Cristina Momblona

List of Publications by Year
in descending order

55 papers	4,473 citations	218677 26 h-index	182427 51 g-index
56 all docs	56 docs citations	56 times ranked	6322 citing authors

#	Article	IF	Citations
1	Recombination in Perovskite Solar Cells: Significance of Grain Boundaries, Interface Traps, and Defect Ions. ACS Energy Letters, 2017, 2, 1214-1222.	17.4	826
2	Trapâ€Assisted Nonâ€Radiative Recombination in Organicâ€“Inorganic Perovskite Solar Cells. Advanced Materials, 2015, 27, 1837-1841.	21.0	684
3	Efficient vacuum deposited p-i-n and n-i-p perovskite solar cells employing doped charge transport layers. Energy and Environmental Science, 2016, 9, 3456-3463.	30.8	410
4	Vapor-Deposited Perovskites: The Route to High-Performance Solar Cell Production?. Joule, 2017, 1, 431-442.	24.0	274
5	High efficiency single-junction semitransparent perovskite solar cells. Energy and Environmental Science, 2014, 7, 2968-2973.	30.8	266
6	Efficient Monolithic Perovskite/Perovskite Tandem Solar Cells. Advanced Energy Materials, 2017, 7, 1602121.	19.5	255
7	Vacuum Deposited Tripleâ€Cation Mixedâ€Halide Perovskite Solar Cells. Advanced Energy Materials, 2018, 8, 1703506.	19.5	147
8	Improving Perovskite Solar Cells: Insights From a Validated Device Model. Advanced Energy Materials, 2017, 7, 1602432.	19.5	132
9	Efficient methylammonium lead iodide perovskite solar cells with active layers from 300 to 900 nm. APL Materials, 2014, 2, .	5.1	118
10	Removing Leakage and Surface Recombination in Planar Perovskite Solar Cells. ACS Energy Letters, 2017, 2, 424-430.	17.4	117
11	Quantification of spatial inhomogeneity in perovskite solar cells by hyperspectral luminescence imaging. Energy and Environmental Science, 2016, 9, 2286-2294.	30.8	102
12	High voltage vacuum-deposited CH₃NH₃PbI₃â€“CH₃NH₃PbI₃ tandem solar cells. Energy and Environmental Science, 2018, 11, 3292-3297.	30.8	98
13	Highly Stable Red-Light-Emitting Electrochemical Cells. Journal of the American Chemical Society, 2017, 139, 3237-3248.	13.7	95
14	Fully Vacuum-Processed Wide Band Gap Mixed-Halide Perovskite Solar Cells. ACS Energy Letters, 2018, 3, 214-219.	17.4	91
15	Persistent photovoltage in methylammonium lead iodide perovskite solar cells. APL Materials, 2014, 2, .	5.1	86
16	Highly Stable and Efficient Light-Emitting Electrochemical Cells Based on Cationic Iridium Complexes Bearing Arylazole Ancillary Ligands. Inorganic Chemistry, 2017, 56, 10298-10310.	4.0	65
17	Green Phosphorescence and Electroluminescence of Sulfur Pentafluoride-Functionalized Cationic Iridium(III) Complexes. Inorganic Chemistry, 2015, 54, 5907-5914.	4.0	61
18	Photovoltaic devices employing vacuum-deposited perovskite layers. MRS Bulletin, 2015, 40, 660-666.	3.5	58

#	ARTICLE	IF	CITATIONS
19	Vacuum deposited perovskite solar cells employing dopant-free triazatruxene as the hole transport material. Solar Energy Materials and Solar Cells, 2017, 163, 237-241.	6.2	54
20	Fullerene imposed high open-circuit voltage in efficient perovskite based solar cells. Journal of Materials Chemistry A, 2016, 4, 3667-3672.	10.3	48
21	Chiral Iridium(III) Complexes in Light-Emitting Electrochemical Cells: Exploring the Impact of Stereochemistry on the Photophysical Properties and Device Performances. ACS Applied Materials & Interfaces, 2016, 8, 33907-33915.	8.0	44
22	Synthesis, Properties, and Light-Emitting Electrochemical Cell (LEEC) Device Fabrication of Cationic Ir(III) Complexes Bearing Electron-Withdrawing Groups on the Cyclometallating Ligands. Inorganic Chemistry, 2016, 55, 10361-10376.	4.0	43
23	Blue-emitting cationic iridium(iii) complexes featuring pyridylpyrimidine ligands and their use in sky-blue electroluminescent devices. Journal of Materials Chemistry C, 2017, 5, 9638-9650.	5.5	39
24	Inexpensive Holeâ€Transporting Materials Derived from TrÃ¶ger's Base Afford Efficient and Stable Perovskite Solar Cells. Angewandte Chemie - International Edition, 2019, 58, 11266-11272.	13.8	37
25	Simple design to achieve red-to-near-infrared emissive cationic Ir(<scp>iii</scp>) emitters and their use in light emitting electrochemical cells. RSC Advances, 2017, 7, 31833-31837.	3.6	30
26	Efficient wide band gap double cation â€“ double halide perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 3203-3207.	10.3	28
27	Fluorene-based enamines as low-cost and dopant-free hole transporting materials for high performance and stable perovskite solar cells. Journal of Materials Chemistry A, 2021, 9, 301-309.	10.3	25
28	Acetylene Used as a New Linker for Molecular Junctions in Phenyleneâ€“Ethynylene Oligomer Langmuirâ€“Blodgett Films. Journal of Physical Chemistry C, 2012, 116, 9142-9150.	3.1	22
29	Interface engineering in efficient vacuum deposited perovskite solar cells. Organic Electronics, 2016, 37, 396-401.	2.6	19
30	Isophorone- and pyran-containing NLO-chromophores: a comparative study. Tetrahedron Letters, 2010, 51, 3662-3665.	1.4	18
31	Exploring the effect of the cyclometallating ligand in 2-(pyridine-2-yl)benzo[<i>d</i>]thiazole-containing iridium(<scp>iii</scp>) complexes for stable light-emitting electrochemical cells. Journal of Materials Chemistry C, 2018, 6, 12679-12688.	5.5	15
32	Azatruxeneâ€Based, Dumbbellâ€Shaped, Donorâ€“Ï€â€Bridgeâ€“Donor Holeâ€Transporting Materials for Perovskite Solar Cells. Chemistry - A European Journal, 2020, 26, 11039-11047.	3.3	15
33	Gradient band structure: high performance perovskite solar cells using poly(bisphenol A) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50	10.3	14
34	Phosphomolybdic acid as an efficient hole injection material in perovskite optoelectronic devices. Dalton Transactions, 2019, 48, 30-34.	3.3	13
35	Co-evaporation as an optimal technique towards compact methylammonium bismuth iodide layers. Scientific Reports, 2020, 10, 10640.	3.3	11
36	Phosphine Oxide Derivative as a Passivating Agent to Enhance the Performance of Perovskite Solar Cells. ACS Applied Energy Materials, 2021, 4, 1259-1268.	5.1	11

