

Vibha Rani Satsangi

List of Publications by Year in descending order

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218677

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docs citations

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times ranked

2377
citing authors

#	ARTICLE	IF	CITATIONS
1	Role and prospects of green quantum dots in photoelectrochemical hydrogen generation: A review. International Journal of Hydrogen Energy, 2022, 47, 11472-11491.	7.1	16
2	$\text{BiVO}_4/\text{Fe}_2\text{O}_3/\text{ZnFe}_2\text{O}_4$; triple heterojunction for an enhanced PEC performance for hydrogen generation. RSC Advances, 2022, 12, 12552-12563.	3.6	6
3	TiO_2 crystal seeds incorporated in amorphous matrix for enhanced solar hydrogen generation: Experimental & first-principles analysis. International Journal of Hydrogen Energy, 2022, 47, 22415-22429.	7.1	9
4	Nano-hetero-structured thin films, $\text{ZnO}/\text{Ag}-(\pm)\text{Fe}_2\text{O}_3$, with n/n junction, as efficient photoanode for renewable hydrogen generation via photoelectrochemical water splitting. Renewable Energy, 2021, 164, 156-170.	8.9	25
5	Effect of 100 keV Ar^+ ion beam irradiation on ZnO thin films – Influence of morphology vis-a-vis electrode/electrolyte interface and its impact on photoelectrochemical water splitting. International Journal of Hydrogen Energy, 2021, 46, 20858-20870.	7.1	1
6	MWCNTs incorporated nanostructured Bismuth Vanadate for solar energy induced water splitting for hydrogen generation. Materials Today: Proceedings, 2021, , .	1.8	0
7	W Co-doping in BiVO_4 – Synergistic effect in photoelectrochemical water splitting. Materials Chemistry and Physics, 2021, 267, 124675.	4.0	9
8	Effect of morphology and impact of the electrode/electrolyte interface on the PEC response of Fe_2O_3 based systems – comparison of two preparation techniques. RSC Advances, 2020, 10, 42256-42266.	3.6	13
9	Nanostructured $\text{Ni}:\text{BiVO}_4$ photoanode in photoelectrochemical water splitting for hydrogen generation. International Journal of Hydrogen Energy, 2020, 45, 26746-26757.	7.1	22
10	Expanded light-absorption and efficient charge-separation: bilayered thin film nano-hetero-structures, $\text{CuO}/\text{Cu}:\text{ZnO}$, make efficient photoanode in photoelectrochemical water splitting. Journal of Applied Electrochemistry, 2020, 50, 887-906.	2.9	10
11	3D-nano-hetero-structured n/n junction, $\text{CuO}/\text{Ru}:\text{ZnO}$ thin films, for hydrogen generation with enhanced photoelectrochemical performances. International Journal of Hydrogen Energy, 2020, 45, 21051-21067.	7.1	14
12	Morphological influence of electrode/electrolyte interface towards augmenting the efficiency of photoelectrochemical water splitting – A case study on ZnO. Journal of Power Sources, 2019, 432, 38-47.	7.8	11
13	$\text{Zn}_x\text{Fe}_y\text{O}_z$ nanocomposites for renewable hydrogen produced efficiently via photoelectrochemical vis-a-vis photocatalytic splitting of water. SN Applied Sciences, 2019, 1, 1.	2.9	2
14	Integrating PbS Quantum Dots with Hematite for Efficient Photoelectrochemical Hydrogen Production. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800839.	1.8	6
15	Efficient hydrogen generation on CuO core/ $\text{Ag}:\text{TiO}_2$ shell nano-hetero-structures by photocatalytic splitting of water. Renewable Energy, 2019, 136, 1202-1216.	8.9	28
16	MWCNTs and Cu_2O sensitized $\text{Ti}:\text{Fe}_2\text{O}_3$ photoanode for improved water splitting performance. International Journal of Hydrogen Energy, 2018, 43, 6049-6059.	7.1	20
17	Experimental and first-principles studies of $\text{BiVO}_4/\text{Bi}_{1-x}\text{Mn}_x\text{O}_4$ n-n+ homojunction for efficient charge carrier separation in sunlight induced water splitting. International Journal of Hydrogen Energy, 2018, 43, 15815-15822.	7.1	8
18	Electronic band-offsets across $\text{Cu}_2\text{O}/\text{BaZrO}_3$ heterojunction and its stable photo-electro-chemical response: First-principles theoretical analysis and experimental optimization. Renewable Energy, 2017, 113, 503-511.	8.9	22

