John K Grey

List of Publications by Year
in descending order

43 papers	1,413 citations	471509 17 h-index	330143 37 g-index
44 all docs	44 docs citations	44 times ranked	2240 citing authors

#	Article	IF	Citations
1	J-Aggregate Behavior in Poly-3-hexylthiophene Nanofibers. Journal of Physical Chemistry Letters, 2012, 3, 259-263.	4.6	258
2	Resonance Chemical Imaging of Polythiophene/Fullerene Photovoltaic Thin Films: Mapping Morphology-Dependent Aggregated and Unaggregated Câ•C Species. Journal of the American Chemical Society, 2009, 131, 9654-9662.	13.7	151
3	Size-Dependent Spectroscopic Properties of Conjugated Polymer Nanoparticles. Journal of Physical Chemistry B, 2006, 110, 25568-25572.	2.6	121
4	The effect of 2,3,5,6-tetrafluoro-7,7,8,8-tetracyanoquinodimethane charge transfer dopants on the conformation and aggregation of poly(3-hexylthiophene). Journal of Materials Chemistry C, 2013, 1, 5638.	5.5	108
5	Aggregates Promote Efficient Charge Transfer Doping of Poly(3-hexylthiophene). Journal of Physical Chemistry Letters, 2013, 4, 2953-2957.	4.6	91
6	Packing Dependent Electronic Coupling in Single Poly(3-hexylthiophene) H- and J-Aggregate Nanofibers. Journal of Physical Chemistry B, 2013, 117, 4478-4487.	2.6	73
7	Enhanced Charge Transfer Doping Efficiency in J-Aggregate Poly(3-hexylthiophene) Nanofibers. Journal of Physical Chemistry C, 2015, 119, 16396-16402.	3.1	65
8	Direct probe of the nuclear modes limiting charge mobility in molecular semiconductors. Materials Horizons, 2019, 6, 182-191.	12.2	53
9	Giant PbSe/CdSe/CdSe Quantum Dots: Crystal-Structure-Defined Ultrastable Near-Infrared Photoluminescence from Single Nanocrystals. Journal of the American Chemical Society, 2017, 139, 11081-11088.	13.7	48
10	Understanding Morphology-Dependent Polymer Aggregation Properties and Photocurrent Generation in Polythiophene/Fullerene Solar Cells of Variable Compositions. Journal of Physical Chemistry C, 2010, 114, 15121-15128.	3.1	43
11	Resonance Raman Spectroscopic- and Photocurrent Imaging of Polythiophene/Fullerene Solar Cells. Journal of Physical Chemistry Letters, 2010, 1, 178-182.	4.6	41
12	Effect of Temperature and Chain Length on the Bimodal Emission Properties of Single Polyfluorene Copolymer Moleculesâ€. Journal of Physical Chemistry B, 2006, 110, 18898-18903.	2.6	40
13	High Intrachain Order Promotes Triplet Formation from Recombination of Long-Lived Polarons in Poly(3-hexylthiophene) J-Aggregate Nanofibers. ACS Nano, 2014, 8, 10559-10568.	14.6	39
14	Spatially Resolving Ordered and Disordered Conformers and Photocurrent Generation in Intercalated Conjugated Polymer/Fullerene Blend Solar Cells. Chemistry of Materials, 2014, 26, 4395-4404.	6.7	30
15	Resonance Raman spectroscopy and imaging of pushâ€“pull conjugated polymerâ€“fullerene blends. Journal of Materials Chemistry C, 2015, 3, 6058-6066.	5.5	24
16	Interchain Charge-Transfer States Mediate Triplet Formation in Purified Conjugated Polymer Aggregates. Journal of Physical Chemistry C, 2016, 120, 23230-23238.	3.1	24
17	Effect of Fullerene Intercalation on the Conformation and Packing of Poly-(2-methoxy-5-(3â€²-7â€²-dimethyloctyloxy)-1,4-phenylenevinylene). ACS Applied Materials & Interfaces, 2011, 3, 3011-3019.	8.0	20
18	Spectroscopic and Intensity Modulated Photocurrent Imaging of Polymer/Fullerene Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 285-293.	8.0	17

