Silvia Colella

List of Publications by Year
in descending order

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73	3,665	172207	128067
papers	citations	29 h-index	60 g-index

74	74	74	6293
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	MAPbI_{3-x}Cl_x Mixed Halide Perovskite for Hybrid Solar Cells: The Role of Chloride as Dopant on the Transport and Structural Properties. Chemistry of Materials, 2013, 25, 4613-4618.	3.2	732
2	Stark Effect in Perovskite/TiO₂ Solar Cells: Evidence of Local Interfacial Order. Nano Letters, 2014, 14, 2168-2174.	4.5	200
3	Elusive Presence of Chloride in Mixed Halide Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2014, 5, 3532-3538.	2.1	175
4	Optical determination of Shockley-Read-Hall and interface recombination currents in hybrid perovskites. Scientific Reports, 2017, 7, 44629.	1.6	175
5	Investigating charge dynamics in halide perovskite-sensitized mesostructured solar cells. Energy and Environmental Science, 2014, 7, 1889-1894.	15.6	151
6	Unraveling Unprecedented Charge Carrier Mobility through Structure Property Relationship of Four Isomers of Didodecyl[1]benzothieno[3,2â€b][1]benzothiophene. Advanced Materials, 2016, 28, 7106-7114.	11.1	138
7	Molecular Tailoring of Phenothiazine-Based Hole-Transporting Materials for High-Performing Perovskite Solar Cells. ACS Energy Letters, 2017, 2, 1029-1034.	8.8	134
8	Forthcoming perspectives of photoelectrochromic devices: a critical review. Energy and Environmental Science, 2016, 9, 2682-2719.	15.6	122
9	Essential Role of the Ancillary Ligand in the Color Tuning of Iridium Tetrazolate Complexes. Inorganic Chemistry, 2008, 47, 10509-10521.	1.9	119
10	The Bright Side of Perovskites. Journal of Physical Chemistry Letters, 2016, 7, 4322-4334.	2.1	115
11	Multiscale morphology design of hybrid halide perovskites through a polymeric template. Nanoscale, 2015, 7, 18956-18963.	2.8	80
12	Growing perovskite into polymers for easy-processable optoelectronic devices. Scientific Reports, 2015, 5, 7725.	1.6	78
13	Effect of Mesostructured Layer upon Crystalline Properties and Device Performance on Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2015, 6, 1628-1637.	2.1	78
14	Organic Gelators as Growth Control Agents for Stable and Reproducible Hybrid Perovskiteâ€Based Solar Cells. Advanced Energy Materials, 2017, 7, 1602600.	10.2	78
15	Cooperative Effect of GO and Glucose on PEDOT:PSS for High V_{OC} and Hysteresisâ€Free Solutionâ€Processed Perovskite Solar Cells. Advanced Functional Materials, 2016, 26, 6985-6994.	7.8	61
16	Polymeric rheology modifier allows single-step coating of perovskite ink for highly efficient and stable solar cells. Nano Energy, 2018, 54, 400-408.	8.2	60
17	NiO/MAPbI_{3-x}Cl_x/PCBM: A Model Case for an Improved Understanding of Inverted Mesoscopic Solar Cells. ACS Applied Materials & Interfaces, 2015, 7, 4283-4289.	4.0	59
18	Sensitized near-infrared emission from ytterbium(iii) via direct energy transfer from iridium(iii) in a heterometallic neutral complex. Dalton Transactions, 2008, , 2385.	1.6	57

