Annallisa Bruno

List of Publications by Year
in descending order

131 papers	5,424 citations	94433 37 h-index	88630 70 g-index
137 all docs	137 docs citations	137 times ranked	8123 citing authors

#	Article	IF	Citations
1	Advances and Potentials of NiO_{<i>x</i>} Surface Treatments for pâˆ’iâˆ’n Perovskite Solar Cells. Solar Rrl, 2022, 6, 2100700.	5.8	25
2	Halide Perovskite Solar Cells for Building Integrated Photovoltaics: Transforming Building FaÃ§ades into Power Generators. Advanced Materials, 2022, 34, e2104661.	21.0	37
3	Lowâ€Temperature Atomic Layer Deposited Electron Transport Layers for Coâ€Evaporated Perovskite Solar Cells. Solar Rrl, 2022, 6, 2100842.	5.8	16
4	Alkali Additives Enable Efficient Large Area (>55 cm²) Slotâ€Die Coated Perovskite Solar Modules. Advanced Functional Materials, 2022, 32, .	14.9	39
5	Semitransparent Perovskite Solar Cells with > 13% Efficiency and 27% Transperancy Using Plasmonic Au Nanorods. ACS Applied Materials & Interfaces, 2022, 14, 11339-11349.	8.0	29
6	Perovskite Solar Modules. Solar Rrl, 2022, 6, .	5.8	3
7	Advances and Potentials of NiO_{<i>x</i>} Surface Treatments for pâˆ’iâˆ’n Perovskite Solar Cells. Solar Rrl, 2022, 6, .	5.8	5
8	Efficient bandgap widening in co-evaporated MAPbI₃ perovskite. Sustainable Energy and Fuels, 2022, 6, 2428-2438.	4.9	8
9	Interfacial passivation with 4-chlorobenzene sulfonyl chloride for stable and efficient planar perovskite solar cells. Journal of Materials Chemistry C, 2022, 10, 9044-9051.	5.5	8
10	Charge Carrier Dynamics in Co-evaporated MAPbI₃ with a Gradient in Composition. ACS Applied Energy Materials, 2022, 5, 7049-7055.	5.1	2
11	Amplified Spontaneous Emission Threshold Dependence on Determination Method in Dye-Doped Polymer and Lead Halide Perovskite Waveguides. Molecules, 2022, 27, 4261.	3.8	8
12	Improving the Performance of Carbon-Based Perovskite Solar Modules (70 cm2) by Incorporating Cesium Halide in Mesoporous TiO2. ACS Applied Energy Materials, 2021, 4, 249-258.	5.1	9
13	Effects of Allâ€Organic Interlayer Surface Modifiers on the Efficiency and Stability of Perovskite Solar Cells. ChemSusChem, 2021, 14, 1524-1533.	6.8	5
14	Excellent Intrinsic Longâ€Term Thermal Stability of Coâ€Evaporated MAPbI₃ Solar Cells at 85 Â°C. Advanced Functional Materials, 2021, 31, 2100557.	14.9	36
15	Vacuumâ€Processed Metal Halide Perovskite Lightâ€Emitting Diodes: Prospects and Challenges. ChemPlusChem, 2021, 86, 558-573.	2.8	12
16	Picosecond Charge Localization Dynamics in CH3NH3PbI3 Perovskite Probed by Infrared-Activated Vibrations. Journal of Physical Chemistry Letters, 2021, 12, 4428-4433.	4.6	6
17	Coâ€Evaporated MAPbI₃: Excellent Intrinsic Longâ€Term Thermal Stability of Coâ€Evaporated MAPbI₃ Solar Cells at 85 Â°C (Adv. Funct. Mater. 22/2021). Advanced Functional Materials, 2021, 31, 2170155.	14.9	0
18	Synchronized Injection of Charge Carriers in Perovskite Light Emitting Transistors. , 2021, , .		0

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19	Coâ€Evaporated Perovskite Lightâ€Emitting Transistor Operating at Room Temperature. Advanced Electronic Materials, 2021, 7, 2100403.	5.1	15
20	Coâ€Evaporated MAPbI₃ with Graded Fermi Levels Enables Highly Performing, Scalable, and Flexible pâ€iâ€n Perovskite Solar Cells. Advanced Functional Materials, 2021, 31, 2103252.	14.9	40
21	Double-Pulse Operation Enhances Brightness of Hybrid Perovskite Light Emitting Transistor. , 2021, , .		0
