Maria IbÃ¡Ã±ez

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6414/publications.pdf

Version: 2024-02-01

81 papers	7,071 citations	93792 39 h-index	71088 80 g-index
83 all docs	83 docs citations	83 times ranked	11568 citing authors

#	Article	IF	Citations
1	Defect Engineering in Solution-Processed Polycrystalline SnSe Leads to High Thermoelectric Performance. ACS Nano, 2022, 16, 78-88.	7.3	50
2	Room temperature aqueous-based synthesis of copper-doped lead sulfide nanoparticles for thermoelectric application. Chemical Engineering Journal, 2022, 433, 133837.	6.6	8
3	Field-Effect Transistor with a Plasmonic Fiber Optic Gate Electrode as a Multivariable Biosensor Device. ACS Sensors, 2022, 7, 504-512.	4.0	17
4	The Chemistry of Cu₃N and Cu₃PdN Nanocrystals**. Angewandte Chemie - International Edition, 2022, 61, .	7.2	12
5	Surface Functionalization of Surfactantâ€Free Particles: A Strategy to Tailor the Properties of Nanocomposites for Enhanced Thermoelectric Performance. Angewandte Chemie - International Edition, 2022, 61, .	7.2	15
6	Exploiting the Lability of Metal Halide Perovskites for Doping Semiconductor Nanocomposites. ACS Energy Letters, 2021, 6, 581-587.	8.8	12
7	Synthesis, Bottom up Assembly and Thermoelectric Properties of Sb-Doped PbS Nanocrystal Building Blocks. Materials, 2021, 14, 853.	1.3	5
8	Tidying up the mess. Science, 2021, 371, 678-679.	6.0	18
9	Effect of the Annealing Atmosphere on Crystal Phase and Thermoelectric Properties of Copper Sulfide. ACS Nano, 2021, 15, 4967-4978.	7.3	39
10	Doping-mediated stabilization of copper vacancies to promote thermoelectric properties of Cu2â[^]'xS. Nano Energy, 2021, 85, 105991.	8.2	26
11	Influence of copper telluride nanodomains on the transport properties of n-type bismuth telluride. Chemical Engineering Journal, 2021, 418, 129374.	6.6	18
12	Enhanced Thermoelectric Performance by Surface Engineering in SnTe-PbS Nanocomposites. Materials, 2021, 14, 5416.	1.3	7
13	The Importance of Surface Adsorbates in Solutionâ€Processed Thermoelectric Materials: The Case of SnSe. Advanced Materials, 2021, 33, e2106858.	11.1	19
14	Ligand Conversion in Nanocrystal Synthesis: The Oxidation of Alkylamines to Fatty Acids by Nitrate. Jacs Au, 2021, 1, 1898-1903.	3.6	15
15	PbSâ€"Pbâ€"Cu<i>_x</i>S Composites for Thermoelectric Application. ACS Applied Materials & Interfaces, 2021, 13, 51373-51382.	4.0	9
16	Influence of the Ligand Stripping on the Transport Properties of Nanoparticle-Based PbSe Nanomaterials. ACS Applied Energy Materials, 2020, 3, 2120-2129.	2.5	11
17	Electron transport in iodide-capped core@shell PbTe@PbS colloidal nanocrystal solids. Applied Physics Letters, 2020, 117, .	1.5	2
18	Bismuth tellurideâ€"copper telluride nanocomposites from heterostructured building blocks. Journal of Materials Chemistry C, 2020, 8, 14092-14099.	2.7	15

