Jianan Deng

List of Publications by Year
in descending order

39 papers	6,153 citations	109321 35 h-index	302126 39 g-index
39 all docs	39 docs citations	39 times ranked	6742 citing authors

#	Article	IF	Citations
1	Self-powered textile for wearable electronics by hybridizing fiber-shaped nanogenerators, solar cells, and supercapacitors. Science Advances, 2016, 2, e1600097.	10.3	705
2	A Highly Stretchable and Washable All-Yarn-Based Self-Charging Knitting Power Textile Composed of Fiber Triboelectric Nanogenerators and Supercapacitors. ACS Nano, 2017, 11, 9490-9499.	14.6	419
3	A Stretchable Yarn Embedded Triboelectric Nanogenerator as Electronic Skin for Biomechanical Energy Harvesting and Multifunctional Pressure Sensing. Advanced Materials, 2018, 30, e1804944.	21.0	396
4	Single‐Thread‐Based Wearable and Highly Stretchable Triboelectric Nanogenerators and Their Applications in Cloth‐Based Self‐Powered Human‐Interactive and Biomedical Sensing. Advanced Functional Materials, 2017, 27, 1604462.	14.9	327
5	3D Orthogonal Woven Triboelectric Nanogenerator for Effective Biomechanical Energy Harvesting and as Self‐Powered Active Motion Sensors. Advanced Materials, 2017, 29, 1702648.	21.0	321
6	Electric Eel‐Skin‐Inspired Mechanically Durable and Super‐Stretchable Nanogenerator for Deformable Power Source and Fully Autonomous Conformable Electronic‐Skin Applications. Advanced Materials, 2016, 28, 10024-10032.	21.0	273
7	Multifunctional TENG for Blue Energy Scavenging and Self‐Powered Wind‐Speed Sensor. Advanced Energy Materials, 2017, 7, 1602397.	19.5	273
8	Vitrimer Elastomer‐Based Jigsaw Puzzle‐Like Healable Triboelectric Nanogenerator for Self‐Powered Wearable Electronics. Advanced Materials, 2018, 30, e1705918.	21.0	265
9	Actively Perceiving and Responsive Soft Robots Enabled by Self‐Powered, Highly Extensible, and Highly Sensitive Triboelectric Proximity‐ and Pressure‐Sensing Skins. Advanced Materials, 2018, 30, e1801114.	21.0	254
10	Shape Memory Polymers for Body Motion Energy Harvesting and Self‐Powered Mechanosensing. Advanced Materials, 2018, 30, 1705195.	21.0	249
11	Harvesting Broad Frequency Band Blue Energy by a Triboelectric–Electromagnetic Hybrid Nanogenerator. ACS Nano, 2016, 10, 6526-6534.	14.6	244
12	Branch-like Hierarchical Heterostructure (α-Fe$_2$O$_3$/TiO$_2$): A Novel Sensing Material for Trimethylamine Gas Sensor. ACS Applied Materials & Interfaces, 2013, 5, 12310-12316.	8.0	230
13	Versatile Core–Sheath Yarn for Sustainable Biomechanical Energy Harvesting and Real‐Time Human‐Interactive Sensing. Advanced Energy Materials, 2018, 8, 1801114.	19.5	212
14	P-type Co3O4 nanomaterials-based gas sensor: Preparation and acetone sensing performance. Sensors and Actuators B: Chemical, 2017, 242, 369-377.	7.8	184
15	Ethanol Gas Detection Using a Yolk-Shell (Core-Shell) α-Fe$_2$O$_3$ Nanospheres as Sensing Material. ACS Applied Materials & Interfaces, 2015, 7, 13098-13104.	8.0	170
16	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.	10.3	135
17	Hybrid Co$_3$O$_4$/SnO$_2$ Core–Shell Nanospheres as Real-Time Rapid-Response Sensors for Ammonia Gas. ACS Applied Materials & Interfaces, 2016, 8, 6539-6545.	8.0	134
18	Hollow ZnSnO$_3$ Cubes with Controllable Shells Enabling Highly Efficient Chemical Sensing Detection of Formaldehyde Vapors. ACS Applied Materials & Interfaces, 2017, 9, 14525-14533.	8.0	110

