Sean T Roberts

List of Publications by Year
in descending order

52 papers	3,718 citations	201674 27 h-index	168389 53 g-index
56 all docs	56 docs citations	56 times ranked	3705 citing authors

#	Article	IF	Citations
1	Using Spectator Ligands to Enhance Nanocrystal-to-Molecule Electron Transfer. Journal of Physical Chemistry Letters, 2022, , 1416-1423.	4.6	4
2	Controlling Symmetry Breaking Charge Transfer in BODIPY Pairs. Accounts of Chemical Research, 2022, 55, 1561-1572.	15.6	19
3	The Length of Molecular Tethers Can Be Used to Control the Structure and Electronic Properties of Stapled Supramolecular Polymers. Chemistry of Materials, 2022, 34, 6518-6528.	6.7	3
4	CdSe nanocrystal sensitized photon upconverting film. RSC Advances, 2021, 11, 31042-31046.	3.6	7
5	Sensitivity of sum frequency generation experimental conditions to thin film interference effects. Journal of Chemical Physics, 2021, 154, 114704.	3.0	8
6	Bidirectional triplet exciton transfer between silicon nanocrystals and perylene. Chemical Science, 2021, 12, 6737-6746.	7.4	19
7	Achieving spin-triplet exciton transfer between silicon and molecular acceptors for photon upconversion. Nature Chemistry, 2020, 12, 137-144.	13.6	85
8	Catalyst Halogenation Enables Rapid and Efficient Polymerizations with Visible to Far-Red Light. Journal of the American Chemical Society, 2020, 142, 14733-14742.	13.7	44
9	Moisture-Driven Formation and Growth of Quasi-2-D Organolead Halide Perovskite Crystallites. ACS Applied Energy Materials, 2020, 3, 6280-6290.	5.1	11
10	Using Electronic Sum-Frequency Generation to Analyze the Interfacial Structure of Singlet Fission-Capable Perylenediimide Thin Films. Journal of Physical Chemistry C, 2020, 124, 11401-11413.	3.1	17
11	Modulation of the Visible Absorption and Reflection Profiles of ITO Nanocrystal Thin Films by Plasmon Excitation. ACS Photonics, 2020, 7, 1188-1196.	6.6	16
12	Low temperature radical initiated hydrosilylation of silicon quantum dots. Faraday Discussions, 2020, 222, 190-200.	3.2	3
13	Benzannulation through Ruthenium(0)â€Catalyzed Transfer Hydrogenative Cycloaddition: Precision Synthesis and Photophysical Characterization of Soluble Diindenoperylenes. Chemistry - A European Journal, 2020, 26, 7504-7510.	3.3	4
14	Ligand-Enhanced Energy Transport in Nanocrystal Solids Viewed with Two-Dimensional Electronic Spectroscopy. Journal of Physical Chemistry Letters, 2019, 10, 5602-5608.	4.6	7
15	Triple Helical Ir(ppy) 3 Phenylene Cage Prepared by Diolâ€Mediated Benzannulation: Synthesis, Resolution, Absolute Stereochemistry and Photophysical Properties. Chemistry - A European Journal, 2019, 25, 8719-8724.	3.3	6
16	Exciton-Delocalizing Ligands Can Speed Up Energy Migration in Nanocrystal Solids. Nano Letters, 2018, 18, 3259-3270.	9.1	29
17	Helical Rod-like Phenylene Cages via Ruthenium Catalyzed Diol-Diene Benzannulation: A Cord of Three Strands. Journal of the American Chemical Society, 2018, 140, 2455-2459.	13.7	30
18	Singlet Fission Involves an Interplay between Energetic Driving Force and Electronic Coupling in Perylenediimide Films. Journal of the American Chemical Society, 2018, 140, 814-826.	13.7	167

