Joel van Embden

List of Publications by Year
in descending order

56 papers	4,013 citations	159358 30 h-index	174990 52 g-index
60 all docs	60 docs citations	60 times ranked	6434 citing authors

#	Article	IF	Citations
1	Highly Conductive and Visibly Transparent p-Type CuCrO₂ Films by Ultrasonic Spray Pyrolysis. ACS Applied Materials & Interfaces, 2022, 14, 11768-11778.	4.0	11
2	Highâ€Resistance Metal Oxide Window Layers for Optimal Front Contact Interfaces in Sb₂Se₃ Solar Cells. Solar Rrl, 2022, 6, .	3.1	8
3	High-mobility p-type semiconducting two-dimensional Î²-TeO2. Nature Electronics, 2021, 4, 277-283.	13.1	75
4	Surface transfer doping of diamond using solution-processed molybdenum trioxide. Carbon, 2021, 175, 20-26.	5.4	5
5	High Gain Solutionâ€Processed Carbonâ€Free BiSI Chalcohalide Thin Film Photodetectors. Advanced Functional Materials, 2021, 31, 2104788.	7.8	30
6	SILAR deposition of bismuth vanadate photoanodes for photoelectrochemical water splitting. Journal of Materials Chemistry A, 2021, 9, 25641-25650.	5.2	5
7	Transparent Electrodes: Ultrasonic Spray Pyrolysis of Antimonyâ€Doped Tin Oxide Transparent Conductive Coatings (Adv. Mater. Interfaces 18/2020). Advanced Materials Interfaces, 2020, 7, 2070104.	1.9	0
8	Transparent electrodes based on spray coated fluorine-doped tin oxide with enhanced optical, electrical and mechanical properties. Journal of Materials Chemistry C, 2020, 8, 14531-14539.	2.7	17
9	Solution-Processed CuSbS₂ Thin Films and Superstrate Solar Cells with CdS/In₂S₃ Buffer Layers. ACS Applied Energy Materials, 2020, 3, 7885-7895.	2.5	25
10	Perovskite-Inspired High Stability Organometal Antimony(V) Halide Thin Films by Post-Deposition Bromination. , 2020, 2, 1203-1210.		2
11	Ultrasonic Spray Pyrolysis of Antimonyâ€Doped Tin Oxide Transparent Conductive Coatings. Advanced Materials Interfaces, 2020, 7, 2000655.	1.9	20
12	Fluorine-Doped Tin Oxide Colloidal Nanocrystals. Nanomaterials, 2020, 10, 863.	1.9	12
13	Significant Enhancement of Antimicrobial Activity in Oxygen-Deficient Zinc Oxide Nanowires. ACS Applied Bio Materials, 2020, 3, 2997-3004.	2.3	36
14	Accurate control of stoichiometry and doping in barium stannate perovskite oxide nanoparticles. Chemical Communications, 2019, 55, 11880-11883.	2.2	14
15	Continuous Growth Synthesis of Zinc Oxide Nanocrystals with Tunable Size and Doping. Chemistry of Materials, 2019, 31, 9604-9613.	3.2	18
16	Augmented band gap tunability in indium-doped zinc sulfide nanocrystals. Nanoscale, 2019, 11, 3154-3163.	2.8	15
17	Ultrathin Solar Absorber Layers of Silver Bismuth Sulfide from Molecular Precursors. ACS Applied Materials & Interfaces, 2019, 11, 16674-16682.	4.0	24
18	Oxygen-deficient photostable Cu₂O for enhanced visible light photocatalytic activity. Nanoscale, 2018, 10, 6039-6050.	2.8	115

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19	Soft exfoliation of 2D SnO with size-dependent optical properties. 2D Materials, 2017, 4, 025110.	2.0	59
20	Sonicationâ€Assisted Synthesis of Gallium Oxide Suspensions Featuring Trap State Absorption: Test of Photochemistry. Advanced Functional Materials, 2017, 27, 1702295.	7.8	110
21	Highâ€Performance Field Effect Transistors Using Electronic Inks of 2D Molybdenum Oxide Nanoflakes. Advanced Functional Materials, 2016, 26, 91-100.	7.8	164
22	The formation mechanism of Janus nanostructures in one-pot reactions: the case of Agâ€“Ag₈GeS₆. Journal of Materials Chemistry A, 2016, 4, 7060-7070.	5.2	7
23	Plastic Microgroove Solar Cells Using CuInSe₂ Nanocrystals. ACS Energy Letters, 2016, 1, 1021-1027.	8.8	13
24	Exfoliation Solvent Dependent Plasmon Resonances in Two-Dimensional Sub-Stoichiometric Molybdenum Oxide Nanoflakes. ACS Applied Materials & Interfaces, 2016, 8, 3482-3493.	4.0	111
25	Back-contacted hybrid organicâ€“inorganic perovskite solar cells. Journal of Materials Chemistry C, 2016, 4, 3125-3130.	2.7	54
26	Optoelectronics: Flashâ€Assisted Processing of Highly Conductive Zinc Oxide Electrodes from Water (Adv. Funct. Mater. 47/2015). Advanced Functional Materials, 2015, 25, 7246-7246.	7.8	0
27	Flashâ€Assisted Processing of Highly Conductive Zinc Oxide Electrodes from Water. Advanced Functional Materials, 2015, 25, 7263-7271.	7.8	25
28	Electronic Tuning of 2D MoS₂ through Surface Functionalization. Advanced Materials, 2015, 27, 6225-6229.	11.1	194
29	Optically monitored spray coating system for the controlled deposition of the photoactive layer in organic solar cells. Applied Physics Letters, 2015, 106, .	1.5	18
30	The Heat-Up Synthesis of Colloidal Nanocrystals. Chemistry of Materials, 2015, 27, 2246-2285.	3.2	313
31	Plasmonic Ge-doped ZnO nanocrystals. Chemical Communications, 2015, 51, 12369-12372.	2.2	28
32	Photonic Sintering of Copper through the Controlled Reduction of Printed CuO Nanocrystals. ACS Applied Materials & Interfaces, 2015, 7, 25473-25478.	4.0	57
33	Mimicry of Sputtered i-ZnO Thin Films Using Chemical Bath Deposition for Solution-Processed Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 22519-22526.	4.0	23
34	Cu₂ZnSnS_{4x}Se_{4(1â€“x)} Solar Cells from Polar Nanocrystal Inks. Journal of the American Chemical Society, 2014, 136, 5237-5240.	6.6	102
35	Non-injection Synthesis of Doped Zinc Oxide Plasmonic Nanocrystals. ACS Nano, 2014, 8, 9154-9163.	7.3	112
36	Cu2ZnGeS4 Nanocrystals from Air-Stable Precursors for Sintered Thin Film Alloys. Chemistry of Materials, 2014, 26, 5482-5491.	3.2	42

