Ashim Gurung

List of Publications by Year
in descending order

42 papers	2,623 citations	201385 27 h-index	288905 40 g-index
42 all docs	42 docs citations	42 times ranked	3593 citing authors

#	Article	IF	Citations
1	Highly efficient electron transport based on double-layered PC61BM in inverted perovskite solar cells. Organic Electronics, 2022, 100, 106391.	1.4	4
2	Mitigating Interfacial Mismatch between Lithium Metal and Garnet-Type Solid Electrolyte by Depositing Metal Nitride Lithiophilic Interlayer. ACS Applied Energy Materials, 2022, 5, 648-657.	2.5	16
3	Interface Engineering of Pbâ€“Sn Lowâ€Bandgap Perovskite Solar Cells for Improved Efficiency and Stability. Solar Rrl, 2022, 6, .	3.1	8
4	Kinetic Monte Carlo Simulation of Perovskite Solar Cells to Probe Film Coverage and Thickness. Advanced Energy and Sustainability Research, 2021, 2, 2000068.	2.8	3
5	Mitigating Open-Circuit Voltage Loss in Pbâ€“Sn Low-Bandgap Perovskite Solar Cells via Additive Engineering. ACS Applied Energy Materials, 2021, 4, 1731-1742.	2.5	43
6	Grain Boundary Defect Passivation in Quadruple Cation Wideâ€Bandgap Perovskite Solar Cells. Solar Rrl, 2021, 5, 2000740.	3.1	19
7	Enhancing efficiency and stability of inverted structure perovskite solar cells with fullerene C60 doped PC61BM electron transport layer. Carbon, 2021, 180, 226-236.	5.4	19
8	MOF-derived hierarchical carbon network as an extremely-high-performance supercapacitor electrode. Electrochimica Acta, 2021, 394, 139058.	2.6	67
9	Tailored PEDOT:PSS hole transport layer for higher performance in perovskite solar cells: Enhancement of electrical and optical properties with improved morphology. Journal of Energy Chemistry, 2020, 44, 41-50.	7.1	105
10	A copper-clad lithiophilic current collector for dendrite-free lithium metal anodes. Journal of Materials Chemistry A, 2020, 8, 1911-1919.	5.2	49
11	Improved Performance of Carbon Electrode Perovskite Solar Cells Using Urea Treatment in Twoâ€Step Processing. ChemNanoMat, 2020, 6, 806-815.	1.5	9
12	Nanoscale control of grain boundary potential barrier, dopant density and filled trap state density for higher efficiency perovskite solar cells. InformaÄnÃ-MateriÃ¡ly, 2020, 2, 409-423.	8.5	25
13	Synergistic engineering of hole transport materials in perovskite solar cells. InformaÄnÃ-MateriÃ¡ly, 2020, 2, 928-941.	8.5	29
14	Fluorinated hybrid solid-electrolyte-interphase for dendrite-free lithium deposition. Nature Communications, 2020, 11, 93.	5.8	312
15	Tailoring the Grain Boundaries of Wideâ€Bandgap Perovskite Solar Cells by Molecular Engineering. Solar Rrl, 2020, 4, 2000384.	3.1	15
16	Grain Boundary Defect Passivation of Triple Cation Mixed Halide Perovskite with Hydrazine-Based Aromatic Iodide for Efficiency Improvement. ACS Applied Materials & Interfaces, 2020, 12, 41312-41322.	4.0	45
17	Metallic 1T Phase Tungsten Disulfide Microflowers for Trace Level Detection of Hg²⁺ Ions. Advanced Sustainable Systems, 2020, 4, 2000068.	2.7	12
18	Rearâ€Illuminated Perovskite Photorechargeable Lithium Battery. Advanced Functional Materials, 2020, 30, 2001865.	7.8	31

