

# Andreu Cabot

## List of Publications by Year in descending order

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216  
papers

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all docs

222  
docs citations

222  
times ranked

17806  
citing authors

#	ARTICLE	IF	CITATIONS
1	Room temperature aqueous-based synthesis of copper-doped lead sulfide nanoparticles for thermoelectric application. Chemical Engineering Journal, 2022, 433, 133837.	12.7	8
2	Activating the lattice oxygen oxidation mechanism in amorphous molybdenum cobalt oxide nanosheets for water oxidation. Journal of Materials Chemistry A, 2022, 10, 3659-3666.	10.3	24
3	A High Conductivity 1D "d Conjugated Metal"Organic Framework with Efficient Polysulfide Trapping&Diffusion&Catalysis in Lithium"Sulfur Batteries. Advanced Materials, 2022, 34, e2108835.	21.0	86
4	Robust Lithium"Sulfur Batteries Enabled by Highly Conductive WSe <sub>2</sub> -Based Superlattices with Tunable Interlayer Space. Advanced Functional Materials, 2022, 32, .	14.9	51
5	Enhanced Polysulfide Conversion with Highly Conductive and Electrocatalytic Iodine&Doped Bismuth Selenide Nanosheets in Lithium"Sulfur Batteries. Advanced Functional Materials, 2022, 32, .	14.9	49
6	Patterning with Aligned Electrospun Nanofibers by Electrostatic Deflection of Fast Jets. Advanced Engineering Materials, 2022, 24, .	3.5	6
7	Electrochemical reforming of ethanol with acetate Co-Production on nickel cobalt selenide nanoparticles. Chemical Engineering Journal, 2022, 440, 135817.	12.7	19
8	Controlled oxygen doping in highly dispersed Ni-loaded g-C3N4 nanotubes for efficient photocatalytic H2O2 production. Chemical Engineering Journal, 2022, 441, 135999.	12.7	88
9	Branch-Regulated Palladium"Antimony Nanoparticles Boost Ethanol Electro-oxidation to Acetate. Inorganic Chemistry, 2022, 61, 6337-6346.	4.0	10
10	Pd2Ga nanorods as highly active bifunctional catalysts for electrosynthesis of acetic acid coupled with hydrogen production. Chemical Engineering Journal, 2022, 446, 136878.	12.7	11
11	2D/2D Heterojunction of TiO2 Nanoparticles and Ultrathin G-C3N4 Nanosheets for Efficient Photocatalytic Hydrogen Evolution. Nanomaterials, 2022, 12, 1557.	4.1	6
12	Molecular engineering to introduce carbonyl between nickel salophen active sites to enhance electrochemical CO2 reduction to methanol. Applied Catalysis B: Environmental, 2022, 314, 121451.	20.2	32
13	Subsuming the Metal Seed to Transform Binary Metal Chalcogenide Nanocrystals into Multinary Compositions. ACS Nano, 2022, 16, 8917-8927.	14.6	8
14	Entropy-stabilized metal oxide nanoparticles supported on reduced graphene oxide as a highly active heterogeneous catalyst for selective and solvent-free oxidation of toluene: a combined experimental and numerical investigation. Journal of Materials Chemistry A, 2022, 10, 14488-14500.	10.3	12
15	Phase Engineering of Defective Copper Selenide toward Robust Lithium"Sulfur Batteries. ACS Nano, 2022, 16, 11102-11114.	14.6	50
16	Surface strain-enhanced MoS2 as a high-performance cathode catalyst for lithium"sulfur batteries. EScience, 2022, 2, 405-415.	41.6	70
17	Highly Sensitive Self&Powered H <sub>2</sub> Sensor Based on Nanostructured Thermoelectric Silicon Fabrics. Advanced Materials Technologies, 2021, 6, .	5.8	9
18	Atomically dispersed Fe in a C <sub>2</sub> N Based Catalyst as a Sulfur Host for Efficient Lithium"Sulfur Batteries. Advanced Energy Materials, 2021, 11, 2003507.	19.5	91

