sima umrao

List of Publications by Year in descending order

28 papers	1,425 citations	331259 21 h-index	500791 28 g-index
31 all docs	31 docs citations	31 times ranked	2476 citing authors

#	Article	IF	Citations
1	MXene artificial muscles based on ionically cross-linked Ti ₃ C ₂ T _x electrode for kinetic soft robotics. Science Robotics, 2019, 4, .	9.9	169
2	Microwave-Assisted Synthesis of Boron and Nitrogen co-doped Reduced Graphene Oxide for the Protection of Electromagnetic Radiation in Ku-Band. ACS Applied Materials & Interfaces, 2015, 7, 19831-19842.	4.0	145
3	A possible mechanism for the emergence of an additional band gap due to a Tiâ€“Oâ€“C bond in the TiO₂â€“graphene hybrid system for enhanced photodegradation of methylene blue under visible light. RSC Advances, 2014, 4, 59890-59901.	1.7	143
4	Large-Area Highly Conductive Transparent Two-Dimensional Ti₂CT_x Film. Journal of Physical Chemistry Letters, 2017, 8, 859-865.	2.1	118
5	Synthesis, Characterization, and Tribological Evaluation of TiO₂-Reinforced Boron and Nitrogen co-Doped Reduced Graphene Oxide Based Hybrid Nanomaterials as Efficient Antiwear Lubricant Additives. ACS Applied Materials & Interfaces, 2016, 8, 11698-11710.	4.0	104
6	Microwave bottom-up route for size-tunable and switchable photoluminescent graphene quantum dots using acetylacetone: New platform for enzyme-free detection of hydrogen peroxide. Carbon, 2015, 81, 514-524.	5.4	93
7	Facile, rapid and upscaled synthesis of green luminescent functional graphene quantum dots for bioimaging. RSC Advances, 2014, 4, 21101.	1.7	61
8	Graphene Oxide-Based Biosensor for Food Toxin Detection. Applied Biochemistry and Biotechnology, 2014, 174, 960-970.	1.4	60
9	In Situ Functionalized Fluorescent WS₂-QDs as Sensitive and Selective Probe for Fe³⁺ and a Detailed Study of Its Fluorescence Quenching. ACS Applied Nano Materials, 2019, 2, 566-576.	2.4	57
10	Self-aligned and hierarchically porous graphene-polyurethane foams for acoustic wave absorption. Carbon, 2019, 147, 510-518.	5.4	45
11	Sonochemical self-growth of functionalized titanium carbide nanorods on Ti3C2 nanosheets for high capacity anode for lithium-ion batteries. Composites Part B: Engineering, 2020, 181, 107583.	5.9	41
12	Nanostructured palladium-reduced graphene oxide platform for high sensitive, label free detection of a cancer biomarker. RSC Advances, 2013, 4, 2267-2273.	1.7	38
13	Integrated dielectric-electrode layer for triboelectric nanogenerator based on Cu nanowire-Mesh hybrid electrode. Nano Energy, 2019, 59, 120-128.	8.2	37
14	Influence of nanostructured SnS thin films for visible light photo detection. Optical Materials, 2021, 121, 111489.	1.7	36
15	Multi-layered graphene quantum dots derived photodegradation mechanism of methylene blue. RSC Advances, 2015, 5, 51790-51798.	1.7	35
16	A homogeneous atomic layer MoS_{2(1â^'x)}Se_{2x}alloy prepared by low-pressure chemical vapor deposition, and its properties. Nanoscale, 2017, 9, 594-603.	2.8	33
17	pH Dependent Optical Switching and Fluorescence Modulation of Molybdenum Sulfide Quantum Dots. Advanced Optical Materials, 2017, 5, 1601021.	3.6	32
18	Mutually Exclusive pâ€Type and nâ€Type Hybrid Electrode of MoS₂ and Graphene for Artificial Soft Touch Fingers. Advanced Functional Materials, 2019, 29, 1905454.	7.8	30

#	Article	IF	Citations
19	Graphene Mesh for Selfâ€Sensing Ionic Soft Actuator Inspired from Mechanoreceptors in Human Body. Advanced Science, 2019, 6, 1901711.	5.6	29
20	Eu:Y2O3 highly dispersed fluorescent PVA film as turn off luminescent probe for enzyme free detection of H2O2. Sensors and Actuators B: Chemical, 2017, 247, 170-178.	4.0	24
21	Orbital facilitated charge transfer originated phonon mode in Crâ€substituted PrFeO₃: A brief Raman study. Journal of Raman Spectroscopy, 2020, 51, 1210-1218.	1.2	22
22	Crumpled Quaternary Nanoarchitecture of Sulfur-Doped Nickel Cobalt Selenide Directly Grown on Carbon Cloth for Making Stronger Ionic Soft Actuators. ACS Applied Materials & Interfaces, 2019, 11, 40451-40460.	4.0	21
23	Anticarcinogenic activity of blue fluorescent hexagonal boron nitride quantum dots: as an effective enhancer for DNA cleavage activity of anticancer drug doxorubicin. Materials Today Bio, 2019, 1, 100001.	2.6	13
24	Highly sensitive and selective estimation of aspartame by chitosan nanoparticlesâ€“graphene nanocomposite tailored EQCM-MIP sensor. Polymer Bulletin, 2019, 76, 4431-4449.	1.7	13
25	A novel Raman spectroscopic approach to identify polymorphism in leflunomide: a combined experimental and theoretical study. Journal of Raman Spectroscopy, 2016, 47, 468-475.	1.2	9
26	Microwave-assisted boron and nitrogen co-doped reduced graphene oxide as a transparent conductive electrode. Applied Physics Letters, 2017, 111, .	1.5	9
27	Nanosheets Based Approach to Elevate the Proliferative and Differentiation Efficacy of Human Whartonâ€™s Jelly Mesenchymal Stem Cells. International Journal of Molecular Sciences, 2022, 23, 5816.	1.8	3
28	Catalytically Active Enzyme Mimetic Nanomaterials and Their Role in Biosensing. , 2018, , 285-300.		0