Seung-Ho Yu

List of Publications by Citations

98 papers	4,560 citations	35 h-index	66 g-index
111 ext. papers	5,318 ext. citations	11.4 avg, IF	5.69 L-index

#	Paper	IF	Citations
98	Galvanic replacement reactions in metal oxide nanocrystals. *Science*, **2013**, 340, 964-8	33.3	421
97	Conversion Reaction-Based Oxide Nanomaterials for Lithium Ion Battery Anodes. *Small*, **2016**, 12, 2146-72	11	310
96	Self-assembled Fe3O4 nanoparticle clusters as high-performance anodes for lithium ion batteries via geometric confinement. *Nano Letters*, **2013**, 13, 4249-56	11.5	302
95	Edge-exposed MoS2 nano-assembled structures as efficient electrocatalysts for hydrogen evolution reaction. *Nanoscale*, **2014**, 6, 2131-6	7.7	225
94	Understanding Conversion-Type Electrodes for Lithium Rechargeable Batteries. *Accounts of Chemical Research*, **2018**, 51, 273-281	24.3	166
93	In Situ Hydrothermal Synthesis of Mn3O4 Nanoparticles on Nitrogen-doped Graphene as High-Performance Anode materials for Lithium Ion Batteries. *Electrochimica Acta*, **2014**, 120, 452-459	6.7	124
92	Highly selective lithium recovery from brine using a λ-MnO2-Ag battery. *Physical Chemistry Chemical Physics*, **2013**, 15, 7690-5	3.6	119
91	A simple L-cysteine-assisted method for the growth of MoS2 nanosheets on carbon nanotubes for high-performance lithium ion batteries. *Dalton Transactions*, **2013**, 42, 2399-405	4.3	118
90	A facile hydrazine-assisted hydrothermal method for the deposition of monodisperse SnO2 nanoparticles onto graphene for lithium ion batteries. *Journal of Materials Chemistry*, **2012**, 22, 2520-2525		113
89	Facile and economical synthesis of hierarchical carbon-coated magnetite nanocomposite particles and their applications in lithium ion battery anodes. *Energy and Environmental Science*, **2012**, 5, 9528	35.4	109
88	A chemically activated graphene-encapsulated LiFePO4 composite for high-performance lithium ion batteries. *Nanoscale*, **2013**, 5, 8647-55	7.7	106
87	Hybrid Cellular Nanosheets for High-Performance Lithium-Ion Battery Anodes. *Journal of the American Chemical Society*, **2015**, 137, 11954-61	16.4	100
86	Continuous activation of Li2MnO3 component upon cycling in Li1.167Ni0.233Co0.100Mn0.467Mo0.033O2 cathode material for lithium ion batteries. *Journal of Materials Chemistry A*, **2013**, 1, 2833	13	99
85	Single source precursor-based solvothermal synthesis of heteroatom-doped graphene and its energy storage and conversion applications. *Scientific Reports*, **2014**, 4, 5639	4.9	92
84	Solvothermal-Derived S-Doped Graphene as an Anode Material for Sodium-Ion Batteries. *Advanced Science*, **2018**, 5, 1700880	13.6	91
83	Alveoli-Inspired Facile Transport Structure of N-Doped Porous Carbon for Electrochemical Energy Applications. *Advanced Energy Materials*, **2015**, 5, 1401309	21.8	89
82	A facile and green strategy for the synthesis of MoS2 nanospheres with excellent Li-ion storage properties. *CrystEngComm*, **2012**, 14, 8323	3.3	88

81	Structure-Properties Relationship in Iron Oxide-Reduced Graphene Oxide Nanostructures for Li-Ion Batteries. *Advanced Functional Materials*, **2013**, 23, 4293-4305	15.6	84
80	Large-Scale Synthesis of Ultrathin Manganese Oxide Nanoplates and Their Applications to T1 MRI Contrast Agents. *Chemistry of Materials*, **2011**, 23, 3318-3324	9.6	83
79	Design of structural and functional nanomaterials for lithium-sulfur batteries. *Nano Today*, **2018**, 18, 35-64	17.9	82
78	Graphene quantum dots: structural integrity and oxygen functional groups for high sulfur/sulfide utilization in lithium sulfur batteries. *NPG Asia Materials*, **2016**, 8, e272-e272	10.3	78
77	In Situ X-ray Absorption Spectroscopy of a Synergistic Co-Mn Oxide Catalyst for the Oxygen Reduction Reaction. *Journal of the American Chemical Society*, **2019**, 141, 1463-1466	16.4	78
76	Surfactant-free nonaqueous synthesis of lithium titanium oxide (LTO) nanostructures for lithium ion battery applications. *Journal of Materials Chemistry*, **2011**, 21, 806-810		73
75	A one-pot microwave-assisted non-aqueous sol□gel approach to metal oxide/graphene nanocomposites for Li-ion batteries. *RSC Advances*, **2011**, 1, 1687	3.7	72
74	Tin Dioxide Sensing Layer Grown on Tubular Nanostructures by a Non-Aqueous Atomic Layer Deposition Process. *Advanced Functional Materials*, **2011**, 21, 658-666	15.6	68
73	Direct visualization of sulfur cathodes: new insights into Li-S batteries via X-ray based methods.. *Energy and Environmental Science*, **2018**, 8, 202-210	35.4	67
72	Reactively sputtered nickel nitride as electrocatalytic counter electrode for dye- and quantum dot-sensitized solar cells. *Scientific Reports*, **2015**, 5, 10450	4.9	66
71	Regulating Key Variables and Visualizing Lithium Dendrite Growth: An Operando X-ray Study. *Journal of the American Chemical Society*, **2019**, 141, 8441-8449	16.4	65
70	Iron Hexacyanoferrate Nanoparticles as Cathode Materials for Lithium and Sodium Rechargeable Batteries. *ECS Electrochemistry Letters*, **2013**, 2, A39-A41		58
69	Hollow Nanostructured Metal Silicates with Tunable Properties for Lithium Ion Battery Anodes. *ACS Applied Materials & Interfaces*, **2015**, 7, 25725-32	9.5	56
68	Iron Oxide Photoelectrode with Multidimensional Architecture for Highly Efficient Photoelectrochemical Water Splitting. *Angewandte Chemie - International Edition*, **2017**, 56, 6583-6588	16.4	53
67	Sulfur encapsulation by MOF-derived CoS2 embedded in carbon hosts for high-performance Li□ batteries. *Journal of Materials Chemistry A*, **2019**, 7, 21128-21139	13	48
66	Bismuth oxide as a high capacity anode material for sodium-ion batteries. *Chemical Communications* , **2016**, 52, 11775-11778	5.8	44
65	Titanium Silicide Coated Porous Silicon Nanospheres as Anode Materials for Lithium Ion Batteries. *Electrochimica Acta*, **2015**, 151, 256-262	6.7	42
64	Discharging a Li-S battery with ultra-high sulphur content cathode using a redox mediator. *Scientific Reports*, **2016**, 6, 32433	4.9	37

