Gun-hee Moon

List of Publications by Year
in descending order

43 papers	3,539 citations	201575 27 h-index	243529 44 g-index
44 all docs	44 docs citations	44 times ranked	5001 citing authors

#	Article	IF	Citations
1	Photoinduced charge transfer processes in solar photocatalysis based on modified TiO₂. Energy and Environmental Science, 2016, 9, 411-433.	15.6	494
2	Solar production of H₂O₂on reduced graphene oxideâ€“TiO₂hybrid photocatalysts consisting of earth-abundant elements only. Energy and Environmental Science, 2014, 7, 4023-4028.	15.6	311
3	Solar Photoconversion Using Graphene/TiO₂ Composites: Nanographene Shell on TiO₂ Core versus TiO₂ Nanoparticles on Graphene Sheet. Journal of Physical Chemistry C, 2012, 116, 1535-1543.	1.5	292
4	Eco-Friendly Photochemical Production of H₂O₂ through O₂ Reduction over Carbon Nitride Frameworks Incorporated with Multiple Heteroelements. ACS Catalysis, 2017, 7, 2886-2895.	5.5	287
5	Ultra-efficient and durable photoelectrochemical water oxidation using elaborately designed hematite nanorod arrays. Nano Energy, 2017, 39, 211-218.	8.2	171
6	Oxidation of organic pollutants by peroxymonosulfate activated with low-temperature-modified nanodiamonds: Understanding the reaction kinetics and mechanism. Applied Catalysis B: Environmental, 2018, 237, 432-441.	10.8	161
7	Boosting up the Low Catalytic Activity of Silver for H₂ Production on Ag/TiO₂ Photocatalyst: Thiocyanate as a Selective Modifier. ACS Catalysis, 2016, 6, 821-828.	5.5	153
8	Molecularâ€Level Understanding of the Photocatalytic Activity Difference between Anatase and Rutile Nanoparticles. Angewandte Chemie - International Edition, 2014, 53, 14036-14041.	7.2	143
9	Platinum-like Behavior of Reduced Graphene Oxide as a Cocatalyst on TiO₂ for the Efficient Photocatalytic Oxidation of Arsenite. Environmental Science and Technology Letters, 2014, 1, 185-190.	3.9	114
10	Robust Co-catalytic Performance of Nanodiamonds Loaded on WO₃ for the Decomposition of Volatile Organic Compounds under Visible Light. ACS Catalysis, 2016, 6, 8350-8360.	5.5	98
11	Photochemical loading of metal nanoparticles on reduced graphene oxide sheets using phosphotungstate. Carbon, 2011, 49, 3454-3462.	5.4	97
12	Selective charge transfer to dioxygen on KPF6-modified carbon nitride for photocatalytic synthesis of H2O2 under visible light. Journal of Catalysis, 2018, 357, 51-58.	3.1	89
13	Activation of peroxymonosulfate on visible light irradiated TiO2 via a charge transfer complex path. Chemical Engineering Journal, 2018, 346, 249-257.	6.6	85
14	How g-C₃N₄ Works and Is Different from TiO₂ as an Environmental Photocatalyst: Mechanistic View. Environmental Science & Technology, 2020, 54, 497-506.	4.6	76
15	Minireview: Selective production of hydrogen peroxide as a clean oxidant over structurally tailored carbon nitride photocatalysts. Catalysis Today, 2019, 335, 55-64.	2.2	72
16	TiO2 complexed with dopamine-derived polymers and the visible light photocatalytic activities for water pollutants. Journal of Catalysis, 2017, 346, 92-100.	3.1	71
17	Optimizing Niâ€“Fe Oxide Electrocatalysts for Oxygen Evolution Reaction by Using Hard Templating as a Toolbox. ACS Applied Energy Materials, 2019, 2, 1199-1209.	2.5	71
18	Highly Active Cobaltâ€Based Electrocatalysts with Facile Incorporation of Dopants for the Oxygen Evolution Reaction. Angewandte Chemie - International Edition, 2019, 58, 3491-3495.	7.2	67