22	Colorful Perovskite Solar Cells: Progress, Strategies, and Potentials. Journal of Physical Chemistry Letters, 2021, 12, 1321-1329.	4.6	39
23	Perovskite Solar Mini-Modules. Europhysics News, 2021, 52, 16-19.	0.3	0
24	Roadmap for cost-effective, commercially-viable perovskite silicon tandems for the current and future PV market. Sustainable Energy and Fuels, 2020, 4, 852-862.	4.9	58
25	Low temperature, solution processed spinel NiCo2O4 nanoparticles as efficient hole transporting material for mesoscopic n-i-p perovskite solar cells. Solar Energy, 2020, 196, 367-378.	6.1	26
26	Fourâ€Terminal Perovskite on Silicon Tandem Solar Cells Optimal Measurement Schemes. Energy Technology, 2020, 8, 1901267.	3.8	13
27	Bifacial, Color-Tunable Semitransparent Perovskite Solar Cells for Building-Integrated Photovoltaics. ACS Applied Materials & Interfaces, 2020, 12, 484-493.	8.0	80
28	Interlayer Engineering for Flexible Large-Area Planar Perovskite Solar Cells. ACS Applied Energy Materials, 2020, 3, 777-784.	5.1	13
29	Design of Perovskite Thermally Coâ€Evaporated Highly Efficient Miniâ€Modules with High Geometrical Fill Factors. Solar Rrl, 2020, 4, 2000473.	5.8	29
30	Potassium Acetate-Based Treatment for Thermally Co-Evaporated Perovskite Solar Cells. Coatings, 2020, 10, 1163.	2.6	9
31	Performance Enhanced Light-Emitting Diodes Fabricated from Nanocrystalline CsPbBr₃ with In Situ Zn²⁺ Addition. ACS Applied Electronic Materials, 2020, 2, 4002-4011.	4.3	33
32	Investigating the structureâ€"function relationship in triple cation perovskite nanocrystals for light-emitting diode applications. Journal of Materials Chemistry C, 2020, 8, 11805-11821.	5.5	27
33	Disordered Polymer Antireflective Coating for Improved Perovskite Photovoltaics. ACS Photonics, 2020, 7, 1971-1977.	6.6	14
34	Realizing Reduced Imperfections via Quantum Dots Interdiffusion in High Efficiency Perovskite Solar Cells. Advanced Materials, 2020, 32, e2003296.	21.0	50
35	Novel amphiphilic corannulene additive for moisture-resistant perovskite solar cells. Chemical Communications, 2020, 56, 11997-12000.	4.1	15
36	Hybrid 2D [Pb(CH₃NH₂)I₂]_{<i>n</i>} Coordination Polymer Precursor for Scalable Perovskite Deposition. ACS Energy Letters, 2020, 5, 2305-2312.	17.4	18

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37	Mixed-Dimensional Naphthylmethylammonium-Methylammonium Lead Iodide Perovskites with Improved Thermal Stability. Scientific Reports, 2020, 10, 429.	3.3	39
38	Highly Efficient Thermally Co-evaporated Perovskite Solar Cells and Mini-modules. Joule, 2020, 4, 1035-1053.	24.0	257
39	Origin of Amplified Spontaneous Emission Degradation in MAPbBr₃ Thin Films under Nanosecond-UV Laser Irradiation. Journal of Physical Chemistry C, 2020, 124, 10696-10704.	3.1	14
40	Designing the Perovskite Structural Landscape for Efficient Blue Emission. ACS Energy Letters, 2020, 5, 1593-1600.	17.4	71
41	Broadband emission from zero-dimensional Cs₄PbI₆ perovskite nanocrystals. RSC Advances, 2020, 10, 13431-13436.	3.6	31
42	Highly Efficient Semitransparent Perovskite Solar Cells for Four Terminal Perovskite-Silicon Tandems. ACS Applied Materials & Interfaces, 2019, 11, 34178-34187.	8.0	71
43	Perturbation-Induced Seeding and Crystallization of Hybrid Perovskites over Surface-Modified Substrates for Optoelectronic Devices. ACS Applied Materials & Interfaces, 2019, 11, 27727-27734.	8.0	12
44	Self-assembly of a robust hydrogen-bonded octylphosphonate network on cesium lead bromide perovskite nanocrystals for light-emitting diodes. Nanoscale, 2019, 11, 12370-12380.	5.6	67
