Maria Bernechea

List of Publications by Year
in descending order

38 papers	3,728 citations	279798 23 h-index	361022 35 g-index
38 all docs	38 docs citations	38 times ranked	6666 citing authors

#	Article	IF	Citations
1	Earth-abundant non-toxic perovskite nanocrystals for solution processed solar cells. Materials Advances, 2021, 2, 4140-4151.	5.4	14
2	Bismuth-based nanomaterials for energy applications. , 2021, , 3-35.		0
3	Effect of oxidation temperature on the properties of NiOx layers for application in optical sensors. Thin Solid Films, 2021, 734, 138849.	1.8	3
4	Charge Photogeneration and Transport in AgBiS₂ Nanocrystal Films for Photovoltaics. Solar Rrl, 2019, 3, 1900075.	5.8	20
5	Research Update: Bismuth based materials for photovoltaics. APL Materials, 2018, 6, .	5.1	79
6	Matildite versus schapbachite: First-principles investigation of the origin of photoactivity in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>AgBi</mml:mi><mml:msub><mml:m mathvariant="normal">S</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2016, 94, .	3.2	39
7	Solution-processed solar cells based on environmentally friendly AgBiS2 nanocrystals. Nature Photonics, 2016, 10, 521-525.	31.4	298
8	Interface Engineering in Hybrid Quantum Dotâ€“2D Phototransistors. ACS Photonics, 2016, 3, 1324-1330.	6.6	122
9	Time-resolved spectroscopic study of resonant energy transfer between lead-sulphide quantum dots and bulk silicon. , 2015, , .		1
10	Tailoring the Electronic Properties of Colloidal Quantum Dots in Metalâ€“Semiconductor Nanocomposites for High Performance Photodetectors. Small, 2015, 11, 2636-2641.	10.0	35
11	Solution Processed Bismuth Sulfide Nanowire Array Core/Silver Sulfide Shell Solar Cells. Chemistry of Materials, 2015, 27, 3700-3706.	6.7	37
12	Size and bandgap tunability in Bi₂S₃ colloidal nanocrystals and its effect in solution processed solar cells. Journal of Materials Chemistry A, 2015, 3, 20642-20648.	10.3	83
13	Determination of carrier lifetime and mobility in colloidal quantum dot films via impedance spectroscopy. Applied Physics Letters, 2014, 104, .	3.3	27
14	Remote Trap Passivation in Colloidal Quantum Dot Bulk Nanoâ€heterojunctions and Its Effect in Solutionâ€Processed Solar Cells. Advanced Materials, 2014, 26, 4741-4747.	21.0	62
15	Improved electronic coupling in hybrid organicâ€“inorganic nanocomposites employing thiol-functionalized P3HT and bismuth sulfide nanocrystals. Nanoscale, 2014, 6, 10018-10026.	5.6	24
16	Hybrid solution-processed bulk heterojunction solar cells based on bismuth sulfide nanocrystals. Physical Chemistry Chemical Physics, 2013, 15, 5482.	2.8	40
17	Size- and Temperature-Dependent Carrier Dynamics in Oleic Acid Capped PbS Quantum Dots. Journal of Physical Chemistry C, 2013, 117, 1887-1892.	3.1	35
18	Coupling Resonant Modes of Embedded Dielectric Microspheres in Solutionâ€Processed Solar Cells. Advanced Optical Materials, 2013, 1, 139-143.	7.3	15