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19	A Direct Z-Scheme for the Photocatalytic Hydrogen Production from a Water Ethanol Mixture on CoTiO <sub>3</sub> /TiO <sub>2</sub> Heterostructures. ACS Applied Materials & Interfaces, 2021, 13, 449-457.	8.0	37
20	Low-Cost Control and Measurement Circuit for the Implementation of Single Element Heat Dissipation Soil Water Matric Potential Sensor Based on a SnSe <sub>2</sub> Thermosensitive Resistor. Sensors, 2021, 21, 1490.	3.8	3
21	2D Organic Layered Materials: Atomically dispersed Fe in a C <sub>2</sub> N Based Catalyst as a Sulfur Host for Efficient Lithium-Sulfur Batteries (Adv. Energy Mater. 5/2021). Advanced Energy Materials, 2021, 11, 2170022.	19.5	3
22	Synthesis, Bottom up Assembly and Thermoelectric Properties of Sb-Doped PbS Nanocrystal Building Blocks. Materials, 2021, 14, 853.	2.9	5
23	Electrocatalysis: Nickel Iron Diselenide for Highly Efficient and Selective Electrocatalytic Conversion of Methanol to Formate (Small 6/2021). Small, 2021, 17, 2170023.	10.0	3
24	High-Performance Micro-Radioisotope Thermoelectric Generator with Large-Scale Integration of Multilayer Annular Arrays through Screen Printing and Stacking Coupling. Energy Technology, 2021, 9, 2001047.	3.8	5
25	Influence of Colloidal Au on the Growth of ZnO Nanostructures. Nanomaterials, 2021, 11, 870.	4.1	9
26	Hierarchical Nanoreactor with Multiple Adsorption and Catalytic Sites for Robust Lithium-Sulfur Batteries. ACS Nano, 2021, 15, 6849-6860.	14.6	70
27	Phase formation and thermoelectric properties of Zn <sub>1</sub> +Sb binary system. Transactions of Nonferrous Metals Society of China, 2021, 31, 753-763.	4.2	4
28	Effect of the Annealing Atmosphere on Crystal Phase and Thermoelectric Properties of Copper Sulfide. ACS Nano, 2021, 15, 4967-4978.	14.6	39
29	Photodehydrogenation of Ethanol over Cu <sub>2</sub> O/TiO <sub>2</sub> Heterostructures. Nanomaterials, 2021, 11, 1399.	4.1	11
30	Tubular CoFeP@CN as a Mott-Schottky Catalyst with Multiple Adsorption Sites for Robust Lithium-Sulfur Batteries. Advanced Energy Materials, 2021, 11, 2100432.	19.5	125
31	Architecturing 1D-2D-3D Multidimensional Coupled CsPbI <sub>2</sub> Br Perovskites toward Highly Effective and Stable Solar Cells. Small, 2021, 17, e2100888.	10.0	17
32	Does the pathway for development of next generation nuclear materials straightly go through high-entropy materials?. International Journal of Refractory Metals and Hard Materials, 2021, 97, 105504.	3.8	25
33	Enhanced Thermoelectric Performance of n-Type Bi <sub>2</sub> Se <sub>3</sub> Nanosheets through Sn Doping. Nanomaterials, 2021, 11, 1827.	4.1	23
34	Doping-mediated stabilization of copper vacancies to promote thermoelectric properties of Cu <sub>2</sub> xS. Nano Energy, 2021, 85, 105991.	16.0	26
35	NbSe <sub>2</sub> Meets C <sub>2</sub> N: A 2D Heterostructure Catalysts as Multifunctional Polysulfide Mediator in Ultra-Long-Life Lithium-Sulfur Batteries. Advanced Energy Materials, 2021, 11, 2101250.	19.5	89
36	Ultrafast electrohydrodynamic 3D printing with in situ jet speed monitoring. Materials and Design, 2021, 206, 109791.	7.0	13

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37	Influence of copper telluride nanodomains on the transport properties of n-type bismuth telluride. Chemical Engineering Journal, 2021, 418, 129374.	12.7	18
38	Molecular Engineering to Tune the Ligand Environment of Atomically Dispersed Nickel for Efficient Alcohol Electrochemical Oxidation. Advanced Functional Materials, 2021, 31, 2106349.	14.9	27
39	A Finite Element Investigation into the Cohesive Properties of Glass-Fiber-Reinforced Polymers with Nanostructured Interphases. Nanomaterials, 2021, 11, 2487.	4.1	3
40	Chromium-Based Metal-Organic Framework as A-site Cation in CsPbI <sub>2</sub> Br Perovskite Solar Cells. Advanced Functional Materials, 2021, 31, 2106233.	14.9	36
41	Nickel Iron Diselenide for Highly Efficient and Selective Electrocatalytic Conversion of Methanol to Formate. Small, 2021, 17, e2006623.	10.0	29
42	Hierarchical CoP Nanostructures on Nickel Foam as Efficient Bifunctional Catalysts for Water Splitting. ChemSusChem, 2021, 14, 1094-1102.	6.8	20
43	PbS-Cu <sub>x</sub> S Composites for Thermoelectric Application. ACS Applied Materials & Interfaces, 2021, 13, 51373-51382.	8.0	9
44	Performance of oil sorbents based on reduced graphene oxide-silica composite aerogels. Journal of Environmental Chemical Engineering, 2020, 8, 103632.	6.7	37
45	Influence of the Ligand Stripping on the Transport Properties of Nanoparticle-Based PbSe Nanomaterials. ACS Applied Energy Materials, 2020, 3, 2120-2129.	5.1	11
46	Monodisperse CoSn and NiSn Nanoparticles Supported on Commercial Carbon as Anode for Lithium- and Potassium-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 4414-4422.	8.0	46
47	Hydrogen photogeneration using ternary CuGaS <sub>2</sub> -TiO <sub>2</sub> -Pt nanocomposites. International Journal of Hydrogen Energy, 2020, 45, 1510-1520.	7.1	24
48	ZnSe/N-Doped Carbon Nanoreactor with Multiple Adsorption Sites for Stable Lithium-Sulfur Batteries. ACS Nano, 2020, 14, 15492-15504.	14.6	114
49	Phosphorous incorporation in Pd <sub>2</sub> Sn alloys for electrocatalytic ethanol oxidation. Nano Energy, 2020, 77, 105116.	16.0	48
50	Selective Methanol-to-Formate Electrocatalytic Conversion on Branched Nickel Carbide. Angewandte Chemie - International Edition, 2020, 59, 20826-20830.	13.8	83
51	Selective Methanol-to-Formate Electrocatalytic Conversion on Branched Nickel Carbide. Angewandte Chemie, 2020, 132, 21012-21016.	2.0	24
52	Bismuth telluride-copper telluride nanocomposites from heterostructured building blocks. Journal of Materials Chemistry C, 2020, 8, 14092-14099.	5.5	15
53	SnS <sub>2</sub> /g-C <sub>3</sub> N <sub>4</sub> /graphite nanocomposites as durable lithium-ion battery anode with high pseudocapacitance contribution. Electrochimica Acta, 2020, 349, 136369.	5.2	29
54	Improving Mechanical Properties of Glass Fiber Reinforced Polymers through Silica-Based Surface Nanoengineering. ACS Applied Polymer Materials, 2020, 2, 2667-2675.	4.4	12