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37	Subphthalocyanine-based electron-transport materials for perovskite solar cells. Journal of Materials Chemistry C, 2021, 9, 16298-16303.	5.5	10
38	Crystallographically Oriented Hybrid Perovskites via Thermal Vacuum Codeposition. Solar Rrl, 2021, 5, 2100191.	5.8	8
39	Triarylamine-Functionalized Imidazolyl-Capped Bithiophene Hole Transporting Material for Cost-Effective Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2022, 14, 22053-22060.	8.0	8
40	Structural and photophysical investigation of single-source evaporation of CsFAPbI₃ and FAPbI₃ perovskite thin films. Journal of Materials Chemistry C, 2022, 10, 10075-10082.	5.5	8
41	[Ir(C^N)₂(N^N)]⁺ emitters containing a naphthalene unit within a linker between the two cyclometallating ligands. Dalton Transactions, 2016, 45, 16379-16392.	3.3	7
42	Light Stability Enhancement of Perovskite Solar Cells Using <i>1H</i>,<i>1H</i>,<i>2H</i>,<i>2H</i>â€Perfluorooctyltriethoxysilane Passivation. Solar Rrl, 2021, 5, 2000650.	5.8	7
43	Selenopheneâ€Based Holeâ€Transporting Materials for Perovskite Solar Cells. ChemPlusChem, 2021, 86, 1006-1013.	2.8	7
44	Cut from the Same Cloth: Enamine-Derived Spirobifluorenes as Hole Transporters for Perovskite Solar Cells. Chemistry of Materials, 2021, 33, 6059-6067.	6.7	7
45	Adsorption of single 1,8-octanedithiol molecules on Cu(100). Physical Chemistry Chemical Physics, 2016, 18, 27521-27528.	2.8	6
46	C₆₀ Thin Films in Perovskite Solar Cells: Efficient or Limiting Charge Transport Layer?. ACS Applied Energy Materials, 2022, 5, 1646-1655.	5.1	6
47	Molecular Engineering of Fluoreneâ€Based Holeâ€Transporting Materials for Efficient Perovskite Solar Cells. Solar Rrl, 2022, 6, .	5.8	6
48	Inexpensive Holeâ€Transporting Materials Derived from TrÃ¶ger's Base Afford Efficient and Stable Perovskite Solar Cells. Angewandte Chemie, 2019, 131, 11388.	2.0	5
49	Molecular Engineering of Thienyl Functionalized Ullazines as Holeâ€Transporting Materials for Perovskite Solar Cells. Solar Rrl, 2022, 6, .	5.8	5
50	Modulating the Electron Transporting Properties of Subphthalocyanines for Inverted Perovskite Solar Cells. Frontiers in Chemistry, 0, 10, .	3.6	5
51	Application of a Tetraâ€TPDâ€Type Holeâ€Transporting Material Fused by a TrÃ¶ger's Base Core in Perovskite SolarÂCells. Solar Rrl, 2019, 3, 1900224.	5.8	4
52	Mechanistic Insights into the Role of the Bis(trifluoromethanesulfonyl)imide Ion in Coevaporated pâ€“iâ€“n Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, , .	8.0	2
53	Identifying Key Parameters to Control Perovskite Crystallization in Co-Evaporation. , 0, , .		0
54	Zn(II) and Cu(II) Tetrakis(Diarylamine)Phthalocyanines as Hole-Transporting Materials for Perovskite Solar Cells. SSRN Electronic Journal, 0, , .	0.4	0

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55	Fluorene-based enamines as low-cost and dopant-free hole transporting materials for high performance and stable perovskite solar cells. , 0, , .		0