

# Pratap M Rao

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7814965/publications.pdf>

Version: 2024-02-01

39  
papers

3,342  
citations

279798

23  
h-index

330143

37  
g-index

41  
all docs

41  
docs citations

41  
times ranked

5210  
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis and optoelectronic properties of a promising quaternary metal oxide light absorber $\text{CuBiW}_2\text{O}_8$ . Journal of Materials Chemistry A, 2021, 9, 1643-1654.	10.3	8
2	A Noninvasive Miniaturized Transcutaneous Oxygen Monitor. IEEE Transactions on Biomedical Circuits and Systems, 2021, 15, 474-485.	4.0	20
3	Stability and electronic properties of edges of $\text{SnS}_2$ . Physical Review B, 2020, 102, .		
4	Balancing Light Absorption and Charge Transport in Vertical $\text{SnS}_2$ Nanoflake Photoanodes with Stepped Layers and Large Intrinsic Mobility. Advanced Energy Materials, 2019, 9, 1901236.	19.5	41
5	Atomic Layer Deposition of Space-Efficient $\text{SnO}_2$ Underlayers for $\text{BiVO}_4$ Guest Architectures for Photoassisted Water Splitting. ChemSusChem, 2019, 12, 1770-1770.	6.8	1
6	Superhydrophobic behavior of polymer-coated nanowire-arrays as a function of interfacial affinity and etching. Materials Research Express, 2019, 6, 095099.	1.6	3
7	Atomic Layer Deposition of Space-Efficient $\text{SnO}_2$ Underlayers for $\text{BiVO}_4$ Guest Architectures for Photoassisted Water Splitting. ChemSusChem, 2019, 12, 1916-1924.	6.8	10
8	Niobium Doping in $\text{BiVO}_4$ : Interplay Between Effective Mass, Stability, and Pressure. ChemPhysChem, 2019, 20, 773-784.	2.1	14
9	All-electrodeposited p-Cu $_2$ ZnSnS $_4$ /n-In $_2$ S $_3$ Heterojunction Formation for Solar Cell Applications. , 2018, , .		0
10	Carrier Dynamics in $\text{SnS}_2$ Single Crystals and Vertical Nanostructures: Role of Edges. , 2018, , .		1
11	Dynamics of Photoexcited Carriers in Polycrystalline PbS and at PbS/ZnO Heterojunctions: Influence of Grain Boundaries and Interfaces. Journal of Physical Chemistry C, 2018, 122, 11682-11688.	3.1	12
12	Photoanode with Enhanced Performance Achieved by Coating $\text{BiVO}_4$ onto ZnO-Templated Sb-Doped $\text{SnO}_2$ Nanotube Scaffold. ACS Applied Materials & Interfaces, 2017, 9, 11356-11362.	8.0	33
13	Photoelectrochemical Properties and Behavior of $\text{SnWO}_4$ Photoanodes Synthesized by Hydrothermal Conversion of $\text{WO}_3$ Films. ACS Applied Materials & Interfaces, 2017, 9, 1459-1470.	8.0	42
14	Enhancing the solar energy conversion efficiency of solution-deposited $\text{Bi}_2\text{S}_3$ thin films by annealing in sulfur vapor at elevated temperature. Sustainable Energy and Fuels, 2017, 1, 2134-2144.	4.9	25
15	The structural and electronic properties of reduced amorphous titania. Physical Chemistry Chemical Physics, 2017, 19, 18671-18684.	2.8	31
16	Ultrafast carrier dynamics in $\text{BiVO}_4$ : Interplay between free carriers, trapped carriers and low-frequency lattice vibrations. , 2016, , .		1
17	High Light Absorption and Charge Separation Efficiency at Low Applied Voltage from Sb-Doped $\text{SnO}_2$ / $\text{BiVO}_4$ Core/Shell Nanorod-Array Photoanodes. Nano Letters, 2016, 16, 3463-3474.	9.1	166
18	Rapid Synthesis of Thin and Long $\text{Mo}_2\text{O}_7$ Nanowire-Arrays in an Oxygen Deficient Flame. Scientific Reports, 2016, 6, 27832.	3.3	11

