

Subhrangsu Mukherjee

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Systematically Controlling Acceptor Fluorination Optimizes Hierarchical Morphology, Vertical Phase Separation, and Efficiency in Non-Fullerene Organic Solar Cells. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	46
2	Non-fullerene acceptors with direct and indirect hexa-fluorination afford >17% efficiency in polymer solar cells. <i>Energy and Environmental Science</i> , 2022, 15, 645-659.	15.6	65
3	Systematic Merging of Nonfullerene Acceptor Ā-Extension and Tetrafluorination Strategies Affords Polymer Solar Cells with >16% Efficiency. <i>Journal of the American Chemical Society</i> , 2021, 143, 6123-6139.	6.6	125
4	Orientational Ordering within Semiconducting Polymer Fibrils. <i>Advanced Functional Materials</i> , 2021, 31, 2102522.	7.8	3
5	Polarized X-ray scattering measures molecular orientation in polymer-grafted nanoparticles. <i>Nature Communications</i> , 2021, 12, 4896.	5.8	11
6	Crystallography, Morphology, Electronic Structure, and Transport in Non-Fullerene/Non-Indacenodithienothiophene Polymer:Y6 Solar Cells. <i>Journal of the American Chemical Society</i> , 2020, 142, 14532-14547.	6.6	214
7	Molecular Orientation Depth Profiles in Organic Glasses Using Polarized Resonant Soft X-ray Reflectivity. <i>Chemistry of Materials</i> , 2020, 32, 6295-6309.	3.2	10
8	Experimental and theoretical evidence for hydrogen doping in polymer solution-processed indium gallium oxide. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 18231-18239.	3.3	31
9	Readily Accessible Benzo[d]thiazole Polymers for Nonfullerene Solar Cells with >16% Efficiency and Potential Pitfalls. <i>ACS Energy Letters</i> , 2020, 5, 1780-1787.	8.8	58
10	Mixed-flow design for microfluidic printing of two-component polymer semiconductor systems. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 17551-17557.	3.3	24
11	Sub-picosecond charge-transfer at near-zero driving force in polymer:non-fullerene acceptor blends and bilayers. <i>Nature Communications</i> , 2020, 11, 833.	5.8	130
12	Influence of Polymer Aggregation and Liquid Immiscibility on Morphology Tuning by Varying Composition in PffBT4TĀ2DT/Nonfullerene Organic Solar Cells. <i>Advanced Energy Materials</i> , 2020, 10, 1903248.	10.2	23
13	Photovoltaic Blend Microstructure for High Efficiency Post-Fullerene Solar Cells. To Tilt or Not To Tilt?. <i>Journal of the American Chemical Society</i> , 2019, 141, 13410-13420.	6.6	33
14	Stable Postfullerene Solar Cells via Direct CĀH Arylation Polymerization. MorphologyĀPerformance Relationships. <i>Chemistry of Materials</i> , 2019, 31, 4313-4321.	3.2	31
15	Morphological characterization of fullerene and fullerene-free organic photovoltaics by combined real and reciprocal space techniques. <i>Journal of Materials Research</i> , 2017, 32, 1921-1934.	1.2	28
16	HighĀEfficiency Nonfullerene Organic Solar Cells: Critical Factors that Affect Complex MultiĀLength Scale Morphology and Device Performance. <i>Advanced Energy Materials</i> , 2017, 7, 1602000.	10.2	232
17	Charge Creation and Recombination in MultiĀLength Scale Polymer:Fullerene BHJ Solar Cell Morphologies. <i>Advanced Energy Materials</i> , 2016, 6, 1600699.	10.2	85
18	Quantitative resonant soft x-ray reflectivity of ultrathin anisotropic organic layers: Simulation and experiment of PTCDA on Au. <i>Journal of Chemical Physics</i> , 2016, 145, 024201.	1.2	16

