Ming Lee Tang

List of Publications by Year
in descending order

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65 papers	6,173 citations	81839 39 h-index	98753 67 g-index
67 all docs	67 docs citations	67 times ranked	8160 citing authors

#	Article	IF	Citations
1	Nanoantenna-enhanced gas sensing in a single tailored nanofocus. Nature Materials, 2011, 10, 631-636.	13.3	863
2	Halogenated Materials as Organic Semiconductors. Chemistry of Materials, 2011, 23, 446-455.	3.2	489
3	Molecular Cobalt Pentapyridine Catalysts for Generating Hydrogen from Water. Journal of the American Chemical Society, 2011, 133, 9212-9215.	6.6	397
4	Chlorination: A General Route toward Electron Transport in Organic Semiconductors. Journal of the American Chemical Society, 2009, 131, 3733-3740.	6.6	334
5	Hybrid Moleculeâ€“Nanocrystal Photon Upconversion Across the Visible and Near-Infrared. Nano Letters, 2015, 15, 5552-5557.	4.5	284
6	Ambipolar, High Performance, Acene-Based Organic Thin Film Transistors. Journal of the American Chemical Society, 2008, 130, 6064-6065.	6.6	256
7	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
8	High-Performance Organic Semiconductors:Â Asymmetric Linear Acenes Containing Sulphur. Journal of the American Chemical Society, 2006, 128, 16002-16003.	6.6	209
9	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
10	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
11	Efficient Infrared-to-Visible Upconversion with Subsolar Irradiance. Nano Letters, 2016, 16, 7169-7175.	4.5	140
12	Lanthanide-doped inorganic nanoparticles turn molecular triplet excitons bright. Nature, 2020, 587, 594-599.	13.7	135
13	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
14	Observations of Shape-Dependent Hydrogen Uptake Trajectories from Single Nanocrystals. Journal of the American Chemical Society, 2011, 133, 13220-13223.	6.6	116
15	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
16	CdS/ZnS coreâ€“shell nanocrystal photosensitizers for visible to UV upconversion. Chemical Science, 2017, 8, 5488-5496.	3.7	98
17	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
18	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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19	Surface States Mediate Triplet Energy Transfer in Nanocrystalâ€“Acene Composite Systems. Journal of the American Chemical Society, 2018, 140, 7543-7553.	6.6	88
20	Achieving spin-triplet exciton transfer between silicon and molecular acceptors for photon upconversion. Nature Chemistry, 2020, 12, 137-144.	6.6	85
21	Distance-Dependent Triplet Energy Transfer between CdSe Nanocrystals and Surface Bound Anthracene. Journal of Physical Chemistry Letters, 2016, 7, 1955-1959.	2.1	82
22	New indolo[3,2-b]carbazole derivatives for field-effect transistor applications. Journal of Materials Chemistry, 2009, 19, 2921.	6.7	80
23	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
24	Ligand enhanced upconversion of near-infrared photons with nanocrystal light absorbers. Chemical Science, 2016, 7, 4101-4104.	3.7	74
25	PbS/CdS Coreâ€“Shell Quantum Dots Suppress Charge Transfer and Enhance Triplet Transfer. Angewandte Chemie - International Edition, 2017, 56, 16583-16587.	7.2	74
26	Correlating Molecular Structure to Field-Effect Mobility:Â The Investigation of Side-Chain Functionality in Phenyleneâ^'Thiophene Oligomers and Their Application in Field Effect Transistors. Chemistry of Materials, 2007, 19, 2342-2351.	3.2	69
27	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
28	Trialkylsilylethynyl-Functionalized Tetraceno[2,3-b]thiophene and Anthra[2,3-b]thiophene Organic Transistors. Chemistry of Materials, 2008, 20, 4669-4676.	3.2	66
29	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
30	Thin Film Structure of Tetraceno[2,3-b]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
31	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
32	Semiconductor Nanocrystal Light Absorbers for Photon Upconversion. Journal of Physical Chemistry Letters, 2018, 9, 6198-6206.	2.1	62
33	Enhancement in open circuit voltage through a cascade-type energy band structure. Applied Physics Letters, 2007, 91, 223508.	1.5	60
34	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
35	Anthradithiophene-Containing Copolymers for Thin-Film Transistors and Photovoltaic Cells. Macromolecules, 2010, 43, 6361-6367.	2.2	49
36	Anthracene Diphosphate Ligands for CdSe Quantum Dots; Molecular Design for Efficient Upconversion. Chemistry of Materials, 2020, 32, 1461-1466.	3.2	46

