Si Wang

List of Publications by Year
in descending order

30 papers	3,294 citations	172457 29 h-index	477307 29 g-index
30 all docs	30 docs citations	30 times ranked	2220 citing authors

#	Article	IF	Citations
1	Facile, Flexible, Cost-Saving, and Environment-Friendly Paper-Based Humidity Sensor for Multifunctional Applications. ACS Applied Materials & Interfaces, 2019, 11, 21840-21849.	8.0	326
2	Paper-Based Sensors for Gas, Humidity, and Strain Detections: A Review. ACS Applied Materials & Interfaces, 2020, 12, 31037-31053.	8.0	296
3	Evolution of breath analysis based on humidity and gas sensors: Potential and challenges. Sensors and Actuators B: Chemical, 2020, 318, 128104.	7.8	217
4	Self-powered room temperature NO2 detection driven by triboelectric nanogenerator under UV illumination. Nano Energy, 2018, 47, 316-324.	16.0	192
5	An integrated flexible self-powered wearable respiration sensor. Nano Energy, 2019, 63, 103829.	16.0	181
6	Halloysite nanotubes: Natural, environmental-friendly and low-cost nanomaterials for high-performance humidity sensor. Sensors and Actuators B: Chemical, 2020, 317, 128204.	7.8	160
7	A facile respiration-driven triboelectric nanogenerator for multifunctional respiratory monitoring. Nano Energy, 2019, 58, 312-321.	16.0	143
8	Novel high-performance self-powered humidity detection enabled by triboelectric effect. Sensors and Actuators B: Chemical, 2017, 251, 144-152.	7.8	141
9	Ultrasensitive flexible NH3 gas sensor based on polyaniline/SrGe4O9 nanocomposite with ppt-level detection ability at room temperature. Sensors and Actuators B: Chemical, 2020, 319, 128293.	7.8	129
10	A review on Ti3C2Tx-based nanomaterials: synthesis and applications in gas and humidity sensors. Rare Metals, 2021, 40, 1459-1476.	7.1	121
11	Daily writing carbon ink: Novel application on humidity sensor with wide detection range, low detection limit and high detection resolution. Sensors and Actuators B: Chemical, 2021, 339, 129884.	7.8	113
12	PANI nanofibers-supported Nb2CTx nanosheets-enabled selective NH3 detection driven by TENG at room temperature. Sensors and Actuators B: Chemical, 2021, 327, 128923.	7.8	108
13	Highly sensitive and selective NO2 sensor of alkalized V2CT MXene driven by interlayer swelling. Sensors and Actuators B: Chemical, 2021, 344, 130150.	7.8	104
14	Ultrasensitive flexible self-powered ammonia sensor based on triboelectric nanogenerator at room temperature. Nano Energy, 2018, 51, 231-240.	16.0	102
15	Ultrathin Nb2CT nanosheets-supported polyaniline nanocomposite: Enabling ultrasensitive NH3 detection. Sensors and Actuators B: Chemical, 2021, 343, 130069.	7.8	94
16	Paper and carbon ink enabled low-cost, eco-friendly, flexible, multifunctional pressure and humidity sensors. Smart Materials and Structures, 2021, 30, 055012.	3.5	91
17	Simultaneous Biomechanical and Biochemical Monitoring for Self-Powered Breath Analysis. ACS Applied Materials & Interfaces, 2022, 14, 7301-7310.	8.0	86
18	Reduced graphene oxide-polyethylene oxide composite films for humidity sensing via quartz crystal microbalance. Sensors and Actuators B: Chemical, 2018, 255, 2203-2210.	7.8	80

#	Article	IF	Citations
19	Novel application of attapulgite on high performance and low-cost humidity sensors. Sensors and Actuators B: Chemical, 2020, 305, 127534.	7.8	79
20	Inspiration from Daily Goods: A Low-Cost, Facilely Fabricated, and Environment-Friendly Strain Sensor Based on Common Carbon Ink and Elastic Core-Spun Yarn. ACS Sustainable Chemistry and Engineering, 2019, 7, 17474-17481.	6.7	76
21	A do-it-yourself approach to achieving a flexible pressure sensor using daily use materials. Journal of Materials Chemistry C, 2021, 9, 13659-13667.	5.5	76
22	Enhanced positive humidity sensitive behavior of p-reduced graphene oxide decorated with n-WS2 nanoparticles. Rare Metals, 2021, 40, 1762-1767.	7.1	62
23	Novel chitosan/ZnO bilayer film with enhanced humidity-tolerant property: Endowing triboelectric nanogenerator with acetone analysis capability. Nano Energy, 2020, 78, 105256.	16.0	61
24	Enhanced Blocking Effect: A New Strategy to Improve the NO₂ Sensing Performance of Ti₃C₂T_x by Î³-Poly(<scp>l</scp>-glutamic acid) Modification. ACS Sensors, 2021, 6, 2858-2867.	7.8	51
25	Facilely constructed two-sided microstructure interfaces between electrodes and cellulose paper active layer: eco-friendly, low-cost and high-performance piezoresistive sensor. Cellulose, 2021, 28, 6389.	4.9	48
26	A chitosan/amido-graphene oxide-based self-powered humidity sensor enabled by triboelectric effect. Rare Metals, 2021, 40, 1995-2003.	7.1	47
27	Facile and low-cost fabrication of a humidity sensor using naturally available sepiolite nanofibers. Nanotechnology, 2020, 31, 355501.	2.6	39
28	Surface Engineering of a 3D Topological Network for Ultrasensitive Piezoresistive Pressure Sensors. ACS Applied Materials & Interfaces, 2020, 12, 38805-38812.	8.0	38
29	Integrated cross-section interface engineering and surface encapsulating strategy: A high-response, waterproof, and low-cost paper-based bending strain sensor. Journal of Materials Chemistry C, 2021, 9, 14003-14011.	5.5	33
30	Flexible self-powered ammonia sensor based on Ce-ZnO composite film. , 2019, , .		0