#	ARTICLE	IF	CITATIONS
19	Microresonators: Coupling Resonant Modes of Embedded Dielectric Microspheres in Solutionâ€Processed Solar Cells (Advanced Optical Materials 2/2013). Advanced Optical Materials, 2013, 1, 194-194.	7.3	1
20	Spectroscopic evidence of resonance energy transfer mechanism from PbS QDs to bulk silicon. EPJ Web of Conferences, 2013, 54, 01017.	0.3	4
21	Resonance energy transfer from PbS colloidal quantum dots to bulk silicon: the road to hybrid photovoltaics. , 2012, , .		7
22	Electrical effects of metal nanoparticles embedded in ultra-thin colloidal quantum dot films. Applied Physics Letters, 2012, 101, 041103.	3.3	19
23	Plasmonic light trapping leads to responsivity increase in colloidal quantum dot photodetectors. Applied Physics Letters, 2012, 100, .	3.3	52
24	Hybrid grapheneâ€"quantum dot phototransistors with ultrahigh gain. Nature Nanotechnology, 2012, 7, 363-368.	31.5	1,936
25	Solution-processed inorganic bulk nano-heterojunctions and their application to solar cells. Nature Photonics, 2012, 6, 529-534.	31.4	221
26	Synthesis of Coreâˆ'Shell PtRu Dendrimer-Encapsulated Nanoparticles. Relevance as Electrocatalysts for CO Oxidation. Journal of Physical Chemistry C, 2011, 115, 1287-1294.	3.1	31
27	Octahedral Alkynylphosphine Ruthenium(II) Complexes: Synthesis, Structure, and Electrochemistry. Organometallics, 2011, 30, 4665-4677.	2.3	9
28	Solutionâ€Processed Heterojunction Solar Cells Based on pâ€type PbS Quantum Dots and nâ€type Bi₂S₃ Nanocrystals. Advanced Materials, 2011, 23, 3712-3717.	21.0	179
29	Near IRâ€Sensitive, Nonâ€toxic, Polymer/Nanocrystal Solar Cells Employing Bi₂S₃ as the Electron Acceptor. Advanced Energy Materials, 2011, 1, 1029-1035.	19.5	78
30	Dendrimer-Encapsulated Pd Nanoparticles versus Palladium Acetate as Catalytic Precursors in the Stille Reaction in Water. Inorganic Chemistry, 2009, 48, 4491-4496.	4.0	99
31	Facile Single or Double Câˆ'H Bond Activation on a Cp* Ligand Promoted by the Presence of Alkynylphosphine Ligands. Organometallics, 2009, 28, 312-320.	2.3	14
32	Rearrangement or Câˆ'H Activation Processes Promoted by Reaction with the Solvate [cis-Pt(C6F5)2(thf)2]. Organometallics, 2007, 26, 1161-1172.	2.3	13
33	Câ€"H and Pâ€"C(Ph) activation competitive processes caused by interaction with the solvate [cis-Pt(C6F5)2(thf)2]. Dalton Transactions, 2007, , 2384-2393.	3.3	8
34	Six-Coordinate Alkynyldiphenylphosphine Ruthenium(II) Complexes:â€‰ Synthesis, Structure, and Catalytic Activity as ROMP Initiators. Organometallics, 2006, 25, 684-692.	2.3	23
35	Facile Single or Double Câˆ'H Bond Activation on Î·2-Platinum-Complexed Acetylenes by Interaction with [cis-PtR2S2] and [cis-PtR2(CO)S] (R = C6F5, S = Thf). Organometallics, 2005, 24, 431-438.	2.3	22
36	Alkynyldiphenylphosphine d8(Pt, Rh, Ir) Complexes:Â Contrasting Behavior towardcis-[Pt(C6F5)2(THF)2]. Inorganic Chemistry, 2004, 43, 8185-8198.	4.0	28

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37	(p-cymene)Ruthenium(II)(diphenylphosphino)alkyne Complexes:â€‰ Preparation of (Î¼-Cl)(Î¼-PPh2Câ‹®CR)-Bridged Ru/Pt Heterobimetallic Complexes. Organometallics, 2004, 23, 4288-4300.	2.3	23
38	Diphenyl(phenylethynyl)phosphine d6 [Rh(III), Ir(III), Ru(II)] Complexes:â€‰ Preparation of Homo (Î¼-Cl)2 and Hetero (Î¼-Cl)(Î¼-PPh2Câ‹®CPh) Bridged d6â^'d8 Compounds. Organometallics, 2002, 21, 2314-2324.	2.3	27