Maya Bar Sadan

List of Publications by Year
in descending order

73 papers	2,896 citations	172386 29 h-index	168321 53 g-index
76 all docs	76 docs citations	76 times ranked	4796 citing authors

#	Article	IF	Citations
1	New Route for Stabilization of 1T-WS₂ and MoS₂ Phases. Journal of Physical Chemistry C, 2011, 115, 24586-24591.	1.5	430
2	Enantioselective control of lattice and shape chirality in inorganic nanostructures using chiral biomolecules. Nature Communications, 2014, 5, 4302.	5.8	187
3	Direct Imaging of Single Au Atoms Within GaAs Nanowires. Nano Letters, 2012, 12, 2352-2356.	4.5	151
4	Hybrid nanoscale inorganic cages. Nature Materials, 2010, 9, 810-815.	13.3	129
5	Line Defects in Molybdenum Disulfide Layers. Journal of Physical Chemistry C, 2013, 117, 10842-10848.	1.5	127
6	Niâ€“WSe₂nanostructures as efficient catalysts for electrochemical hydrogen evolution reaction (HER) in acidic and alkaline media. Journal of Materials Chemistry A, 2020, 8, 1403-1416.	5.2	102
7	Structure and Stability of Molybdenum Sulfide Fullerenes. Angewandte Chemie - International Edition, 2007, 46, 623-627.	7.2	84
8	Atom by atom: HRTEM insights into inorganic nanotubes and fullerene-like structures. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 15643-15648.	3.3	77
9	Defect-induced magnetism in chemically synthesized nanoscale sheets of MgO. Physical Review B, 2011, 83, .	1.1	72
10	Manganese Doping of MoSe₂ Promotes Active Defect Sites for Hydrogen Evolution. ACS Applied Materials & Interfaces, 2019, 11, 25155-25162.	4.0	70
11	MoS₂ Hybrid Nanostructures: From Octahedral to Quasiâ€Spherical Shells within Individual Nanoparticles. Angewandte Chemie - International Edition, 2011, 50, 1810-1814.	7.2	62
12	Structure and Stability of Molybdenum Sulfide Fullerenesâ€. Journal of Physical Chemistry B, 2006, 110, 25399-25410.	1.2	61
13	Toward Atomic-Scale Bright-Field Electron Tomography for the Study of Fullerene-Like Nanostructures. Nano Letters, 2008, 8, 891-896.	4.5	61
14	Effect of Ru Doping on the Properties of MoSe₂ Nanoflowers. Journal of Physical Chemistry C, 2019, 123, 1987-1994.	1.5	60
15	Improved catalytic activity of Mo_{1âˆ’x}W_xSe₂ alloy nanoflowers promotes efficient hydrogen evolution reaction in both acidic and alkaline aqueous solutions. Nanoscale, 2017, 9, 13998-14005.	2.8	59
16	The golden gate to photocatalytic hydrogen production. Journal of Materials Chemistry A, 2015, 3, 19679-19682.	5.2	50
17	Diffraction from Disordered Stacking Sequences in MoS2and WS2Fullerenes and Nanotubes. Journal of Physical Chemistry C, 2012, 116, 24350-24357.	1.5	49
18	Cu_{2â€“<i>x</i>}Sâ€“MoS₂ Nano-Octahedra at the Atomic Scale: Using a Template To Activate the Basal Plane of MoS₂ for Hydrogen Production. Chemistry of Materials, 2018, 30, 4489-4492.	3.2	48