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19	Thermal Stability and Performance Enhancement of Perovskite Solar Cells Through Oxalic Acid-Induced Perovskite Formation. ACS Applied Energy Materials, 2020, 3, 2432-2439.	2.5	55
20	Phenylhydrazinium Iodide for Surface Passivation and Defects Suppression in Perovskite Solar Cells. Advanced Functional Materials, 2020, 30, 2000778.	7.8	103
21	Transparent MoS₂/PEDOT Composite Counter Electrodes for Bifacial Dye-Sensitized Solar Cells. ACS Omega, 2020, 5, 8687-8696.	1.6	60
22	Ultrathin Bilayer of Graphite/SiO₂ as Solid Interface for Reviving Li Metal Anode. Advanced Energy Materials, 2019, 9, 1901486.	10.2	128
23	Graphene Oxideâ€"Silver Nanowire Nanocomposites for Enhanced Sensing of Hg²⁺. ACS Applied Nano Materials, 2019, 2, 4842-4851.	2.4	62
24	High-performance carbon electrode-based CsPbI2Br inorganic perovskite solar cell based on poly(3-hexylthiophene)-carbon nanotubes composite hole-transporting layer. Journal of Colloid and Interface Science, 2019, 555, 180-186.	5.0	58
25	A review on strategies addressing interface incompatibilities in inorganic all-solid-state lithium batteries. Sustainable Energy and Fuels, 2019, 3, 3279-3309.	2.5	83
26	Improving photovoltaic performance of carbon-based CsPbBr3 perovskite solar cells by interfacial engineering using P3HT interlayer. Journal of Power Sources, 2019, 432, 48-54.	4.0	94
27	Tuning Hole Transport Layer Using Urea for Highâ€Performance Perovskite Solar Cells. Advanced Functional Materials, 2019, 29, 1806740.	7.8	101
28	Flower-shaped lithium nitride as a protective layer via facile plasma activation for stable lithium metal anodes. Energy Storage Materials, 2019, 18, 389-396.	9.5	149
29	Advanced Coupling of Energy Storage and Photovoltaics. , 2019, , 317-350.		0
30	Electrochemical Phosphate Sensors Using Silver Nanowires Treated Screen Printed Electrodes. IEEE Sensors Journal, 2018, 18, 3480-3485.	2.4	43
31	Solar Charging Batteries: Advances, Challenges, and Opportunities. Joule, 2018, 2, 1217-1230.	11.7	229
32	Self-recovery in Li-metal hybrid lithium-ion batteries <i>via</i> WO₃ reduction. Nanoscale, 2018, 10, 15956-15966.	2.8	87
33	Highly Efficient Perovskite Solar Cell Photocharging of Lithium Ion Battery Using DCâ€"DC Booster. Advanced Energy Materials, 2017, 7, 1602105.	10.2	128
34	Kirkendall Growth of Hollow Mn₃O₄ Nanoparticles upon Galvanic Reaction of MnO with Cu²⁺ and Evaluation as Anode for Lithium-Ion Batteries. Journal of Physical Chemistry C, 2017, 121, 11089-11099.	1.5	34
35	Binder Free Hierarchical Mesoporous Carbon Foam for High Performance Lithium Ion Battery. Scientific Reports, 2017, 7, 1440.	1.6	56
36	Higher efficiency perovskite solar cells using additives of LiI, LiTFSI and BMImI in the PbI₂ precursor. Sustainable Energy and Fuels, 2017, 1, 2162-2171.	2.5	53

#	Article	IF	Citations
37	Activation of Passive Nanofillers in Composite Polymer Electrolyte for Higher Performance Lithiumâ€Ion Batteries. Advanced Sustainable Systems, 2017, 1, 1700043.	2.7	26
38	Tin Selenide â€“ Multi-Walled Carbon Nanotubes Hybrid Anodes for High Performance Lithium-Ion Batteries. Electrochimica Acta, 2016, 211, 720-725.	2.6	105
39	Urea treated WO<inf>3</inf> and SnO<inf>2</inf> as cost effective and efficient counter electrodes of dye sensitized solar cells. , 2016, , .		2
40	A Simple Cost-Effective Approach to Enhance Performance of Bifacial Dye-Sensitized Solar Cells. IEEE Journal of Photovoltaics, 2016, 6, 912-917.	1.5	16
41	A simple acrylic acid functionalized zinc porphyrin for cost-effective dye-sensitized solar cells. Chemical Communications, 2012, 48, 7619.	2.2	34
42	8-Hydroxylquinoline as a strong alternative anchoring group for porphyrin-sensitized solar cells. Chemical Communications, 2012, 48, 5910.	2.2	106