Teresa S Ripolles

List of Publications by Year
in descending order

39 papers	2,309 citations	236925 25 h-index	361022 35 g-index
39 all docs	39 docs citations	39 times ranked	4384 citing authors

#	Article	IF	Citations
1	Recombination Study of Combined Halides (Cl, Br, I) Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2014, 5, 1628-1635.	4.6	384
2	Colloidal Synthesis of Air-Stable Alloyed CsSn_{1â€“x}Pb_xI₃ Perovskite Nanocrystals for Use in Solar Cells. Journal of the American Chemical Society, 2017, 139, 16708-16719.	13.7	314
3	Highly Efficient 17.6% Tinâ€“Lead Mixed Perovskite Solar Cells Realized through Spike Structure. Nano Letters, 2018, 18, 3600-3607.	9.1	114
4	How the Charge-Neutrality Level of Interface States Controls Energy Level Alignment in Cathode Contacts of Organic Bulk-Heterojunction Solar Cells. ACS Nano, 2012, 6, 3453-3460.	14.6	113
5	Design and characterization of alkoxy-wrapped pushâ€“pull porphyrins for dye-sensitized solar cells. Chemical Communications, 2012, 48, 4368.	4.1	108
6	Facile Synthesis and Characterization of Sulfur Doped Low Bandgap Bismuth Based Perovskites by Soluble Precursor Route. Chemistry of Materials, 2016, 28, 6436-6440.	6.7	87
7	Oxygen doping-induced photogeneration loss in P3HT:PCBM solar cells. Solar Energy Materials and Solar Cells, 2012, 100, 185-191.	6.2	82
8	Porphyrin Dyes with High Injection and Low Recombination for Highly Efficient Mesoscopic Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2011, 115, 10898-10902.	3.1	79
9	Efficiency enhancement by changing perovskite crystal phase and adding a charge extraction interlayer in organic amine free-perovskite solar cells based on cesium. Solar Energy Materials and Solar Cells, 2016, 144, 532-536.	6.2	79
10	Origin of efficiency enhancement in Nb2O5 coated titanium dioxide nanorod based dye sensitized solar cells. Energy and Environmental Science, 2011, 4, 3414.	30.8	75
11	Ultrafast Electron Injection from Photoexcited Perovskite CsPbI₃ QDs into TiO₂ Nanoparticles with Injection Efficiency near 99%. Journal of Physical Chemistry Letters, 2018, 9, 294-297.	4.6	75
12	Interplay between Fullerene Surface Coverage and Contact Selectivity of Cathode Interfaces in Organic Solar Cells. ACS Nano, 2013, 7, 4637-4646.	14.6	72
13	Tunable Open Circuit Voltage by Engineering Inorganic Cesium Lead Bromide/Iodide Perovskite Solar Cells. Scientific Reports, 2018, 8, 2482.	3.3	62
14	Series resistance in organic bulk-heterojunction solar devices: Modulating carrier transport with fullerene electron traps. Organic Electronics, 2012, 13, 2326-2332.	2.6	60
15	Slow hot carrier cooling in cesium lead iodide perovskites. Applied Physics Letters, 2017, 111, .	3.3	56
16	Substitution of a hydroxamic acid anchor into the MK-2 dye for enhanced photovoltaic performance and water stability in a DSSC. Physical Chemistry Chemical Physics, 2014, 16, 16629-16641.	2.8	53
17	Improved Reproducibility and Intercalation Control of Efficient Planar Inorganic Perovskite Solar Cells by Simple Alternate Vacuum Deposition of PbI₂ and CsI. ACS Omega, 2017, 2, 4464-4469.	3.5	49
18	Diffusion-Recombination Determines Collected Current and Voltage in Polymer:Fullerene Solar Cells. Journal of Physical Chemistry C, 2012, 116, 16925-16933.	3.1	46

