Emilio J Juarez-Perez

List of Publications by Year
in descending order

72	8,318	94433 37	98798 67
papers	citations	h-index	g-index

77	77	77	9779
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Short Photoluminescence Lifetimes Linked to Crystallite Dimensions, Connectivity, and Perovskite Crystal Phases. Journal of Physical Chemistry C, 2022, 126, 3466-3474.	3.1	4
2	An open-access database and analysis tool for perovskite solar cells based on the FAIR data principles. Nature Energy, 2022, 7, 107-115.	39.5	136
3	Formamidinium halide salts as precursors of carbon nitrides. Carbon, 2022, 196, 1035-1046.	10.3	9
4	Nano-vault architecture mitigates stress in silicon-based anodes for lithium-ion batteries. Communications Materials, 2021, 2, .	6.9	13
5	Influence of Ion Migration from ITO and SiO₂ Substrates on Photo and Thermal Stability of CH₃NH₃SnI₃ Hybrid Perovskite. Journal of Physical Chemistry C, 2020, 124, 14928-14934.	3.1	18
6	Perovskite solar cells take a step forward. Science, 2020, 368, 1309-1309.	12.6	36
7	Mechanisms of Spontaneous and Amplified Spontaneous Emission in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:msub><mml:mi>CH</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi>NH</mml:mi><mml:mi><mml:mathvariant="normal">I</mml:mi></mml:mrow><mml:mn>3</mml:mn></mml:msub></mml:math> Perovskite Thin Films Integrated in an Optical Waveguide. Physical Review Applied, 2020, 13, .	4.3	10
8	Approaching isotropic transfer integrals in crystalline organic semiconductors. Physical Review Materials, 2020, 4, .	2.4	5
9	Hybrid lead halide [(CH₃)₂NH₂]PbX₃(X =) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Journal of Materials Chemistry C, 2019, 7, 10008-10018.	5.5	35
10	Carbon-Based Electrode Engineering Boosts the Efficiency of All Low-Temperature-Processed Perovskite Solar Cells. ACS Energy Letters, 2019, 4, 2032-2039.	17.4	79
11	The Causes of Degradation of Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2019, 10, 5889-5891.	4.6	113
12	Reduction of lead leakage from damaged lead halide perovskite solar modules using self-healing polymer-based encapsulation. Nature Energy, 2019, 4, 585-593.	39.5	327
13	Thermal degradation of formamidinium based lead halide perovskites into sym-triazine and hydrogen cyanide observed by coupled thermogravimetry-mass spectrometry analysis. Journal of Materials Chemistry A, 2019, 7, 16912-16919.	10.3	163
14	Determination of Carrier Diffusion Length Using Transient Electron Photoemission Microscopy in the GaAs/InSe Heterojunction. Physica Status Solidi (B): Basic Research, 2019, 256, 1900126.	1.5	1
15	Degradation Mechanism and Relative Stability of Methylammonium Halide Based Perovskites Analyzed on the Basis of Acidâ€“Base Theory. ACS Applied Materials & Interfaces, 2019, 11, 12586-12593.	8.0	55
16	Negligibleâ€Pbâ€Waste and Upscalable Perovskite Deposition Technology for Highâ€Operationalâ€Stability Perovskite Solar Modules. Advanced Energy Materials, 2019, 9, 1803047.	19.5	68
17	Inhibition of light emission from the metastable tetragonal phase at low temperatures in island-like films of lead iodide perovskites. Nanoscale, 2019, 11, 22378-22386.	5.6	4
18	Structural characterization of bulk and nanoparticle lead halide perovskite thin films by (S)TEM techniques. Nanotechnology, 2019, 30, 135701.	2.6	5