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19	Resonance Raman overtones reveal vibrational displacements and dynamics of crystalline and amorphous poly(3-hexylthiophene) chains in fullerene blends. Journal of Chemical Physics, 2013, 139, 044903.	3.0	16
20	Effect of a heavy heteroatom on triplet formation and interactions in single conjugated polymer molecules and aggregates. Physical Chemistry Chemical Physics, 2017, 19, 28239-28248.	2.8	15
21	Resonance Raman studies of excited state structural displacements of conjugated polymers in donor/acceptor charge transfer complexes. Physical Chemistry Chemical Physics, 2012, 14, 11273.	2.8	14
22	Polythienyleneâ€“Vinylene Structureâ€“Function Correlations Revealed from Resonance Raman Spectroscopy and Photocurrent Imaging. Journal of Physical Chemistry C, 2015, 119, 8980-8990.	3.1	14
23	Modulating Charge Recombination and Structural Dynamics in Isolated Organometal Halide Perovskite Crystals by External Electric Fields. Journal of Physical Chemistry Letters, 2015, 6, 4560-4565.	4.6	14
24	Unravelling the enigma of ultrafast excited state relaxation in non-emissive aggregating conjugated polymers. Physical Chemistry Chemical Physics, 2018, 20, 22159-22167.	2.8	10
25	Ionizing radiation exposure reveals instability of purified domains in polymer/fullerene solar cells. Solar Energy Materials and Solar Cells, 2017, 160, 85-93.	6.2	8
26	Morphological Contributions to Interfacial Charge Trapping and Nongeminate Recombination in Polymer Solar Cells Revealed by UV Light Soaking. ACS Applied Materials & Interfaces, 2018, 10, 19853-19862.	8.0	8
27	Understanding the Structural Evolution of Single Conjugated Polymer Chain Conformers. Polymers, 2016, 8, 388.	4.5	7
28	Charge Transfer Doping Induced Conformational Ordering of a Non-Crystalline Conjugated Polymer. Journal of Physical Chemistry C, 2017, 121, 23817-23826.	3.1	7
29	Charge Transfer Doping of Conjugated Polymers with Large Vibrational Activities: Insights into the Regime of Partial Charge Transfer. Journal of Physical Chemistry C, 2020, 124, 2137-2145.	3.1	7
30	Conformational Flexibility Determines Electronic Coupling and Charge Transfer Character in Single Propeller-Shaped Perylene Diimide Tetramer Arrays. Journal of Physical Chemistry C, 2018, 122, 23261-23270.	3.1	6
31	Hierarchical Self-Assembly and Chemical Imaging of Nanoscale Domains in Polymer Blend Thin Films. Journal of Physical Chemistry C, 2022, 126, 7764-7772.	3.1	6
32	Population dynamics of multiple triplet excitons revealed from time-dependent fluorescence quenching of single conjugated polymer chains. Scientific Reports, 2019, 9, 817.	3.3	5
33	Responsive Fluorophore Aggregation Provides Spectral Contrast for Fluorescence Lifetime Imaging. ChemBioChem, 2020, 21, 2196-2204.	2.6	5
34	Resolving Anomalous Heavy Atom Effects from Discrete Triplet Mediated Photochemistry Events on Single Conjugated Polymer Chains. Journal of Physical Chemistry C, 2018, 122, 9718-9725.	3.1	4
35	Resolving population dynamics and interactions of multiple triplet excitons one molecule at a time. Journal of Chemical Physics, 2019, 151, 044203.	3.0	4
36	Large Excited-State Conformational Displacements Expedite Triplet Formation in a Small Conjugated Oligomer. Journal of Physical Chemistry Letters, 2019, 10, 1259-1263.	4.6	4

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37	Implications of Trap-Assisted Nongeminate Charge Recombination on Time- and Frequency-Domain Photocurrent Degradation Signatures of Organic Solar Cells. Journal of Physical Chemistry C, 2020, 124, 16838-16848.	3.1	4
38	Resonance Raman Spectroscopy and Imaging of Franckâ€“Condon Vibrational Activity and Morphology in Conjugated Polymers for Solar Cells. Accounts of Chemical Research, 2019, 52, 2221-2231.	15.6	3
39	Steady-State Fluorescence Signatures of Intramolecular Singlet Fission from Stochastic Predictions. Journal of Physical Chemistry A, 2020, 124, 8918-8930.	2.5	1
40	Triplet Population Dynamics of Single Conjugated Polymer Molecules and Nanoscale Assemblies. Journal of Physical Chemistry C, 2020, 124, 13511-13524.	3.1	1
41	Unique Degradation Signatures of Organic Solar Cells with Nonfullerene Electron Acceptors. ACS Applied Materials & Interfaces, 2021, 13, 5338-5348.	8.0	1
42	Dynamic emissive signatures of intramolecular singlet fission during equilibration to steady state revealed from stochastic kinetic simulations. Journal of Chemical Physics, 2020, 153, 234102.	3.0	1
43	Latent Photoinduced Oxygen Doping Revealed from Emission Saturation of Aggregated Domains in Conjugated Polymer Nanofibers. Advanced Electronic Materials, 2020, 6, 2000265.	5.1	0