

# Kunal Mondal

## List of Publications by Year in descending order

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Version: 2024-02-01

63  
papers

2,349  
citations

236925

25  
h-index

214800

47  
g-index

67  
all docs

67  
docs citations

67  
times ranked

3157  
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent advances in the synthesis and application of photocatalytic metal-oxide core-shell nanoparticles for environmental remediation and their recycling process. RSC Advances, 2016, 6, 83589-83612.	3.6	171
2	Microfluidic Immuno-Biochip for Detection of Breast Cancer Biomarkers Using Hierarchical Composite of Porous Graphene and Titanium Dioxide Nanofibers. ACS Applied Materials & Interfaces, 2016, 8, 20570-20582.	8.0	157
3	Silicones for Stretchable and Durable Soft Devices: Beyond Sylgard-184. ACS Applied Materials & Interfaces, 2018, 10, 11261-11268.	8.0	149
4	Highly Sensitive Biofunctionalized Mesoporous Electrospun TiO <sub>2</sub> Nanofiber Based Interface for Biosensing. ACS Applied Materials & Interfaces, 2014, 6, 2516-2527.	8.0	136
5	Reusable electrospun mesoporous ZnO nanofiber mats for photocatalytic degradation of polycyclic aromatic hydrocarbon dyes in wastewater. Journal of Colloid and Interface Science, 2013, 394, 208-215.	9.4	131
6	Core-shell nanostructures: perspectives towards drug delivery applications. Journal of Materials Chemistry B, 2020, 8, 8992-9027.	5.8	127
7	Recent advances in electrospun metal-oxide nanofiber based interfaces for electrochemical biosensing. RSC Advances, 2016, 6, 94595-94616.	3.6	116
8	Anti-epidermal growth factor receptor conjugated mesoporous zinc oxide nanofibers for breast cancer diagnostics. Nanoscale, 2015, 7, 7234-7245.	5.6	107
9	Photocatalytic Degradation of Naphthalene by Electrospun Mesoporous Carbon-Doped Anatase TiO <sub>2</sub> Nanofiber Mats. Industrial & Engineering Chemistry Research, 2014, 53, 18900-18909.	3.7	73
10	Mechanochromic Stretchable Electronics. ACS Applied Materials & Interfaces, 2018, 10, 29918-29924.	8.0	72
11	Highly sensitive porous carbon and metal/carbon conducting nanofiber based enzymatic biosensors for triglyceride detection. Sensors and Actuators B: Chemical, 2017, 246, 202-214.	7.8	65
12	Quantum dot sensitized electrospun mesoporous titanium dioxide hollow nanofibers for photocatalytic applications. RSC Advances, 2016, 6, 48109-48119.	3.6	64
13	Hydrogen production technologies - Membrane based separation, storage and challenges. Journal of Environmental Management, 2022, 302, 113963.	7.8	64
14	Patterned Liquid Metal Contacts for Printed Carbon Nanotube Transistors. ACS Nano, 2018, 12, 5482-5488.	14.6	63
15	Recent Advances in the Synthesis of Metal Oxide Nanofibers and Their Environmental Remediation Applications. Inventions, 2017, 2, 9.	2.5	58
16	In situ integration of graphene foam-titanium nitride based bio-scaffolds and microfluidic structures for soil nutrient sensors. Lab on A Chip, 2017, 17, 274-285.	6.0	57
17	Mesoporous Few-Layer Graphene Platform for Affinity Biosensing Application. ACS Applied Materials & Interfaces, 2016, 8, 7646-7656.	8.0	50
18	Thermal Barrier Coatings Overview: Design, Manufacturing, and Applications in High-Temperature Industries. Industrial & Engineering Chemistry Research, 2021, 60, 6061-6077.	3.7	47

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19	Superhydrophobic polymethylsilsesquioxane pinned one dimensional ZnO nanostructures for water remediation through photo-catalysis. RSC Advances, 2015, 5, 45897-45907.	3.6	40
20	Processing copper-carbon nanotube composite powders by high energy milling. Materials Characterization, 2013, 84, 58-66.	4.4	38
21	Electrospun functional micro/nanochannels embedded in porous carbon electrodes for microfluidic biosensing. Sensors and Actuators B: Chemical, 2016, 229, 82-91.	7.8	37
22	A surface functionalized nanoporous titania integrated microfluidic biochip. Nanoscale, 2014, 6, 13958-13969.	5.6	31
23	Si-based MEMS resonant sensor: A review from microfabrication perspective. Microelectronics Journal, 2021, 118, 105210.	2.0	28
24	Metal-Oxide Decorated Multilayered Three-Dimensional (3D) Porous Carbon Thin Films for Supercapacitor Electrodes. Industrial & Engineering Chemistry Research, 2016, 55, 12569-12581.	3.7	27
25	Hydration Phenomena of Functionalized Carbon Nanotubes (CNT)/Cement Composites. Fibers, 2017, 5, 39.	4.0	26
26	Self-organized macroporous thin carbon films for supported metal catalysis. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 427, 83-94.	4.7	25
27	Palladium-Functionalized Graphene for Hydrogen Sensing Performance: Theoretical Studies. Energies, 2021, 14, 5738.	3.1	24
28	Preparation of Smart Materials by Additive Manufacturing Technologies: A Review. Materials, 2021, 14, 6442.	2.9	23
29	Neurodegenerative disorders management: state-of-art and prospects of nano-biotechnology. Critical Reviews in Biotechnology, 2022, 42, 1180-1212.	9.0	22
30	Present status of the functional advanced micro-, nano-printings a mini review. Materials Today Chemistry, 2020, 17, 100328.	3.5	21
31	Nano-functionalized paper-based IoT enabled devices for point-of-care testing: a review. Biomedical Microdevices, 2022, 24, 2.	2.8	20
32	TiO <sub>2</sub> -nanoparticles-impregnated photocatalytic macroporous carbon films by spin coating. Nanomaterials and Energy, 2013, 2, 121-133.	0.2	19
33	One-step sol-gel synthesis of hierarchically porous, flow-through carbon/silica monoliths. RSC Advances, 2016, 6, 12298-12310.	3.6	18
34	Versatile Graphitized Carbon Nanofibers in Energy Applications. ACS Sustainable Chemistry and Engineering, 2022, 10, 1334-1360.	6.7	18
35	Multi-Ruthenocene Assemblies on an Organostannoxane Platform. Supramolecular Signatures and Conversion to (Ru-Sn)O <sub>2</sub> . Crystal Growth and Design, 2014, 14, 861-870.	3.0	17
36	Facile reduction of para-nitrophenols: catalytic efficiency of silver nanoferns in batch and continuous flow reactors. RSC Advances, 2016, 6, 113981-113990.	3.6	17