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19	Spin-Coated Crystalline Molecular Monolayers for Performance Enhancement in Organic Field-Effect Transistors. Journal of Physical Chemistry Letters, 2018, 9, 1318-1323.	4.6	37
20	Photodecomposition and thermal decomposition in methylammonium halide lead perovskites and inferred design principles to increase photovoltaic device stability. Journal of Materials Chemistry A, 2018, 6, 9604-9612.	10.3	437
21	Largeâ€Area Perovskite Solar Modules: Combination of Hybrid CVD and Cation Exchange for Upscaling Csâ€Substituted Mixed Cation Perovskite Solar Cells with High Efficiency and Stability (Adv. Funct.) Tj ETQq1 1 0.784314 rgBT /Overlock	14.9	158
22	Relative impacts of methylammonium lead triiodide perovskite solar cells based on life cycle assessment. Solar Energy Materials and Solar Cells, 2018, 179, 169-177.	6.2	34
23	Combination of Hybrid CVD and Cation Exchange for Upscaling Csâ€Substituted Mixed Cation Perovskite Solar Cells with High Efficiency and Stability. Advanced Functional Materials, 2018, 28, 1703835.	14.9	158
24	Gas-solid reaction based over one-micrometer thick stable perovskite films for efficient solar cells and modules. Nature Communications, 2018, 9, 3880.	12.8	109
25	Nanostructured CuO films deposited on fluorine doped tin oxide conducting glass with a facile technology. Thin Solid Films, 2018, 660, 386-390.	1.8	10
26	Benchmarking Chemical Stability of Arbitrarily Mixed 3D Hybrid Halide Perovskites for Solar Cell Applications. Small Methods, 2018, 2, 1800242.	8.6	26
27	The influence of secondary solvents on the morphology of a spiro-MeOTAD hole transport layer for lead halide perovskite solar cells. Journal Physics D: Applied Physics, 2018, 51, 294001.	2.8	23
28	Improved Efficiency and Stability of Perovskite Solar Cells Induced by Cï£¾O Functionalized Hydrophobic Ammoniumâ€Based Additives. Advanced Materials, 2018, 30, 1703670.	21.0	132
29	Accelerated degradation of methylammonium lead iodide perovskites induced by exposure to iodine vapour. Nature Energy, 2017, 2, .	39.5	491
30	Carboraneâ€“stilbene dyads: the influence of substituents and cluster isomers on photoluminescence properties. Dalton Transactions, 2017, 46, 2091-2104.	3.3	49
31	Progress on Perovskite Materials and Solar Cells with Mixed Cations and Halide Anions. ACS Applied Materials & Interfaces, 2017, 9, 30197-30246.	8.0	453
32	Methylammonium Lead Bromide Perovskite Light-Emitting Diodes by Chemical Vapor Deposition. Journal of Physical Chemistry Letters, 2017, 8, 3193-3198.	4.6	113
33	Optimization of semiconductor halide perovskite layers to implement waveguide amplifiers. , 2017, , .		0
34	Halide perovskite amplifiers integrated in polymer waveguides. , 2016, , .		0
35	Post-annealing of MAPbI₃ perovskite films with methylamine for efficient perovskite solar cells. Materials Horizons, 2016, 3, 548-555.	12.2	141
36	Role of the Dopants on the Morphological and Transport Properties of Spiro-MeOTAD Hole Transport Layer. Chemistry of Materials, 2016, 28, 5702-5709.	6.7	194

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37	Thermal degradation of CH₃NH₃PbI₃ perovskite into NH₃ and CH₃I gases observed by coupled thermogravimetryâ€“mass spectrometry analysis. Energy and Environmental Science, 2016, 9, 3406-3410.	30.8	616
38	Influence of the substrate on the bulk properties of hybrid lead halide perovskite films. Journal of Materials Chemistry A, 2016, 4, 18153-18163.	10.3	52
39	Recombination reduction on lead halide perovskite solar cells based on low temperature synthesized hierarchical TiO₂nanorods. Nanoscale, 2016, 8, 6271-6277.	5.6	28
40	Polymer/Perovskite Amplifying Waveguides for Active Hybrid Silicon Photonics. Advanced Materials, 2015, 27, 6157-6162.	21.0	83
41	Fast and low temperature growth of electron transport layers for efficient perovskite solar cells. Journal of Materials Chemistry A, 2015, 3, 4909-4915.	10.3	101
42	Effect of Mesostructured Layer upon Crystalline Properties and Device Performance on Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2015, 6, 1628-1637.	4.6	78
43	Fast synthesis of micro/mesoporous xerogels: Textural and energetic assessment. Microporous and Mesoporous Materials, 2015, 209, 2-9.	4.4	13
44	Role of the Selective Contacts in the Performance of Lead Halide Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2014, 5, 680-685.	4.6	583
45	General Working Principles of CH₃NH₃PbX₃ Perovskite Solar Cells. Nano Letters, 2014, 14, 888-893.	9.1	786
46	Organoselenium(<scp>ii</scp>) halides containing the pincer 2,6-(Me₂NCH₂)₂C₆H₃ligand â€“ an experimental and theoretical investigation. Dalton Transactions, 2014, 43, 2221-2233.	3.3	15
47	Electrical field profile and doping in planar lead halide perovskite solar cells. Applied Physics Letters, 2014, 105, .	3.3	168
48	Quantum Dot-Sensitized Solar Cells. Green Energy and Technology, 2014, , 89-136.	0.6	8
49	Photoinduced Giant Dielectric Constant in Lead Halide Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2014, 5, 2390-2394.	4.6	629
50	Molienda asistida con microondas de un coque metalÃºrgico. Revista De Metalurgia, 2014, 50, e013.	0.5	0
51	Mechanism of carrier accumulation in perovskite thin-absorber solar cells. Nature Communications, 2013, 4, 2242.	12.8	760
52	Synthesis, Characterization, and Thermal Behavior of Carboranylâ€“Styrene Decorated Octasilsesquioxanes: Influence of the Carborane Clusters on Photoluminescence. Chemistry - A European Journal, 2013, 19, 17021-17030.	3.3	74
53	Pulses of microwave radiation to improve coke grindability. Fuel, 2012, 102, 65-71.	6.4	27
54	Metallacarboranes and their interactions: theoretical insights and their applicability. Chemical Society Reviews, 2012, 41, 3445.	38.1	117