#	Article	IF	Citations
19	Ligand-Mode Directed Selectivity in Cuâ€“Ag Coreâ€“Shell Based Gas Diffusion Electrodes for CO₂ Electroreduction. ACS Catalysis, 2020, 10, 13468-13478.	5.5	24
20	Exclusive Electron Transport in Core@Shell PbTe@PbS Colloidal Semiconductor Nanocrystal Assemblies. ACS Nano, 2020, 14, 3242-3250.	7.3	19
21	Tin Selenide Molecular Precursor for the Solution Processing of Thermoelectric Materials and Devices. ACS Applied Materials & Interfaces, 2020, 12, 27104-27111.	4.0	15
22	Tuning Transport Properties in Thermoelectric Nanocomposites through Inorganic Ligands and Heterostructured Building Blocks. ACS Nano, 2019, 13, 6572-6580.	7.3	27
23	Ligand-Mediated Band Engineering in Bottom-Up Assembled SnTe Nanocomposites for Thermoelectric Energy Conversion. Journal of the American Chemical Society, 2019, 141, 8025-8029.	6.6	47
24	Crystallographically Textured Nanomaterials Produced from the Liquid Phase Sintering of Bi_{<i>x</i>}Sb_{2â€“<i>x</i>}Te₃ Nanocrystal Building Blocks. Nano Letters, 2018, 18, 2557-2563.	4.5	89
25	Tin Diselenide Molecular Precursor for Solutionâ€Processable Thermoelectric Materials. Angewandte Chemie, 2018, 130, 17309-17314.	1.6	9
26	Tin Diselenide Molecular Precursor for Solutionâ€Processable Thermoelectric Materials. Angewandte Chemie - International Edition, 2018, 57, 17063-17068.	7.2	23
27	SnP nanocrystals as anode materials for Na-ion batteries. Journal of Materials Chemistry A, 2018, 6, 10958-10966.	5.2	56
28	High Thermoelectric Performance in Crystallographically Textured n-Type Bi₂Te_{3â€“<i>x</i>}Se_{<i>x</i>} Produced from Asymmetric Colloidal Nanocrystals. ACS Nano, 2018, 12, 7174-7184.	7.3	114
29	Electron Mobility of 24 cm² V^{âˆ’1} s^{âˆ’1} in PbSe Colloidalâ€Quantumâ€Dot Superlattices. Advanced Materials, 2018, 30, e1802265.	11.1	40
30	Electrostatic-Driven Gelation of Colloidal Nanocrystals. Langmuir, 2018, 34, 9167-9174.	1.6	12
31	Growth of Auâ€“Pd₂Sn Nanorods via Galvanic Replacement and Their Catalytic Performance on Hydrogenation and Sonogashira Coupling Reactions. Langmuir, 2018, 34, 10634-10643.	1.6	13
32	Compound Copper Chalcogenide Nanocrystals. Chemical Reviews, 2017, 117, 5865-6109.	23.0	670
33	Bottom-up engineering of thermoelectric nanomaterials and devices from solution-processed nanoparticle building blocks. Chemical Society Reviews, 2017, 46, 3510-3528.	18.7	184
34	Tuning Branching in Ceria Nanocrystals. Chemistry of Materials, 2017, 29, 4418-4424.	3.2	19
35	Solution-based synthesis and processing of Sn- and Bi-doped Cu₃SbSe₄nanocrystals, nanomaterials and ring-shaped thermoelectric generators. Journal of Materials Chemistry A, 2017, 5, 2592-2602.	5.2	73
36	Tuning <i>p</i>-Type Transport in Bottom-Up-Engineered Nanocrystalline Pb Chalcogenides Using Alkali Metal Chalcogenides as Capping Ligands. Chemistry of Materials, 2017, 29, 7093-7097.	3.2	27

