

# Hyoungil Kim

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

47  
papers

3,320  
citations

27  
h-index

50  
g-index

50  
ext. papers

3,962  
ext. citations

13.3  
avg, IF

5.66  
L-index

#	Paper	IF	Citations
47	Solar-to-hydrogen Peroxide Conversion of Photocatalytic Carbon Dots With Anthraquinone: Unveiling the Dual Role of Surface Functionalities. <i>Applied Catalysis B: Environmental</i> , <b>2022</b> , 121379	21.8	0
46	Low-temperature hydrogenation of nanodiamond as a strategy to fabricate sp-hybridized nanocarbon as a high-performance persulfate activator. <i>Applied Catalysis B: Environmental</i> , <b>2022</b> , 121589	21.8	0
45	Evaluation of thermal properties and acetaldehyde adsorption performance of sustainable composites using waste wood and biochar. <i>Environmental Research</i> , <b>2021</b> , 110910	7.9	6
44	Hand-ground fullerene-nanodiamond composite for photosensitized water treatment and photodynamic cancer therapy. <i>Journal of Colloid and Interface Science</i> , <b>2021</b> , 587, 101-109	9.3	4
43	Synergistic effect of Sn doping and hydrogenation on hematite electrodes for photoelectrochemical water oxidation. <i>Materials Chemistry Frontiers</i> , <b>2021</b> , 5, 6592-6602	7.8	1
42	Ag(I) ions working as a hole-transfer mediator in photoelectrocatalytic water oxidation on WO film. <i>Nature Communications</i> , <b>2020</b> , 11, 967	17.4	34
41	Highly durable photoelectrochemical H <sub>2</sub> O <sub>2</sub> production via dual photoanode and cathode processes under solar simulating and external bias-free conditions. <i>Energy and Environmental Science</i> , <b>2020</b> , 13, 1730-1742	35.4	37
40	Spontaneous oxidation of arsenite on platinized TiO <sub>2</sub> through activating molecular oxygen under ambient aqueous condition. <i>Applied Catalysis B: Environmental</i> , <b>2020</b> , 260, 118146	21.8	9
39	Surface and bulk modification for advanced electrode design in photoelectrochemical water splitting. <i>International Journal of Hydrogen Energy</i> , <b>2020</b> , 45, 5793-5815	6.7	10
38	Single-photon-driven up-/down-conversion nanohybrids for in vivo mercury detection and real-time tracking. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 1668-1677	13	6
37	Electrochemical oxidation of organics in sulfate solutions on boron-doped diamond electrode: Multiple pathways for sulfate radical generation. <i>Applied Catalysis B: Environmental</i> , <b>2019</b> , 254, 156-165	21.8	45
36	Titanium dioxide surface modified with both palladium and fluoride as an efficient photocatalyst for the degradation of urea. <i>Separation and Purification Technology</i> , <b>2019</b> , 209, 580-587	8.3	12
35	Minireview: Selective production of hydrogen peroxide as a clean oxidant over structurally tailored carbon nitride photocatalysts. <i>Catalysis Today</i> , <b>2019</b> , 335, 55-64	5.3	38
34	Surface-loaded metal nanoparticles for peroxymonosulfate activation: Efficiency and mechanism reconnaissance. <i>Applied Catalysis B: Environmental</i> , <b>2019</b> , 241, 561-569	21.8	124
33	The Myth of Visible Light Photocatalysis Using Lanthanide Upconversion Materials. <i>Environmental Science &amp; Technology</i> , <b>2018</b> , 52, 2973-2980	10.3	34
32	Photocatalytic hydrogen peroxide production by anthraquinone-augmented polymeric carbon nitride. <i>Applied Catalysis B: Environmental</i> , <b>2018</b> , 229, 121-129	21.8	96
31	Surface-modified polymer nanofiber membrane for high-efficiency microdust capturing. <i>Chemical Engineering Journal</i> , <b>2018</b> , 339, 204-213	14.7	46

