

Michael D Barnes

List of Publications by Year in descending order

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40
papers

897
citations

394286

19
h-index

454834

30
g-index

40
all docs

40
docs citations

40
times ranked

1741
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of Polymer Chain Folding on the Transition from H- to J-Aggregate Behavior in P3HT Nanofibers. <i>Journal of Physical Chemistry C</i> , 2014, 118, 2229-2235.	1.5	91
2	Tuning charge transport dynamics via clustering of doping in organic semiconductor thin films. <i>Nature Communications</i> , 2019, 10, 2827.	5.8	73
3	A Polymer Hole Extraction Layer for Inverted Perovskite Solar Cells from Aqueous Solutions. <i>Advanced Energy Materials</i> , 2016, 6, 1600664.	10.2	56
4	Probing Inter- and Intrachain Exciton Coupling in Isolated Poly(3-hexylthiophene) Nanofibers: Effect of Solvation and Regioregularity. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 1674-1679.	2.1	55
5	Work Function Modification in P3HT H/J Aggregate Nanostructures Revealed by Kelvin Probe Force Microscopy and Photoluminescence Imaging. <i>ACS Nano</i> , 2015, 9, 7105-7112.	7.3	48
6	Time- and Polarization-Resolved Photoluminescence of Individual Semicrystalline Polythiophene (P3HT) Nanoparticles. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 2089-2093.	2.1	46
7	Single-molecule chiroptical spectroscopy: Fluorescence excitation of individual helicene molecules in polymer-supported thin films. <i>Chirality</i> , 2008, 20, 1039-1046.	1.3	41
8	Direct patterning of quantum dot nanostructures via electron beam lithography. <i>Journal of Materials Chemistry</i> , 2011, 21, 16859.	6.7	41
9	Role of Ionic Functional Groups on Ion Transport at Perovskite Interfaces. <i>Advanced Energy Materials</i> , 2017, 7, 1701235.	10.2	37
10	Tetrathiafulvalene-containing polymers for simultaneous non-covalent modification and electronic modulation of MoS ₂ nanomaterials. <i>Chemical Science</i> , 2016, 7, 4698-4705.	3.7	34
11	Optical probes of chain packing structure and exciton dynamics in polythiophene films, composites, and nanostructures. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2012, 50, 1121-1129.	2.4	29
12	Fabrication of Robust Protein Films Using Nanoimprint Lithography. <i>Advanced Materials</i> , 2015, 27, 6251-6255.	11.1	29
13	Time- and Polarization-Resolved Photoluminescence Decay from Isolated Polythiophene (P3HT) Nanofibers. <i>Journal of Physical Chemistry C</i> , 2012, 116, 23803-23811.	1.5	27
14	Electrostatic Force Microscopy and Spectral Studies of Electron Attachment to Single Quantum Dots on Indium Tin Oxide Substrates. <i>Journal of Physical Chemistry C</i> , 2012, 116, 15847-15853.	1.5	23
15	Morphology-Dependent Electronic Properties in Cross-Linked (P3HT- <i>b</i> -P3MT) Block Copolymer Nanostructures. <i>ACS Nano</i> , 2014, 8, 8344-8349.	7.3	23
16	Direct Evidence of Surface Charges in n-Type Al-Doped ZnO. <i>Journal of Physical Chemistry C</i> , 2018, 122, 18596-18602.	1.5	23
17	High-Fidelity Transfer of Chemical Vapor Deposition Grown 2D Transition Metal Dichalcogenides via Substrate Decoupling and Polymer/Small Molecule Composite. <i>ACS Nano</i> , 2020, 14, 7370-7379.	7.3	22
18	Single-Molecule Studies of a Model Fluorenone. <i>ChemPhysChem</i> , 2007, 8, 1481-1486.	1.0	21

