Gautam Gupta

List of Publications by Year in descending order

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331642 330122 5,030 39 21 h-index citations g-index papers

39 39 39 9565 docs citations times ranked citing authors all docs

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#	Article	IF	CITATIONS
1	High-efficiency solution-processed perovskite solar cells with millimeter-scale grains. Science, 2015, 347, 522-525.	12.6	2,978
2	Light-activated photocurrent degradation and self-healing in perovskite solar cells. Nature Communications, 2016, 7, 11574.	12.8	584
3	Polaron Stabilization by Cooperative Lattice Distortion and Cation Rotations in Hybrid Perovskite Materials. Nano Letters, 2016, 16, 3809-3816.	9.1	245
4	Efficient hydrogen evolution in transition metal dichalcogenides via a simple one-step hydrazine reaction. Nature Communications, 2016, 7, 11857.	12.8	179
5	Effect of Precursor Solution Aging on the Crystallinity and Photovoltaic Performance of Perovskite Solar Cells. Advanced Energy Materials, 2017, 7, 1602159.	19.5	130
6	High-Performance Flexible Supercapacitors obtained via Recycled Jute: Bio-Waste to Energy Storage Approach. Scientific Reports, 2017, 7, 1174.	3.3	122
7	Highly stable hollow bifunctional cobalt sulfides for flexible supercapacitors and hydrogen evolution. Journal of Materials Chemistry A, 2016, 4, 9014-9018.	10.3	85
8	Optimizing Composition and Morphology for Large-Grain Perovskite Solar Cells via Chemical Control. Chemistry of Materials, 2015, 27, 5570-5576.	6.7	82
9	Nitrogen-Doped Graphene Oxide Electrocatalysts for the Oxygen Reduction Reaction. ACS Applied Nano Materials, 2019, 2, 1675-1682.	5.0	69
10	Reduced Graphene Oxide Thin Films as Ultrabarriers for Organic Electronics. Advanced Energy Materials, 2014, 4, 1300986.	19.5	59
11	MoS2 Decorated Carbon Nanofibers as Efficient and Durable Electrocatalyst for Hydrogen Evolution Reaction. Journal of Carbon Research, 2017, 3, 33.	2.7	45
12	Critical role of intercalated water for electrocatalytically active nitrogen-doped graphitic systems. Science Advances, 2016, 2, e1501178.	10.3	36
13	Effects of powder characteristics and processing conditions on the corrosion performance of 17-4 PH stainless steel fabricated by laser-powder bed fusion. Progress in Additive Manufacturing, 2018, 3, 39-49.	4.8	35
14	Flexible memory devices with tunable electrical bistability via controlled energetics in donor–donor and donor–acceptor conjugated polymers. Journal of Materials Chemistry C, 2014, 2, 4374-4378.	5.5	34
15	Direct Imaging of Charge Transport in Progressively Reduced Graphene Oxide Using Electrostatic Force Microscopy. ACS Nano, 2015, 9, 2981-2988.	14.6	29
16	High-energy density nanofiber-based solid-state supercapacitors. Journal of Materials Chemistry A, 2016, 4, 160-166.	10.3	29
17	Effects of Nb and Mo on the microstructure and properties of 420 stainless steel processed by laser-powder bed fusion. Additive Manufacturing, 2019, 28, 682-691.	3.0	29
18	CVD for the Facile Synthesis of Hybrid Nanobiomaterials Integrating Functional Supramolecular Assemblies. Langmuir, 2009, 25, 13322-13327.	3.5	28

#	Article	IF	Citations
19	Highly Efficient and Durable Electrocatalyst Based on Nanowires of Cobalt Sulfide for Overall Water Splitting. ChemNanoMat, 2018, 4, 1240-1246.	2.8	28
20	Charge transfer in crystalline germanium/monolayer MoS ₂ heterostructures prepared by chemical vapor deposition. Nanoscale, 2016, 8, 18675-18681.	5.6	25
21	Active bialkali photocathodes on free-standing graphene substrates. Npj 2D Materials and Applications, 2017, 1, .	7.9	24
22	Effects of layer thickness in laser-powder bed fusion of 420 stainless steel. Rapid Prototyping Journal, 2020, 26, 1197-1208.	3.2	23
23	Single layer graphene protective gas barrier for copper photocathodes. Applied Physics Letters, 2017, 110, .	3.3	20
24	Graphite Intercalation Compounds Derived by Green Chemistry as Oxygen Reduction Reaction Catalysts. ACS Applied Materials & Samp; Interfaces, 2020, 12, 42678-42685.	8.0	18
25	Stable and Fluid Multilayer Phospholipid–Silica Thin Films: Mimicking Active Multi-lamellar Biological Assemblies. ACS Nano, 2013, 7, 5300-5307.	14.6	13
26	Valenceâ€band electronic structure evolution of graphene oxide upon thermal annealing for optoelectronics. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 2380-2386.	1.8	13
27	Investigation of the photocorrosion of n-GaP photoanodes in acid with in situ UV-Vis spectroscopy. Journal of Materials Chemistry A, 2019, 7, 25377-25388.	10.3	13
28	Fabrication of flexible perovskite solar cells via rapid thermal annealing. Materials Letters, 2020, 276, 128215.	2.6	12
29	Adapting L-PBF process for fine powders: a case study in 420 stainless steel. Materials and Manufacturing Processes, 2022, 37, 1320-1331.	4.7	11
30	Robust hybrid thin films that incorporate lamellar phospholipid bilayer assemblies and transmembrane proteins. Biointerphases, 2006, 1, 6-10.	1.6	8
31	Effect of Stacking Interactions on the Translation of Structurally Related Bis(thiosemicarbazonato)nickel(II) HER Catalysts to Modified Electrode Surfaces. Inorganic Chemistry, 2019, 58, 12025-12039.	4.0	6
32	Long-term stabilization of DNA at room temperature using a one-step microwave assisted process. Emergent Materials, 2022, 5, 307-314.	5.7	5
33	Bio-CaRGOS: capture and release gels for optimized storage of hemoglobin. RSC Advances, 2021, 11, 13034-13039.	3.6	4
34	Stabilization and solidification of brine water containing selenium, chromium, copper, and mercury utilizing a microwave enabled sol–gel process. Environmental Science: Water Research and Technology, 2021, 7, 904-912.	2.4	3
35	Carbon Nanomaterials in Silica Aerogel Matrices. Materials Research Society Symposia Proceedings, 2010, 1258, 1.	0.1	2
36	Long term storage of miRNA at room and elevated temperatures in a silica sol–gel matrix. RSC Advances, 2021, 11, 31505-31510.	3.6	2

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#	Article	IF	CITATIONS
37	Stable and Responsive Fluorescent Carbon Nanotube Silica Gels. Materials Research Society Symposia Proceedings, 2010, 1258, 1.	0.1	1
38	Handbook of Nanomaterials Properties: Siliceous Nanobiomaterials., 2014,, 963-993.		1
39	Optoelectronic properties and photo-physics of large grain hybrid perovskites. , 2016, , .		O