Francisco Palazon

List of Publications by Year
in descending order

61 papers	3,338 citations	186265 28 h-index	144013 57 g-index
61 all docs	61 docs citations	61 times ranked	5409 citing authors

#	Article	IF	Citations
1	Metal Chalcohalides: Next Generation Photovoltaic Materials?. Solar Rrl, 2022, 6, 2100829.	5.8	29
2	Quadruple-Cation Wide-Bandgap Perovskite Solar Cells with Enhanced Thermal Stability Enabled by Vacuum Deposition. ACS Energy Letters, 2022, 7, 1355-1363.	17.4	24
3	Dimensionality Controls Anion Intermixing in Electroluminescent Perovskite Heterojunctions. ACS Photonics, 2022, 9, 2483-2488.	6.6	3
4	Crystal Reorientation and Amorphization Induced by Stressing Efficient and Stable Pâ€“Iâ€“N Vacuumâ€Processed MAPbI₃ Perovskite Solar Cells. Advanced Energy and Sustainability Research, 2021, 2, 2000065.	5.8	20
5	Efficient Wide-Bandgap Mixed-Cation and Mixed-Halide Perovskite Solar Cells by Vacuum Deposition. ACS Energy Letters, 2021, 6, 827-836.	17.4	81
6	Zero-Dimensional Hybrid Organicâ€“Inorganic Lead Halides and Their Post-Synthesis Reversible Transformation into Three-Dimensional Perovskites. Inorganic Chemistry, 2021, 60, 5212-5216.	4.0	17
7	Pulsed Laser Deposition of Cs₂AgBiBr₆: from Mechanochemically Synthesized Powders to Dry, Single-Step Deposition. Chemistry of Materials, 2021, 33, 7417-7422.	6.7	29
8	Tuning the Optical Absorption of Sn-, Ge-, and Zn-Substituted Cs₂AgBiBr₆ Double Perovskites: Structural and Electronic Effects. Chemistry of Materials, 2021, 33, 8028-8035.	6.7	18
9	Low Temperature, Vacuumâ€Processed Bismuth Triiodide Solar Cells with Organic Smallâ€Molecule Hole Transport Bilayer. Energy Technology, 2021, 9, 2100661.	3.8	2
10	Mechanochemical Synthesis of Sn(II) and Sn(IV) Iodide Perovskites and Study of Their Structural, Chemical, Thermal, Optical, and Electrical Properties. Energy Technology, 2020, 8, 1900788.	3.8	34
11	Making by Grinding: Mechanochemistry Boosts the Development of Halide Perovskites and Other Multinary Metal Halides. Advanced Energy Materials, 2020, 10, 1902499.	19.5	76
12	Dry Mechanochemical Synthesis of Highly Luminescent, Blue and Green Hybrid Perovskite Solids. Advanced Optical Materials, 2020, 8, 1901494.	7.3	16
13	Efficient Vacuum-Deposited Perovskite Solar Cells with Stable Cubic FA_{1â€“x}MA_xPbI₃. ACS Energy Letters, 2020, 5, 3053-3061.	17.4	49
14	Room-Temperature Vacuum Deposition of CsPbI₂Br Perovskite Films from Multiple Sources and Mixed Halide Precursors. Chemistry of Materials, 2020, 32, 8641-8652.	6.7	32
15	Potential and limitations of CsBi3I10 as a photovoltaic material. Journal of Materials Chemistry A, 2020, 8, 15670-15674.	10.3	21
16	Tunable Wideâ€Bandgap Monohalide Perovskites. Advanced Optical Materials, 2020, 8, 2000423.	7.3	6
17	Dual-source vacuum deposition of pure and mixed halide 2D perovskites: thin film characterization and processing guidelines. Journal of Materials Chemistry C, 2020, 8, 1902-1908.	5.5	15
18	Melamine Foams Decorated with In-Situ Synthesized Gold and Palladium Nanoparticles. Polymers, 2020, 12, 934.	4.5	3