45	Improved photovoltaic performance of triple-cation mixed-halide perovskite solar cells with binary trivalent metals incorporated into the titanium dioxide electron transport layer. Journal of Materials Chemistry C, 2019, 7, 5028-5036.	5.5	36
46	Cu-doped nickel oxide interface layer with nanoscale thickness for efficient and highly stable printable carbon-based perovskite solar cell. Solar Energy, 2019, 182, 225-236.	6.1	58
47	Small-area Passivated Contact monoPoly^{TM} Silicon Solar Cells for Tandem Device Integration. , 2019, , .		2
48	Regulating Vertical Domain Distribution in Ruddlesdenâ€“Popper Perovskites for Electroluminescence Devices. Journal of Physical Chemistry Letters, 2019, 10, 7949-7955.	4.6	5
49	Improved Photovoltaic Efficiency and Amplified Photocurrent Generation in Mesoporous <i>n</i> = 1 Two-Dimensional Leadâ€“Iodide Perovskite Solar Cells. Chemistry of Materials, 2019, 31, 890-898.	6.7	57
50	Crown Ethers Enable Room-Temperature Synthesis of CsPbBr₃ Quantum Dots for Light-Emitting Diodes. ACS Energy Letters, 2018, 3, 526-531.	17.4	92
51	Perovskite templating <i>via</i> a bathophenanthroline additive for efficient light-emitting devices. Journal of Materials Chemistry C, 2018, 6, 2295-2302.	5.5	12
52	Engineering the Emission of Broadband 2D Perovskites by Polymer Distributed Bragg Reflectors. ACS Photonics, 2018, 5, 867-874.	6.6	38
53	Spinel Co₃O₄ nanomaterials for efficient and stable large area carbon-based printed perovskite solar cells. Nanoscale, 2018, 10, 2341-2350.	5.6	106
54	Extended Absorption Window and Improved Stability of Cesium-Based Triple-Cation Perovskite Solar Cells Passivated with Perfluorinated Organics. ACS Energy Letters, 2018, 3, 1068-1076.	17.4	44

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55	Additive Selection Strategy for High Performance Perovskite Photovoltaics. Journal of Physical Chemistry C, 2018, 122, 13884-13893.	3.1	71
56	Self-assembled hierarchical nanostructured perovskites enable highly efficient LEDs <i>via</i> an energy cascade. Energy and Environmental Science, 2018, 11, 1770-1778.	30.8	135
57	Brightness Enhancement in Pulsed-Operated Perovskite Light-Emitting Transistors. ACS Applied Materials & Interfaces, 2018, 10, 37316-37325.	8.0	46
58	Efficient and Ambientâ€Airâ€Stable Solar Cell with Highly Oriented 2D@3D Perovskites. Advanced Functional Materials, 2018, 28, 1801654.	14.9	98
59	Recovery of Shallow Charge-Trapping Defects in CsPbX₃ Nanocrystals through Specific Binding and Encapsulation with Amino-Functionalized Silanes. ACS Energy Letters, 2018, 3, 1409-1414.	17.4	60
60	Designing Efficient Energy Funneling Kinetics in Ruddlesdenâ€"Popper Perovskites for Highâ€Performance Lightâ€Emitting Diodes. Advanced Materials, 2018, 30, e1800818.	21.0	85
61	Inducing Panchromatic Absorption and Photoconductivity in Polycrystalline Molecular 1D Lead-Iodide Perovskites through Ï€-Stacked Viologens. Chemistry of Materials, 2018, 30, 5827-5830.	6.7	33
62	A Zero-Dimensional Mixed-Anion Hybrid Halogenobismuthate(III) Semiconductor: Structural, Optical, and Photovoltaic Properties. Inorganic Chemistry, 2018, 57, 10576-10586.	4.0	26
63	Oxadiazole-carbazole polymer (POC)-Ir(ppy) 3 tunable emitting composites. Optical Materials, 2017, 66, 166-170.	3.6	5
64	Polaron self-localization in white-light emitting hybrid perovskites. Journal of Materials Chemistry C, 2017, 5, 2771-2780.	5.5	196
