Ming Lee Tang

List of Publications by Year
in descending order

65 papers	6,173 citations	39 h-index	67 g-index
67 all docs	67 docs citations	67 times ranked	8160 citing authors

81839

98753

#	Article	IF	Citations
1	Quantifying the Ligand-Induced Triplet Energy Transfer Barrier in a Quantum Dot-Based Upconversion System. Journal of Physical Chemistry Letters, 2022, 13, 3002-3007.	2.1	8
2	Mechanistic Understanding and Rational Design of Quantum Dot/Mediator Interfaces for Efficient Photon Upconversion. Accounts of Chemical Research, 2021, 54, 70-80.	7.6	34
3	CdSe nanocrystal sensitized photon upconverting film. RSC Advances, 2021, 11, 31042-31046.	1.7	7
4	Airâ€Stable Silicon Nanocrystalâ€Based Photon Upconversion. Advanced Optical Materials, 2021, 9, 2100453.	3.6	11
5	Bidirectional triplet exciton transfer between silicon nanocrystals and perylene. Chemical Science, 2021, 12, 6737-6746.	3.7	19
6	Achieving spin-triplet exciton transfer between silicon and molecular acceptors for photon upconversion. Nature Chemistry, 2020, 12, 137-144.	6.6	85
7	Tuning the Quantum Dot (QD)/Mediator Interface for Optimal Efficiency of QD-Sensitized Near-Infrared-to-Visible Photon Upconversion Systems. ACS Applied Materials & Interfaces, 2020, 12, 36558-36567.	4.0	25
8	Lanthanide-doped inorganic nanoparticles turn molecular triplet excitons bright. Nature, 2020, 587, 594-599.	13.7	135
9	Evolution from Tunneling to Hopping Mediated Triplet Energy Transfer from Quantum Dots to Molecules. Journal of the American Chemical Society, 2020, 142, 17581-17588.	6.6	28
10	On the size-dependence of CdSe nanocrystals for photon upconversion with anthracene. Journal of Chemical Physics, 2020, 153, 114702.	1.2	15
11	Spin-coated fluorinated PbS QD superlattice thin film with high hole mobility. Nanoscale, 2020, 12, 11174-11181.	2.8	5
12	Low temperature radical initiated hydrosilylation of silicon quantum dots. Faraday Discussions, 2020, 222, 190-200.	1.6	3
13	Anthracene Diphosphate Ligands for CdSe Quantum Dots; Molecular Design for Efficient Upconversion. Chemistry of Materials, 2020, 32, 1461-1466.	3.2	46
14	Primary amines enhance triplet energy transfer from both the band edge and trap state from CdSe nanocrystals. Journal of Chemical Physics, 2019, 151, 174701.	1.2	10
15	Enhanced Near-Infrared-to-Visible Upconversion by Synthetic Control of PbS Nanocrystal Triplet Photosensitizers. Journal of the American Chemical Society, 2019, 141, 9769-9772.	6.6	50
16	Midgap States in PbS Quantum Dots Induced by Cd and Zn Enhance Photon Upconversion. ACS Energy Letters, 2018, 3, 767-772.	8.8	34
17	Semiconductor Nanocrystal Light Absorbers for Photon Upconversion. Journal of Physical Chemistry Letters, 2018, 9, 6198-6206.	2.1	62
18	Surface States Mediate Triplet Energy Transfer in Nanocrystalâ€"Acene Composite Systems. Journal of the American Chemical Society, 2018, 140, 7543-7553.	6.6	88