#	Article	IF	Citations
19	Enhanced stability and efficiency in inverted perovskite solar cells through graphene doping of PEDOT:PSS hole transport layer. Materials and Design, 2020, 191, 108587.	7.0	43
20	Polymer defect states modulate open-circuit voltage in bulk-heterojunction solar cells. Applied Physics Letters, 2013, 103, 243306.	3.3	40
21	Annealing effects on CsPbI₃-based planar heterojunction perovskite solar cells formed by vacuum deposition method. Japanese Journal of Applied Physics, 2017, 56, 04CS11.	1.5	35
22	Electrodeposited NiO anode interlayers: Enhancement of the charge carrier selectivity in organic solar cells. Solar Energy Materials and Solar Cells, 2013, 117, 564-568.	6.2	32
23	Shelf Life Degradation of Bulk Heterojunction Solar Cells: Intrinsic Evolution of Charge Transfer Complex. Advanced Energy Materials, 2015, 5, 1401997.	19.5	32
24	Architecture of the Interface between the Perovskite and Holeâ€Transport Layers in Perovskite Solar Cells. ChemSusChem, 2016, 9, 2634-2639.	6.8	27
25	New Tin(II) Fluoride Derivative as a Precursor for Enhancing the Efficiency of Inverted Planar Tin/Lead Perovskite Solar Cells. Journal of Physical Chemistry C, 2018, 122, 27284-27291.	3.1	26
26	Nanoscale mapping by electron energy-loss spectroscopy reveals evolution of organic solar cell contact selectivity. Organic Electronics, 2015, 16, 227-233.	2.6	25
27	Ultrafast selective extraction of hot holes from cesium lead iodide perovskite films. Journal of Energy Chemistry, 2018, 27, 1170-1174.	12.9	23
28	High-Efficiency Lead-Free Wide Band Gap Perovskite Solar Cells via Guanidinium Bromide Incorporation. ACS Applied Energy Materials, 2021, 4, 5615-5624.	5.1	19
29	Enhanced efficiency and stability in Sn-based perovskite solar cells by trimethylsilyl halide surface passivation. Journal of Energy Chemistry, 2022, 71, 604-611.	12.9	19
30	Enhanced Nonlinear Optical Coefficients of MAPbI3 Thin Films by Bismuth Doping. Journal of Physical Chemistry Letters, 2020, 11, 2188-2194.	4.6	15
31	Large Grain Growth and Energy Alignment Optimization by Diethylammonium Iodide Substitution at A Site in Leadâ€Free Tin Halide Perovskite Solar Cells. Solar Rrl, 2021, 5, 2100633.	5.8	14
32	Molecular Electronic Coupling Controls Charge Recombination Kinetics in Organic Solar Cells of Low Bandgap Diketopyrrolopyrrole, Carbazole, and Thiophene Polymers. Journal of Physical Chemistry C, 2013, 117, 8719-8726.	3.1	13
33	Enhancing the Electronic Properties and Stability of High-Efficiency Tinâ€“Lead Mixed Halide Perovskite Solar Cells via Doping Engineering. Journal of Physical Chemistry Letters, 2022, 13, 3130-3137.	4.6	12
34	Mechanisms of charge accumulation in the dark operation of perovskite solar cells. Physical Chemistry Chemical Physics, 2016, 18, 14970-14975.	2.8	11
35	Effect of Pristine Graphene on Methylammonium Lead Iodide Films and Implications on Solar Cell Performance. ACS Applied Energy Materials, 2021, 4, 13943-13951.	5.1	7
36	Interface Engineering in Perovskite Solar Cells by low concentration of PEAI solution in the antisolvent step. Energy Technology, 0, , .	3.8	5

#	Article	IF	Citations
37	Infrared light sensitive Sn/Pb binary perovskite solar cells with improved stability in air and organic amine-free perovskite solar cells with improved stability against light exposure. , 2015, , .		2
38	Near IR sensitive Sn based perovskite solar cells with high current density reaching 30mA/cm². , 2016, , .		1
39	Relationship between Relative Lattice Strain and Efficiency for Sn-Perovskite Solar Cells. , 0, , .		0