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55	Optimization of the TEGs Configuration (Series/Parallel) in Energy Harvesting Systems with Low-Voltage Thermoelectric Generators Connected to Ultra-Low Voltage DC-DC Converters. Energies, 2020, 13, 2297.	3.1	15
56	Self-Induced Strain in 2D Chalcogenide Nanocrystals with Enhanced Photoelectrochemical Responsivity. Chemistry of Materials, 2020, 32, 2774-2781.	6.7	7
57	Monodispersed Nickel Phosphide Nanocrystals in Situ Grown on Reduced Graphene Oxide with Controllable Size and Composition as a Counter Electrode for Dye-Sensitized Solar Cells. ACS Sustainable Chemistry and Engineering, 2020, 8, 5920-5926.	6.7	27
58	Low-cost tangerine peel waste mediated production of Titanium Dioxide Nanocrystals: Synthesis and characterization. Environmental Nanotechnology, Monitoring and Management, 2020, 13, 100285.	2.9	14
59	Stability of Pd <sub>3</sub> Pb Nanocubes during Electrocatalytic Ethanol Oxidation. Chemistry of Materials, 2020, 32, 2044-2052.	6.7	62
60	A SnS <sub>2</sub> Molecular Precursor for Conformal Nanostructured Coatings. Chemistry of Materials, 2020, 32, 2097-2106.	6.7	9
61	Ultrafast 3D printing with submicrometer features using electrostatic jet deflection. Nature Communications, 2020, 11, 753.	12.8	114
62	Advanced Raman spectroscopy of Cs <sub>2</sub> AgBiBr <sub>6</sub> double perovskites and identification of Cs <sub>3</sub> Bi <sub>2</sub> Br <sub>9</sub> secondary phases. Scripta Materialia, 2020, 184, 24-29.	5.2	46
63	Tin Selenide Molecular Precursor for the Solution Processing of Thermoelectric Materials and Devices. ACS Applied Materials & Interfaces, 2020, 12, 27104-27111.	8.0	15
64	Upscaling high activity oxygen evolution catalysts based on CoFe <sub>2</sub> O <sub>4</sub> nanoparticles supported on nickel foam for power-to-gas electrochemical conversion with energy efficiencies above 80%. Applied Catalysis B: Environmental, 2019, 259, 118055.	20.2	35
65	In Situ Electrochemical Oxidation of Cu <sub>2</sub> S into CuO Nanowires as a Durable and Efficient Electrocatalyst for Oxygen Evolution Reaction. Chemistry of Materials, 2019, 31, 7732-7743.	6.7	131
66	Ge-Doped ZnSb <sub>1/2</sub> Te <sub>3/2</sub> Nanocomposites with High Thermoelectric Performance. Advanced Materials Interfaces, 2019, 6, 1900467.	3.7	19
67	Porous NiTiO <sub>3</sub> /TiO <sub>2</sub> nanostructures for photocatalytic hydrogen evolution. Journal of Materials Chemistry A, 2019, 7, 17053-17059.	10.3	33
68	A low temperature solid state reaction to produce hollow Mn <sub>x</sub> Fe <sub>3-x</sub> O <sub>4</sub> nanoparticles as anode for lithium-ion batteries. Nano Energy, 2019, 66, 104199.	16.0	21
69	Superior methanol electrooxidation performance of (110)-faceted nickel polyhedral nanocrystals. Journal of Materials Chemistry A, 2019, 7, 22036-22043.	10.3	38
70	Solution-Processed Ultrathin SnS <sub>2</sub> -Pt Nanoplates for Photoelectrochemical Water Oxidation. ACS Applied Materials & Interfaces, 2019, 11, 6918-6926.	8.0	57
71	Co-Sn Nanocrystalline Solid Solutions as Anode Materials in Lithium-Ion Batteries with High Pseudocapacitive Contribution. ChemSusChem, 2019, 12, 1451-1458.	6.8	38
72	Combined High Catalytic Activity and Efficient Polar Tubular Nanostructure in Urchin-Like Metallic NiCo <sub>2</sub> Se <sub>4</sub> for High-Performance Lithium-Sulfur Batteries. Advanced Functional Materials, 2019, 29, 1903842.	14.9	153