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19	Ag(I) ions working as a hole-transfer mediator in photoelectrocatalytic water oxidation on WO3 film. Nature Communications, 2020, 11, 967.	5.8	66
20	Dual Role of Silver Moieties Coupled with Ordered Mesoporous Cobalt Oxide towards Electrocatalytic Oxygen Evolution Reaction. Angewandte Chemie - International Edition, 2020, 59, 16544-16552.	7.2	64
21	Crystal phase-dependent generation of mobile OH radicals on TiO2: Revisiting the photocatalytic oxidation mechanism of anatase and rutile. Applied Catalysis B: Environmental, 2021, 286, 119905.	10.8	61
22	Synergistic combination of bandgap-modified carbon nitride and WO3 for visible light-induced oxidation of arsenite accelerated by in-situ Fenton reaction. Applied Catalysis B: Environmental, 2017, 218, 819-824.	10.8	57
23	Selective dual-purpose photocatalysis for simultaneous H₂ evolution and mineralization of organic compounds enabled by a Cr₂O₃ barrier layer coated on Rh/SrTiO₃. Chemical Communications, 2016, 52, 9636-9639.	2.2	39
24	Highly Active Cobaltâ€Based Electrocatalysts with Facile Incorporation of Dopants for the Oxygen Evolution Reaction. Angewandte Chemie, 2019, 131, 3529-3533.	1.6	36
25	Chemical-free growth of metal nanoparticles on graphene oxide sheets under visible light irradiation. RSC Advances, 2012, 2, 2205.	1.7	31
26	Catalytic templating approaches for three-dimensional hollow carbon/graphene oxide nano-architectures. Nanoscale, 2013, 5, 6291.	2.8	31
27	Photocatalytic oxidation mechanism of arsenite on tungsten trioxide under visible light. Journal of Photochemistry and Photobiology A: Chemistry, 2015, 311, 35-40.	2.0	28
28	Oxalate-TiO2 complex-mediated oxidation of pharmaceutical pollutants through ligand-to-metal charge transfer under visible light. Chemical Engineering Journal, 2018, 343, 689-698.	6.6	28
29	Structural Engineering of 3D Carbon Materials from Transition Metal Ion-Exchanged Y Zeolite Templates. Chemistry of Materials, 2018, 30, 3779-3788.	3.2	28
30	Nitrogen-Doped Mesostructured Carbon-Supported Metallic Cobalt Nanoparticles for Oxygen Evolution Reaction. ACS Applied Energy Materials, 2019, 2, 6672-6680.	2.5	28
31	Photocatalytic Synthesis of Pure and Waterâ€Dispersible Graphene Monosheets. Chemistry - A European Journal, 2012, 18, 2762-2767.	1.7	27
32	Dual Role of Silver Moieties Coupled with Ordered Mesoporous Cobalt Oxide towards Electrocatalytic Oxygen Evolution Reaction. Angewandte Chemie, 2020, 132, 16687.	1.6	23
33	Visible light-induced degradation of sulfa drugs on pure TiO 2 through ligand-to-metal charge transfer. Separation and Purification Technology, 2018, 203, 242-250.	3.9	19
34	Carbon dioxide-assisted fabrication of highly uniform submicron-sized colloidal carbon spheres via hydrothermal carbonization using soft drink. Colloid and Polymer Science, 2012, 290, 1567-1573.	1.0	17
35	Spontaneous oxidation of arsenite on platinized TiO2 through activating molecular oxygen under ambient aqueous condition. Applied Catalysis B: Environmental, 2020, 260, 118146.	10.8	16
36	Reactor Design and Kinetic Study on Adsorption/Desorption of CO and Cl₂ for Industrial Phosgene Synthesis. Chemie-Ingenieur-Technik, 2018, 90, 1513-1519.	0.4	10

#	Article	IF	Citations
37	Nafion-Assisted Noncovalent Assembly of Molecular Sensitizers and Catalysts for Sustained Photoreduction of CO₂ to CO. ACS Sustainable Chemistry and Engineering, 2020, 8, 3709-3717.	3.2	10
38	A Highlyâ€Efficient Oxygen Evolution Electrocatalyst Derived from a Metalâ€Organic Framework and Ketjenblack Carbon Material. ChemPlusChem, 2021, 86, 1106-1115.	1.3	10
39	Understanding (photo)electrocatalysis for the conversion of methane to valuable chemicals through partial oxidation processes. Journal of Materials Chemistry A, 2022, 10, 19107-19128.	5.2	9
40	In situ total scattering experiments of nucleation and crystallisation of tantalum-based oxides: from highly dilute solutions via cluster formation to nanoparticles. Nanoscale, 2021, 13, 150-162.	2.8	7
41	Biomimetic photocatalysts for the conversion of aqueous- and gas-phase nitrogen species to molecular nitrogen via denitrification and ammonia oxidation. Journal of Materials Chemistry A, 2021, 9, 19179-19205.	5.2	6
42	Preparation of Practical Highâ€Performance Electrodes for Acidic and Alkaline Media Water Electrolysis. ChemSusChem, 2021, , .	3.6	6
43	CHAPTER 5. Photoexcitation in Pure and Modified Semiconductor Photocatalysts. RSC Energy and Environment Series, 2016, , 110-128.	0.2	1