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19	Connecting the solution chemistry of PbI₂ and MAI: a cyclodextrin-based supramolecular approach to the formation of hybrid halide perovskites. Chemical Science, 2018, 9, 3200-3208.	3.7	55
20	Direct or Indirect Bandgap in Hybrid Lead Halide Perovskites?. Advanced Optical Materials, 2018, 6, 1701254.	3.6	54
21	Polaritonâ€Induced Enhanced Emission from an Organic Dye under the Strong Coupling Regime. Advanced Optical Materials, 2014, 2, 1076-1081.	3.6	46
22	Nitrogen Soaking Promotes Lattice Recovery inÂPolycrystalline Hybrid Perovskites. Advanced Energy Materials, 2019, 9, 1803450.	10.2	46
23	Ultra-Bright Near-Infrared Perovskite Light-Emitting Diodes with Reduced Efficiency Roll-off. Scientific Reports, 2018, 8, 15496.	1.6	42
24	X-ray photoelectron spectroscopy of reduced graphene oxide prepared by a novel green method. Vacuum, 2015, 119, 159-162.	1.6	39
25	Covalently Functionalized SWCNTs as Tailored p-Type Dopants for Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 27966-27973.	4.0	38
26	GO/glucose/PEDOT:PSS ternary nanocomposites for flexible supercapacitors. Composites Part B: Engineering, 2018, 148, 149-155.	5.9	37
27	Texture of MAPbI₃ Layers Assisted by Chloride on Flat TiO₂ Substrates. Journal of Physical Chemistry C, 2015, 119, 19808-19816.	1.5	36
28	Fully Vaporâ€Deposited Heterostructured Lightâ€Emitting Diode Based on Organoâ€Metal Halide Perovskite. Advanced Electronic Materials, 2016, 2, 1500325.	2.6	35
29	Addressing the Function of Easily Synthesized Hole Transporters in Direct and Inverted Perovskite Solar Cells. ACS Applied Energy Materials, 2018, 1, 1069-1076.	2.5	33
30	Implications of TiO₂ surface functionalization on polycrystalline mixed halide perovskite films and photovoltaic devices. Journal of Materials Chemistry A, 2015, 3, 20811-20818.	5.2	31
31	Rheological Tunability of Perovskite Precursor Solutions: From Spin Coating to Inkjet Printing Process. Nanomaterials, 2019, 9, 582.	1.9	31
32	First disubstituted dibenzothiophene-5,5-dioxide monodispersed molecular materials for efficient blue-electroluminescence. Journal of Materials Chemistry, 2010, 20, 1012-1018.	6.7	29
33	Light-Induced Formation of Pb³⁺ Paramagnetic Species in Lead Halide Perovskites. ACS Energy Letters, 2018, 3, 1840-1847.	8.8	28
34	Low band gap poly(1,4-arylene-2,5-thienylene)s with benzothiadiazole units: Synthesis, characterization and application in polymer solar cells. Solar Energy Materials and Solar Cells, 2011, 95, 3490-3503.	3.0	26
35	Rheological and physical characterization of <scp>PEDOT</scp>: <scp>PSS</scp>/graphene oxide nanocomposites for perovskite solar cells. Polymer Engineering and Science, 2017, 57, 546-552.	1.5	25
36	Two-step MAPbI₃ deposition by low-vacuum proximity-space-effusion for high-efficiency inverted semitransparent perovskite solar cells. Journal of Materials Chemistry A, 2021, 9, 16456-16469.	5.2	25

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37	Engineering TiO₂/Perovskite Planar Heterojunction for Hysteresisâ€Less Solar Cells. Advanced Materials Interfaces, 2016, 3, 1600493.	1.9	24
38	Optimizing the Interface between Hole Transporting Material and Nanocomposite for Highly Efficient Perovskite Solar Cells. Nanomaterials, 2019, 9, 1627.	1.9	23
39	One-step polymer assisted roll-to-roll gravure-printed perovskite solar cells without using anti-solvent bathing. Cell Reports Physical Science, 2021, 2, 100639.	2.8	23
40	Managing transparency through polymer/perovskite blending: A route toward thermostable and highly efficient, semi-transparent solar cells. Nano Energy, 2021, 89, 106406.	8.2	20
41	UV Reduced Graphene Oxide PEDOT:PSS Nanocomposite for Perovskite Solar Cells. IEEE Nanotechnology Magazine, 2016, 15, 725-730.	1.1	19
42	Highly Efficient All-Solid-State WO₃-Perovskite Photovoltachromic Cells for Single-Glass Smart Windows. ACS Applied Energy Materials, 2020, 3, 10453-10462.	2.5	19
43	Chemical insights into perovskite ink stability. CheM, 2022, 8, 31-45.	5.8	19
44	Thermally evaporated hybrid perovskite for hetero-structured green light-emitting diodes. Applied Physics Letters, 2017, 111, .	1.5	18
45	Methylammonium-formamidinium reactivity in aged organometal halide perovskite inks. Cell Reports Physical Science, 2021, 2, 100432.	2.8	18
46	Polymerâ€Assisted Singleâ€Step Slotâ€Die Coating of Flexible Perovskite Solar Cells at Mild Temperature from Dimethyl Sulfoxide. ChemPlusChem, 2021, 86, 1442-1450.	1.3	16
47	High Mobility in Solutionâ€Processed 2,7â€Dialkylâ€[1]benzothieno[3,2â€b][1]benzothiopheneâ€Based Fieldâ€Effect Transistors Prepared with a Simplified Deposition Method. ChemPlusChem, 2014, 79, 371-374.	1.3	14
48	GO/PEDOT:PSS nanocomposites: effect of different dispersing agents on rheological, thermal, wettability and electrochemical properties. Nanotechnology, 2017, 28, 174001.	1.3	14
49	Monodispersed molecular donors for bulk hetero-junction solar cells: from molecular properties to device performances. Chemical Communications, 2010, 46, 6273.	2.2	13
50	Spray coating fabrication of organic solar cells bypassing the limit of orthogonal solvents. Applied Physics Letters, 2013, 102, .	1.5	13
51	Implication of polymeric template agent on the formation process of hybrid halide perovskite films. Nanotechnology, 2021, 32, 265707.	1.3	13
52	Room-temperature processed films of colloidal carved rod-shaped nanocrystals of reduced tungsten oxide as interlayers for perovskite solar cells. Physical Chemistry Chemical Physics, 2018, 20, 11396-11404.	1.3	12
53	Simple Processing Additive-Driven 20% Efficiency for Inverted Planar Heterojunction Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 18431-18436.	4.0	12
54	Nanopatterning the graphite surface with ordered macrocyclic or ribbon-like assemblies of isocytosine derivatives: an STM study. CrystEngComm, 2011, 13, 5535.	1.3	11

