

# Marc A Baldo

## List of Publications by Year in descending order

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61  
papers

10,990  
citations

94269

37  
h-index

143772

57  
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63  
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63  
docs citations

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times ranked

9293  
citing authors

#	ARTICLE	IF	CITATIONS
1	Large Single Crystals of Two-Dimensional $\pi$ -Conjugated Metal-Organic Frameworks via Biphasic Solution-Solid Growth. <i>ACS Central Science</i> , 2021, 7, 104-109.	5.3	40
2	Nanocrystal-Sensitized Infrared-to-Visible Upconversion in a Microcavity under Subsolar Flux. <i>Nano Letters</i> , 2021, 21, 1011-1016.	4.5	26
3	Interfacial Trap-Assisted Triplet Generation in Lead Halide Perovskite Sensitized Solid-State Upconversion. <i>Advanced Materials</i> , 2021, 33, e2100854.	11.1	18
4	Polymerization and Depolymerization of Photoluminescent Polyarylene Chalcogenides. <i>Macromolecules</i> , 2021, 54, 6698-6704.	2.2	3
5	Magnetic-Field-Switchable Laser via Optical Pumping of Rubrene. <i>Advanced Materials</i> , 2021, , 2103870.	11.1	6
6	Magnetic Domain Wall Based Synaptic and Activation Function Generator for Neuromorphic Accelerators. <i>Nano Letters</i> , 2020, 20, 1033-1040.	4.5	72
7	Strategies for High-Performance Solid-State Triplet-Triplet-Annihilation-Based Photon Upconversion. <i>Advanced Materials</i> , 2020, 32, e1908175.	11.1	58
8	Investigation of External Quantum Efficiency Roll-Off in OLEDs Using the Mean-Field Steady-State Kinetic Model. <i>Journal of Physical Chemistry C</i> , 2020, 124, 14424-14431.	1.5	2
9	Exploiting chemistry and molecular systems for quantum information science. <i>Nature Reviews Chemistry</i> , 2020, 4, 490-504.	13.8	247
10	Dominance of Exciton Lifetime in the Stability of Phosphorescent Dyes. <i>Advanced Optical Materials</i> , 2019, 7, 1901048.	3.6	23
11	Large Increase in External Quantum Efficiency by Dihedral Angle Tuning in a Sky-Blue Thermally Activated Delayed Fluorescence Emitter. <i>Advanced Optical Materials</i> , 2019, 7, 1900476.	3.6	25
12	Sensitization of silicon by singlet exciton fission in tetracene. <i>Nature</i> , 2019, 571, 90-94.	13.7	221
13	Discovery of blue singlet exciton fission molecules via a high-throughput virtual screening and experimental approach. <i>Journal of Chemical Physics</i> , 2019, 151, 121102.	1.2	24
14	A Heterogeneous Kinetics Model for Triplet Exciton Transfer in Solid-State Upconversion. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 3147-3152.	2.1	24
15	Triplet-Sensitization by Lead Halide Perovskite Thin Films for Near-Infrared-to-Visible Upconversion. <i>ACS Energy Letters</i> , 2019, 4, 888-895.	8.8	117
16	Effect of Magnetostatic Interactions on Stochastic Domain Wall Motion in Sub-100nm Wide Nanowires. <i>IEEE Magnetism Letters</i> , 2018, 9, 1-5.	0.6	3
17	Using lead chalcogenide nanocrystals as spin mixers: a perspective on near-infrared-to-visible upconversion. <i>Dalton Transactions</i> , 2018, 47, 8509-8516.	1.6	65
18	Molecular Design of Deep Blue Thermally Activated Delayed Fluorescence Materials Employing a Homoconjugative Triptycene Scaffold and Dihedral Angle Tuning. <i>Chemistry of Materials</i> , 2018, 30, 1462-1466.	3.2	71

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19	Solid-state infrared-to-visible upconversion for sub-bandgap sensitization of photovoltaics. , 2018, , .		5
20	3D-Printing: 3D-Printed Autonomous Sensory Composites (Adv. Mater. Technol. 3/2017). Advanced Materials Technologies, 2017, 2, .	3.0	0
21	Interference-enhanced infrared-to-visible upconversion in solid-state thin films sensitized by colloidal nanocrystals. Applied Physics Letters, 2017, 110, .	1.5	39
22	3D-Printed Autonomous Sensory Composites. Advanced Materials Technologies, 2017, 2, 1600257.	3.0	13
23	The Spatial Resolution Limit for an Individual Domain Wall in Magnetic Nanowires. Nano Letters, 2017, 17, 5869-5874.	4.5	14
24	Shorter Exciton Lifetimes via an External Heavy-Atom Effect: Alleviating the Effects of Bimolecular Processes in Organic Light-Emitting Diodes. Advanced Materials, 2017, 29, 1701987.	11.1	90
25	Donor-Acceptor Iptycenes with Thermally Activated Delayed Fluorescence. European Journal of Organic Chemistry, 2017, 2017, 4846-4851.	1.2	13
26	Speed Limit for Triplet-Exciton Transfer in Solid-State PbS Nanocrystal-Sensitized Photon Upconversion. ACS Nano, 2017, 11, 7848-7857.	7.3	130
27	A logic-in-memory design with 3-terminal magnetic tunnel junction function evaluators for convolutional neural networks. , 2017, , .		12
28	Designing a Broadband Pump for High-Quality Micro-Lasers via Modified Net Radiation Method. Scientific Reports, 2016, 6, 38576.	1.6	4
29	Link between hopping models and percolation scaling laws for charge transport in mixtures of small molecules. AIP Advances, 2016, 6, .	0.6	8
30	Red Phosphorescence from Benzo[2,1,3]thiadiazoles at Room Temperature. Journal of Organic Chemistry, 2016, 81, 4789-4796.	1.7	43
31	Solid-state infrared-to-visible upconversion sensitized by colloidal nanocrystals. Nature Photonics, 2016, 10, 31-34.	15.6	418
32	A path to practical Solar Pumped Lasers via Radiative Energy Transfer. Scientific Reports, 2015, 5, 14758.	1.6	35
33	Spin-dependent charge transfer state design rules in organic photovoltaics. Nature Communications, 2015, 6, 6415.	5.8	83
34	The Role of Electron-Hole Separation in Thermally Activated Delayed Fluorescence in Donor-Acceptor Blends. Journal of Physical Chemistry C, 2015, 119, 25591-25597.	1.5	45
35	Solid state photon upconversion utilizing thermally activated delayed fluorescence molecules as triplet sensitizer. Applied Physics Letters, 2015, 107, .	1.5	80
36	Thermally Activated Delayed Fluorescence Materials Based on Homoconjugation Effect of Donor-Acceptor Triptycenes. Journal of the American Chemical Society, 2015, 137, 11908-11911.	6.6	331