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37	Measurement of Interlayer Screening Length of Layered Graphene by Plasmonic Nanostructure Resonances. Journal of Physical Chemistry C, 2013, 117, 22211-22217.	1.5	44
38	Structure Property Relationships:â€‰ Asymmetric Oligofluoreneâ˜Thiophene Molecules for Organic TFTs. Chemistry of Materials, 2006, 18, 6250-6257.	3.2	40
39	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
40	Triplet transport in thin films: fundamentals and applications. Chemical Communications, 2017, 53, 4429-4440.	2.2	38
41	Functionalized Asymmetric Linear Acenes for Highâ€Performance Organic Semiconductors. Advanced Functional Materials, 2008, 18, 1579-1585.	7.8	37
42	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
43	Microstructure of Oligofluorene Asymmetric Derivatives in Organic Thin Film Transistors. Chemistry of Materials, 2008, 20, 2763-2772.	3.2	35
44	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
45	Midgap States in PbS Quantum Dots Induced by Cd and Zn Enhance Photon Upconversion. ACS Energy Letters, 2018, 3, 767-772.	8.8	34
46	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
47	ZnS Shells Enhance Triplet Energy Transfer from CdSe Nanocrystals for Photon Upconversion. ACS Photonics, 2018, 5, 3089-3096.	3.2	31
48	On the efficacy of anthracene isomers for triplet transmission from CdSe nanocrystals. Chemical Communications, 2017, 53, 1241-1244.	2.2	28
49	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
50	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
51	Synthesis of regioregular pentacene-containing conjugated polymers. Journal of Materials Chemistry, 2011, 21, 7078.	6.7	19
52	Bidirectional triplet exciton transfer between silicon nanocrystals and perylene. Chemical Science, 2021, 12, 6737-6746.	3.7	19
53	On the size-dependence of CdSe nanocrystals for photon upconversion with anthracene. Journal of Chemical Physics, 2020, 153, 114702.	1.2	15
54	PbS/CdS Coreâ€“Shell Quantum Dots Suppress Charge Transfer and Enhance Triplet Transfer. Angewandte Chemie, 2017, 129, 16810-16814.	1.6	11

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55	Airâ€Stable Silicon Nanocrystalâ€Based Photon Upconversion. Advanced Optical Materials, 2021, 9, 2100453.	3.6	11
56	2,9-Dibromopentacene: Synthesis and the role of substituent and symmetry on solid-state order. Synthetic Metals, 2010, 160, 2447-2451.	2.1	10
57	Complementary Lockâ€andâ€Key Ligand Binding of a Triplet Transmitter to a Nanocrystal Photosensitizer. Angewandte Chemie, 2017, 129, 5690-5694.	1.6	10
58	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
59	Ligand Binding to Distinct Sites on Nanocrystals Affecting Energy and Charge Transfer. Journal of Physical Chemistry Letters, 2015, 6, 1709-1713.	2.1	9
60	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
61	CdSe nanocrystal sensitized photon upconverting film. RSC Advances, 2021, 11, 31042-31046.	1.7	7
62	Surface Fluorination for Controlling the PbS Quantum Dot Bandgap and Band Offset. Chemistry of Materials, 2018, 30, 4943-4948.	3.2	6
63	Spin-coated fluorinated PbS QD superlattice thin film with high hole mobility. Nanoscale, 2020, 12, 11174-11181.	2.8	5
64	Low temperature radical initiated hydrosilylation of silicon quantum dots. Faraday Discussions, 2020, 222, 190-200.	1.6	3
65	Synthetic Control of Isolated, Single Functional Groups on Silica Surfaces. Langmuir, 2014, 30, 7098-7103.	1.6	1