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19	Correlating Electron Tomography and Plasmon Spectroscopy of Single Noble Metal Coreâ€“Shell Nanoparticles. Nano Letters, 2012, 12, 145-150.	4.5	47
20	Hollow V₂O₅ Nanoparticles (Fullerene-Like Analogues) Prepared by Laser Ablation. Journal of the American Chemical Society, 2010, 132, 11214-11222.	6.6	45
21	Designing Bimetallic Co-Catalysts: A Party of Two. Journal of Physical Chemistry Letters, 2015, 6, 3760-3764.	2.1	44
22	Au-MoS₂ Hybrids as Hydrogen Evolution Electrocatalysts. ACS Applied Energy Materials, 2019, 2, 6043-6050.	2.5	43
23	Refinement procedure for the image alignment in high-resolution electron tomography. Ultramicroscopy, 2011, 111, 1512-1520.	0.8	42
24	Promoting Active Sites for Hydrogen Evolution in MoSe₂ via Transition-Metal Doping. Journal of Physical Chemistry C, 2020, 124, 12324-12336.	1.5	38
25	Enhancing the catalytic activity of the alkaline hydrogen evolution reaction by tuning the S/Se ratio in the Mo(S_xSe_{1âˆ’x})₂ catalyst. Nanoscale, 2018, 10, 16211-16216.	2.8	35
26	Shelling with MoS2: Functional CuS@MoS2 hybrids as electrocatalysts for the oxygen reduction and hydrogen evolution reactions. Chemical Engineering Journal, 2021, 420, 129771.	6.6	35
27	Inorganic fullerenes and nanotubes: Wealth of materials and morphologies. European Physical Journal: Special Topics, 2007, 149, 71-101.	1.2	34
28	Catalyst Composition, Morphology and Reaction Pathway in the Growth of â€œSuperâ€Longâ€•Carbon Nanotubes. ChemCatChem, 2010, 2, 1069-1073.	1.8	34
29	Fullerene-like WS₂nanoparticles and nanotubes by the vapor-phase synthesis of WCl_{<i>n</i>}and H₂S. Nanotechnology, 2008, 19, 095601.	1.3	33
30	Coâ€Doped MoSe₂ Nanoflowers as Efficient Catalysts for Electrochemical Hydrogen Evolution Reaction (HER) in Acidic and Alkaline Media. Israel Journal of Chemistry, 2020, 60, 624-629.	1.0	32
31	Porous MoS₂ Framework and Its Functionality for Electrochemical Hydrogen Evolution Reaction and Lithium Ion Batteries. ACS Applied Energy Materials, 2019, 2, 5900-5908.	2.5	30
32	Nanoseashells and Nanooctahedra of MoS2: Routes to Inorganic Fullerenes. Chemistry of Materials, 2009, 21, 5627-5636.	3.2	29
33	Highly defective MgO nanosheets from colloidal self-assembly. Journal of Materials Chemistry, 2011, 21, 9532.	6.7	29
34	W Doping in Ni₁₂P₅ as a Platform to Enhance Overall Electrochemical Water Splitting. ACS Applied Materials & Interfaces, 2022, 14, 581-589.	4.0	29
35	Growth Mechanisms and Electronic Properties of Vertically Aligned MoS2. Scientific Reports, 2018, 8, 16480.	1.6	28
36	Understanding the formation mechanism and the 3D structure of Mo(S_xSe_{1âˆ’x})₂ nanoflowers. RSC Advances, 2015, 5, 88108-88114.	1.7	27

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37	Preparation and Structural Characterization of Stable Cs2O Closed-Cage Structures. Angewandte Chemie - International Edition, 2005, 44, 4169-4172.	7.2	26
38	Stability of Seeded Rod Photocatalysts: Atomic Scale View. Chemistry of Materials, 2016, 28, 1546-1552.	3.2	25
39	Structural Transformation of SnS₂ to SnS by Mo Doping Produces Electro/Photocatalyst for Hydrogen Production. Chemistry - A European Journal, 2020, 26, 6679-6685.	1.7	23
40	Closed-cage (fullerene-like) structures of NiBr2. Materials Research Bulletin, 2006, 41, 2137-2146.	2.7	22
41	NiSe and CoSe Topological Nodalâ€Line Semimetals: A Sustainable Platform for Efficient Thermoplasmonics and Solarâ€Driven Photothermal Membrane Distillation. Small, 2022, 18, .	5.2	21
42	Alcohol oxidation with high efficiency and selectivity by nickel phosphide phases. Journal of Materials Chemistry A, 2022, 10, 8238-8244.	5.2	20
43	Nickel phosphide catalysts for hydrogen generation through water reduction, ammonia-borane and borohydride hydrolysis. Applied Materials Today, 2020, 20, 100693.	2.3	19
44	Inside-Out: The Role of Buried Interfaces in Hybrid Cu2ZnSnS4â€“Noble Metal Photocatalysts. Journal of Physical Chemistry C, 2017, 121, 7062-7068.	1.5	18
45	MoS2 FULLERENE-LIKE NANOPARTICLES AND NANOTUBES USING GAS-PHASE REACTION WITH MoCl5. Nano, 2006, 01, 167-180.	0.5	17
46	Inorganic WS2 nanotubes revealed atom by atom using ultra-high-resolution transmission electron microscopy. Applied Physics A: Materials Science and Processing, 2009, 96, 343-348.	1.1	16
47	Growth Schemes of Tunable Ultrathin CdSxSe1â€“x Alloyed Nanostructures at Low Temperatures. Journal of Physical Chemistry C, 2015, 119, 10734-10739.	1.5	16
48	Atomic-Scale Evolution of a Growing Coreâ€“Shell Nanoparticle. Journal of the American Chemical Society, 2014, 136, 12564-12567.	6.6	14
49	Identifying a New Pathway for Nitrogen Reduction Reaction on Fe-Doped MoS₂ by the Coadsorption of Hydrogen and N₂. Journal of Physical Chemistry C, 2021, 125, 19980-19990.	1.5	14
50	Stability Criteria of Fullerene-like Nanoparticles: Comparing V2O5 to Layered Metal Dichalcogenides and Dihalides. Materials, 2010, 3, 4428-4445.	1.3	12
51	Interactions between Transition-Metal Surfaces and MoS₂ Monolayers: Implications for Hydrogen Evolution and CO₂ Reduction Reactions. Journal of Physical Chemistry C, 2020, 124, 20116-20124.	1.5	12
52	Solution phase synthesis of homogeneously alloyed ultrathin CdS_xSe_{1âˆ’x} nanosheets. RSC Advances, 2014, 4, 49842-49845.	1.7	10
53	Tuning the surface properties of alloyed CdS_xSe_{1âˆ’x} 2D nanosheets. RSC Advances, 2015, 5, 100834-100837.	1.7	9
54	Oriented Attachment of 2D Nanosheets: The Case of Few-Layer Bi₂Se₃. Chemistry of Materials, 2021, 33, 7558-7565.	3.2	9

