Tae Hyung Lee

List of Publications by Citations

69 papers	1,360 citations	22 h-index	34 g-index
74 ext. papers	1,891 ext. citations	8.1 avg, IF	5.05 L-index

#	Paper	IF	Citations
69	Magnetically retrievable nanocomposite adorned with Pd nanocatalysts: efficient reduction of nitroaromatics in aqueous media. *Green Chemistry*, **2018**, 20, 3809-3817	10	119
68	Perspectives and challenges in multilayer ceramic capacitors for next generation electronics. *Journal of Materials Chemistry C*, **2019**, 7, 9782-9802	7.1	68
67	Black Phosphorus: Critical Review and Potential for Water Splitting Photocatalyst. *Nanomaterials*, **2016**, 6,	5.4	60
66	Copper oxide-graphene oxide nanocomposite: efficient catalyst for hydrogenation of nitroaromatics in water. *Nano Convergence*, **2019**, 6, 6	9.2	59
65	Tailoring Crystallographic Orientations to Substantially Enhance Charge Separation Efficiency in Anisotropic BiVO4 Photoanodes. *ACS Catalysis*, **2018**, 8, 5952-5962	13.1	59
64	Facile synthesis of monodispersed Pd nanocatalysts decorated on graphene oxide for reduction of nitroaromatics in aqueous solution. *Research on Chemical Intermediates*, **2019**, 45, 599-611	2.8	57
63	Tailored NiOx/Ni Cocatalysts on Silicon for Highly Efficient Water Splitting Photoanodes via Pulsed Electrodeposition. *ACS Catalysis*, **2018**, 8, 7261-7269	13.1	54
62	SnS Nanograins on Porous SiO Nanorods Template for Highly Sensitive NO Sensor at Room Temperature with Excellent Recovery. *ACS Sensors*, **2019**, 4, 678-686	9.2	47
61	Water Splitting Exceeding 17% Solar-to-Hydrogen Conversion Efficiency Using Solution-Processed Ni-Based Electrocatalysts and Perovskite/Si Tandem Solar Cell. *ACS Applied Materials & Interfaces*, **2019**, 11, 33835-33843	9.5	39
60	Au decoration of a graphene microchannel for self-activated chemoresistive flexible gas sensors with substantially enhanced response to hydrogen. *Nanoscale*, **2019**, 11, 2966-2973	7.7	38
59	Direct synthesis of two-dimensional MoS2 on p-type Si and application to solar hydrogen production. *NPG Asia Materials*, **2019**, 11,	10.3	37
58	All-Solution-Processed WO/BiVO Core-Shell Nanorod Arrays for Highly Stable Photoanodes. *ACS Applied Materials & Interfaces*, **2019**, 11, 20004-20012	9.5	37
57	Boosting Aerobic Oxidation of Alcohols via Synergistic Effect between TEMPO and a Composite FeO/Cu-BDC/GO Nanocatalyst. *ACS Omega*, **2020**, 5, 5182-5191	3.9	33
56	Enhanced Oxygen Evolution Electrocatalysis in Strained A-Site Cation Deficient LaNiO Perovskite Thin Films. *Nano Letters*, **2020**, 20, 8040-8045	11.5	30
55	Two-dimensional boron nitride as a sulfur fixer for high performance rechargeable aluminum-sulfur batteries. *Scientific Reports*, **2019**, 9, 13573	4.9	29
54	A Hybrid Energy Storage Mechanism of Zinc Hexacyanocobaltate-Based Metal□Organic Framework Endowing Stationary and High-Performance Lithium-Ion Storage. *Electronic Materials Letters*, **2019**, 15, 444-453	2.9	24
53	Substantially improved room temperature NO2 sensing in 2-dimensional SnS2 nanoflowers enabled by visible light illumination. *Journal of Materials Chemistry A*, **2021**, 9, 11168-11178	13	24

