Mark W B Wilson

List of Publications by Year
in descending order

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		201575	315616
39	5,223	27	38
papers	citations	h-index	g-index

42	42	42	6490
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Next-generation in vivo optical imaging with short-wave infrared quantum dots. Nature Biomedical Engineering, 2017, 1, .	11.6	490
2	Solid-state infrared-to-visible upconversion sensitized by colloidal nanocrystals. Nature Photonics, 2016, 10, 31-34.	15.6	418
3	A transferable model for singlet-fission kinetics. Nature Chemistry, 2014, 6, 492-497.	6.6	402
4	Ultrafast Dynamics of Exciton Fission in Polycrystalline Pentacene. Journal of the American Chemical Society, 2011, 133, 11830-11833.	6.6	394
5	Methylammonium Bismuth Iodide as a Leadâ€Free, Stable Hybrid Organicâ€“Inorganic Solar Absorber. Chemistry - A European Journal, 2016, 22, 2605-2610.	1.7	312
6	Real-time observation of multiexcitonic states in ultrafast singlet fission using coherent 2D electronic spectroscopy. Nature Chemistry, 2016, 8, 16-23.	6.6	308
7	Exciton Fission and Charge Generation via Triplet Excitons in Pentacene/C₆₀ Bilayers. Journal of the American Chemical Society, 2010, 132, 12698-12703.	6.6	295
8	Searching for â€œDefect-Tolerantâ€•Photovoltaic Materials: Combined Theoretical and Experimental Screening. Chemistry of Materials, 2017, 29, 4667-4674.	3.2	275
9	Energy harvesting of non-emissive triplet excitons in tetracene by emissive PbS nanocrystals. Nature Materials, 2014, 13, 1039-1043.	13.3	235
10	Singlet Exciton Fission in Polycrystalline Pentacene: From Photophysics toward Devices. Accounts of Chemical Research, 2013, 46, 1330-1338.	7.6	230
11	Continuous injection synthesis of indium arsenide quantum dots emissive in the short-wavelength infrared. Nature Communications, 2016, 7, 12749.	5.8	209
12	Singlet Exciton Fission-Sensitized Infrared Quantum Dot Solar Cells. Nano Letters, 2012, 12, 1053-1057.	4.5	200
13	Temperature-Independent Singlet Exciton Fission in Tetracene. Journal of the American Chemical Society, 2013, 135, 16680-16688.	6.6	198
14	Investigation of Bismuth Triiodide (BiI₃) for Photovoltaic Applications. Journal of Physical Chemistry Letters, 2015, 6, 4297-4302.	2.1	176
15	In situ measurement of exciton energy in hybrid singlet-fission solar cells. Nature Communications, 2012, 3, 1019.	5.8	165
16	Speed Limit for Triplet-Exciton Transfer in Solid-State PbS Nanocrystal-Sensitized Photon Upconversion. ACS Nano, 2017, 11, 7848-7857.	7.3	130
17	Photophysics of pentacene thin films: The role of exciton fission and heating effects. Physical Review B, 2011, 84, .	1.1	114
18	Efficient ZnO Nanowire Solid-State Dye-Sensitized Solar Cells Using Organic Dyes and Coreâ˜'shell Nanostructures. Journal of Physical Chemistry C, 2009, 113, 18515-18522.	1.5	85

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19	Identifying and Eliminating Emissive Subâ€bandgap States in Thin Films of PbS Nanocrystals. Advanced Materials, 2015, 27, 4481-4486.	11.1	77
20	Deconstructing the photon stream from single nanocrystals: from binning to correlation. Chemical Society Reviews, 2014, 43, 1287-1310.	18.7	73
21	PbS Nanocrystal Emission Is Governed by Multiple Emissive States. Nano Letters, 2016, 16, 6070-6077.	4.5	71
22	Triplet Dynamics in Pentacene Crystals: Applications to Fissionâ€Sensitized Photovoltaics. Advanced Materials, 2014, 26, 919-924.	11.1	62
23	Saturation of the Photoluminescence at Few-Exciton Levels in a Single-Walled Carbon Nanotube under Ultrafast Excitation. Physical Review Letters, 2010, 104, 017401.	2.9	54
24	Excitons and charges at organic semiconductor heterojunctions. Faraday Discussions, 2012, 155, 339-348.	1.6	38
25	Triplet-Fusion Upconversion Using a Rigid Tetracene Homodimer. Journal of Physical Chemistry Letters, 2019, 10, 7463-7469.	2.1	37
26	Recombination Dynamics of Charge Pairs in a Pushâ€“Pull Polyfluorene-Derivative. Journal of Physical Chemistry B, 2013, 117, 4649-4653.	1.2	30
27	Loss determination in microsphere resonators by phase-shift cavity ring-down measurements. Optics Express, 2008, 16, 13158.	1.7	28
28	Controlling Cluster Intermediates Enables the Synthesis of Small PbS Nanocrystals with Narrow Ensemble Line Widths. Chemistry of Materials, 2020, 32, 4083-4094.	3.2	23
29	Ultra-small PbS nanocrystals as sensitizers for red-to-blue triplet-fusion upconversion. Chemical Science, 2021, 12, 14111-14120.	3.7	21
30	Directed Ligand Exchange on the Surface of PbS Nanocrystals: Implications for Incoherent Photon Conversion. ACS Applied Nano Materials, 2021, 4, 5655-5664.	2.4	16
31	PbS Nanocrystals Made with Excess PbCl₂ Have an Intrinsic Shell that Reduces Their Stokes Shift. Journal of Physical Chemistry Letters, 2019, 10, 5897-5901.	2.1	12
32	Binary Cu_{2â€“x}S Templates Direct the Formation of Quaternary Cu₂ZnSnS₄ (Kesterite, Wurtzite) Nanocrystals. ACS Nano, 2021, 15, 18085-18099.	7.3	12
33	Sub-Bandgap Optical Modulation of Quantum Dot Blinking Statistics. Journal of Physical Chemistry Letters, 2020, 11, 6404-6412.	2.1	8
34	Glycol ether additives control the size of PbS nanocrystals at reaction completion. Journal of Materials Chemistry C, 2020, 8, 12068-12074.	2.7	7
35	PbS Nanocrystals Made Using Excess Lead Chloride Have a Halide-Perovskite-Like Surface. Chemistry of Materials, 2021, 33, 9270-9284.	3.2	6
36	Anisotropic, Nonthermal Lattice Disordering Observed in Photoexcited PbS Quantum Dots. Journal of Physical Chemistry C, 2021, 125, 22120-22132.	1.5	5

#	Article	IF	Citations
37	Scalable ways to break the efficiency limit of single-junction solar cells. Applied Physics Letters, 2022, 120, .	1.5	4
38	Vaporâ€Phase Deposition of Highly Luminescent Embedded Perovskite Nanocrystals. Advanced Optical Materials, 0, , 2102809.	3.6	1
39	Synthesis and optoelectronic properties of radical conjugated polyfluorenes. Chemical Communications, 2022, 58, 8630-8633.	2.2	1