

# Neha Arora

## List of Publications by Year in descending order

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Version: 2024-02-01

37  
papers

3,931  
citations

236612

25  
h-index

344852

36  
g-index

37  
all docs

37  
docs citations

37  
times ranked

6384  
citing authors

#	ARTICLE	IF	CITATIONS
1	Perovskite solar cells with CuSCN hole extraction layers yield stabilized efficiencies greater than 20%. <i>Science</i> , 2017, 358, 768-771.	6.0	1,285
2	Ultrahydrophobic 3D/2D fluoroarene bilayer-based water-resistant perovskite solar cells with efficiencies exceeding 22%. <i>Science Advances</i> , 2019, 5, eaaw2543.	4.7	524
3	Origin of unusual bandgap shift and dual emission in organic-inorganic lead halide perovskites. <i>Science Advances</i> , 2016, 2, e1601156.	4.7	307
4	New Strategies for Defect Passivation in High-Efficiency Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2020, 10, 1903090.	10.2	237
5	Impact of Monovalent Cation Halide Additives on the Structural and Optoelectronic Properties of $\text{CH}_3\text{NH}_3\text{PbI}_3$ Perovskite. <i>Advanced Energy Materials</i> , 2016, 6, 1502472.	10.2	196
6	Investigation Regarding the Role of Chloride in Organic-Inorganic Halide Perovskites Obtained from Chloride Containing Precursors. <i>Nano Letters</i> , 2014, 14, 6991-6996.	4.5	185
7	The Role of Rubidium in Multiple-Cation-Based High-Efficiency Perovskite Solar Cells. <i>Advanced Materials</i> , 2017, 29, 1701077.	11.1	120
8	High Open-Circuit Voltage: Fabrication of Formamidinium Lead Bromide Perovskite Solar Cells Using Fluorene-Dithiophene Derivatives as Hole-Transporting Materials. <i>ACS Energy Letters</i> , 2016, 1, 107-112.	8.8	105
9	Intrinsic and Extrinsic Stability of Formamidinium Lead Bromide Perovskite Solar Cells Yielding High Photovoltage. <i>Nano Letters</i> , 2016, 16, 7155-7162.	4.5	104
10	Low-Cost and Highly Efficient Carbon-Based Perovskite Solar Cells Exhibiting Excellent Long-Term Operational and UV Stability. <i>Small</i> , 2019, 15, e1904746.	5.2	83
11	Understanding the Impact of Bromide on the Photovoltaic Performance of $\text{CH}_3\text{NH}_3\text{PbI}_3$ Solar Cells. <i>Advanced Materials</i> , 2015, 27, 7221-7228.	11.1	73
12	Photovoltaic and Amplified Spontaneous Emission Studies of High-Quality Formamidinium Lead Bromide Perovskite Films. <i>Advanced Functional Materials</i> , 2016, 26, 2846-2854.	7.8	66
13	Influence of the Nature of A Cation on Dynamics of Charge Transfer Processes in Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2018, 28, 1706073.	7.8	58
14	Reduced Graphene Oxide as a Stabilizing Agent in Perovskite Solar Cells. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800416.	1.9	45
15	Unraveling the Impact of Rubidium Incorporation on the Transport-Recombination Mechanisms in Highly Efficient Perovskite Solar Cells by Small-Perturbation Techniques. <i>Journal of Physical Chemistry C</i> , 2017, 121, 24903-24908.	1.5	42
16	Growth Engineering of $\text{CH}_3\text{NH}_3\text{PbI}_3$ Structures for High-Efficiency Solar Cells. <i>Advanced Energy Materials</i> , 2016, 6, 1501358.	10.2	36
17	Minimizing the Trade-Off between Photocurrent and Photovoltage in Triple-Cation Mixed-Halide Perovskite Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 10188-10195.	2.1	36
18	From $(\text{Au}_5\text{Sn} + \text{AuSn})$ physical mixture to phase pure AuSn and $\text{Au}_5\text{Sn}$ intermetallic nanocrystals with tailored morphology: digestive ripening assisted approach. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 11381-11389.	1.3	35