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19	Mechanochemical synthesis of inorganic halide perovskites: evolution of phase-purity, morphology, and photoluminescence. Journal of Materials Chemistry C, 2019, 7, 11406-11410.	5.5	58
20	Roomâ€Temperature Cubic Phase Crystallization and High Stability of Vacuumâ€Deposited Methylammonium Lead Triiodide Thin Films for Highâ€Efficiency Solar Cells. Advanced Materials, 2019, 31, e1902692.	21.0	47
21	Short Photoluminescence Lifetimes in Vacuum-Deposited CH₃NH₃PbI₃ Perovskite Thin Films as a Result of Fast Diffusion of Photogenerated Charge Carriers. Journal of Physical Chemistry Letters, 2019, 10, 5167-5172.	4.6	24
22	Vacuum-Deposited 2D/3D Perovskite Heterojunctions. ACS Energy Letters, 2019, 4, 2893-2901.	17.4	77
23	Modifying the Optical Phonon Response of Nanocrystals inside Terahertz Plasmonic Nanocavities. , 2019, , .		0
24	Low-dimensional iodide perovskite nanocrystals enable efficient red emission. Nanoscale, 2019, 11, 12793-12797.	5.6	13
25	Low-dimensional non-toxic A₃Bi₂X₉ compounds synthesized by a dry mechanochemical route with tunable visible photoluminescence at room temperature. Journal of Materials Chemistry C, 2019, 7, 6236-6240.	5.5	43
26	CsPbX₃/SiO_x (X = Cl, Br, I) monoliths prepared via a novel solâ€“gel route starting from Cs₄PbX₆ nanocrystals. Nanoscale, 2019, 11, 18739-18745.	5.6	23
27	Solvent-Free Synthesis and Thin-Film Deposition of Cesium Copper Halides with Bright Blue Photoluminescence. Chemistry of Materials, 2019, 31, 10205-10210.	6.7	94
28	Design, Fabrication, and In Vitro Evaluation of Nanoceria-Loaded Nanostructured Lipid Carriers for the Treatment of Neurological Diseases. ACS Biomaterials Science and Engineering, 2019, 5, 670-682.	5.2	25
29	Coating Evaporated MAPI Thin Films with Organic Molecules: Improved Stability at High Temperature and Implementation in High-Efficiency Solar Cells. ACS Energy Letters, 2018, 3, 835-839.	17.4	30
30	Reshaping the phonon energy landscape of nanocrystals inside a terahertz plasmonic nanocavity. Nature Communications, 2018, 9, 763.	12.8	30
31	Antibacterial Melamine Foams Decorated with in Situ Synthesized Silver Nanoparticles. ACS Applied Materials & Interfaces, 2018, 10, 16095-16104.	8.0	35
32	Lateral epitaxial heterojunctions in single nanowires fabricated by masked cation exchange. Nature Communications, 2018, 9, 505.	12.8	28
33	Enhancing the Performance of CdSe/CdS Dot-in-Rod Light-Emitting Diodes via Surface Ligand Modification. ACS Applied Materials & Interfaces, 2018, 10, 5665-5672.	8.0	55
34	Incorporation of potassium halides in the mechanosynthesis of inorganic perovskites: feasibility and limitations of ion-replacement and trap passivation. RSC Advances, 2018, 8, 41548-41551.	3.6	21
35	Efficient Photo- and Electroluminescence by Trap States Passivation in Vacuum-Deposited Hybrid Perovskite Thin Films. ACS Applied Materials & Interfaces, 2018, 10, 36187-36193.	8.0	23
36	Single-Source Vacuum Deposition of Mechanosynthesized Inorganic Halide Perovskites. Chemistry of Materials, 2018, 30, 7423-7427.	6.7	67