#	Article	IF	Citations
37	Thermoelectric properties of semiconductor-metal composites produced by particle blending. APL Materials, 2016, 4, .	2.2	50
38	Colloidal AgSbSe₂ nanocrystals: surface analysis, electronic doping and processing into thermoelectric nanomaterials. Journal of Materials Chemistry C, 2016, 4, 4756-4762.	2.7	27
39	Synthesis and Thermoelectric Properties of Noble Metal Ternary Chalcogenide Systems of Agâ€“Auâ€“Se in the Forms of Alloyed Nanoparticles and Colloidal Nanoheterostructures. Chemistry of Materials, 2016, 28, 7017-7028.	3.2	26
40	Fe₃O₄@NiFe_{<i>x</i>}O_{<i>y</i>} Nanoparticles with Enhanced Electrocatalytic Properties for Oxygen Evolution in Carbonate Electrolyte. ACS Applied Materials & Interfaces, 2016, 8, 29461-29469.	4.0	34
41	Pd₂Sn [010] nanorods as a highly active and stable ethanol oxidation catalyst. Journal of Materials Chemistry A, 2016, 4, 16706-16713.	5.2	65
42	Phosphonic acids aid composition adjustment in the synthesis of Cu2+x Zn1âˆ’x SnSe4âˆ’y nanoparticles. Journal of Nanoparticle Research, 2016, 18, 1.	0.8	5
43	Polymer-Enhanced Stability of Inorganic Perovskite Nanocrystals and Their Application in Color Conversion LEDs. ACS Applied Materials & Interfaces, 2016, 8, 19579-19586.	4.0	295
44	High-performance thermoelectric nanocomposites from nanocrystal building blocks. Nature Communications, 2016, 7, 10766.	5.8	224
45	Mn₃O₄@CoMn₂O₄â€“Co_{<i>x</i>}O_{<i>y</i>}Nanopartic Partial Cation Exchange Synthesis and Electrocatalytic Properties toward the Oxygen Reduction and Evolution Reactions. ACS Applied Materials & Interfaces, 2016, 8, 17435-17444.	4.0	72
46	Crystal symmetry breaking and vacancies in colloidal lead chalcogenide quantum dots. Nature Materials, 2016, 15, 987-994.	13.3	101
47	Highly Dynamic Ligand Binding and Light Absorption Coefficient of Cesium Lead Bromide Perovskite Nanocrystals. ACS Nano, 2016, 10, 2071-2081.	7.3	1,448
48	Scalable Heating-Up Synthesis of Monodisperse Cu₂ZnSnS₄ Nanocrystals. Chemistry of Materials, 2016, 28, 720-726.	3.2	43
49	Coâ€“Cu Nanoparticles: Synthesis by Galvanic Replacement and Phase Rearrangement during Catalytic Activation. Langmuir, 2016, 32, 2267-2276.	1.6	37
50	Size and Aspect Ratio Control of Pd₂Sn Nanorods and Their Water Denitration Properties. Langmuir, 2015, 31, 3952-3957.	1.6	29
51	Electron Doping in Bottom-Up Engineered Thermoelectric Nanomaterials through HCl-Mediated Ligand Displacement. Journal of the American Chemical Society, 2015, 137, 4046-4049.	6.6	98
52	Efficient and Inexpensive Sodiumâ€“Magnesium Hybrid Battery. Chemistry of Materials, 2015, 27, 7452-7458.	3.2	96
53	Cu₂ZnSnS₄â€“PtM (M = Co, Ni) Nanoheterostructures for Photocatalytic Hydrogen Evolution. Journal of Physical Chemistry C, 2015, 119, 21882-21888.	1.5	50
54	Cu₂ZnSnS₄â€“Ag₂S Nanoscale pâ€“n Heterostructures as Sensitizers for Photoelectrochemical Water Splitting. Langmuir, 2015, 31, 10555-10561.	1.6	55

