Haoxuan He

List of Publications by Year
in descending order

25 papers	1,668 citations	331538 21 h-index	580701 25 g-index
25 all docs	25 docs citations	25 times ranked	1980 citing authors

#	Article	IF	Citations
1	High Piezo-photocatalytic Efficiency of CuS/ZnO Nanowires Using Both Solar and Mechanical Energy for Degrading Organic Dye. ACS Applied Materials & Interfaces, 2016, 8, 21302-21314.	4.0	268
2	A flexible self-powered T-ZnO/PVDF/fabric electronic-skin with multi-functions of tactile-perception, atmosphere-detection and self-clean. Nano Energy, 2017, 31, 37-48.	8.2	172
3	A Self-Powered Wearable Noninvasive Electronic-Skin for Perspiration Analysis Based on Piezo-Biosensing Unit Matrix of Enzyme/ZnO Nanoarrays. ACS Applied Materials & Interfaces, 2017, 9, 29526-29537.	4.0	119
4	A self-powered wearable sweat-evaporation-biosensing analyzer for building sports big data. Nano Energy, 2019, 59, 754-761.	8.2	116
5	Enhanced H₂ Production of TiO₂/ZnO Nanowires Co-Using Solar and Mechanical Energy through Piezo-Photocatalytic Effect. ACS Sustainable Chemistry and Engineering, 2018, 6, 10162-10172.	3.2	101
6	All-solid-state flexible self-charging power cell basing on piezo-electrolyte for harvesting/storing body-motion energy and powering wearable electronics. Nano Energy, 2017, 39, 590-600.	8.2	99
7	A Self-Powered Breath Analyzer Based on PANI/PVDF Piezo-Gas-Sensing Arrays for Potential Diagnostics Application. Nano-Micro Letters, 2018, 10, 76.	14.4	80
8	A self-powered flexibly-arranged gas monitoring system with evaporating rainwater as fuel for building atmosphere big data. Nano Energy, 2019, 60, 52-60.	8.2	68
9	Enhanced piezo/solar-photocatalytic activity of Ag/ZnO nanotetrapods arising from the coupling of surface plasmon resonance and piezophototronic effect. Journal of Physics and Chemistry of Solids, 2017, 102, 27-33.	1.9	64
10	Self-powering/self-cleaning electronic-skin basing on PVDF/TiO 2 nanofibers for actively detecting body motion and degrading organic pollutants. Applied Surface Science, 2017, 416, 424-431.	3.1	58
11	A self-powered electronic-skin for real-time perspiration analysis and application in motion state monitoring. Journal of Materials Chemistry C, 2018, 6, 9624-9630.	2.7	53
12	Self-powered, stretchable, fiber-based electronic-skin for actively detecting human motion and environmental atmosphere based on a triboelectrification/gas-sensing coupling effect. Journal of Materials Chemistry C, 2017, 5, 1231-1239.	2.7	51
13	A water-evaporation-induced self-charging hybrid power unit for application in the Internet of Things. Science Bulletin, 2019, 64, 1409-1417.	4.3	51
14	Exploiting Free-Standing p-CuO/n-TiO₂ Nanochannels as a Flexible Gas Sensor with High Sensitivity for H₂S at Room Temperature. ACS Sensors, 2021, 6, 3387-3397.	4.0	51
15	An artificial triboelectricity-brain-behavior closed loop for intelligent olfactory substitution. Nano Energy, 2019, 63, 103884.	8.2	47
16	Self-powered smelling electronic-skin based on the piezo-gas-sensor matrix for real-time monitoring the mining environment. Sensors and Actuators B: Chemical, 2018, 267, 392-402.	4.0	41
17	Self-powered wearable sensing-textiles for real-time detecting environmental atmosphere and body motion based on surface-triboelectric coupling effect. Nanotechnology, 2018, 29, 405504.	1.3	37
18	A self-powered gas sensor based on PDMS/Ppy triboelectric-gas-sensing arrays for the real-time monitoring of automotive exhaust gas at room temperature. Science China Materials, 2019, 62, 1433-1444.	3.5	37

#	Article	IF	Citations
19	High-efficiency sono-solar-induced degradation of organic dye by the piezophototronic/photocatalytic coupling effect of FeS/ZnO nanoarrays. Nanotechnology, 2016, 27, 375704.	1.3	33
20	A self-powered biosensing electronic-skin for real-time sweat Ca²⁺ detection and wireless data transmission. Smart Materials and Structures, 2019, 28, 085015.	1.8	29
21	Self-powered gustation electronic skin for mimicking taste buds based on piezoelectricâ€“enzymatic reaction coupling process. Nanotechnology, 2018, 29, 075501.	1.3	28
22	A self-powered brain-linked biosensing electronic-skin for actively tasting beverage and its potential application in artificial gustation. Nanoscale, 2018, 10, 19987-19994.	2.8	21
23	A self-powered temperature-sensitive electronic-skin based on tribotronic effect of PDMS/PANI nanostructures. Journal of Materials Science and Technology, 2019, 35, 2187-2193.	5.6	20
24	Self-powered vision electronic-skin basing on piezo-photodetecting Ppy/PVDF pixel-patterned matrix for mimicking vision. Nanotechnology, 2018, 29, 255501.	1.3	13
25	A self-powered electronic-skin for detecting CRP level in body fluid based on the piezoelectric-biosensing coupling effect of GaN nanowire. Smart Materials and Structures, 2019, 28, 105001.	1.8	11