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19	ZnS Shells Enhance Triplet Energy Transfer from CdSe Nanocrystals for Photon Upconversion. ACS Photonics, 2018, 5, 3089-3096.	3.2	31
20	Surface Fluorination for Controlling the PbS Quantum Dot Bandgap and Band Offset. Chemistry of Materials, 2018, 30, 4943-4948.	3.2	6
21	Complementary Lockâ€andâ€Key Ligand Binding of a Triplet Transmitter to a Nanocrystal Photosensitizer. Angewandte Chemie - International Edition, 2017, 56, 5598-5602.	7.2	37
22	Complementary Lockâ€andâ€Key Ligand Binding of a Triplet Transmitter to a Nanocrystal Photosensitizer. Angewandte Chemie, 2017, 129, 5690-5694.	1.6	10
23	On the efficacy of anthracene isomers for triplet transmission from CdSe nanocrystals. Chemical Communications, 2017, 53, 1241-1244.	2.2	28
24	Designing Transmitter Ligands That Mediate Energy Transfer between Semiconductor Nanocrystals and Molecules. Journal of the American Chemical Society, 2017, 139, 9412-9418.	6.6	130
25	CdS/ZnS coreâ€“shell nanocrystal photosensitizers for visible to UV upconversion. Chemical Science, 2017, 8, 5488-5496.	3.7	98
26	Triplet transport in thin films: fundamentals and applications. Chemical Communications, 2017, 53, 4429-4440.	2.2	38
27	PbS/CdS Coreâ€“Shell Quantum Dots Suppress Charge Transfer and Enhance Triplet Transfer. Angewandte Chemie, 2017, 129, 16810-16814.	1.6	11
28	PbS/CdS Coreâ€“Shell Quantum Dots Suppress Charge Transfer and Enhance Triplet Transfer. Angewandte Chemie - International Edition, 2017, 56, 16583-16587.	7.2	74
29	Triplet Energy Transfer from PbS(Se) Nanocrystals to Rubrene: the Relationship between the Upconversion Quantum Yield and Size. Advanced Functional Materials, 2016, 26, 6091-6097.	7.8	74
30	Distance-Dependent Triplet Energy Transfer between CdSe Nanocrystals and Surface Bound Anthracene. Journal of Physical Chemistry Letters, 2016, 7, 1955-1959.	2.1	82
31	Efficient Infrared-to-Visible Upconversion with Subsolar Irradiance. Nano Letters, 2016, 16, 7169-7175.	4.5	140
32	Ligand enhanced upconversion of near-infrared photons with nanocrystal light absorbers. Chemical Science, 2016, 7, 4101-4104.	3.7	74
33	Dynamics of Energy Transfer from CdSe Nanocrystals to Triplet States of Anthracene Ligand Molecules. Journal of Physical Chemistry C, 2016, 120, 5883-5889.	1.5	39
34	Hybrid Moleculeâ€“Nanocrystal Photon Upconversion Across the Visible and Near-Infrared. Nano Letters, 2015, 15, 5552-5557.	4.5	284
35	Ligand Binding to Distinct Sites on Nanocrystals Affecting Energy and Charge Transfer. Journal of Physical Chemistry Letters, 2015, 6, 1709-1713.	2.1	9
36	Nanocrystal Size and Quantum Yield in the Upconversion of Green to Violet Light with CdSe and Anthracene Derivatives. Chemistry of Materials, 2015, 27, 7503-7507.	3.2	90