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37	Effects of Oxygen Plasma on the Chemical, Light-Emitting, and Electrical-Transport Properties of Inorganic and Hybrid Lead Bromide Perovskite Nanocrystal Films. ACS Applied Nano Materials, 2018, 1, 5396-5400.	5.0	8
38	Molecular Iodine for a General Synthesis of Binary and Ternary Inorganic and Hybrid Organicâ€“Inorganic Iodide Nanocrystals. Chemistry of Materials, 2018, 30, 6915-6921.	6.7	36
39	High-yield production of 2D crystals by wet-jet milling. Materials Horizons, 2018, 5, 890-904.	12.2	139
40	In Situ Transmission Electron Microscopy Study of Electron Beam-Induced Transformations in Colloidal Cesium Lead Halide Perovskite Nanocrystals. ACS Nano, 2017, 11, 2124-2132.	14.6	246
41	From CsPbBr₃ Nano-Inks to Sintered CsPbBr₃â€“CsPb₂Br₅ Films via Thermal Annealing: Implications on Optoelectronic Properties. Journal of Physical Chemistry C, 2017, 121, 11956-11961.	3.1	96
42	Ultralow friction of ink-jet printed graphene flakes. Nanoscale, 2017, 9, 7612-7624.	5.6	20
43	Oneâ€Pot Hybrid SnO₂/Poly(methyl methacrylate) Nanocomposite Formation through Pulsed Laser Irradiation. ChemPhysChem, 2017, 18, 1635-1641.	2.1	6
44	Superhydrophobic high impact polystyrene (HIPS) nanocomposites with wear abrasion resistance. Chemical Engineering Journal, 2017, 322, 10-21.	12.7	53
45	Changing the Dimensionality of Cesium Lead Bromide Nanocrystals by Reversible Postsynthesis Transformations with Amines. Chemistry of Materials, 2017, 29, 4167-4171.	6.7	142
46	Strongly emissive perovskite nanocrystal inks for high-voltage solar cells. Nature Energy, 2017, 2, .	39.5	544
47	Facile synthesis of Geâ€“MWCNT nanocomposite electrodes for high capacity lithium ion batteries. Journal of Materials Chemistry A, 2017, 5, 19721-19728.	10.3	19
48	Postsynthesis Transformation of Insulating Cs₄PbBr₆ Nanocrystals into Bright Perovskite CsPbBr₃ through Physical and Chemical Extraction of CsBr. ACS Energy Letters, 2017, 2, 2445-2448.	17.4	177
49	Writing on Nanocrystals: Patterning Colloidal Inorganic Nanocrystal Films through Irradiation-Induced Chemical Transformations of Surface Ligands. Journal of the American Chemical Society, 2017, 139, 13250-13259.	13.7	34
50	Facile production of seaweed-based biomaterials with antioxidant and anti-inflammatory activities. Algal Research, 2017, 27, 1-11.	4.6	28
51	Laser-induced in situ synthesis of Pd and Pt nanoparticles on polymer films. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	7
52	Polymer-Free Films of Inorganic Halide Perovskite Nanocrystals as UV-to-White Color-Conversion Layers in LEDs. Chemistry of Materials, 2016, 28, 2902-2906.	6.7	152
53	Evolution of CsPbBr₃ nanocrystals upon post-synthesis annealing under an inert atmosphere. Journal of Materials Chemistry C, 2016, 4, 9179-9182.	5.5	62
54	Cu₂Se and Cu Nanocrystals as Local Sources of Copper in Thermally Activated In Situ Cation Exchange. ACS Nano, 2016, 10, 2406-2414.	14.6	23

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55	X-ray Lithography on Perovskite Nanocrystals Films: From Patterning with Anion-Exchange Reactions to Enhanced Stability in Air and Water. ACS Nano, 2016, 10, 1224-1230.	14.6	320
56	X-ray-induced degradation of OEG-terminated SAMs on silica surfaces during XPS characterization. Surface and Interface Analysis, 2015, 47, 719-722.	1.8	2
57	Orthogonal chemical functionalization of patterned gold on silica surfaces. Beilstein Journal of Nanotechnology, 2015, 6, 2272-2277.	2.8	4
58	Nanoparticles selectively immobilized onto large arrays of gold micro and nanostructures through surface chemical functionalizations. Journal of Colloid and Interface Science, 2015, 447, 152-158.	9.4	5
59	Site-Selective Self-Assembly of Nano-Objects on a Planar Substrate Based on Surface Chemical Functionalization. Advances in Atom and Single Molecule Machines, 2015, , 93-112.	0.0	2
60	Carbodiimide/NHS Derivatization of COOH-Terminated SAMs: Activation or Byproduct Formation?. Langmuir, 2014, 30, 4545-4550.	3.5	42
61	NANOTRAPS: Different Approaches for the Precise Placement of Micro and Nano-Objects from a Colloidal Dispersion Onto Nanometric Scale Sites of a Patterned Macroscopic Surface. Journal of Colloid Science and Biotechnology, 2013, 2, 249-262.	0.2	3