52	Coordinating gallium hexacyanocobaltate: Prussian blue-based nanomaterial for Li-ion storage.. *RSC Advances*, **2019**, 9, 26668-26675	3.7	23
51	Realization of Lithium-Ion Capacitors with Enhanced Energy Density via the Use of Gadolinium Hexacyanocobaltate as a Cathode Material. *ACS Applied Materials & Interfaces*, **2019**, 11, 31799-31805	8.5	23
50	Fabrication of a WS/p-Si Heterostructure Photocathode Using Direct Hybrid Thermolysis. *ACS Applied Materials & Interfaces*, **2019**, 11, 29910-29916	9.5	23
49	Layered metal-organic framework based on tetracyanonickelate as a cathode material for Li-ion storage.. *RSC Advances*, **2019**, 9, 21363-21370	3.7	23
48	Pd- and Au-Decorated MoS2 Gas Sensors for Enhanced Selectivity. *Electronic Materials Letters*, **2019**, 15, 368-376	2.9	22
47	Metal-organic framework-derived metal oxide nanoparticles@reduced graphene oxide composites as cathode materials for rechargeable aluminium-ion batteries. *Scientific Reports*, **2019**, 9, 13739	4.9	21
46	Properties of CoS2/CNT as a Cathode Material of Rechargeable Aluminum-Ion Batteries. *Electronic Materials Letters*, **2019**, 15, 727-732	2.9	21
45	Enhanced Optical Properties and Stability of CsPbBr3 Nanocrystals Through Nickel Doping. *Advanced Functional Materials*, **2021**, 31, 2102770	15.6	20
44	Tailored Graphene Micropatterns by Wafer-Scale Direct Transfer for Flexible Chemical Sensor Platform. *Advanced Materials*, **2021**, 33, e2004827	24	20
43	MoSe□GO/rGO Composite Catalyst for Hydrogen Evolution Reaction. *Polymers*, **2018**, 10,	4.5	20
42	Facile synthesis of CsPbBr/PbSe composite clusters. *Science and Technology of Advanced Materials*, **2018**, 19, 10-17	7.1	19
41	Cerium Hexacyanocobaltate: A Lanthanide-Compliant Prussian Blue Analogue for Li-Ion Storage. *ACS Omega*, **2019**, 4, 21410-21416	3.9	19
40	S@GO as a High-Performance Cathode Material for Rechargeable Aluminum-Ion Batteries. *Electronic Materials Letters*, **2019**, 15, 720-726	2.9	18
39	Graphite carbon-encapsulated metal nanoparticles derived from Prussian blue analogs growing on natural loofa as cathode materials for rechargeable aluminum-ion batteries. *Scientific Reports*, **2019**, 9, 13665	4.9	18
38	Ni3Se4@MoSe2 Composites for Hydrogen Evolution Reaction. *Applied Sciences (Switzerland)*, **2019**, 9, 5035	2.6	18
37	Tailoring of Interfacial Band Offsets by an Atomically Thin Polar Insulating Layer To Enhance the Water-Splitting Performance of Oxide Heterojunction Photoanodes. *Nano Letters*, **2019**, 19, 5897-5903	11.5	17
36	Tailorable Topologies for Selectively Controlling Crystals of Expanded Prussian Blue Analogues. *Crystal Growth and Design*, **2019**, 19, 7385-7395	3.5	14
35	Comprehensive Study on the Morphology Control of TiO2 Nanorods on Foreign Substrates by the Hydrothermal Method. *Crystal Growth and Design*, **2018**, 18, 6504-6512	3.5	14

34	CdSe Quantum Dots Doped WS2 Nanoflowers for Enhanced Solar Hydrogen Production. *Physica Status Solidi (A) Applications and Materials Science*, **2019**, 216, 1800853	1.6	12
33	All-Solution-Processed BiVO4/TiO2 Photoanode with NiCo2O4 Nanofiber Cocatalyst for Enhanced Solar Water Oxidation. *ACS Applied Energy Materials*, **2020**, 3, 5646-5656	6.1	11
32	Electrochemical activity of Samarium on starch-derived porous carbon: rechargeable Li- and Al-ion batteries. *Nano Convergence*, **2020**, 7, 11	9.2	11
31	Tungsten Trioxide Doped with CdSe Quantum Dots for Smart Windows. *ACS Applied Materials & Interfaces*, **2018**, 10, 43785-43791	9.5	11
30	Manufacturing ZrB-SiC-TaC Composite: Potential Application for Aircraft Wing Assessed by Frequency Analysis through Finite Element Model. *Materials*, **2020**, 13,	3.5	10
29	Regulating the Catalytic Dynamics Through a Crystal Structure Modulation of Bimetallic Catalyst. *Advanced Energy Materials*, **2020**, 10, 1903225	21.8	10
28	Synthesis of MoSx/Ni-metal-organic framework-74 composites as efficient electrocatalysts for hydrogen evolution reactions. *International Journal of Energy Research*, **2021**, 45, 9638-9647	4.5	10
27	Influence of C3N4 Precursors on Photoelectrochemical Behavior of TiO2/C3N4 Photoanode for Solar Water Oxidation. *Energies*, **2020**, 13, 974	3.1	9
26	Direct Observation of Surface Potential Distribution in Insulation Resistance Degraded Acceptor-Doped BaTiO3 Multilayered Ceramic Capacitors. *Electronic Materials Letters*, **2018**, 14, 629-635	2.9	9
25	Understanding the Enhancement of the Catalytic Properties of Goethite by Transition Metal Doping: Critical Role of O* Formation Energy Relative to OH* and OOH*. *ACS Applied Energy Materials*, **2020**, 3, 1634-1643	6.1	9
24	Edge-exposed WS2 on 1D nanostructures for highly selective NO2 sensor at room temperature. *Sensors and Actuators B: Chemical*, **2021**, 333, 129566	8.5	8
23	Microscopic evidence of strong interactions between chemical vapor deposited 2D MoS film and SiO growth template. *Nano Convergence*, **2021**, 8, 11	9.2	8
22	Boosting Unassisted Alkaline Solar Water Splitting Using Silicon Photocathode with TiO Nanorods Decorated by Edge-Rich MoS Nanoplates. *Small*, **2021**, 17, e2103457	11	8
21	Grain Boundaries Boost Oxygen Evolution Reaction in NiFe Electrocatalysts.. *Small Methods*, **2021**, 5, e2000755	12.8	7
20	Daylight-Induced Metal-Insulator Transition in Ag-Decorated Vanadium Dioxide Nanorod Arrays. *ACS Applied Materials & Interfaces*, **2019**, 11, 11568-11578	9.5	6
19	Surface-Tailored Medium Entropy Alloys as Radically Low Overpotential Oxygen Evolution Electrocatalysts.. *Small*, **2022**, e2105611	11	6
18	Rendering Redox Reactions of Cathodes in Li-Ion Capacitors Enabled by Lanthanides. *ACS Omega*, **2020**, 5, 1634-1639	3.9	6
17	Stabilization of NiFe Layered Double Hydroxides on n-Si by an Activated TiO2 Interlayer for Efficient Solar Water Oxidation. *ACS Applied Energy Materials*, **2020**, 3, 12298-12307	6.1	6