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55	Bright-field electron tomography of individual inorganic fullerene-like structures. Nanoscale, 2010, 2, 423-428.	2.8	7
56	Revealing Growth Schemes of Nanoparticles in Atomic Resolution: Mapping Stacking Fault Formation and Distribution. Crystal Growth and Design, 2015, 15, 3114-3118.	1.4	7
57	The effect of atomic disorder at the coreâ€"shell interface on stacking fault formation in hybrid nanoparticles. Nanoscale, 2016, 8, 17568-17572.	2.8	7
58	Flatlands in the Holy Land: The Evolution of Layered Materials Research in Israel. Advanced Materials, 2018, 30, e1706581.	11.1	7
59	Facile synthetic approach to produce optimized molybdenum carbide catalyst for alkaline HER. Applied Surface Science, 2021, 559, 149932.	3.1	7
60	Seeded Rods with Ag and Pd Bimetallic Tipsâ€"Spontaneous Rearrangements of the Nanoalloys on the Atomic Scale. Chemistry of Materials, 2019, 31, 7231-7237.	3.2	6
61	Incorporating Nb into MoSe₂ Nanoflowers for Overall Electrocatalytic Water Splitting. Israel Journal of Chemistry, 2022, 62, .	1.0	4
62	Weak Links and Phase Slip Centers in Superconducting MgB2Wires. Journal of Superconductivity and Novel Magnetism, 2004, 17, 497-502.	0.5	3
63	Inorganic Nanotubes and Nanostructures. Israel Journal of Chemistry, 2010, 50, 393-394.	1.0	3
64	One-pot synthesis of MoS2(1â^'x)Se2x on N-doped reduced graphene oxide: tailoring chemical and structural properties for photoenhanced hydrogen evolution reaction. Nanoscale Advances, 2020, 2, 4830-4840.	2.2	3
65	Orienting MoS2 flakes into ordered films. Journal of Materials Science, 2014, 49, 7353-7359.	1.7	2
66	Compound Crystals. , 2013, , 605-638.		2
67	Catalytic Hydrogen Evolution Reaction Enhancement on Vertically Aligned MoS₂ by Synergistic Addition of Silver and Palladium. ChemElectroChem, 2020, 7, 4224-4232.	1.7	1
68	Preparation and Structural Characterization of Stable Cs2O Closed-Cage Structures.. ChemInform, 2005, 36, no.	0.1	0
69	Inside Cover: MoS2 Hybrid Nanostructures: From Octahedral to Quasi-Spherical Shells within Individual Nanoparticles (Angew. Chem. Int. Ed. 8/2011). Angewandte Chemie - International Edition, 2011, 50, 1728-1728.	7.2	0
70	Correlating the Structure and Composition of 2D Materials with Their Catalytic Activity. Microscopy and Microanalysis, 2017, 23, 1708-1709.	0.2	0
71	Transition Metals Dichalcodenides: Growth mechanism, Structure and Catalytic Activity. , 0, , .		0
72	A place where everyone matters â€" interfaces in 2D functional nanostructures. , 0, , .		0

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73	Transition Metals Dichalcodenides: Growth mechanism, Structure and Catalytic Activity. , 0, , .		0