

Rajiv Giridharagopal

List of Publications by Year in descending order

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28
papers

1,266
citations

430874

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all docs

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docs citations

29
times ranked

2017
citing authors

#	ARTICLE	IF	CITATIONS
1	Characterizing Morphology in Bulk Heterojunction Organic Photovoltaic Systems. Journal of Physical Chemistry Letters, 2010, 1, 1160-1169.	4.6	127
2	Anion-Dependent Doping and Charge Transport in Organic Electrochemical Transistors. Chemistry of Materials, 2018, 30, 5380-5389.	6.7	125
3	Ag Incorporation with Controlled Grain Growth Enables 12.5% Efficient Kesterite Solar Cell with Open Circuit Voltage Reached 64.2% Shockley-Queisser Limit. Advanced Functional Materials, 2021, 31, 2101927.	14.9	110
4	Interplay of Mobile Ions and Injected Carriers Creates Recombination Centers in Metal Halide Perovskites under Bias. ACS Energy Letters, 2018, 3, 1279-1286.	17.4	106
5	Sn ⁴⁺ precursor enables 12.4% efficient kesterite solar cell from DMSO solution with open circuit voltage deficit below 0.30 V. Science China Materials, 2021, 64, 52-60.	6.3	85
6	Submicrosecond Time Resolution Atomic Force Microscopy for Probing Nanoscale Dynamics. Nano Letters, 2012, 12, 893-898.	9.1	82
7	Controlling Vertical Morphology within the Active Layer of Organic Photovoltaics Using Poly(3-hexylthiophene) Nanowires and Phenyl-C61-butyric Acid Methyl Ester. ACS Nano, 2011, 5, 3132-3140.	14.6	61
8	Direct Observation and Quantitative Analysis of Mobile Frenkel Defects in Metal Halide Perovskites Using Scanning Kelvin Probe Microscopy. Journal of Physical Chemistry C, 2018, 122, 12633-12639.	3.1	58
9	Highly efficient copper-rich chalcopyrite solar cells from DMF molecular solution. Nano Energy, 2020, 69, 104438.	16.0	57
10	Perovskite-Polymer Blends Influencing Microstructures, Nonradiative Recombination Pathways, and Photovoltaic Performance of Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 42542-42551.	8.0	50
11	Orientation of Ferroelectric Domains and Disappearance upon Heating Methylammonium Lead Triiodide Perovskite from Tetragonal to Cubic Phase. ACS Applied Energy Materials, 2018, 1, 1534-1539.	5.1	49
12	Quantitative sub-surface and non-contact imaging using scanning microwave microscopy. Nanotechnology, 2015, 26, 135701.	2.6	47
13	Functional Scanning Probe Imaging of Nanostructured Solar Energy Materials. Accounts of Chemical Research, 2016, 49, 1769-1776.	15.6	43
14	Substrate-Dependent Properties of Polydiacetylene Nanowires on Graphite and MoS ₂ . ACS Nano, 2008, 2, 1571-1580.	14.6	42
15	Fast time-resolved electrostatic force microscopy: Achieving sub-cycle time resolution. Review of Scientific Instruments, 2016, 87, 053702.	1.3	42
16	Time-Resolved Electrical Scanning Probe Microscopy of Layered Perovskites Reveals Spatial Variations in Photoinduced Ionic and Electronic Carrier Motion. ACS Nano, 2019, 13, 2812-2821.	14.6	38
17	STM-Induced Desorption of Polydiacetylene Nanowires and Reordering via Molecular Cascades. Journal of Physical Chemistry C, 2007, 111, 6161-6166.	3.1	25
18	Scanning Kelvin Probe Microscopy Reveals That Ion Motion Varies with Dimensionality in 2D Halide Perovskites. ACS Energy Letters, 2021, 6, 100-108.	17.4	23

#	ARTICLE	IF	CITATIONS
19	Imaging Graphene Moiré Superlattices via Scanning Kelvin Probe Microscopy. Nano Letters, 2021, 21, 3280-3286.	9.1	17
20	Nanowire Architectures Improve Ion Uptake Kinetics in Conjugated Polymer Electrochemical Transistors. ACS Applied Materials & Interfaces, 2021, 13, 34616-34624.	8.0	16
21	Noncontact Imaging of Ion Dynamics in Polymer Electrolytes with Time-Resolved Electrostatic Force Microscopy. ACS Nano, 2019, 13, 536-543.	14.6	14
22	Bismuth Doping Alters Structural Phase Transitions in Methylammonium Lead Tribromide Single Crystals. Journal of Physical Chemistry Letters, 2021, 12, 2749-2755.	4.6	14
23	Identifying Nanoscale Structure-Function Relationships Using Multimodal Atomic Force Microscopy, Dimensionality Reduction, and Regression Techniques. Journal of Physical Chemistry Letters, 2018, 9, 3307-3314.	4.6	13
24	Inverse gold photonic crystals and conjugated polymer coated opals for functional materials. Physica B: Condensed Matter, 2003, 338, 165-170.	2.7	6
25	Interfacial charge transfer in nanoscale polymer transistors. Nano Research, 2008, 1, 341-350.	10.4	5
26	Extraction of Instantaneous Frequencies and Amplitudes in Nonstationary Time-Series Data. IEEE Access, 2021, 9, 83453-83466.	4.2	5
27	Cantilever Ringdown Dissipation Imaging for the Study of Loss Processes in Polymer/Fullerene Solar Cells. Journal of Physical Chemistry C, 2016, 120, 12369-12376.	3.1	4
28	Advances in Multimodal Scanning Probe Microscopy at the Nanoscale. , 0, , .		0