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37	Synthetic Control of Isolated, Single Functional Groups on Silica Surfaces. Langmuir, 2014, 30, 7098-7103.	1.6	1
38	Observation of Multiple, Identical Binding Sites in the Exchange of Carboxylic Acid Ligands with CdS Nanocrystals.. Nano Letters, 2014, 14, 3382-3387.	4.5	35
39	Measurement of Interlayer Screening Length of Layered Graphene by Plasmonic Nanostructure Resonances. Journal of Physical Chemistry C, 2013, 117, 22211-22217.	1.5	44
40	Synthesis of regioregular pentacene-containing conjugated polymers. Journal of Materials Chemistry, 2011, 21, 7078.	6.7	19
41	Observations of Shape-Dependent Hydrogen Uptake Trajectories from Single Nanocrystals. Journal of the American Chemical Society, 2011, 133, 13220-13223.	6.6	116
42	Molecular Cobalt Pentapyridine Catalysts for Generating Hydrogen from Water. Journal of the American Chemical Society, 2011, 133, 9212-9215.	6.6	397
43	Nanoantenna-enhanced gas sensing in a single tailored nanofocus. Nature Materials, 2011, 10, 631-636.	13.3	863
44	Halogenated Materials as Organic Semiconductors. Chemistry of Materials, 2011, 23, 446-455.	3.2	489
45	Thin Film Structure of Triisopropylsilylethynylâ€Functionalized Pentacene and Tetraceno[2,3â€b]thiophene from Grazing Incidence Xâ€Ray Diffraction. Advanced Materials, 2011, 23, 127-131.	11.1	146
46	Structural and Electronic Study of an Amorphous MoS₃ Hydrogenâ€Generation Catalyst on a Quantumâ€Controlled Photosensitizer. Angewandte Chemie - International Edition, 2011, 50, 10203-10207.	7.2	158
47	Fabrication and Evaluation of Solution-Processed Reduced Graphene Oxide Electrodes for p- and n-Channel Bottom-Contact Organic Thin-Film Transistors. ACS Nano, 2010, 4, 6343-6352.	7.3	69
48	2,9-Dibromopentacene: Synthesis and the role of substituent and symmetry on solid-state order. Synthetic Metals, 2010, 160, 2447-2451.	2.1	10
49	Anthradithiophene-Containing Copolymers for Thin-Film Transistors and Photovoltaic Cells. Macromolecules, 2010, 43, 6361-6367.	2.2	49
50	Pentaceno[2,3-b]thiophene, a Hexacene Analogue for Organic Thin Film Transistors. Journal of the American Chemical Society, 2009, 131, 882-883.	6.6	90
51	Correlating Carrier Type with Frontier Molecular Orbital Energy Levels in Organic Thin Film Transistors of Functionalized Acene Derivatives. Journal of the American Chemical Society, 2009, 131, 5264-5273.	6.6	221
52	Chlorination: A General Route toward Electron Transport in Organic Semiconductors. Journal of the American Chemical Society, 2009, 131, 3733-3740.	6.6	334
53	New indolo[3,2-b]carbazole derivatives for field-effect transistor applications. Journal of Materials Chemistry, 2009, 19, 2921.	6.7	80
54	Transistor and solar cell performance of donorâ€“acceptor low bandgap copolymers bearing an acenaphtho[1,2-b]thieno[3,4-e]pyrazine (ACTP) motif. Journal of Materials Chemistry, 2009, 19, 591-593.	6.7	66

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55	Synthesis of Acenaphthyl and Phenanthrene Based Fused-Aromatic Thienopyrazine Co-Polymers for Photovoltaic and Thin Film Transistor Applications. Chemistry of Materials, 2009, 21, 3618-3628.	3.2	109
56	Functionalized Asymmetric Linear Acenes for Highâ€Performance Organic Semiconductors. Advanced Functional Materials, 2008, 18, 1579-1585.	7.8	37
57	Influence of Molecular Structure and Film Properties on the Water-Stability and Sensor Characteristics of Organic Transistors. Chemistry of Materials, 2008, 20, 7332-7338.	3.2	64
58	Microstructure of Oligofluorene Asymmetric Derivatives in Organic Thin Film Transistors. Chemistry of Materials, 2008, 20, 2763-2772.	3.2	35
59	Ambipolar, High Performance, Acene-Based Organic Thin Film Transistors. Journal of the American Chemical Society, 2008, 130, 6064-6065.	6.6	256
60	Thin Film Structure of Tetraceno[2,3-<i>b</i>]thiophene Characterized by Grazing Incidence X-ray Scattering and Near-Edge X-ray Absorption Fine Structure Analysis. Journal of the American Chemical Society, 2008, 130, 3502-3508.	6.6	65
61	Trialkylsilylethynyl-Functionalized Tetraceno[2,3-<i>b</i>]thiophene and Anthra[2,3-<i>b</i>]thiophene Organic Transistors. Chemistry of Materials, 2008, 20, 4669-4676.	3.2	66
62	Enhancement in open circuit voltage through a cascade-type energy band structure. Applied Physics Letters, 2007, 91, 223508.	1.5	60
63	Correlating Molecular Structure to Field-Effect Mobility:Â The Investigation of Side-Chain Functionality in Phenyleneâˆ’Thiophene Oligomers and Their Application in Field Effect Transistors. Chemistry of Materials, 2007, 19, 2342-2351.	3.2	69
64	High-Performance Organic Semiconductors:Â Asymmetric Linear Acenes Containing Sulphur. Journal of the American Chemical Society, 2006, 128, 16002-16003.	6.6	209
65	Structure Property Relationships:â€‰ Asymmetric Oligofluoreneâˆ’Thiophene Molecules for Organic TFTs. Chemistry of Materials, 2006, 18, 6250-6257.	3.2	40