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37	Polymethyl methacrylate/hydrogen silsesquioxane bilayer resist electron beam lithography process for etching 25-nm wide magnetic wires. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2014, 32, .	0.6	12
38	Visualization of exciton transport in ordered and disordered molecular solids. <i>Nature Communications</i> , 2014, 5, 3646.	5.8	270
39	Singlet fission efficiency in tetracene-based organic solar cells. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	79
40	A transferable model for singlet-fission kinetics. <i>Nature Chemistry</i> , 2014, 6, 492-497.	6.6	402
41	Nanostructured Singlet Fission Photovoltaics Subject to Triplet-Charge Annihilation. <i>Advanced Materials</i> , 2014, 26, 1366-1371.	11.1	51
42	Energy harvesting of non-emissive triplet excitons in tetracene by emissive PbS nanocrystals. <i>Nature Materials</i> , 2014, 13, 1039-1043.	13.3	235
43	Room temperature triplet state spectroscopy of organic semiconductors. <i>Scientific Reports</i> , 2014, 4, 3797.	1.6	180
44	Light-recycling within electronic displays using deep red and near infrared photoluminescent polarizers. <i>Energy and Environmental Science</i> , 2013, 6, 72-75.	15.6	24
45	Singlet Exciton Fission in a Hexacene Derivative. <i>Advanced Materials</i> , 2013, 25, 1445-1448.	11.1	73
46	External Quantum Efficiency Above 100% in a Singlet-Exciton-Fission-Based Organic Photovoltaic Cell. <i>Science</i> , 2013, 340, 334-337.	6.0	783
47	Singlet Exciton Fission Photovoltaics. <i>Accounts of Chemical Research</i> , 2013, 46, 1300-1311.	7.6	271
48	Slow light enhanced singlet exciton fission solar cells with a 126% yield of electrons per photon. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	72
49	Highly efficient, dual state emission from an organic semiconductor. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	76
50	Recent progress in the understanding of exciton dynamics within phosphorescent OLEDs. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2012, 209, 2341-2353.	0.8	74
51	Triplet Exciton Dissociation in Singlet Exciton Fission Photovoltaics. <i>Advanced Materials</i> , 2012, 24, 6169-6174.	11.1	108
52	Organic Semiconductors: Dry Lithography of Large-Area, Thin-Film Organic Semiconductors Using Frozen CO <sub>2</sub> Resists ( <i>Adv. Mater.</i> 46/2012). <i>Advanced Materials</i> , 2012, 24, 6116-6116.	11.1	0
53	Singlet Exciton Fission in Nanostructured Organic Solar Cells. <i>Nano Letters</i> , 2011, 11, 1495-1498.	4.5	170
54	Luminescent Solar Concentrators Employing Phycobilisomes. <i>Advanced Materials</i> , 2009, 21, 3181-3185.	11.1	66

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55	All graphene electromechanical switch fabricated by chemical vapor deposition. Applied Physics Letters, 2009, 95, 183105.	1.5	145
56	High-Efficiency Organic Solar Concentrators for Photovoltaics. Science, 2008, 321, 226-228.	6.0	632
57	Phosphorescence as a probe of exciton formation and energy transfer in organic light emitting diodes. Physica Status Solidi A, 2004, 201, 1205-1214.	1.7	34
58	Endothermic energy transfer: A mechanism for generating very efficient high-energy phosphorescent emission in organic materials. Applied Physics Letters, 2001, 79, 2082-2084.	1.5	1,029
59	Nearly 100% internal phosphorescence efficiency in an organic light-emitting device. Journal of Applied Physics, 2001, 90, 5048-5051.	1.1	3,189
60	High-efficiency yellow double-doped organic light-emitting devices based on phosphor-sensitized fluorescence. Applied Physics Letters, 2001, 79, 1045-1047.	1.5	199
61	Electroluminescence mechanisms in organic light emitting devices employing a europium chelate doped in a wide energy gap bipolar conducting host. Journal of Applied Physics, 2000, 87, 8049-8055.	1.1	408