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55	Aryl 5-substitution of a phenyl-pyridine based ligand as a viable way to influence the opto-electronic properties of bis-cyclometalated Ir(iii) heteroleptic complexes. Dalton Transactions, 2013, 42, 8939.	1.6	11
56	Robust, High-Performing Maizeâ€“Perovskite-Based Solar Cells with Improved Stability. ACS Applied Energy Materials, 2021, 4, 11194-11203.	2.5	11
57	Molecular Doping for Hole Transporting Materials in Hybrid Perovskite Solar Cells. Metals, 2020, 10, 14.	1.0	9
58	Synthesis of Reduced Graphite Oxide by a Novel Green Process Based on UV Light Irradiation. Science of Advanced Materials, 2015, 7, 2445-2451.	0.1	9
59	Synthesis, characterization and photovoltaic properties of random poly(arylene-vinylene)s containing benzothiadiazole. Polymer, 2011, 52, 2740-2746.	1.8	8
60	The Effect of Extended Ball-Milling upon Three-Dimensional and Two-Dimensional Perovskite Crystals Properties. Applied Sciences (Switzerland), 2020, 10, 4775.	1.3	8
61	Titanium Dioxide Mesoporous Electrodes for Solidâ€State Dyeâ€Sensitized Solar Cells: Crossâ€Analysis of the Critical Parameters. Advanced Energy Materials, 2014, 4, 1301362.	10.2	7
62	Inclusion of 2D Transition Metal Dichalcogenides in Perovskite Inks and Their Influence on Solar Cell Performance. Nanomaterials, 2021, 11, 1706.	1.9	7
63	Selective self-assembly and light emission tuning of layered hybrid perovskites on patterned graphene. Nanoscale, 2018, 10, 3198-3211.	2.8	6
64	Electronic transport, ionic activation energy and trapping phenomena in a polymer-hybrid halide perovskite composite. Journal of Science: Advanced Materials and Devices, 2021, 6, 543-550.	1.5	6
65	Sequential deposition of hybrid halide perovskite starting both from lead iodide and lead chloride on the most widely employed substrates. Thin Solid Films, 2018, 657, 110-117.	0.8	5
66	MAPbI_{3-x}Cl_x mixed halide perovskite for hybrid solar cells: the role of chloride as dopant on the transport and structural properties. Materials Research Society Symposia Proceedings, 2014, 1667, 41.	0.1	4
67	Investigating Charge Dynamics in Halide Perovskite Sensitized Mesostructured Solar Cells. Materials Research Society Symposia Proceedings, 2014, 1667, 7.	0.1	2
68	Quantum Nature of Light in Nonstoichiometric Bulk Perovskites. ACS Nano, 2019, 13, 10711-10716.	7.3	2
69	Plasma-Deposited Fluorocarbon Coatings on Methylammonium Lead Iodide Perovskite Films. Energies, 2022, 15, 4512.	1.6	1
70	Isothermal Titration Calorimetry Study of a Bistable Supramolecular System: Reversible Complexation of Cryptand[2.2.2] with Potassium Ions. ChemPhysChem, 2014, 15, 2743-2748.	1.0	0
71	Polymer Nanocomposites based on in situ reduced graphene oxide for photovoltaic applications in innovative hybrid solar cells. , 2015, , .		0
72	PEDOT:PSS/GO nanocomposites: Determination of the aspect ratio by indirect measurements. AIP Conference Proceedings, 2016, , .	0.3	0

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73	Charge Carrier Mobility: Unraveling Unprecedented Charge Carrier Mobility through Structure Property Relationship of Four Isomers of Didodecyl[1]benzothieno[3,2-b][1]benzothiophene (Adv.) Tj ETQq1 1 0.784314 rgBT /Over		