#	Article	IF	Citations
19	Enhanced sensing performance of the Co3O4 hierarchical nanorods to NH3 gas. Sensors and Actuators B: Chemical, 2015, 209, 449-455.	7.8	104
20	Design of CuO–TiO$_2$ heterostructure nanofibers and their sensing performance. Journal of Materials Chemistry A, 2014, 2, 9030-9034.	10.3	94
21	Facile synthesis and enhanced ethanol sensing properties of the brush-like ZnO–TiO2 heterojunctions nanofibers. Sensors and Actuators B: Chemical, 2013, 184, 21-26.	7.8	92
22	Nanoparticles-assembled Co3O4 nanorods p-type nanomaterials: One-pot synthesis and toluene-sensing properties. Sensors and Actuators B: Chemical, 2014, 201, 1-6.	7.8	90
23	P-type octahedral Cu 2 O particles with exposed {111} facets and superior CO sensing properties. Sensors and Actuators B: Chemical, 2017, 239, 211-217.	7.8	83
24	Template-free synthesized hollow NiO–SnO2 nanospheres with high gas-sensing performance. Sensors and Actuators B: Chemical, 2012, 164, 90-95.	7.8	73
25	Toluene and ethanol sensing performances of pristine and PdO-decorated flower-like ZnO structures. Sensors and Actuators B: Chemical, 2013, 176, 323-329.	7.8	73
26	Concave Cu 2 O octahedral nanoparticles as an advanced sensing material for benzene (C 6 H 6) and nitrogen dioxide (NO 2) detection. Sensors and Actuators B: Chemical, 2016, 223, 311-317.	7.8	72
27	Structure-driven efficient NiFe2O4 materials for ultra-fast response electronic sensing platform. Sensors and Actuators B: Chemical, 2018, 255, 1436-1444.	7.8	65
28	Comparison of toluene sensing performances of zinc stannate with different morphology-based gas sensors. Sensors and Actuators B: Chemical, 2016, 227, 448-455.	7.8	62
29	Highly sensitive sensing platform based on ZnSnO 3 hollow cubes for detection of ethanol. Applied Surface Science, 2017, 400, 262-268.	6.1	60
30	Hierarchical structure with heterogeneous phase as high performance sensing materials for trimethylamine gas detecting. Sensors and Actuators B: Chemical, 2015, 220, 1224-1231.	7.8	55
31	Controllable and enhanced HCHO sensing performances of different-shelled ZnO hollow microspheres. Sensors and Actuators B: Chemical, 2013, 183, 467-473.	7.8	53
32	Synthesis of rattle-type SnO2 structures with porous shells. Journal of Materials Chemistry, 2012, 22, 18111.	6.7	51
33	A class of hierarchical nanostructures: ZnO surface-functionalized TiO2 with enhanced sensing properties. RSC Advances, 2013, 3, 3131.	3.6	49
34	Curling-like Bi2WO6 microdiscs with lamellar structure for enhanced gas-sensing properties. Sensors and Actuators B: Chemical, 2013, 182, 217-222.	7.8	44
35	Fast and real-time acetone gas sensor using hybrid ZnFe$_2$O$_4$/ZnO hollow spheres. RSC Advances, 2016, 6, 66738-66744.	3.6	37
36	Constructing p–n heterostructures for efficient structure–driven ethanol sensing performance. Sensors and Actuators B: Chemical, 2018, 255, 745-753.	7.8	34

#	Article	IF	Citations
37	The synthesis and fast ethanol sensing properties of core–shell SnO_2@ZnO composite nanospheres using carbon spheres as templates. New Journal of Chemistry, 2016, 40, 6796-6802.	2.8	26
38	Ultrahigh-sensitive sensing platform based on p-type dumbbell-like Co 3 O 4 network. Applied Surface Science, 2017, 426, 951-956.	6.1	21
39	Fast response/recovery performance of comb-like Co3O4 nanostructure. RSC Advances, 2014, 4, 21115.	3.6	14