Srinivas Vanka

List of Publications by Year
in descending order

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39 papers	1,811 citations	279798 23 h-index	377865 34 g-index
39 all docs	39 docs citations	39 times ranked	2408 citing authors

#	Article	IF	Citations
1	Photoelectrochemical CO₂ Reduction into Syngas with the Metal/Oxide Interface. Journal of the American Chemical Society, 2018, 140, 7869-7877.	13.7	191
2	Binary molecular-semiconductor pâ€“n junctions for photoelectrocatalytic CO2 reduction. Nature Energy, 2019, 4, 290-299.	39.5	149
3	An AlGaN Coreâ€“Shell Tunnel Junction Nanowire Light-Emitting Diode Operating in the Ultraviolet-C Band. Nano Letters, 2017, 17, 1212-1218.	9.1	117
4	High efficiency, Pt-free photoelectrochemical cells for solar hydrogen generation based on â€œgiantâ€• quantum dots. Nano Energy, 2016, 27, 265-274.	16.0	103
5	Nitrogen Photofixation over IIIâ€Nitride Nanowires Assisted by Ruthenium Clusters of Low Atomicity. Angewandte Chemie - International Edition, 2017, 56, 8701-8705.	13.8	96
6	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.	7.1	93
7	Gallium nitride nanowire as a linker of molybdenum sulfides and silicon for photoelectrocatalytic water splitting. Nature Communications, 2018, 9, 3856.	12.8	87
8	High Efficiency Si Photocathode Protected by Multifunctional GaN Nanostructures. Nano Letters, 2018, 18, 6530-6537.	9.1	83
9	A GaN:Sn nanoarchitecture integrated on a silicon platform for converting CO₂ to HCOOH by photoelectrocatalysis. Energy and Environmental Science, 2019, 12, 2842-2848.	30.8	75
10	Solar Water Oxidation by an InGaN Nanowire Photoanode with a Bandgap of 1.7 eV. ACS Energy Letters, 2018, 3, 307-314.	17.4	73
11	Sub-milliwatt AlGaN nanowire tunnel junction deep ultraviolet light emitting diodes on silicon operating at 242â€‰nm. Applied Physics Letters, 2016, 109, .	3.3	65
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.	10.3	63
13	Photochemical Carbon Dioxide Reduction on Mg-Doped Ga(In)N Nanowire Arrays under Visible Light Irradiation. ACS Energy Letters, 2016, 1, 246-252.	17.4	60
14	Photorechargeable High Voltage Redox Battery Enabled by Ta₃N₅ and GaN/Si Dualâ€Photoelectrode. Advanced Materials, 2017, 29, 1700312.	21.0	60
15	A Metal-Nitride Nanowire Dual-Photoelectrode Device for Unassisted Solar-to-Hydrogen Conversion under Parallel Illumination. Nano Letters, 2015, 15, 6821-6828.	9.1	55
16	Highly efficient and stable Si photocathode with hierarchical MoS2/Ni3S2 catalyst for solar hydrogen production in alkaline media. Nano Energy, 2020, 71, 104631.	16.0	51
17	InGaN/Si Double-Junction Photocathode for Unassisted Solar Water Splitting. ACS Energy Letters, 2020, 5, 3741-3751.	17.4	49
18	Development of a photoelectrochemically self-improving Si/GaN photocathode for efficient and durable H2 production. Nature Materials, 2021, 20, 1130-1135.	27.5	49

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19	Making of an Industry-Friendly Artificial Photosynthesis Device. ACS Energy Letters, 2018, 3, 2230-2231.	17.4	48
20	Understanding the role of co-catalysts on silicon photocathodes using intensity modulated photocurrent spectroscopy. Physical Chemistry Chemical Physics, 2017, 19, 29653-29659.	2.8	40
21	An In0.42Ga0.58N tunnel junction nanowire photocathode monolithically integrated on a nonplanar Si wafer. Nano Energy, 2019, 57, 405-413.	16.0	38
22	Long-term stability studies of a semiconductor photoelectrode in three-electrode configuration. Journal of Materials Chemistry A, 2019, 7, 27612-27619.	10.3	28
23	Nitrogen Photofixation over IIIâ€Nitride Nanowires Assisted by Ruthenium Clusters of Low Atomicity. Angewandte Chemie, 2017, 129, 8827-8831.	2.0	25
24	Nanofiber-supported CuS nanoplatelets as high efficiency counter electrodes for quantum dot-based photoelectrochemical hydrogen production. Materials Chemistry Frontiers, 2017, 1, 65-72.	5.9	22
25	An In0.5Ga0.5N nanowire photoanode for harvesting deep visible light photons. APL Materials, 2016, 4, .	5.1	15
26	Dependence of interface energetics and kinetics on catalyst loading in a photoelectrochemical system. Nano Research, 2019, 12, 2378-2384.	10.4	15
27	Crystallographic Effects of GaN Nanostructures in Photoelectrochemical Reaction. Nano Letters, 2022, 22, 2236-2243.	9.1	12
28	Artificial Photosynthesis on III-Nitride Nanowire Arrays. Semiconductors and Semimetals, 2017, 97, 223-255.	0.7	10
29	A High Efficiency Si Photoanode Protected by Fewâ€Layer MoSe₂. Solar Rrl, 2018, 2, 1800113.	5.8	10
30	Emerging Applications of IIIâ€Nitride Nanocrystals. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900885.	1.8	8
31	Few-Atomic-Layers Iron for Hydrogen Evolution from Water by Photoelectrocatalysis. IScience, 2020, 23, 101613.	4.1	6
32	On the design and performance of InGaN/Si double-junction photocathodes. Applied Physics Letters, 2021, 118, .	3.3	6
33	Long-Term Stability Metrics of Photoelectrochemical Water Splitting. Frontiers in Energy Research, 2022, 10, .	2.3	6
34	Hydrogen Atom Dopingâ€"A Versatile Method for Modulated Interface Resistive Switching. Advanced Electronic Materials, 0, , 2200353.	5.1	2
35	Selective area grown AlInGaN nanowire arrays with coreâ€"shell structures for photovoltaics on silicon. Nanoscale, 2021, 13, 8163-8173.	5.6	1
36	High efficiency GaN nanowire/Si photocathode for photoelectrochemical water splitting. , 2017, , .		0

#	Article	IF	Citations
37	Hierarchical InGaN Nanowires for High-Efficiency Solar Water Splitting. Microscopy and Microanalysis, 2018, 24, 1670-1671.	0.4	0
38	III-Nitride Nanocrystals: From Low Threshold Ultraviolet Laser Diodes to High Efficiency Artificial Photosynthesis. , 2019, , .		0
39	Gallium Nitride Nanostructures: From Multi-Color Micro LEDs to High Efficiency Solar Fuel Production. , 2019, , .		0