65	Temperature and Electrical Poling Effects on Ionic Motion in MAPbI₃ Photovoltaic Cells. Advanced Energy Materials, 2017, 7, 1700265.	19.5	26
66	Relaxation lifetimes of plasmonically enhanced hybrid gold-carbon nanotubes systems. Nanotechnology, 2017, 28, 255202.	2.6	4
67	Structural morphological and optical properties of P3HT/CdSe/WS2 ternary composites for hybrid organic/inorganic photovoltaics. Journal of Materials Science, 2017, 52, 9573-9583.	3.7	2
68	GaN Schottky Metalâ€"Semiconductorâ€"Metal UV Photodetectors on Si(111) Grown by Ammonia-MBE. IEEE Sensors Journal, 2017, 17, 72-77.	4.7	35
69	Highly efficient Cs-based perovskite light-emitting diodes enabled by energy funnelling. Chemical Communications, 2017, 53, 12004-12007.	4.1	85
70	Simplified Architecture of a Fully Printable Perovskite Solar Cell Using a Thick Zirconia Layer. Energy Technology, 2017, 5, 1866-1872.	3.8	31
71	Photovoltaics: Temperature and Electrical Poling Effects on Ionic Motion in MAPbI₃ Photovoltaic Cells (Adv. Energy Mater. 18/2017). Advanced Energy Materials, 2017, 7, .	19.5	1
72	Effect of Excess PbI₂ in Fully Printable Carbonâ€based Perovskite Solar Cells. Energy Technology, 2017, 5, 1880-1886.	3.8	30

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73	Broadbandâ€Emitting 2â€‰D Hybrid Organicâ€“Inorganic Perovskite Based on Cyclohexaneâ€bis(methylamonium) Cation. ChemSusChem, 2017, 10, 3765-3772.	6.8	72
74	Investigation of electronic band structure and charge transfer mechanism of oxidized three-dimensional graphene as metal-free anodes material for dye sensitized solar cell application. Chemical Physics Letters, 2017, 685, 442-450.	2.6	6
75	Benzyl Alcohol-Treated CH₃NH₃PbBr₃ Nanocrystals Exhibiting High Luminescence, Stability, and Ultralow Amplified Spontaneous Emission Thresholds. Nano Letters, 2017, 17, 7424-7432.	9.1	100
76	Intrinsic Lead Ion Emissions in Zero-Dimensional Cs₄PbBr₆ Nanocrystals. ACS Energy Letters, 2017, 2, 2805-2811.	17.4	133
77	Cathodoluminescence of Self-Organized Heterogeneous Phases in Multidimensional Perovskite Thin Films. Chemistry of Materials, 2017, 29, 10088-10094.	6.7	30
78	Nanopatterning-enhanced perovskite luminophores. , 2017, , .		0
79	AC-driven perovskite light-emitting field-effect transistors. , 2017, , .		3
80	Evidence for photo-induced charge separation between dye molecules adsorbed to aluminium oxide surfaces. Scientific Reports, 2016, 6, 21276.	3.3	13
81	Responsivity drop due to conductance modulation in GaN metal-semiconductor-metal Schottky based UV photodetectors on Si(111). Semiconductor Science and Technology, 2016, 31, 095003.	2.0	12
82	Facile synthesis of a hole transporting material with a silafluorene core for efficient mesoscopic CH₃NH₃PbI₃ perovskite solar cells. Journal of Materials Chemistry A, 2016, 4, 8750-8754.	10.3	36
83	X-ray Scintillation in Lead Halide Perovskite Crystals. Scientific Reports, 2016, 6, 37254.	3.3	271
84	Hot exciton cooling and multiple exciton generation in PbSe quantum dots. Physical Chemistry Chemical Physics, 2016, 18, 31107-31114.	2.8	14
85	Lead-Free MA₂CuCl_{<i>x</i>}Br_{4â€“<i>x</i>} Hybrid Perovskites. Inorganic Chemistry, 2016, 55, 1044-1052.	4.0	457
86	Facile Synthesis of a Furanâ€“Arylamine Holeâ€Transporting Material for Highâ€Efficiency, Mesoscopic Perovskite Solar Cells. Chemistry - A European Journal, 2015, 21, 15113-15117.	3.3	49
87	Influence of ligand exchange on the electrical transport properties of PbS nanocrystals. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 2677-2685.	1.8	5