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55	Grafting of Metallacarboranes onto Selfâ€Assembled Monolayers Deposited on Silicon Wafers. Chemistry - an Asian Journal, 2012, 7, 277-281.	3.3	10
56	Electrochemical behavior and capacitance properties of carbon xerogel/multiwalled carbon nanotubes composites. Journal of Solid State Electrochemistry, 2012, 16, 1067-1076.	2.5	13
57	A microwave-based method for the synthesis of carbon xerogel spheres. Carbon, 2012, 50, 3555-3560.	10.3	17
58	Synthesis and Characterization of New Fluorescent Styreneâ€Containing Carborane Derivatives: The Singular Quenching Role of a Phenyl Substituent. Chemistry - A European Journal, 2012, 18, 544-553.	3.3	88
59	A Unique Case of Oxidative Addition of Interhalogens IX (X=Cl, Br) to Organodiselone Ligands: Nature of the Chemical Bonding in Asymmetric Ï£¿Seï£¿X Polarised Hypervalent Systems. Chemistry - A European Journal, 2011, 17, 11497-11514.	3.3	35
60	Ball lightning plasma and plasma arc formation during the microwave heating of carbons. Carbon, 2011, 49, 346-349.	10.3	139
61	Fast microwave-assisted synthesis of tailored mesoporous carbon xerogels. Journal of Colloid and Interface Science, 2011, 357, 541-547.	9.4	62
62	The Role of Câ€“HÂ·Â·Â·Hâ€“B Interactions in Establishing Rotamer Configurations in Metallabis(dicarbollide) Systems. European Journal of Inorganic Chemistry, 2010, 2010, 2385-2392.	2.0	53
63	Precise determination of the point of solâ€“gel transition in carbon gel synthesis using a microwave heating method. Carbon, 2010, 48, 3305-3308.	10.3	17
64	Decorating Poly(alkyl aryl-ether) Dendrimers with Metallacarboranes. Inorganic Chemistry, 2010, 49, 9993-10000.	4.0	34
65	Anchoring of Phosphorus-Containing Cobaltabisdicarbollide Derivatives to Titania Surface. Langmuir, 2010, 26, 12185-12189.	3.5	22
66	Polyanionic Aryl Ether Metallodendrimers Based on Cobaltabisdicarbollide Derivatives. Photoluminescent Properties. Macromolecules, 2010, 43, 150-159.	4.8	54
67	First example of the formation of a Siâ€“C bond from an intramolecular Siâ€“Hâ‹¯Hâ€“C diyhydrogen interaction in a metallacarborane: A theoretical study. Journal of Organometallic Chemistry, 2009, 694, 1764-1770.	1.8	22
68	Polyanionic Carbosilane and Carbosiloxane Metallodendrimers Based on Cobaltabisdicarbollide Derivatives. Organometallics, 2009, 28, 5550-5559.	2.3	40
69	Controlled Direct Synthesis of C-Mono- and C-Disubstituted Derivatives of [3,3â€²-Co(1,2-C2B9H11)2]â^' with Organosilane Groups: Theoretical Calculations Compared with Experimental Results. Chemistry - A European Journal, 2008, 14, 4924-4938.	3.3	23
70	Carboranyl Substituted Siloxanes and Octasilsesquioxanes: Synthesis, Characterization, and Reactivity. Macromolecules, 2008, 41, 8458-8466.	4.8	57
71	Mitigation of photodecomposition processes in lead halide based solar cells to improve operational stability. , 0, , .		0
72	What does the HCN decomposition gas release tell us about the stability of formamidinium based perovskite?. , 0, , .		0