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73	Chromium phosphide CrP as highly active and stable electrocatalysts for oxygen electroreduction in alkaline media. <i>Applied Catalysis B: Environmental</i> , 2019, 256, 117846.	20.2	20
74	Tuning Transport Properties in Thermoelectric Nanocomposites through Inorganic Ligands and Heterostructured Building Blocks. <i>ACS Nano</i> , 2019, 13, 6572-6580.	14.6	27
75	Ligand-Mediated Band Engineering in Bottom-Up Assembled SnTe Nanocomposites for Thermoelectric Energy Conversion. <i>Journal of the American Chemical Society</i> , 2019, 141, 8025-8029.	13.7	47
76	Autonomous Soil Water Content Sensors Based on Bipolar Transistors Encapsulated in Porous Ceramic Blocks. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 1211.	2.5	2
77	Compositionally tuned NixSn alloys as anode materials for lithium-ion and sodium-ion batteries with a high pseudocapacitive contribution. <i>Electrochimica Acta</i> , 2019, 304, 246-254.	5.2	51
78	Crystallographically textured SnSe nanomaterials produced from the liquid phase sintering of nanocrystals. <i>Dalton Transactions</i> , 2019, 48, 3641-3647.	3.3	16
79	Critical role of nanoinclusions in silver selenide nanocomposites as a promising room temperature thermoelectric material. <i>Journal of Materials Chemistry C</i> , 2019, 7, 2646-2652.	5.5	47
80	Mechanistic study of energy dependent scattering and hole-phonon interaction at hybrid polymer composite interfaces for optimized thermoelectric performance. <i>Composites Part B: Engineering</i> , 2019, 164, 54-60.	12.0	24
81	Substantial role of doping in the thermoelectric and hardness properties of nanostructured bornite, Cu <sub>5</sub> FeS <sub>4</sub> . <i>Journal of Alloys and Compounds</i> , 2019, 773, 1064-1074.	5.5	21
82	Graphene-supported palladium phosphide PdP <sub>2</sub> nanocrystals for ethanol electrooxidation. <i>Applied Catalysis B: Environmental</i> , 2019, 242, 258-266.	20.2	76
83	Metal Oxide Aerogels with Controlled Crystallinity and Faceting from the Epoxide-Driven Cross-Linking of Colloidal Nanocrystals. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 16041-16048.	8.0	11
84	NiSn bimetallic nanoparticles as stable electrocatalysts for methanol oxidation reaction. <i>Applied Catalysis B: Environmental</i> , 2018, 234, 10-18.	20.2	142
85	Thermoelectric properties of nanostructured bornite Cu <sub>5-x</sub> CoxFeS <sub>4</sub> synthesized by high energy ball milling. <i>Journal of Alloys and Compounds</i> , 2018, 750, 1-7.	5.5	15
86	Synthesis of bornite Cu <sub>5</sub> FeS <sub>4</sub> nanoparticles via high energy ball milling: Photocatalytic and thermoelectric properties. <i>Powder Technology</i> , 2018, 333, 160-166.	4.2	28
87	Triphenyl Phosphite as the Phosphorus Source for the Scalable and Cost-Effective Production of Transition Metal Phosphides. <i>Chemistry of Materials</i> , 2018, 30, 1799-1807.	6.7	65
88	Crystallographically Textured Nanomaterials Produced from the Liquid Phase Sintering of Bi <sub>x</sub> Sb <sub>2-2x</sub> Te <sub>3</sub> Nanocrystal Building Blocks. <i>Nano Letters</i> , 2018, 18, 2557-2563.	9.1	89
89	Colloidal NiCoSn nanoparticles as efficient electrocatalysts for the methanol oxidation reaction. <i>Journal of Materials Chemistry A</i> , 2018, 6, 22915-22924.	10.3	85
90	Evaluation of the Thermoelectric Energy Harvesting Potential at Different Latitudes Using Solar Flat Panels Systems with Buried Heat Sink. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 2641.	2.5	20

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91	Tin Diselenide Molecular Precursor for Solution-Processable Thermoelectric Materials. Angewandte Chemie, 2018, 130, 17309-17314.	2.0	9
92	Large-area and adaptable electrospun silicon-based thermoelectric nanomaterials with high energy conversion efficiencies. Nature Communications, 2018, 9, 4759.	12.8	62
93	Common Aspects Influencing the Translocation of SERS to Biomedicine. Current Medicinal Chemistry, 2018, 25, 4638-4652.	2.4	18
94	Tin Diselenide Molecular Precursor for Solution-Processable Thermoelectric Materials. Angewandte Chemie - International Edition, 2018, 57, 17063-17068.	13.8	23
95	Enhanced Heterojunction Quality and Performance of Kesterite Solar Cells by Aluminum Hydroxide Nanolayers and Efficiency Limitation Revealed by Atomic-resolution Scanning Transmission Electron Microscopy. Solar Rrl, 2018, 3, 1800279.	5.8	6
96	Thermoelectric Properties of Doped-Cu <sub>3</sub> SbSe <sub>4</sub> Compounds: A First-Principles Insight. Inorganic Chemistry, 2018, 57, 7321-7333.	4.0	36
97	Surface Chemistry and Nano-/Microstructure Engineering on Photocatalytic In <sub>2</sub> S <sub>3</sub> Nanocrystals. Langmuir, 2018, 34, 6470-6479.	3.5	17
98	SnP nanocrystals as anode materials for Na-ion batteries. Journal of Materials Chemistry A, 2018, 6, 10958-10966.	10.3	56
99	Topological doping effects in 2D chalcogenide thermoelectrics. 2D Materials, 2018, 5, 045008.	4.4	5
100	Doping and Surface Effects of CuFeS <sub>2</sub> Nanocrystals Used in Thermoelectric Nanocomposites. ChemNanoMat, 2018, 4, 982-991.	2.8	26
101	High Thermoelectric Performance in Crystallographically Textured n-Type Bi <sub>2</sub> Te <sub>3</sub> Se Produced from Asymmetric Colloidal Nanocrystals. ACS Nano, 2018, 12, 7174-7184.	14.6	114
102	CuGaS <sub>2</sub> and CuGaS <sub>2</sub> -ZnS Porous Layers from Solution-Processed Nanocrystals. Nanomaterials, 2018, 8, 220.	4.1	7
103	Electrostatic-Driven Gelation of Colloidal Nanocrystals. Langmuir, 2018, 34, 9167-9174.	3.5	12
104	Colloidal Ni <sub>2</sub> Co <sub>x</sub> P nanocrystals for the hydrogen evolution reaction. Journal of Materials Chemistry A, 2018, 6, 11453-11462.	10.3	57
105	Colloidal Synthesis of CsX Nanocrystals (X = Cl, Br, I). Nanomaterials, 2018, 8, 506.	4.1	5
106	Growth of Au-Pd <sub>2</sub> Sn Nanorods via Galvanic Replacement and Their Catalytic Performance on Hydrogenation and Sonogashira Coupling Reactions. Langmuir, 2018, 34, 10634-10643.	3.5	13
107	Noble metal distribution in mesoporous silica as a selective active filter for semiconductor gas sensors. , 2018, , 433-436.		0
108	Compound Copper Chalcogenide Nanocrystals. Chemical Reviews, 2017, 117, 5865-6109.	47.7	670