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19	Enhancing efficiency of Fe ₂ O ₃ for robust and proficient solar water splitting using a highly dispersed bioinspired catalyst. <i>Journal of Catalysis</i> , 2017, 352, 83-92.	6.2	28
20	CNT based photoelectrodes for PEC generation of hydrogen: A review. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 3994-4006.	7.1	39
21	Quantum dots sensitization for photoelectrochemical generation of hydrogen: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 68, 19-27.	16.4	73
22	Enhanced photoelectrochemical response of plasmonic Au embedded BiVO ₄ /Fe ₂ O ₃ heterojunction. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 15039-15049.	2.8	34
23	Augmented photoelectrochemical response of CdS/ZnS quantum dots sensitized hematite photoelectrode. <i>International Journal of Energy Research</i> , 2016, 40, 1811-1819.	4.5	13
24	Photoelectrochemical performance of CuO electrodes by surface modification with ZnO in water splitting process. <i>AIP Conference Proceedings</i> , 2016, , .	0.4	4
25	Plasmonic layer enhanced photoelectrochemical response of Fe ₂ O ₃ photoanodes. <i>Journal of Power Sources</i> , 2016, 315, 152-160.	7.8	28
26	A study on the effect of low energy ion beam irradiation on Au/TiO ₂ system for its application in photoelectrochemical splitting of water. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2016, 379, 255-261.	1.4	24
27	Understanding the photoelectrochemical properties of nanostructured CeO ₂ /Cu ₂ O heterojunction photoanode for efficient photoelectrochemical water splitting. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 18339-18350.	7.1	48
28	Improved charge transportation at PbS QDs/TiO ₂ interface for efficient PEC hydrogen generation. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 15815-15821.	2.8	33
29	Gradient doping " a case study with Ti-Fe ₂ O ₃ towards an improved photoelectrochemical response. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 32735-32743.	2.8	40
30	Nanostructured BaTiO ₃ /Cu ₂ O heterojunction with improved photoelectrochemical activity for H ₂ evolution: Experimental and first-principles analysis. <i>Applied Catalysis B: Environmental</i> , 2016, 189, 75-85.	20.2	51
31	Ni-Doped Cu ₂ O Thin Films for Solar-Hydrogen Generation: Experiments and First-Principles Analysis. <i>Advanced Science Letters</i> , 2016, 22, 780-784.	0.2	2
32	Photoactivity of MWCNTs modified $\hat{\pm}$ -Fe ₂ O ₃ photoelectrode towards efficient solar water splitting. <i>Renewable Energy</i> , 2015, 83, 447-454.	8.9	44
33	Chemically etched ZnO thin films, with surface-evolved nano-ridges, for efficient photoelectrochemical splitting of water. <i>Journal of Solid State Electrochemistry</i> , 2015, 19, 1311-1320.	2.5	10
34	Surface deposition of Ag and Au nano-isles on ZnO thin films yields enhanced photoelectrochemical splitting of water. <i>Journal of Applied Electrochemistry</i> , 2015, 45, 299-312.	2.9	25
35	Spray pyrolytically deposited Fe-doped Cu ₂ O thin films for solar hydrogen generation: Experiments & first-principles analysis. <i>Materials Chemistry and Physics</i> , 2015, 160, 32-39.	4.0	16
36	Enhanced photoelectrochemical conversion performance of ZnO quantum dots sensitized $\hat{\pm}$ -Fe ₂ O ₃ thin films. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 5583-5592.	7.1	27