88	Further details on particle inception and growth in premixed flames. Proceedings of the Combustion Institute, 2015, 35, 1795-1802.	3.9	43
89	PbS nanocrystals in hybrid systems for solar cell applications. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 245-251.	1.8	13
90	Spectroscopic investigation of flame synthesized carbon nanoparticle/P3HT blends. Carbon, 2015, 94, 955-961.	10.3	5

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91	Lead iodide perovskite light-emitting field-effect transistor. Nature Communications, 2015, 6, 7383.	12.8	641
92	Physicochemical evolution of nascent soot particles in a laminar premixed flame: from nucleation to early growth. Combustion and Flame, 2015, 162, 3854-3863.	5.2	80
93	Exciton Dynamics in Hybrid Polymer/QD Blends. Energy Procedia, 2014, 44, 167-175.	1.8	5
94	Photoresponse of pentaceneâ€based transistors. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 460-466.	1.8	9
95	Carrier motion in as-spun and annealed P3HT:PCBM blends revealed by ultrafast optical electric field probing and Monte Carlo simulations. Physical Chemistry Chemical Physics, 2014, 16, 2686.	2.8	25
96	Ternary hybrid systems of P3HTâ€“CdSeâ€“WS₂nanotubes for photovoltaic applications. Physical Chemistry Chemical Physics, 2014, 16, 17998.	2.8	19
97	Spectroscopic Evaluation of Mixing and Crystallinity of Fullerenes in Bulk Heterojunctions. Advanced Functional Materials, 2014, 24, 6972-6980.	14.9	26
98	Morphological and spectroscopic characterizations of inkjet-printed poly(3-hexylthiophene-2,5-diyl): Phenyl-C61-butyric acid methyl ester blends for organic solar cell applications. Thin Solid Films, 2014, 560, 14-19.	1.8	15
99	Controlling the Interaction of Light with Polymer Semiconductors. Advanced Materials, 2013, 25, 4906-4911.	21.0	42
100	Determining the Exciton Diffusion Length in a Polyfluorene from Ultrafast Fluorescence Measurements of Polymer/Fullerene Blend Films. Journal of Physical Chemistry C, 2013, 117, 19832-19838.	3.1	48
101	White light-emitting nanocomposites based on an oxadiazoleâ€“carbazole copolymer (POC) and InP/ZnS quantum dots. Journal of Nanoparticle Research, 2013, 15, 1.	1.9	22
102	Fast Fourier Transform and autocorrelation function for the analysis of complex mass spectra. International Journal of Mass Spectrometry, 2013, 338, 30-38.	1.5	29
103	Microscopic and spectroscopic investigation of MoS2 nanotubes/P3HT nanocomposites. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 2335-2340.	1.8	4
104	Electroluminescence and fluorescence emission of poly(n-vinylcarbazole) and poly(n-vinylcarbazole)-Ir(ppy)3-based organic light-emitting devices prepared with different solvents. Journal of Photonics for Energy, 2013, 3, 033599.	1.3	9
105	Preparation and characterization of novel nanocomposites of WS2 nanotubes and polyfluorene conductive polymer. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 2278-2283.	1.8	6
106	Insights on photophysical proprieties of DCM dye in PVK host matrix. Polymer Composites, 2013, 34, 1500-1505.	4.6	3
107	Photoluminescence and energy transfer in PVK/DCM blends. , 2012, , .		0
108	Effect of Multiple Adduct Fullerenes on Microstructure and Phase Behavior of P3HT:Fullerene Blend Films for Organic Solar Cells. ACS Nano, 2012, 6, 3868-3875.	14.6	58

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109	Solvent effects on spectral emission of PVK and PVK-Ir(ppy) 3 based OLEDs. , 2012, , .		2