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19	Energyâ€Level Modulation of Smallâ€Molecule Electron Acceptors to Achieve over 12% Efficiency in Polymer Solar Cells. <i>Advanced Materials</i> , 2016, 28, 9423-9429.	11.1	1,307
20	Morphology changes upon scaling a high-efficiency, solution-processed solar cell. <i>Energy and Environmental Science</i> , 2016, 9, 2835-2846.	15.6	170
21	Origins of polarization-dependent anisotropic X-ray scattering from organic thin films. <i>Journal of Synchrotron Radiation</i> , 2016, 23, 219-227.	1.0	26
22	Morphology Changes Upon Scaling a High-Efficiency, Solution-Processed Solar Cell From Spin-Coating to Roll-to-Roll Coating. <i>Energy and Environmental Science</i> , 2016, 9, .	15.6	4
23	Significance of Average Domain Purity and Mixed Domains on the Photovoltaic Performance of Highâ€Efficiency Solutionâ€Processed Smallâ€Molecule BHJ Solar Cells. <i>Advanced Energy Materials</i> , 2015, 5, 1500877.	10.2	133
24	The influence of spacer units on molecular properties and solar cell performance of non-fullerene acceptors. <i>Journal of Materials Chemistry A</i> , 2015, 3, 20108-20112.	5.2	41
25	Importance of Domain Purity and Molecular Packing in Efficient Solutionâ€Processed Smallâ€Molecule Solar Cells. <i>Advanced Materials</i> , 2015, 27, 1105-1111.	11.1	160
26	Interplay of Solvent Additive Concentration and Active Layer Thickness on the Performance of Small Molecule Solar Cells. <i>Advanced Materials</i> , 2014, 26, 7308-7316.	11.1	47
27	Highâ€Molecularâ€Weight Insulating Polymers Can Improve the Performance of Molecular Solar Cells. <i>Advanced Materials</i> , 2014, 26, 4168-4172.	11.1	101
28	Structural and electronic properties of anisotropic ultrathin organic films from dichroic resonant soft x-ray reflectivity. <i>Physical Review B</i> , 2014, 89, .	1.1	37
29	Influence of Fluorination and Molecular Weight on the Morphology and Performance of PTB7:PC₇₁BM Solar Cells. <i>Journal of Physical Chemistry C</i> , 2014, 118, 9918-9929.	1.5	43
30	Gold Nanoparticles Stabilized with Aromatic Thiols: Interaction at the Moleculeâ€Metal Interface and Ligand Arrangement in the Molecular Shell Investigated by SR-XPS and NEXAFS. <i>Journal of Physical Chemistry C</i> , 2014, 118, 8159-8168.	1.5	62
31	Morphology and chemical properties of silver-triblock copolymer nanocomposite thin films. <i>Materials Chemistry and Physics</i> , 2013, 140, 284-293.	2.0	8
32	Lying-Down to Standing-Up Transitions in Self Assembly of Butanedithiol Monolayers on Gold and Substitutional Assembly by Octanethiols. <i>Journal of Physical Chemistry C</i> , 2013, 117, 4625-4631.	1.5	29
33	Thermal effects on Co/Mo2C multilayer mirrors studied by soft x-ray standing wave enhanced photoemission spectroscopy. , 2013, , .		3
34	Co/Mo2C mirror as studied by x-ray fluorescence and photoelectron spectroscopies induced by x-ray standing waves. , 2012, , .		0
35	Role of Interfacial Interaction in Orientation of Poly(N-isopropylacrylamide) Chains on Silicon Substrate.. <i>Macromolecules</i> , 2011, 44, 5750-5757.	2.2	11
36	Significant Role of Ru-Oxide Present in the Pt-Ru Alloy Catalyst for Ethanol Electro-Oxidation in Acid Medium. <i>Materials and Manufacturing Processes</i> , 2011, 26, 261-271.	2.7	21

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37	Study of neutralization kinetics in charged polymer-metal nanocomposite systems by photoemission spectroscopy. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2010, 176, 35-45.	0.8	2
38	Onset Kinetics of Thermal Degradation of Ultrathin Polyacrylamide Films. <i>Macromolecules</i> , 2009, 42, 7889-7896.	2.2	20
39	Neutralization kinetics of charged polymer surface. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2008, 163, 51-58.	0.8	5
40	Controlled surface neutralization: A quantitative approach to study surface charging in photoemission. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2007, 154, 90-95.	0.8	12
41	Nitrogen-mediated interaction in polyacrylamide-silver nanocomposites. <i>Journal of Physics Condensed Matter</i> , 2006, 18, 11233-11242.	0.7	19
42	X-ray photoelectron spectroscopy studies of MgB ₂ for valence state of Mg. <i>Physica C: Superconductivity and Its Applications</i> , 2005, 419, 141-147.	0.6	53