16	Direct Synthesis of Molybdenum Phosphide Nanorods on Silicon Using Graphene at the Heterointerface for Efficient Photoelectrochemical Water Reduction. *Nano-Micro Letters*, **2021**, 13, 81	19.5	6
15	Core-shell architecture of NiSe2 nanoparticles@nitrogen-doped carbon for hydrogen evolution reaction in acidic and alkaline media. *International Journal of Energy Research*, **2021**, 45, 20463	4.5	4
14	Rationally Designed TiO Nanostructures of Continuous Pore Network for Fast-Responding and Highly Sensitive Acetone Sensor.. *Small Methods*, **2021**, 5, e2100941	12.8	3
13	Surface-tailored graphene channels. *Npj 2D Materials and Applications*, **2021**, 5,	8.8	3
12	Bi catalysts supported on GaN nanowires toward efficient photoelectrochemical CO2 reduction. *Journal of Materials Chemistry A*, **2022**, 10, 7869-7877	13	3
11	Enhancement of Ferroelectric Properties of Superlattice-Based Epitaxial BiFeO3 Thin Films via Substitutional Doping Effect. *Journal of Physical Chemistry C*, **2019**, 123, 11564-11571	3.8	2
10	Visible Light Driven Ultrasensitive and Selective NO Detection in Tin Oxide Nanoparticles with Sulfur Doping Assisted by l-Cysteine.. *Small*, **2022**, e2106613	11	2
9	Controlled Band Offsets in Ultrathin Hematite for Enhancing the Photoelectrochemical Water Splitting Performance of Heterostructured Photoanodes.. *ACS Applied Materials & Interfaces*, **2022**,	9.5	2
8	Crystal Facet Engineering of TiO Nanostructures for Enhancing Photoelectrochemical Water Splitting with BiVO Nanodots.. *Nano-Micro Letters*, **2022**, 14, 48	19.5	2
7	High Hole Mobility Inorganic Halide Perovskite Field-Effect Transistors with Enhanced Phase Stability and Interfacial Defect Tolerance. *Advanced Electronic Materials*, **2022**, 8, 2100624	6.4	2
6	Stabilization of FCC Phase Using Mn Incorporation in Nanograin Invar Alloy Foils Fabricated by Electroforming. *Electronic Materials Letters*, **2020**, 16, 188-194	2.9	1
5	Architecture engineering of nanostructured catalyst via layer-by-layer adornment of multiple nanocatalysts on silica nanorod arrays for hydrogenation of nitroarenes.. *Scientific Reports*, **2022**, 12, 2	4.9	1
4	Voltage-dependent gas discrimination using self-activated graphene with Pt decoration. *Sensors and Actuators B: Chemical*, **2021**, 349, 130696	8.5	1
3	Chemical modification of ordered/disordered carbon nanostructures for metal hosts and electrocatalysts of lithium-air batteries. *Informa□□Materi□y*, **2022**, 4,	23.1	1
2	Boosting Unassisted Alkaline Solar Water Splitting Using Silicon Photocathode with TiO2 Nanorods Decorated by Edge-Rich MoS2 Nanoplates (Small 39/2021). *Small*, **2021**, 17, 2170206	11	
1	Suppression of metal-to-insulator transition using strong interfacial coupling at cubic and orthorhombic perovskite oxide heterointerfaces. *Nanoscale*, **2021**, 13, 708-715	7.7	