1003.	1.4	31
65	Three-Dimensional Hierarchical Flowerlike Î±-Fe₂O₃ Nanostructures: Synthesis and Ethanol-Sensing Properties. ACS Applied Materials & Interfaces, 2011, 3, 4689-4694.	4.0	214
66	Zinc oxide coreâ€“shell hollow microspheres with multi-shelled architecture for gas sensor applications. Journal of Materials Chemistry, 2011, 21, 19331.	6.7	100