30	Synchronized methylene blue removal using Fenton-like reaction induced by phosphorous oxoanion and submerged plasma irradiation process. <i>Journal of Environmental Management</i> , <b>2018</b> , 206, 77-84	7.9	10
29	Exploring the Role of Persulfate in the Activation Process: Radical Precursor Versus Electron Acceptor. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 10090-10099	10.3	184
28	Temperature-boosted photocatalytic H <sub>2</sub> production and charge transfer kinetics on TiO <sub>2</sub> under UV and visible light. <i>Photochemical and Photobiological Sciences</i> , <b>2016</b> , 15, 1247-1253	4.2	14
27	Robust Co-catalytic Performance of Nanodiamonds Loaded on WO <sub>3</sub> for the Decomposition of Volatile Organic Compounds under Visible Light. <i>ACS Catalysis</i> , <b>2016</b> , 6, 8350-8360	13.1	81
26	Harnessing low energy photons (635 nm) for the production of H <sub>2</sub> O <sub>2</sub> using upconversion nanohybrid photocatalysts. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 1063-1073	35.4	111
25	Anodic TiO <sub>2</sub> nanotube layer directly formed on the inner surface of Ti pipe for a tubular photocatalytic reactor. <i>Applied Catalysis A: General</i> , <b>2016</b> , 521, 174-181	5.1	9
24	Dual-Color Emissive Upconversion Nanocapsules for Differential Cancer Bioimaging In Vivo. <i>ACS Nano</i> , <b>2016</b> , 10, 1512-21	16.7	130
23	Boosting up the Low Catalytic Activity of Silver for H <sub>2</sub> Production on Ag/TiO <sub>2</sub> Photocatalyst: Thiocyanate as a Selective Modifier. <i>ACS Catalysis</i> , <b>2016</b> , 6, 821-828	13.1	133
22	Photoinduced charge transfer processes in solar photocatalysis based on modified TiO <sub>2</sub> . <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 411-433	35.4	414
21	Scaffold-Like Titanium Nitride Nanotubes with a Highly Conductive Porous Architecture as a Nanoparticle Catalyst Support for Oxygen Reduction. <i>ACS Catalysis</i> , <b>2016</b> , 6, 3914-3920	13.1	42
20	Activation of Persulfates by Graphitized Nanodiamonds for Removal of Organic Compounds. <i>Environmental Science &amp; Technology</i> , <b>2016</b> , 50, 10134-42	10.3	361
19	Plasmon-Enhanced Sub-Bandgap Photocatalysis via Triplet-Triplet Annihilation Upconversion for Volatile Organic Compound Degradation. <i>Environmental Science &amp; Technology</i> , <b>2016</b> , 50, 11184-11192	10.3	45
18	Dual-functional photocatalysis using a ternary hybrid of TiO <sub>2</sub> modified with graphene oxide along with Pt and fluoride for H <sub>2</sub> -producing water treatment. <i>Journal of Catalysis</i> , <b>2015</b> , 330, 387-395	7.3	47
17	To What Extent Can Surface Morphology Influence the Photoelectrochemical Performance of Au:WO <sub>3</sub> Electrodes?. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 1271-1279	3.8	19
16	Squaraine-sensitized composite of a reduced graphene oxide/TiO <sub>2</sub> photocatalyst: Stacking as a new method of dye anchoring. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 232-239	13	21
15	Self-assembled TiO <sub>2</sub> agglomerates hybridized with reduced-graphene oxide: A high-performance hybrid photocatalyst for solar energy conversion. <i>Chemical Engineering Journal</i> , <b>2015</b> , 262, 409-416	14.7	26
14	N-doped TiO <sub>2</sub> nanotubes coated with a thin TaOxNy layer for photoelectrochemical water splitting: dual bulk and surface modification of photoanodes. <i>Energy and Environmental Science</i> , <b>2015</b> , 8, 247-257	35.4	131
13	Inhibition of CO poisoning on Pt catalyst coupled with the reduction of toxic hexavalent chromium in a dual-functional fuel cell. <i>Scientific Reports</i> , <b>2014</b> , 4, 7450	4.9	52

12	Platinum-like Behavior of Reduced Graphene Oxide as a Cocatalyst on TiO <sub>2</sub> for the Efficient Photocatalytic Oxidation of Arsenite. <i>Environmental Science and Technology Letters</i> , <b>2014</b> , 1, 185-190	11	101
11	Graphene oxide embedded into TiO <sub>2</sub> nanofiber: Effective hybrid photocatalyst for solar conversion. <i>Journal of Catalysis</i> , <b>2014</b> , 309, 49-57	7.3	71
10	Promoting water photooxidation on transparent WO <sub>3</sub> thin films using an alumina overlayer. <i>Energy and Environmental Science</i> , <b>2013</b> , 6, 3732	35.4	113
9	Graphitic domain layered titania nanotube arrays for separation and shuttling of solar-driven electrons. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 203-207	13	6
8	Implementation of Ag nanoparticle incorporated WO <sub>3</sub> thin film photoanode for hydrogen production. <i>International Journal of Hydrogen Energy</i> , <b>2013</b> , 38, 2117-2125	6.7	22
7	Chemical-free growth of metal nanoparticles on graphene oxide sheets under visible light irradiation. <i>RSC Advances</i> , <b>2012</b> , 2, 2205	3.7	27
6	Solar Photoconversion Using Graphene/TiO <sub>2</sub> Composites: Nanographene Shell on TiO <sub>2</sub> Core versus TiO <sub>2</sub> Nanoparticles on Graphene Sheet. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 1535-1543	3.8	272
5	A strong electronic coupling between graphene nanosheets and layered titanate nanoplates: a soft-chemical route to highly porous nanocomposites with improved photocatalytic activity. <i>Small</i> , <b>2012</b> , 8, 1038-48	11	109
4	Optimal Ag concentration for H <sub>2</sub> production via Ag:TiO <sub>2</sub> nanocomposite thin film photoanode. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 3056-3065	6.7	38
3	Enhanced Photocatalytic and Photoelectrochemical Activity in the Ternary Hybrid of CdS/TiO <sub>2</sub> /WO <sub>3</sub> through the Cascadal Electron Transfer. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 9797-9805	3.8	221
2	Recent advances in materials for and applications of triplet-triplet annihilation-based upconversion. <i>Journal of Materials Chemistry C</i> ,	7.1	5
1	Revisiting the Role of Peroxymonosulfate in TiO <sub>2</sub> -Mediated Photocatalytic Oxidation: Dependence of Kinetic Enhancement on Target Substrate and Surface Platinization. <i>ACS ES&amp;T Engineering</i> ,		1