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109	Oxidation at the atomic scale. <i>Science</i> , 2017, 356, 245-245.	12.6	3
110	Bottom-up engineering of thermoelectric nanomaterials and devices from solution-processed nanoparticle building blocks. <i>Chemical Society Reviews</i> , 2017, 46, 3510-3528.	38.1	184
111	Tuning Branching in Ceria Nanocrystals. <i>Chemistry of Materials</i> , 2017, 29, 4418-4424.	6.7	19
112	Solution-based synthesis and processing of Sn- and Bi-doped Cu <sub>3</sub> SbSe <sub>4</sub> nanocrystals, nanomaterials and ring-shaped thermoelectric generators. <i>Journal of Materials Chemistry A</i> , 2017, 5, 2592-2602.	10.3	73
113	High Catalytic Activity of W <sub>18</sub> O <sub>49</sub> Nanowire-Reduced Graphite Oxide Composite Counter Electrode for Dye-Sensitized Solar Cells. <i>ChemistrySelect</i> , 2017, 2, 8927-8935.	1.5	12
114	Subcellular Optical pH Nanoscale Sensor. <i>ChemistrySelect</i> , 2017, 2, 8115-8121.	1.5	5
115	Measurement of the electric energy storage capacity in solar thermoelectric generatorsâ€™ energy harvesting modules. <i>International Journal of Distributed Sensor Networks</i> , 2017, 13, 155014771668542.	2.2	4
116	Tuning <i>p</i> -Type Transport in Bottom-Up-Engineered Nanocrystalline Pb Chalcogenides Using Alkali Metal Chalcogenides as Capping Ligands. <i>Chemistry of Materials</i> , 2017, 29, 7093-7097.	6.7	27
117	Atomistic modelling and high resolution electron microscopy simulations of CeO <sub>2</sub> nanoparticles. <i>Applied Physics Letters</i> , 2017, 111, 223107.	3.3	0
118	A Self-Powered and Autonomous Fringing Field Capacitive Sensor Integrated into a Micro Sprinkler Spinner to Measure Soil Water Content. <i>Sensors</i> , 2017, 17, 575.	3.8	36
119	Experimental analysis of an automotive thermoelectric generator under different engine operating regimes. <i>Renewable Energy and Power Quality Journal</i> , 2017, 1, 619-623.	0.2	1
120	Experiments and Simulations of an Automotive Exhaust Thermoelectric System. <i>Renewable Energy and Power Quality Journal</i> , 2017, 1, 614-618.	0.2	0
121	Thermoelectric properties of semiconductor-metal composites produced by particle blending. <i>APL Materials</i> , 2016, 4, .	5.1	50
122	Colloidal AgSbSe <sub>2</sub> nanocrystals: surface analysis, electronic doping and processing into thermoelectric nanomaterials. <i>Journal of Materials Chemistry C</i> , 2016, 4, 4756-4762.	5.5	27
123	Synthesis and Thermoelectric Properties of Noble Metal Ternary Chalcogenide Systems of Agâ€‘Auâ€‘Se in the Forms of Alloyed Nanoparticles and Colloidal Nanoheterostructures. <i>Chemistry of Materials</i> , 2016, 28, 7017-7028.	6.7	26
124	Fe <sub>3</sub> O <sub>4</sub> @NiFe <sub>x</sub> O <sub>y</sub> Nanoparticles with Enhanced Electrocatalytic Properties for Oxygen Evolution in Carbonate Electrolyte. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 29461-29469.	8.0	34
125	Pd <sub>2</sub> Sn [010] nanorods as a highly active and stable ethanol oxidation catalyst. <i>Journal of Materials Chemistry A</i> , 2016, 4, 16706-16713.	10.3	65
126	Phosphonic acids aid composition adjustment in the synthesis of Cu <sub>2+x</sub> Zn <sub>1-x</sub> SnSe <sub>4-y</sub> nanoparticles. <i>Journal of Nanoparticle Research</i> , 2016, 18, 1.	1.9	5