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37	Carbon Nanostructures for Energy and Sensing Applications. Journal of Nanotechnology, 2019, 2019, 1-3.	3.4	17
38	Effect of electrical stress on Au/Pb (Zr <sub>0.52</sub> Ti <sub>0.48</sub> ) O <sub>3</sub> /TiO <sub>x</sub> Ny/Si gate stack for reliability analysis of ferroelectric field effect transistors. Applied Physics Letters, 2014, 105, 152907.	3.3	16
39	Low voltage non-gassing electro-osmotic pump with zeta potential tuned aluminosilicate frits and organic dye electrodes. RSC Advances, 2014, 4, 28814-28821.	3.6	16
40	Recent advances in the thermal barrier coatings for extreme environments. Materials Science for Energy Technologies, 2021, 4, 208-210.	1.8	16
41	Recent Advances in Soft E-Textiles. Inventions, 2018, 3, 23.	2.5	14
42	A Review on Gel Polymer Electrolytes for Dye-Sensitized Solar Cells. Micromachines, 2022, 13, 680.	2.9	14
43	A Review on Advanced Manufacturing for Hydrogen Storage Applications. Energies, 2021, 14, 8513.	3.1	13
44	Surface Feature Recognition and Grasped Object Slip Prevention With a Liquid Metal Tactile Sensor for a Prosthetic Hand. , 2020, , .		9
45	<i>110th Anniversary:</i> Particle Size Effect on Enhanced Graphitization and Electrical Conductivity of Suspended Gold/Carbon Composite Nanofibers. Industrial & Engineering Chemistry Research, 2020, 59, 1944-1952.	3.7	8
46	Finetuning hierarchical energy material microstructure via high temperature material synthesis route. Materials Today Chemistry, 2020, 16, 100269.	3.5	8
47	Advanced Manufacturing of Printed Melt Wire Chips for Cheap, Compact Passive In-Pile Temperature Sensors. Jom, 2020, 72, 4196-4201.	1.9	7
48	Direct measurement of rate-dependent mode I and mode II traction-separation laws for cohesive zone modeling of laminated glass. Composite Structures, 2022, 279, 114759.	5.8	7
49	ZnO Nanoparticle Fortified Highly Permeable Carbon/Silica Monoliths as a Flow-Through Media. Langmuir, 2017, 33, 7692-7700.	3.5	6
50	Application of a Laser Cutter to Pattern Wrinkles on Polymer Films. ACS Applied Polymer Materials, 2020, 2, 1848-1855.	4.4	5
51	Light-Induced Buckles Localized by Polymeric Inks Printed on Bilayer Films. Small, 2018, 14, e1704460.	10.0	4
52	Role of Photo-catalysis in Water Remediation. Energy, Environment, and Sustainability, 2018, , 117-134.	1.0	4
53	Recent Advances in Carbon-Semiconductor Nanocomposites for Water Remediation. Energy, Environment, and Sustainability, 2018, , 45-74.	1.0	4
54	One-step manufacturing process for neodymium-iron (magnet-grade) master alloy. Materials Science for Energy Technologies, 2021, 4, 249-255.	1.8	4

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55	Fabrication of High Surface Area Microporous ZnO from ZnO/Carbon Sacrificial Composite Monolith Template. <i>Micromachines</i> , 2022, 13, 335.	2.9	4
56	Printing noble metal alloy films with compositional gradient. <i>Applied Materials Today</i> , 2022, 27, 101405.	4.3	4
57	Metal-semiconductor core-shell nanostructured photocatalysts for environmental applications and their recycling process. , 2017, , 133-157.		3
58	Study of mechanical properties, microstructures and corrosion behavior of al 7075 t651 alloy with varying strain rate. <i>IOP Conference Series: Materials Science and Engineering</i> , 2015, 75, 012031.	0.6	2
59	Microfluidic detection of soil nitrate ions using novel electrochemical foam electrode. , 2017, , .		2
60	Biomedical application of ZnO nanoscale materials. , 2022, , 407-435.		2
61	Introduction to metal oxide-based biosensing. , 2022, , 169-182.		1
62	A Molten Salt Electrochemical Process for the Preparation of Cost-Effective p-Block (Coating) Materials. <i>Crystals</i> , 2022, 12, 385.	2.2	1
63	Metal oxide nanofibers and their applications for biosensing. , 2022, , 113-137.		0