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37	Near-Infrared Absorbing Cu₁₂Sb₄S₁₃ and Cu₃SbS₄ Nanocrystals: Synthesis, Characterization, and Photoelectrochemistry. Journal of the American Chemical Society, 2013, 135, 11562-11571.	6.6	155
38	In Situ Formation of Reactive Sulfide Precursors in the One-Pot, Multigram Synthesis of Cu₂ZnSnS₄ Nanocrystals. Crystal Growth and Design, 2013, 13, 1712-1720.	1.4	57
39	Synthesis and characterisation of famatinite copper antimony sulfide nanocrystals. Journal of Materials Chemistry, 2012, 22, 11466.	6.7	93
40	Functional three-dimensional nonlinear nanostructures in a gold ion nanocomposite. , 2011, , .		0
41	Type-II core/shell nanoparticle induced photorefractivity. Applied Physics Letters, 2011, 98, 231107.	1.5	6
42	High Activity Phosphine-Free Selenium Precursor Solution for Semiconductor Nanocrystal Growth. Chemistry of Materials, 2010, 22, 4135-4143.	3.2	97
43	Superâ€resolution imaging and statistical analysis of CdSe/CdS Core/Shell semiconductor nanocrystals. Journal of Biophotonics, 2010, 3, 437-445.	1.1	6
44	Highly Nonâ€Linear Quantum Dot Doped Nanocomposites for Functional Threeâ€Dimensional Structures Generated by Twoâ€Photon Polymerization. Advanced Materials, 2010, 22, 2463-2467.	11.1	32
45	Enhanced photorefractive performance in CdSe quantum-dot-dispersed poly(styrene-co-acrylonitrile) polymers. Applied Physics Letters, 2010, 96, 253302.	1.5	5
46	Enhanced two-photon absorption of CdS nanocrystal rods. Applied Physics Letters, 2009, 94, 103117.	1.5	54
47	Excitonâ^'Trion Transitions in Single CdSeâ€“CdS Coreâ€“Shell Nanocrystals. ACS Nano, 2009, 3, 2281-2287.	7.3	131
48	Re-examination of the Size-Dependent Absorption Properties of CdSe Quantum Dots. Journal of Physical Chemistry C, 2009, 113, 19468-19474.	1.5	523
49	Evolution of Colloidal Nanocrystals: Theory and Modeling of their Nucleation and Growth. Journal of Physical Chemistry C, 2009, 113, 16342-16355.	1.5	92
50	Mapping the Optical Properties of CdSe/CdS Heterostructure Nanocrystals: The Effects of Core Size and Shell Thickness. Journal of the American Chemical Society, 2009, 131, 14299-14309.	6.6	159
51	Review of the Synthetic Chemistry Involved in the Production of Core/Shell Semiconductor Nanocrystals. Australian Journal of Chemistry, 2007, 60, 457.	0.5	114
52	Blinking and Surface Chemistry of Single CdSe Nanocrystals. Small, 2006, 2, 204-208.	5.2	108
53	Spectral diffusion of single semiconductor nanocrystals: The influence of the dielectric environment. Applied Physics Letters, 2006, 88, 154106.	1.5	49
54	Nucleation and Growth of CdSe Nanocrystals in a Binary Ligand System. Langmuir, 2005, 21, 10226-10233.	1.6	203

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55	Phosphine-Free Synthesis of CdSe Nanocrystals. Journal of Physical Chemistry B, 2005, 109, 20665-20668.	1.2	225
56	Two-photon-induced photoenhancement of densely packed CdSeâˆ•ZnSeâˆ•ZnS nanocrystal solids and its application to multilayer optical data storage. Applied Physics Letters, 2004, 85, 5514-5516.	1.5	40