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127	Advanced Raman Spectroscopy of Methylammonium Lead Iodide: Development of a Non-destructive Characterisation Methodology. Scientific Reports, 2016, 6, 35973.	3.3	103
128	Polymer-Enhanced Stability of Inorganic Perovskite Nanocrystals and Their Application in Color Conversion LEDs. ACS Applied Materials & Interfaces, 2016, 8, 19579-19586.	8.0	295
129	Cu <sub>2</sub> ZnSnS <sub>4</sub> Nanocrystals as Highly Active and Stable Electrocatalysts for the Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2016, 120, 24265-24270.	3.1	17
130	High-performance thermoelectric nanocomposites from nanocrystal building blocks. Nature Communications, 2016, 7, 10766.	12.8	224
131	Mn <sub>3</sub> O <sub>4</sub> @CoMn <sub>2</sub> O <sub>4</sub> "Co <sub>x</sub> O <sub>y</sub> " Nanoparticles: Partial Cation Exchange Synthesis and Electrocatalytic Properties toward the Oxygen Reduction and Evolution Reactions. ACS Applied Materials & Interfaces, 2016, 8, 17435-17444.	8.0	72
132	Autonomous soil moisture sensor based on nanostructured thermosensitive resistors powered by an integrated thermoelectric generator. Sensors and Actuators A: Physical, 2016, 239, 1-7.	4.1	28
133	Scalable Heating-Up Synthesis of Monodisperse Cu <sub>2</sub> ZnSnS <sub>4</sub> Nanocrystals. Chemistry of Materials, 2016, 28, 720-726.	6.7	43
134	Co-Cu Nanoparticles: Synthesis by Galvanic Replacement and Phase Rearrangement during Catalytic Activation. Langmuir, 2016, 32, 2267-2276.	3.5	37
135	NH <sub>3</sub> sensing with self-assembled ZnO-nanowire 1/4HP sensors in isothermal and temperature-pulsed mode. Sensors and Actuators B: Chemical, 2016, 226, 110-117.	7.8	34
136	Raman scattering quantitative analysis of the anion chemical composition in kesterite Cu <sub>2</sub> ZnSn(S <sub>x</sub> Se <sub>1-x</sub> ) <sub>4</sub> solid solutions. Journal of Alloys and Compounds, 2015, 628, 464-470.	5.5	69
137	Prospects of Nanoscience with Nanocrystals. ACS Nano, 2015, 9, 1012-1057.	14.6	1,005
138	Influence of substrate temperature on the structural and optical properties of crystalline ZnO films obtained by pulsed spray pyrolysis. Surface and Interface Analysis, 2015, 47, 601-606.	1.8	33
139	Size and Aspect Ratio Control of Pd <sub>2</sub> Sn Nanorods and Their Water Denitration Properties. Langmuir, 2015, 31, 3952-3957.	3.5	29
140	Electron Doping in Bottom-Up Engineered Thermoelectric Nanomaterials through HCl-Mediated Ligand Displacement. Journal of the American Chemical Society, 2015, 137, 4046-4049.	13.7	98
141	Growth Time Effect on the Structural and Sub-Structural Properties of Chemically-Deposited ZnO Films. Advanced Materials Research, 2015, 1117, 168-178.	0.3	1
142	Structure, Synthesis, and Applications of TiO <sub>2</sub> Nanobelts. Advanced Materials, 2015, 27, 2557-2582.	21.0	287
143	Autonomous Multisensor System Powered by a Solar Thermoelectric Energy Harvester With Ultralow-Power Management Circuit. IEEE Transactions on Instrumentation and Measurement, 2015, 64, 2918-2925.	4.7	42
144	Cu <sub>2</sub> ZnSnS <sub>4</sub> -PtM (M = Co, Ni) Nanoheterostructures for Photocatalytic Hydrogen Evolution. Journal of Physical Chemistry C, 2015, 119, 21882-21888.	3.1	50

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145	Cu <sub>2</sub> ZnSnS <sub>4</sub> –Ag <sub>2</sub> S Nanoscale “n Heterostructures as Sensitizers for Photoelectrochemical Water Splitting. Langmuir, 2015, 31, 10555-10561.	3.5	55
146	Spray-deposited CuIn <sub>1-x</sub> Ga <sub>x</sub> Se <sub>2</sub> solar cell absorbers: Influence of spray deposition parameters and crystallization promoters. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 67-71.	1.8	7
147	Colloidal synthesis and functional properties of quaternary Cu-based semiconductors: Cu <sub>2</sub> HgGeSe <sub>4</sub> . Journal of Nanoparticle Research, 2014, 16, 1.	1.9	7
148	Polarity-Driven Polytypic Branching in Cu-Based Quaternary Chalcogenide Nanostructures. ACS Nano, 2014, 8, 2290-2301.	14.6	47
149	ZnS grain size effects on near-resonant Raman scattering: optical non-destructive grain size estimation. CrystEngComm, 2014, 16, 4120.	2.6	105
150	The effect of the Ga content on the photocatalytic hydrogen evolution of CuIn <sub>1-x</sub> Ga <sub>x</sub> S <sub>2</sub> nanocrystals. Journal of Materials Chemistry A, 2014, 2, 12317.	10.3	76
151	In Situ Study of Ethanol Electrooxidation on Monodispersed Pt <sub>3</sub> Sn Nanoparticles. ChemElectroChem, 2014, 1, 885-895.	3.4	28
152	Cu <sub>2</sub> ZnSnS <sub>4</sub> -Pt and Cu <sub>2</sub> ZnSnS <sub>4</sub> -Au Heterostructured Nanoparticles for Photocatalytic Water Splitting and Pollutant Degradation. Journal of the American Chemical Society, 2014, 136, 9236-9239.	13.7	374
153	Highly crystalline hydrothermal ZnO nanowires as photoanodes in DSCs. International Journal of Nanotechnology, 2014, 11, 747.	0.2	3
154	Thermoelectric properties of bottom-up assembled Bi <sub>2</sub> S <sub>3</sub> Te <sub>3</sub> nanocomposites. International Journal of Nanotechnology, 2014, 11, 773.	0.2	7
155	Bottom-up processing of PbTe-PbS thermoelectric nanocomposites. International Journal of Nanotechnology, 2014, 11, 955.	0.2	4
156	Influence of the Annealing Atmosphere on the Performance of ZnO Nanowire Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2013, 117, 16349-16356.	3.1	74
157	Pressure effects in hollow and solid iron oxide nanoparticles. Journal of Magnetism and Magnetic Materials, 2013, 335, 1-5.	2.3	1
158	Cu <sub>2</sub> HgSnSe <sub>4</sub> nanoparticles: synthesis and thermoelectric properties. CrystEngComm, 2013, 15, 8966.	2.6	25
159	Antimony-Based Ligand Exchange To Promote Crystallization in Spray-Deposited Cu <sub>2</sub> ZnSnSe <sub>4</sub> Solar Cells. Journal of the American Chemical Society, 2013, 135, 15982-15985.	13.7	107
160	Enhanced Photovoltaic Performance of Nanowire Dye-Sensitized Solar Cells Based on Coaxial TiO <sub>2</sub> @TiO Heterostructures with a Cobalt(II/III) Redox Electrolyte. ACS Applied Materials & Interfaces, 2013, 5, 9872-9877.	8.0	24
161	Embedding catalytic nanoparticles inside mesoporous structures with controlled porosity: Au@TiO <sub>2</sub> . Journal of Materials Chemistry A, 2013, 1, 14170.	10.3	21
162	All Change for Nanocrystals. Science, 2013, 340, 935-936.	12.6	36