#	ARTICLE	IF	CITATIONS
19	Ultrafast carrier dynamics in BiVO <sub>4</sub> thin film photoanode material: interplay between free carriers, trapped carriers and low-frequency lattice vibrations. Journal of Materials Chemistry A, 2016, 4, 18516-18523.	10.3	60
20	Simultaneously Efficient Light Absorption and Charge Separation in WO <sub>3</sub> /BiVO <sub>4</sub> Core/Shell Nanowire Photoanode for Photoelectrochemical Water Oxidation. Nano Letters, 2014, 14, 1099-1105.	9.1	652
21	Sol-flame synthesis of cobalt-doped TiO <sub>2</sub> nanowires with enhanced electrocatalytic activity for oxygen evolution reaction. Physical Chemistry Chemical Physics, 2014, 16, 12299-12306.	2.8	44
22	Sol-flame synthesis of hybrid metal oxide nanowires. Proceedings of the Combustion Institute, 2013, 34, 2179-2186.	3.9	15
23	Electroassisted Transfer of Vertical Silicon Wire Arrays Using a Sacrificial Porous Silicon Layer. Nano Letters, 2013, 13, 4362-4368.	9.1	33
24	Flame synthesis of WO <sub>3</sub> nanotubes and nanowires for efficient photoelectrochemical water-splitting. Proceedings of the Combustion Institute, 2013, 34, 2187-2195.	3.9	83
25	Flame synthesis of 1-D complex metal oxide nanomaterials. Proceedings of the Combustion Institute, 2013, 34, 2229-2236.	3.9	19
26	Morphological control of heterostructured nanowires synthesized by sol-flame method. Nanoscale Research Letters, 2013, 8, 347.	5.7	6
27	Sol-Flame Synthesis: A General Strategy To Decorate Nanowires with Metal Oxide/Noble Metal Nanoparticles. Nano Letters, 2013, 13, 855-860.	9.1	48
28	Codoping titanium dioxide nanowires with tungsten and carbon for enhanced photoelectrochemical performance. Nature Communications, 2013, 4, 1723.	12.8	249
29	Reducing minimum flash ignition energy of Al microparticles by addition of WO <sub>3</sub> nanoparticles. Applied Physics Letters, 2013, 102, .	3.3	20
30	Thermal conductivity in porous silicon nanowire arrays. Nanoscale Research Letters, 2012, 7, 554.	5.7	64
31	Hybrid Si Microwire and Planar Solar Cells: Passivation and Characterization. Nano Letters, 2011, 11, 2704-2708.	9.1	151
32	Branched TiO <sub>2</sub> Nanorods for Photoelectrochemical Hydrogen Production. Nano Letters, 2011, 11, 4978-4984.	9.1	843
33	Unique Magnetic Properties of Single Crystal $\hat{1}^3$ -Fe <sub>2</sub> O <sub>3</sub> Nanowires Synthesized by Flame Vapor Deposition. Nano Letters, 2011, 11, 2390-2395.	9.1	80
34	Morphology-Controlled Flame Synthesis of Single, Branched, and Flower-like $\hat{1}^{\pm}$ -MoO <sub>3</sub> Nanobelt Arrays. Nano Letters, 2011, 11, 872-877.	9.1	153
35	Flash ignition of Al nanoparticles: Mechanism and applications. Combustion and Flame, 2011, 158, 2544-2548.	5.2	127
36	Methane oxidation over catalytic copper oxides nanowires. Proceedings of the Combustion Institute, 2011, 33, 3169-3175.	3.9	42

#	ARTICLE	IF	CITATIONS
37	Synthesis and ignition of energetic CuO/Al core/shell nanowires. Proceedings of the Combustion Institute, 2011, 33, 1909-1915.	3.9	76
38	Flame synthesis of tungsten oxide nanostructures on diverse substrates. Proceedings of the Combustion Institute, 2011, 33, 1891-1898.	3.9	41
39	Rapid Catalyst-Free Flame Synthesis of Dense, Aligned $\pm$ -Fe <sub>2</sub> O <sub>3</sub> Nanoflake and CuO Nanoneedle Arrays. Nano Letters, 2009, 9, 3001-3006.	9.1	108