Srinivas Vanka

List of Publications by Year
in descending order

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Version: 2024-02-01

39 papers	1,811 citations	279701 23 h-index	377752 34 g-index
39 all docs	39 docs citations	39 times ranked	2408 citing authors

#	Article	IF	Citations
1	Crystallographic Effects of GaN Nanostructures in Photoelectrochemical Reaction. Nano Letters, 2022, 22, 2236-2243.	4.5	12
2	Long-Term Stability Metrics of Photoelectrochemical Water Splitting. Frontiers in Energy Research, 2022, 10, .	1.2	6
3	Selective area grown AlInGaN nanowire arrays with coreâ€“shell structures for photovoltaics on silicon. Nanoscale, 2021, 13, 8163-8173.	2.8	1
4	Development of a photoelectrochemically self-improving Si/GaN photocathode for efficient and durable H2 production. Nature Materials, 2021, 20, 1130-1135.	13.3	49
5	On the design and performance of InGaN/Si double-junction photocathodes. Applied Physics Letters, 2021, 118, .	1.5	6
6	InGaN/Si Double-Junction Photocathode for Unassisted Solar Water Splitting. ACS Energy Letters, 2020, 5, 3741-3751.	8.8	49
7	Few-Atomic-Layers Iron for Hydrogen Evolution from Water by Photoelectrocatalysis. IScience, 2020, 23, 101613.	1.9	6
8	Highly efficient and stable Si photocathode with hierarchical MoS2/Ni3S2 catalyst for solar hydrogen production in alkaline media. Nano Energy, 2020, 71, 104631.	8.2	51
9	Emerging Applications of IIIâ€Nitride Nanocrystals. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900885.	0.8	8
10	Highly efficient binary copperâ”iron catalyst for photoelectrochemical carbon dioxide reduction toward methane. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 1330-1338.	3.3	93
11	A GaN:Sn nanoarchitecture integrated on a silicon platform for converting CO₂ to HCOOH by photoelectrocatalysis. Energy and Environmental Science, 2019, 12, 2842-2848.	15.6	75
12	Unassisted solar water splitting with 9.8% efficiency and over 100 h stability based on Si solar cells and photoelectrodes catalyzed by bifunctional Niâ€“Mo/Ni. Journal of Materials Chemistry A, 2019, 7, 2200-2209.	5.2	63
13	Binary molecular-semiconductor pâ€“n junctions for photoelectrocatalytic CO2 reduction. Nature Energy, 2019, 4, 290-299.	19.8	149
14	Dependence of interface energetics and kinetics on catalyst loading in a photoelectrochemical system. Nano Research, 2019, 12, 2378-2384.	5.8	15
15	Long-term stability studies of a semiconductor photoelectrode in three-electrode configuration. Journal of Materials Chemistry A, 2019, 7, 27612-27619.	5.2	28
16	III-Nitride Nanocrystals: From Low Threshold Ultraviolet Laser Diodes to High Efficiency Artificial Photosynthesis. , 2019, , .		0
17	An In0.42Ga0.58N tunnel junction nanowire photocathode monolithically integrated on a nonplanar Si wafer. Nano Energy, 2019, 57, 405-413.	8.2	38
18	Gallium Nitride Nanostructures: From Multi-Color Micro LEDs to High Efficiency Solar Fuel Production. , 2019, , .		0

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19	Solar Water Oxidation by an InGaN Nanowire Photoanode with a Bandgap of 1.7 eV. ACS Energy Letters, 2018, 3, 307-314.	8.8	73
20	Gallium nitride nanowire as a linker of molybdenum sulfides and silicon for photoelectrocatalytic water splitting. Nature Communications, 2018, 9, 3856.	5.8	87
21	High Efficiency Si Photocathode Protected by Multifunctional GaN Nanostructures. Nano Letters, 2018, 18, 6530-6537.	4.5	83
22	Hierarchical InGaN Nanowires for High-Efficiency Solar Water Splitting. Microscopy and Microanalysis, 2018, 24, 1670-1671.	0.2	0
23	Making of an Industry-Friendly Artificial Photosynthesis Device. ACS Energy Letters, 2018, 3, 2230-2231.	8.8	48
24	Photoelectrochemical CO₂ Reduction into Syngas with the Metal/Oxide Interface. Journal of the American Chemical Society, 2018, 140, 7869-7877.	6.6	191
25	A High Efficiency Si Photoanode Protected by Fewâ€Layer MoSe₂. Solar Rrl, 2018, 2, 1800113.	3.1	10
26	An AlGaN Coreâ€“Shell Tunnel Junction Nanowire Light-Emitting Diode Operating in the Ultraviolet-C Band. Nano Letters, 2017, 17, 1212-1218.	4.5	117
27	Artificial Photosynthesis on III-Nitride Nanowire Arrays. Semiconductors and Semimetals, 2017, 97, 223-255.	0.4	10
28	Photorechargeable High Voltage Redox Battery Enabled by Ta₃N₅ and GaN/Si Dualâ€Photoelectrode. Advanced Materials, 2017, 29, 1700312.	11.1	60
29	Nitrogen Photofixation over IIIâ€Nitride Nanowires Assisted by Ruthenium Clusters of Low Atomicity. Angewandte Chemie - International Edition, 2017, 56, 8701-8705.	7.2	96
30	Nitrogen Photofixation over IIIâ€Nitride Nanowires Assisted by Ruthenium Clusters of Low Atomicity. Angewandte Chemie, 2017, 129, 8827-8831.	1.6	25
31	Understanding the role of co-catalysts on silicon photocathodes using intensity modulated photocurrent spectroscopy. Physical Chemistry Chemical Physics, 2017, 19, 29653-29659.	1.3	40
32	Nanofiber-supported CuS nanoplatelets as high efficiency counter electrodes for quantum dot-based photoelectrochemical hydrogen production. Materials Chemistry Frontiers, 2017, 1, 65-72.	3.2	22
33	High efficiency GaN nanowire/Si photocathode for photoelectrochemical water splitting. , 2017, , .		0
34	High efficiency, Pt-free photoelectrochemical cells for solar hydrogen generation based on â€œgiantâ€• quantum dots. Nano Energy, 2016, 27, 265-274.	8.2	103
35	An In0.5Ga0.5N nanowire photoanode for harvesting deep visible light photons. APL Materials, 2016, 4, .	2.2	15
36	Sub-milliwatt AlGaN nanowire tunnel junction deep ultraviolet light emitting diodes on silicon operating at 242â€‰nm. Applied Physics Letters, 2016, 109, .	1.5	65

#	Article	IF	Citations
37	Photochemical Carbon Dioxide Reduction on Mg-Doped Ga(In)N Nanowire Arrays under Visible Light Irradiation. ACS Energy Letters, 2016, 1, 246-252.	8.8	60
38	A Metal-Nitride Nanowire Dual-Photoelectrode Device for Unassisted Solar-to-Hydrogen Conversion under Parallel Illumination. Nano Letters, 2015, 15, 6821-6828.	4.5	55
39	Hydrogen Atom Dopingâ€"A Versatile Method for Modulated Interface Resistive Switching. Advanced Electronic Materials, 0, , 2200353.	2.6	2