#	ARTICLE	IF	CITATIONS
163	Metal Ions To Control the Morphology of Semiconductor Nanoparticles: Copper Selenide Nanocubes. Journal of the American Chemical Society, 2013, 135, 4664-4667.	13.7	112
164	Organic ligand displacement by metal salts to enhance nanoparticle functionality: thermoelectric properties of Ag <sub>2</sub> Te. Journal of Materials Chemistry A, 2013, 1, 4864.	10.3	54
165	Colloidal synthesis and thermoelectric properties of Cu <sub>2</sub> SnSe <sub>3</sub> nanocrystals. Journal of Materials Chemistry A, 2013, 1, 1421-1426.	10.3	86
166	Solution-growth and optoelectronic properties of ZnO:Cl@ZnS core-shell nanowires with tunable shell thickness. Journal of Alloys and Compounds, 2013, 555, 213-218.	5.5	25
167	Core-Shell Nanoparticles As Building Blocks for the Bottom-Up Production of Functional Nanocomposites: PbTe-PbS Thermoelectric Properties. ACS Nano, 2013, 7, 2573-2586.	14.6	137
168	Learning from Nature to Improve the Heat Generation of Iron-Oxide Nanoparticles for Magnetic Hyperthermia Applications. Scientific Reports, 2013, 3, 1652.	3.3	442
169	Cobalt(II/III) Redox Electrolyte in ZnO Nanowire-Based Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2013, 5, 1902-1906.	8.0	64
170	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.	13.7	403
171	Solution-growth and optoelectronic performance of ZnO:Cl/TiO <sub>2</sub> and ZnO:Cl/Zn <sub>x</sub> TiO <sub>y</sub> /TiO <sub>2</sub> core-shell nanowires with tunable shell thickness. Journal Physics D: Applied Physics, 2012, 45, 415301.	2.8	27
172	Extending the Nanocrystal Synthesis Control to Quaternary Compositions. Crystal Growth and Design, 2012, 12, 1085-1090.	3.0	67
173	Cu <sub>2</sub> ZnGeSe <sub>4</sub> Nanocrystals: Synthesis and Thermoelectric Properties. Journal of the American Chemical Society, 2012, 134, 4060-4063.	13.7	199
174	Bottom-up processing of thermoelectric nanocomposites from colloidal nanocrystal building blocks: the case of Ag <sub>2</sub> Te-PbTe. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	30
175	Composition Control and Thermoelectric Properties of Quaternary Chalcogenide Nanocrystals: The Case of Stannite Cu <sub>2</sub> CdSnSe <sub>4</sub> . Chemistry of Materials, 2012, 24, 562-570.	6.7	153
176	Visible Photoluminescence Components of Solution-Grown ZnO Nanowires: Influence of the Surface Depletion Layer. Journal of Physical Chemistry C, 2012, 116, 19496-19502.	3.1	33
177	Crystallographic Control at the Nanoscale To Enhance Functionality: Polytypic Cu <sub>2</sub> GeSe <sub>3</sub> Nanoparticles as Thermoelectric Materials. Chemistry of Materials, 2012, 24, 4615-4622.	6.7	79
178	Continuous Production of Cu <sub>2</sub> ZnSnS <sub>4</sub> Nanocrystals in a Flow Reactor. Journal of the American Chemical Society, 2012, 134, 1438-1441.	13.7	175
179	Active nano-CuPt <sub>3</sub> electrocatalyst supported on graphene for enhancing reactions at the cathode in all-vanadium redox flow batteries. Carbon, 2012, 50, 2372-2374.	10.3	124
180	Morphology influence on nanoscale magnetism of Co nanoparticles: Experimental and theoretical aspects of exchange bias. Physical Review B, 2011, 84, .	3.2	44