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19	Dissymmetries in fluorescence excitation and emission from single chiral molecules. <i>Chirality</i> , 2009, 21, E265-76.	1.3	21
20	Recent progress of heterostructures based on two dimensional materials and wide bandgap semiconductors. <i>Journal of Physics Condensed Matter</i> , 2022, 34, 183001.	0.7	19
21	Far-field modulation of fluorescence decay rates in pairs of oriented semiconducting polymer nanostructures. <i>Physical Review B</i> , 2005, 71, .	1.1	17
22	Toward Wafer-Scale Production of 2D Transition Metal Chalcogenides. <i>Advanced Electronic Materials</i> , 2021, 7, 2100278.	2.6	16
23	Controlled fractal growth of transition metal dichalcogenides. <i>Nanoscale</i> , 2019, 11, 17065-17072.	2.8	15
24	Comment on "Limits on Fluorescence Detected Circular Dichroism of Single Helicene Molecules". <i>Journal of Physical Chemistry A</i> , 2009, 113, 9757-9758.	1.1	13
25	Carpenter's Rule Folding in Rigid-Flexible Block Copolymers with Conjugation-Interrupting, Flexible Tethers Between Oligophenylenevinylenes. <i>Journal of Physical Chemistry A</i> , 2015, 119, 8010-8020.	1.1	11
26	Effect of Side Chains on Charge Transfer in Quaterthiophene-Naphthalene Diimide Based Donor-Bridge-Acceptor Dyads. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2011, 48, 986-993.	1.2	9
27	Surface and grain boundary carbon heterogeneity in CH ₃ NH ₃ PbI ₃ perovskites and its impact on optoelectronic properties. <i>Applied Physics Reviews</i> , 2020, 7, .	5.5	9
28	Spatial mapping of exciton transition energy and strain in composition graded WS ₂ (1-x)Se _{2x} monolayer. <i>Journal of Applied Physics</i> , 2020, 128, 124304.	1.1	8
29	Bithiazolidinylidene polymers: synthesis and electronic interactions with transition metal dichalcogenides. <i>Chemical Science</i> , 2018, 9, 5047-5051.	3.7	7
30	Evolution of HJ Coupling in Nanoscale Molecular Self-Assemblies. <i>Journal of Physical Chemistry C</i> , 2018, 122, 15723-15728.	1.5	6
31	Bidirectional Electronic Tuning of Single-Layer MoS ₂ with Conjugated Organochalcogens. <i>Journal of Physical Chemistry C</i> , 2019, 123, 1506-1511.	1.5	6
32	Disentangling "Bright" and "Dark" Interactions in Ordered Assemblies of Organic Semiconductors. <i>Nano Letters</i> , 2017, 17, 6949-6953.	4.5	5
33	Copper Bromide Hole Transport Layer for Stable and Efficient Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , 2022, 5, 8075-8083.	2.5	5
34	Probing the Evolution of Molecular Packing Underlying HJ-Aggregate Transition in Organic Semiconductors Using Solvent Vapor Annealing. <i>Journal of Physical Chemistry C</i> , 2019, 123, 28948-28957.	1.5	3
35	Polarization-Driven Asymmetric Electronic Response of Monolayer Graphene to Polymer Zwitterions Probed from Both Sides. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 47945-47953.	4.0	3
36	Poly[2,5-bis(3-dodecylthiophen-2-yl)thieno[3,2-b]thiophene] Oligomer Single-Crystal Nanowires from Supercritical Solution and Their Anisotropic Exciton Dynamics. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 2984-2989.	2.1	2

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37	Generating and Capturing Secondary Hot Carriers in Monolayer Tungsten Dichalcogenides. Journal of Physical Chemistry Letters, 2022, 13, 5703-5710.	2.1	2
38	Stabilization of Three-Particle Excitations in Monolayer MoS ₂ by Fluorinated Methacrylate Polymers. Journal of Physical Chemistry Letters, 2022, 13, 4794-4799.	2.1	1
39	Using Order and Nanoconfinement to Tailor Semiconducting Polymers: A Combined Experimental and Multiscale Computational Study. , 0, , 47-72.		0
40	Probing Inter- and Intra-chain Excitonic Coupling in Crystalline Polythiophene Nanofibers and Nanoparticles. Materials Research Society Symposia Proceedings, 2013, 1500, 1.	0.1	0