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19	High photovoltage in perovskite solar cells: New physical insights from the ultrafast transient absorption spectroscopy. <i>Chemical Physics Letters</i> , 2017, 683, 211-215.	1.2	31
20	Donor-Acceptor-Type S <sub>2</sub> N <sub>2</sub> -Heteroacene-Based Hole-Transporting Materials for Efficient Perovskite Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 44423-44428.	4.0	31
21	Monodispersity and stability: case of ultrafine aluminium nanoparticles (<math>\leq 5\text{ nm}</math>) synthesized by the solvated metal atom dispersion approach. <i>Journal of Materials Chemistry</i> , 2012, 22, 9058.	6.7	30
22	Asymmetric Cathodoluminescence Emission in CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> Perovskite Single Crystals. <i>ACS Photonics</i> , 2016, 3, 947-952.	3.2	30
23	Kinetics of Ion-Exchange Reactions in Hybrid Organic-Inorganic Perovskite Thin Films Studied by In Situ Real-Time X-ray Scattering. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 6750-6754.	2.1	28
24	Function Follows Form: Correlation between the Growth and Local Emission of Perovskite Structures and the Performance of Solar Cells. <i>Advanced Functional Materials</i> , 2017, 27, 1701433.	7.8	26
25	Cyclopentadithiophene-Based Hole-Transporting Material for Highly Stable Perovskite Solar Cells with Stabilized Efficiencies Approaching 21%. <i>ACS Applied Energy Materials</i> , 2020, 3, 7456-7463.	2.5	26
26	Carbonization of solvent and capping agent based enhancement in the stabilization of cobalt nanoparticles and their magnetic study. <i>Journal of Materials Chemistry</i> , 2012, 22, 20671.	6.7	25
27	Insights about the Absence of Rb Cation from the 3D Perovskite Lattice: Effect on the Structural, Morphological, and Photophysical Properties and Photovoltaic Performance. <i>Small</i> , 2018, 14, e1802033.	5.2	24
28	Perovskite Solar Cells Yielding Reproducible Photovoltage of 1.20 V. <i>Research</i> , 2019, 2019, 8474698.	2.8	22
29	Role of spectator ions in influencing the properties of dopant-free ZnO nanocrystals. <i>New Journal of Chemistry</i> , 2014, 38, 4783-4790.	1.4	21
30	Electrochemical Characterization of CuSCN Hole-Extracting Thin Films for Perovskite Photovoltaics. <i>ACS Applied Energy Materials</i> , 2019, 2, 4264-4273.	2.5	20
31	Halide Versus Nonhalide Salts: The Effects of Guanidinium Salts on the Structural, Morphological, and Photovoltaic Performances of Perovskite Solar Cells. <i>Solar Rrl</i> , 2020, 4, 1900234.	3.1	19
32	Perovskite Solar Cells Yielding Reproducible Photovoltage of 1.20 V. <i>Research</i> , 2019, 2019, 1-9.	2.8	15
33	Quantifying Stabilized Phase Purity in Formamidinium-Based Multiple-Cation Hybrid Perovskites. <i>Chemistry of Materials</i> , 2021, 33, 2769-2776.	3.2	13
34	Kinetics and energetics of metal halide perovskite conversion reactions at the nanoscale. <i>Communications Materials</i> , 2022, 3, .	2.9	12
35	Digestive-Ripening-Facilitated Nanoengineering of Diverse Bimetallic Nanostructures. <i>Langmuir</i> , 2019, 35, 6493-6505.	1.6	11
36	High Open Circuit Voltage for Perovskite Solar Cells with S <sub>2</sub> N <sub>2</sub> -Heteropentacene-Based Hole Conductors. <i>European Journal of Inorganic Chemistry</i> , 2018, 2018, 4573-4578.	1.0	10

#	ARTICLE	IF	CITATIONS
37	Extraordinary Stability of Perovskite Solar Cells Yielding Photovoltage above 1.5V. , 0, , .		0