#	ARTICLE	IF	CITATIONS
181	Growth Kinetics of Asymmetric Bi <sub>2</sub> S <sub>3</sub> Nanocrystals: Size Distribution Focusing in Nanorods. Journal of Physical Chemistry C, 2011, 115, 7947-7955.	3.1	43
182	Morphology evolution of Cu <sub>2</sub> -xS nanoparticles: from spheres to dodecahedrons. Chemical Communications, 2011, 47, 10332.	4.1	107
183	Means and Limits of Control of the Shell Parameters in Hollow Nanoparticles Obtained by the Kirkendall Effect. Chemistry of Materials, 2011, 23, 3095-3104.	6.7	67
184	In situ XPS study of the adsorption and reactions of NO and O <sub>2</sub> on gold nanoparticles deposited on TiO <sub>2</sub> and SiO <sub>2</sub> . Journal of Catalysis, 2011, 283, 119-123.	6.2	47
185	Control of the doping concentration, morphology and optoelectronic properties of vertically aligned chlorine-doped ZnO nanowires. Acta Materialia, 2011, 59, 6790-6800.	7.9	57
186	Assessment of absorber composition and nanocrystalline phases in CuInS <sub>2</sub> based photovoltaic technologies by ex-situ/in-situ resonant Raman scattering measurements. Solar Energy Materials and Solar Cells, 2011, 95, S83-S88.	6.2	27
187	Enhancement of the photoelectrochemical properties of Cl-doped ZnO nanowires by tuning their coaxial doping profile. Applied Physics Letters, 2011, 99, .	3.3	24
188	Location and catalytic role of iron species in TiO <sub>2</sub> :Fe photocatalysts: An EPR study. Journal of Photochemistry and Photobiology A: Chemistry, 2010, 211, 170-175.	3.9	65
189	Synthesis of Quaternary Chalcogenide Nanocrystals: Stannite Cu <sub>2</sub> Zn <sub>x</sub> Sn <sub>y</sub> Se <sub>1+x+2y</sub> . Journal of the American Chemical Society, 2010, 132, 4514-4515.	13.7	218
190	Reactivity of Au nanoparticles supported over SiO <sub>2</sub> and TiO <sub>2</sub> studied by ambient pressure photoelectron spectroscopy. Catalysis Today, 2009, 143, 158-166.	4.4	43
191	Influence of the Cobalt Particle Size in the CO Hydrogenation Reaction Studied by In Situ X-Ray Absorption Spectroscopy. Journal of Physical Chemistry B, 2009, 113, 10721-10727.	2.6	110
192	Reaction Regimes on the Synthesis of Hollow Particles by the Kirkendall Effect. Journal of the American Chemical Society, 2009, 131, 11326-11328.	13.7	106
193	Magnetic domains and surface effects in hollow maghemite nanoparticles. Physical Review B, 2009, 79, .	3.2	110
194	Nanosensors: Controlling Transduction Mechanisms at the Nanoscale Using Metal Oxides and Semiconductors. , 2009, , 1-51.		1
195	Ultrahigh stress and strain in hierarchically structured hollow nanoparticles. Nature Materials, 2008, 7, 947-952.	27.5	193
196	Sulfidation of Cadmium at the Nanoscale. ACS Nano, 2008, 2, 1452-1458.	14.6	113
197	Vacancy Coalescence during Oxidation of Iron Nanoparticles. Journal of the American Chemical Society, 2007, 129, 10358-10360.	13.7	298
198	Colloidal Synthesis of Hollow Cobalt Sulfide Nanocrystals. Advanced Functional Materials, 2006, 16, 1389-1399.	14.9	351

#	ARTICLE	IF	CITATIONS
199	Surface states in template synthesized tin oxide nanoparticles. Journal of Applied Physics, 2004, 95, 2178-2180.	2.5	24
200	Synthesis of Tin Oxide Nanostructures with Controlled Particle Size Using Mesoporous Frameworks. Electrochemical and Solid-State Letters, 2004, 7, G93.	2.2	21
201	TEM 3D Tomography of Noble Metal Nanowires Growth Inside SiO <sub>2</sub> Mesoporous Aggregates. Materials Research Society Symposia Proceedings, 2004, 818, 239.	0.1	3
202	Bi <sub>2</sub> O <sub>3</sub> as a selective sensing material for NO detection. Sensors and Actuators B: Chemical, 2004, 99, 74-89.	7.8	206
203	The influence of film structure on In <sub>2</sub> O <sub>3</sub> gas response. Thin Solid Films, 2004, 460, 315-323.	1.8	155
204	In <sub>2</sub> O <sub>3</sub> films deposited by spray pyrolysis as a material for ozone gas sensors. Sensors and Actuators B: Chemical, 2004, 99, 297-303.	7.8	117
205	In <sub>2</sub> O <sub>3</sub> films deposited by spray pyrolysis: gas response to reducing (CO, H <sub>2</sub> ) gases. Sensors and Actuators B: Chemical, 2004, 98, 122-129.	7.8	73
206	Noble Metal Nanostructures Synthesized inside Mesoporous Nanotemplate Pores. Electrochemical and Solid-State Letters, 2004, 7, J17.	2.2	7
207	Mesoporous catalytic filters for semiconductor gas sensors. Thin Solid Films, 2003, 436, 64-69.	1.8	91
208	Study of the Catalytic Additive Effects on the Properties of In <sub>2</sub> O <sub>3</sub> Nanopowders for Gas Sensing Applications. , 2003, , .		0
209	Distributions of noble metal Pd and Pt in mesoporous silica. Applied Physics Letters, 2002, 81, 3449-3451.	3.3	45
210	Crystallographic characterization of In <sub>2</sub> O <sub>3</sub> films deposited by spray pyrolysis. Sensors and Actuators B: Chemical, 2002, 84, 37-42.	7.8	39
211	Analysis of the catalytic activity and electrical characteristics of different modified SnO <sub>2</sub> layers for gas sensors. Sensors and Actuators B: Chemical, 2002, 84, 12-20.	7.8	79
212	COâ€“CH <sub>4</sub> selectivity enhancement by in situ Pd-catalysed microwave SnO <sub>2</sub> nanoparticles for gas detectors using active filter. Sensors and Actuators B: Chemical, 2001, 78, 151-160.	7.8	50
213	Influence of the catalytic introduction procedure on the nano-SnO <sub>2</sub> gas sensor performances. Sensors and Actuators B: Chemical, 2001, 79, 98-106.	7.8	162
214	Microwave processing for the low cost, mass production of undoped and in situ catalytic doped nanosized SnO <sub>2</sub> gas sensor powders. Sensors and Actuators B: Chemical, 2000, 64, 65-69.	7.8	59
215	Influence on the gas sensor performances of the metal chemical states introduced by impregnation of calcinated SnO <sub>2</sub> solâ€“gel nanocrystals. Sensors and Actuators B: Chemical, 2000, 68, 94-99.	7.8	77
216	Analysis of the noble metal catalytic additives introduced by impregnation of as obtained SnO <sub>2</sub> solâ€“gel nanocrystals for gas sensors. Sensors and Actuators B: Chemical, 2000, 70, 87-100.	7.8	286