110	Ultrafast Transient Optical Studies of Charge Pair Generation and Recombination in Poly-3-Hexylthiophene(P3ht):[6,6]Phenyl C61 Butyric Methyl Acid Ester (PCBM) Blend Films. Journal of Physical Chemistry B, 2011, 115, 15174-15180.	2.6	29
111	Diffusivity in water and fluorescence properties ofÂorganic nanoparticles produced inÂflames. Applied Physics B: Lasers and Optics, 2011, 102, 711-715.	2.2	0
112	Triplet Formation in Fullerene Multiâ€Adduct Blends for Organic Solar Cells and Its Influence on Device Performance. Advanced Functional Materials, 2010, 20, 2701-2708.	14.9	53
113	Time-resolved fluorescence polarization anisotropy of multimodal samples: the asphaltene case. Applied Physics B: Lasers and Optics, 2008, 90, 61-67.	2.2	3
114	Analysis of polycyclic aromatic hydrocarbon sequences in a premixed laminar flame by onâ€line timeâ€ofâ€flight mass spectrometry. Rapid Communications in Mass Spectrometry, 2008, 22, 573-581.	1.5	24
115	Detection of fluorescent nanoparticles in flame with femtosecond laser-induced fluorescence anisotropy. Optics Express, 2008, 16, 5623.	3.4	19
116	Measurements of Nanoparticles of Organic Carbon and Soot in Flames and Vehicle Exhausts. Environmental Science & Technology, 2008, 42, 859-863.	10.0	49
117	In situdetection of soot nanoparticles by time-resolved fluorescence analysis. Journal of Optics, 2008, 10, 064016.	1.5	4
118	Evidence of fluorescent carbon nanoparticles produced in premixed flames by time-resolved fluorescence polarization anisotropy. Combustion and Flame, 2007, 151, 472-481.	5.2	28
119	Characterization of nanometric carbon materials by time-resolved fluorescence polarization anisotropy. Optics and Lasers in Engineering, 2006, 44, 732-746.	3.8	13
120	Infrared analysis of nano organic particles produced in laminar flames. Applied Physics B: Lasers and Optics, 2006, 82, 155-160.	2.2	12
121	Characterization of ultrafast fluorescence from nanometric carbon particles. Journal of Optics, 2006, 8, S578-S584.	1.5	9
122	Solution behaviour of C60 fullerene in N-Methylpyrrolidinone/toluene mixtures. Carbon, 2005, 43, 665-667.	10.3	13
123	Aggregation and interactions of C60 and C70 fullerenes in neat N-methylpyrrolidinone and in N-methylpyrrolidinone/toluene mixtures. Chemical Physics Letters, 2005, 405, 193-197.	2.6	42
124	Time resolved fluorescence polarization anisotropy of carbonaceous particles produced in combustion systems. Optics Express, 2005, 13, 5393.	3.4	24
125	Time evolution of plasma afterglow produced by femtosecond laser pulses. Journal of Applied Physics, 2004, 96, 5450-5455.	2.5	30
126	DLS measurements on nanoparticles produced in laminar premixed flames. Synthetic Metals, 2003, 139, 653-656.	3.9	14

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127	Self-, Nitrogen-, and Oxygen-Broadening Coefficient Measurements in the Î½1 Band of H2O Using a Difference Frequency Generation Spectrometer at 3 Î¼m. Journal of Molecular Spectroscopy, 2002, 215, 244-250.	1.2	14
128	Detection and spectroscopy of the Î½1+Î½3 band of N2O by difference-frequency spectrometer at 3 Î¼m. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2002, 58, 2481-2488.	3.9	7
129	Ammonium sulfate treatment at TiO2/perovskite interface boosts operational stability of perovskite solar cells. Journal of Materials Chemistry C, 0, , .	5.5	0
130	Large Area Perovskite Solar Cells and Mini-Modules by Thermal Co-Evaporation. , 0, , .		0
131	Co-evaporated perovskites solar cells and minimodules: Colored, stable and flexible. , 0, , .		0