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19	Alternating oligo(o,p-phenylenes) via ruthenium catalyzed diolâ€“diene benzannulation: orthogonality to cross-coupling enables de novo nanographene and PAH construction. Chemical Science, 2018, 9, 7866-7873.	7.4	14
20	Surface States Mediate Triplet Energy Transfer in Nanocrystalâ€“Acene Composite Systems. Journal of the American Chemical Society, 2018, 140, 7543-7553.	13.7	88
21	Charge carrier concentration dependence of ultrafast plasmonic relaxation in conducting metal oxide nanocrystals. Journal of Materials Chemistry C, 2017, 5, 5757-5763.	5.5	20
22	Using Heterodyne-Detected Electronic Sum Frequency Generation To Probe the Electronic Structure of Buried Interfaces. Journal of Physical Chemistry C, 2017, 121, 18653-18664.	3.1	24
23	Defects Cause Subgap Luminescence from a Crystalline Tetracene Derivative. Journal of Physical Chemistry Letters, 2017, 8, 5993-6001.	4.6	6
24	Can Exciton-Delocalizing Ligands Facilitate Hot Hole Transfer from Semiconductor Nanocrystals?. Journal of Physical Chemistry C, 2016, 120, 28224-28234.	3.1	20
25	Slow Singlet Fission Observed in a Polycrystalline Perylenediimide Thin Film. Journal of Physical Chemistry Letters, 2016, 7, 4922-4928.	4.6	95
26	Extracting the Density of States of Copper Phthalocyanine at the SiO₂ Interface with Electronic Sum Frequency Generation. Journal of Physical Chemistry Letters, 2016, 7, 1060-1066.	4.6	20
27	Singlet to triplet and back again. Nature Chemistry, 2015, 7, 764-765.	13.6	9
28	Quantifying Charge Recombination in Solar Cells Based on Donorâ€“Acceptor P3HT Analogues. Journal of Physical Chemistry C, 2014, 118, 6650-6660.	3.1	6
29	Local and Collective Reaction Coordinates in the Transport of the Aqueous Hydroxide Ion. Journal of Physical Chemistry B, 2014, 118, 8062-8069.	2.6	12
30	Photon quenching in InGaN quantum well light emitting devices. Applied Physics Letters, 2013, 103, 041123.	3.3	6
31	Fused Porphyrinâ€“Single-Walled Carbon Nanotube Hybrids: Efficient Formation and Photophysical Characterization. ACS Nano, 2013, 7, 3466-3475.	14.6	67
32	Annealing-Induced Changes in the Molecular Orientation of Poly-3-hexylthiophene at Buried Interfaces. Journal of Physical Chemistry C, 2013, 117, 15213-15220.	3.1	43
33	Aqueous Colloidal Acene Nanoparticles: A New Platform for Studying Singlet Fission. Journal of Physical Chemistry B, 2013, 117, 15519-15526.	2.6	47
34	Symmetry-breaking intramolecular charge transfer in the excited state of meso-linked BODIPY dyads. Chemical Communications, 2012, 48, 284-286.	4.1	137
35	Efficient Singlet Fission Discovered in a Disordered Acene Film. Journal of the American Chemical Society, 2012, 134, 6388-6400.	13.7	275
36	Singlet and Triplet Excitation Management in a Bichromophoric Near-Infrared-Phosphorescent BODIPY-Benzoporphyrin Platinum Complex. Journal of the American Chemical Society, 2011, 133, 88-96.	13.7	147

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37	Proton Transfer in Concentrated Aqueous Hydroxide Visualized Using Ultrafast Infrared Spectroscopy. Journal of Physical Chemistry A, 2011, 115, 3957-3972.	2.5	45
38	Observation of Triplet Exciton Formation in a Platinum-Sensitized Organic Photovoltaic Device. Journal of Physical Chemistry Letters, 2011, 2, 48-54.	4.6	41
39	A fast-scanning Fourier transform 2D IR interferometer. Optics Communications, 2011, 284, 1062-1066.	2.1	21
40	Ultrafast 2D IR anisotropy of water reveals reorientation during hydrogen-bond switching. Journal of Chemical Physics, 2011, 135, 054509.	3.0	72
41	Hydrogen Bond Rearrangements in Water Probed with Temperature-Dependent 2D IR. Journal of Physical Chemistry Letters, 2010, 1, 1068-1072.	4.6	89
42	Observation of a Zundel-like transition state during proton transfer in aqueous hydroxide solutions. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 15154-15159.	7.1	111
43	Structural Rearrangements in Water Viewed Through Two-Dimensional Infrared Spectroscopy. Accounts of Chemical Research, 2009, 42, 1239-1249.	15.6	177
44	The Dynamics of Aqueous Hydroxide Ion Transport Probed via Ultrafast Vibrational Echo Experiments. Springer Series in Chemical Physics, 2009, , 481-483.	0.2	1
45	Ultrafast Nâ˜H Vibrational Dynamics of Cyclic Doubly Hydrogen-Bonded Homo- and Heterodimers. Journal of Physical Chemistry B, 2008, 112, 13167-13171.	2.6	36
46	Are water simulation models consistent with steady-state and ultrafast vibrational spectroscopy experiments?. Chemical Physics, 2007, 341, 143-157.	1.9	150
47	Variation of the transition dipole moment across the OH stretching band of water. Chemical Physics, 2007, 341, 218-229.	1.9	70
48	Characterization of spectral diffusion from two-dimensional line shapes. Journal of Chemical Physics, 2006, 125, 084502.	3.0	270
49	Multidimensional infrared spectroscopy of water. I. Vibrational dynamics in two-dimensional IR line shapes. Journal of Chemical Physics, 2006, 125, 194521.	3.0	180
50	Multidimensional infrared spectroscopy of water. II. Hydrogen bond switching dynamics. Journal of Chemical Physics, 2006, 125, 194522.	3.0	175
51	Hydrogen bonds in liquid water are broken only fleetingly. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 13019-13022.	7.1	465
52	Local hydrogen bonding dynamics and collective reorganization in water: Ultrafast infrared spectroscopy of HOD/D2O. Journal of Chemical Physics, 2005, 122, 054506.	3.0	295