#	Article	IF	Citations
55	Colloidal synthesis and functional properties of quaternary Cu-based semiconductors: Cu2HgGeSe4. Journal of Nanoparticle Research, 2014, 16, 1.	0.8	7
56	Polarity-Driven Polytypic Branching in Cu-Based Quaternary Chalcogenide Nanostructures. ACS Nano, 2014, 8, 2290-2301.	7.3	47
57	The effect of the Ga content on the photocatalytic hydrogen evolution of CuIn_{1âˆ’x}Ga_xS₂nanocrystals. Journal of Materials Chemistry A, 2014, 2, 12317.	5.2	76
58	Inâ€…Situ Study of Ethanol Electrooxidation on Monodispersed Pt₃Sn Nanoparticles. ChemElectroChem, 2014, 1, 885-895.	1.7	28
59	Cu₂ZnSnS₄-Pt and Cu₂ZnSnS₄-Au Heterostructured Nanoparticles for Photocatalytic Water Splitting and Pollutant Degradation. Journal of the American Chemical Society, 2014, 136, 9236-9239.	6.6	374
60	Thermoelectric properties of bottom-up assembled Bi<SUB align="right">2S<SUB align="right">3xTe<SUB align="right">x nanocomposites. International Journal of Nanotechnology, 2014, 11, 773.	0.1	7
61	Bottom-up processing of PbTe-PbS thermoelectric nanocomposites. International Journal of Nanotechnology, 2014, 11, 955.	0.1	4
62	Cu2HgSnSe4 nanoparticles: synthesis and thermoelectric properties. CrystEngComm, 2013, 15, 8966.	1.3	25
63	Antimony-Based Ligand Exchange To Promote Crystallization in Spray-Deposited Cu₂ZnSnSe₄ Solar Cells. Journal of the American Chemical Society, 2013, 135, 15982-15985.	6.6	107
64	All Change for Nanocrystals. Science, 2013, 340, 935-936.	6.0	36
65	Metal Ions To Control the Morphology of Semiconductor Nanoparticles: Copper Selenide Nanocubes. Journal of the American Chemical Society, 2013, 135, 4664-4667.	6.6	112
66	Organic ligand displacement by metal salts to enhance nanoparticle functionality: thermoelectric properties of Ag2Te. Journal of Materials Chemistry A, 2013, 1, 4864.	5.2	54
67	Colloidal synthesis and thermoelectric properties of Cu₂SnSe₃nanocrystals. Journal of Materials Chemistry A, 2013, 1, 1421-1426.	5.2	86
68	Coreâ€“Shell Nanoparticles As Building Blocks for the Bottom-Up Production of Functional Nanocomposites: PbTeâ€“PbS Thermoelectric Properties. ACS Nano, 2013, 7, 2573-2586.	7.3	137
69	CuTe Nanocrystals: Shape and Size Control, Plasmonic Properties, and Use as SERS Probes and Photothermal Agents. Journal of the American Chemical Society, 2013, 135, 7098-7101.	6.6	403
70	Solution-growth and optoelectronic performance of ZnOâ€‰:â€‰Cl/TiO₂ and ZnOâ€‰:â€‰Cl/Zn_xTiO_y/TiO₂ coreâ€“shell nanowires with tunable shell thickness. Journal Physics D: Applied Physics, 2012, 45, 415301.	1.3	27
71	Extending the Nanocrystal Synthesis Control to Quaternary Compositions. Crystal Growth and Design, 2012, 12, 1085-1090.	1.4	67
72	Cu₂ZnGeSe₄ Nanocrystals: Synthesis and Thermoelectric Properties. Journal of the American Chemical Society, 2012, 134, 4060-4063.	6.6	199

#	Article	IF	Citations
73	Bottom-up processing of thermoelectric nanocomposites from colloidal nanocrystal building blocks: the case of Ag2Teâ€“PbTe. Journal of Nanoparticle Research, 2012, 14, 1.	0.8	30
74	Composition Control and Thermoelectric Properties of Quaternary Chalcogenide Nanocrystals: The Case of Stannite Cu₂CdSnSe₄. Chemistry of Materials, 2012, 24, 562-570.	3.2	153
75	Crystallographic Control at the Nanoscale To Enhance Functionality: Polytypic Cu₂GeSe₃ Nanoparticles as Thermoelectric Materials. Chemistry of Materials, 2012, 24, 4615-4622.	3.2	79
76	Continuous Production of Cu₂ZnSnS₄ Nanocrystals in a Flow Reactor. Journal of the American Chemical Society, 2012, 134, 1438-1441.	6.6	175
77	Growth Kinetics of Asymmetric Bi2S3 Nanocrystals: Size Distribution Focusing in Nanorods. Journal of Physical Chemistry C, 2011, 115, 7947-7955.	1.5	43
78	Morphology evolution of Cu2âˆ’xS nanoparticles: from spheres to dodecahedrons. Chemical Communications, 2011, 47, 10332.	2.2	107
79	Means and Limits of Control of the Shell Parameters in Hollow Nanoparticles Obtained by the Kirkendall Effect. Chemistry of Materials, 2011, 23, 3095-3104.	3.2	67
80	Reaction Regimes on the Synthesis of Hollow Particles by the Kirkendall Effect. Journal of the American Chemical Society, 2009, 131, 11326-11328.	6.6	106
81	The chemistry of Cu3N and Cu3PdN nanocrystals. Angewandte Chemie, 0, , .	1.6	1