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37	Nanostructured Ti-Fe ₂ O ₃ /Cu ₂ O heterojunction photoelectrode for efficient hydrogen production. Thin Solid Films, 2015, 574, 125-131.	1.8	59
38	Wide Band Gap Quantum Dots Sensitized λ -Fe ₂ O ₃ Thin Film for Solar Generation of Hydrogen. Materials Research Society Symposia Proceedings, 2015, 1738, 54.	0.1	2
39	Experimental and first-principles theoretical studies on Ag-doped cuprous oxide as photocathode in photoelectrochemical splitting of water. Journal of Materials Science, 2014, 49, 868-876.	3.7	22
40	Nanostructured SrTiO ₃ thin films sensitized by Cu ₂ O for photoelectrochemical hydrogen generation. International Journal of Hydrogen Energy, 2014, 39, 4189-4197.	7.1	40
41	Nanocrystalline Zn _{1-x} Ag _x O _y thin films evolved through electrodeposition for photoelectrochemical splitting of water. Journal of Solid State Electrochemistry, 2014, 18, 523-533.	2.5	12
42	Improved Photoelectrochemical Water Splitting Performance of Cu ₂ O/SrTiO ₃ Heterojunction Photoelectrode. Journal of Physical Chemistry C, 2014, 118, 25320-25329.	3.1	86
43	ZnO thin films, surface embedded with biologically derived Ag/Au nanoparticles, for efficient photoelectrochemical splitting of water. International Journal of Hydrogen Energy, 2014, 39, 18216-18229.	7.1	34
44	Morphological, optical and photoelectrochemical properties of Fe ₂ O ₃ @GNP composite thin films. RSC Advances, 2014, 4, 17671.	3.6	29
45	CdSe quantum dots sensitized nanoporous hematite for photoelectrochemical generation of hydrogen. International Journal of Hydrogen Energy, 2014, 39, 11860-11866.	7.1	26
46	Electrodeposition and sol-gel derived nanocrystalline Na-ZnO thin films for photoelectrochemical splitting of water: Exploring the role of microstructure. Renewable Energy, 2014, 69, 242-252.	8.9	21
47	Photoelectrochemical splitting of water with nanocrystalline Zn _{1-x} MnxO thin films: First-principle DFT computations supporting the systematic experimental endeavor. International Journal of Hydrogen Energy, 2014, 39, 3637-3648.	7.1	22
48	Synergistic effect of CdSe quantum dots on photoelectrochemical response of electrodeposited λ -Fe ₂ O ₃ films. Journal of Power Sources, 2014, 267, 664-672.	7.8	35
49	Modified structural, morphological and photoelectrochemical properties of 120 MeV Ag ⁹⁺ ion irradiated BaTiO ₃ thin films. Current Applied Physics, 2013, 13, 344-350.	2.4	17
50	Enhanced photoelectrochemical properties of 100 MeV Si ⁸⁺ ion irradiated barium titanate thin films. Journal of Alloys and Compounds, 2013, 561, 114-120.	5.5	25
51	Nanostructured CuO/SrTiO ₃ bilayered thin films for photoelectrochemical water splitting. Journal of Solid State Electrochemistry, 2013, 17, 2531-2538.	2.5	24
52	PHOTOELECTROCHEMICAL WATER SPLITTING USING BILAYERED ZnO/SrTiO ₃ PHOTOELECTRODES. International Journal of Modern Physics Conference Series, 2013, 22, 545-551.	0.7	4
53	Nanostructured bilayered thin films in photoelectrochemical water splitting – A review. International Journal of Hydrogen Energy, 2012, 37, 18713-18730.	7.1	193
54	Nano Porous Hematite for Solar Hydrogen Production. Journal of the Electrochemical Society, 2012, 159, H685-H691.	2.9	19

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55	Photoelectrochemical performance of bilayered Fe-TiO ₂ /Zn-Fe ₂ O ₃ thin films for solar generation of hydrogen. Journal of Solid State Electrochemistry, 2012, 16, 1305-1312.	2.5	23
56	Photoelectrochemical generation of hydrogen using 100 MeV Si ⁸⁺ ion irradiated electrodeposited iron oxide thin films. International Journal of Hydrogen Energy, 2012, 37, 3626-3632.	7.1	14
57	Enhanced Photoelectrochemical Response of BaTiO ₃ with Fe Doping: Experiments and First-Principles Analysis. Journal of Physical Chemistry C, 2011, 115, 24373-24380.	3.1	75
58	Electrodeposited zirconium-doped Fe-Fe ₂ O ₃ thin film for photoelectrochemical water splitting. International Journal of Hydrogen Energy, 2011, 36, 2777-2784.	7.1	175
59	Irradiation-induced modifications and PEC response – A case study of SrTiO ₃ thin films irradiated by 120 MeV Ag ⁹⁺ ions. International Journal of Hydrogen Energy, 2011, 36, 5236-5245.	7.1	43
60	Spray pyrolytically deposited nanoporous Ti ⁴⁺ doped hematite thin films for efficient photoelectrochemical splitting of water. International Journal of Hydrogen Energy, 2010, 35, 3985-3990.	7.1	99
61	Nanostructured Zn-Fe ₂ O ₃ thin film modified by Fe-TiO ₂ for photoelectrochemical generation of hydrogen. International Journal of Hydrogen Energy, 2010, 35, 10883-10889.	7.1	30
62	Improved photoelectrochemical response of hematite by high energy Ag ⁹⁺ ions irradiation. Journal Physics D: Applied Physics, 2009, 42, 085303.	2.8	30
63	Structural, Morphological and Photoelectrochemical Behavior of Hematite Modified by 120 MeV Ag ⁹⁺ ions. Materials Research Society Symposia Proceedings, 2009, 1217, 1.	0.1	0
64	Enhanced Photoelectrochemical Response of Zn-Dotted Hematite. International Journal of Photoenergy, 2007, 2007, 1-6.	2.5	25
65	A photoelectrochemical study of nanostructured Cd-doped titanium oxide. International Journal of Hydrogen Energy, 2007, 32, 1299-1302.	7.1	39
66	A study on 170 MeV Au ¹³⁺ irradiated nanostructured metal oxide (Fe ₂ O ₃ and CuO) thin films for PEC applications. Nuclear Instruments & Methods in Physics Research B, 2006, 244, 128-131.	1.4	19
67	A study on 170 MeV Au ¹³⁺ irradiation induced modifications in structural and photoelectrochemical behavior of nanostructured CuO thin films. Nuclear Instruments & Methods in Physics Research B, 2004, 225, 291-296.	1.4	76