63	Effect of PEDOT:PSS Coating on Manganese Oxide Nanowires for Lithium Ion Battery Anodes. *Electrochimica Acta*, **2016**, 187, 340-347	6.7	35
62	Spindle-like Fe7S8/N-doped carbon nanohybrids for high-performance sodium ion battery anodes. *Nano Research*, **2019**, 12, 695-700	10	34
61	Metal Hexacyanoferrate Nanoparticles as Electrode Materials for Lithium Ion Batteries. *Nanoscience and Nanotechnology Letters*, **2013**, 5, 770-774	0.8	29
60	Si7Ti4Ni4 as a buffer material for Si and its electrochemical study for lithium ion batteries. *Journal of Power Sources*, **2014**, 246, 729-735	8.9	25
59	Revisiting the strategies for stabilizing lithium metal anodes. *Journal of Materials Chemistry A*, **2020**, 8, 13874-13895	13	24
58	Activity–Stability Relationship in Nanoparticles for Electrocatalysis. *ACS Energy Letters*, **2020**, 5, 2827-2834	20.1	22
57	Structural and Thermodynamic Understandings in Mn-Based Sodium Layered Oxides during Anionic Redox. *Advanced Science*, **2020**, 7, 2001263	13.6	21
56	Facile synthesis of metal hydroxide nanoplates and their application as lithium-ion battery anodes. *Journal of Materials Chemistry A*, **2017**, 5, 8744-8751	13	20
55	Enhanced activity of Pt-based electrocatalysts for oxygen reduction via a selective Pt deposition process. *Journal of Electroanalytical Chemistry*, **2011**, 662, 70-79	4.1	20
54	SnS/C nanocomposites for high-performance sodium ion battery anodes.. *RSC Advances*, **2018**, 8, 23847-23853	3.7	20
53	An electrochemical approach to graphene oxide coated sulfur for long cycle life. *Nanoscale*, **2015**, 7, 13249-55	7.7	19
52	Two-dimensional assemblies of ultrathin titanate nanosheets for lithium ion battery anodes. *RSC Advances*, **2014**, 4, 12087	3.7	19
51	Enhancement of cycle performance of Li-S batteries by redistribution of sulfur. *Chemical Communications*, **2016**, 52, 1198-201	5.8	18
50	Iron sulfides with dopamine-derived carbon coating as superior performance anodes for sodium-ion batteries. *Nano Research*, **2019**, 12, 2609-2613	10	18
49	Atomic-Scale Visualization of Electrochemical Lithiation Processes in Monolayer MoS2 by Cryogenic Electron Microscopy. *Advanced Energy Materials*, **2019**, 9, 1902773	21.8	18
48	Facile synthesis of nanostructured carbon nanotube/iron oxide hybrids for lithium-ion battery anodes. *RSC Advances*, **2014**, 4, 37365-37370	3.7	18
47	TiO2-core/Sn-shell Nanotube Arrays Based on Monolithic Negative Electrode for Li-ion Batteries. *Electrochimica Acta*, **2014**, 130, 600-605	6.7	18
46	Enhancing the photoresponse of electrodeposited WO3 film: Structure and thickness effect. *Journal of Electroanalytical Chemistry*, **2015**, 752, 25-32	4.1	17

45	Sn(salen)-derived SnS nanoparticles embedded in N-doped carbon for high performance lithium-ion battery anodes. *Chemical Communications*, **2020**, 56, 8095-8098	5.8	17
44	Electrochemical determination of the degree of atomic surface roughness in PtNi alloy nanocatalysts for oxygen reduction reaction **2021**, 3, 375-383		17
43	Simple size control of TiO2 nanoparticles and their electrochemical performance: emphasizing the contribution of the surface area to lithium storage at high-rates. *Nanoscale*, **2016**, 8, 5688-95	7.7	16
42	Carbon treated self-ordered TiO2 nanotube arrays with enhanced lithium-ion intercalation performance. *Journal of Alloys and Compounds*, **2014**, 597, 275-281	5.7	16
41	Selective deposition of Pt onto supported metal clusters for fuel cell electrocatalysts. *Nanoscale*, **2012**, 4, 6461-9	7.7	16
40	Remote Control of Time-Regulated Stretching of Ligand-Presenting Nanocoils In Situ Regulates the Cyclic Adhesion and Differentiation of Stem Cells. *Advanced Materials*, **2021**, 33, e2008353	24	16
39	Iron Oxide Photoelectrode with Multidimensional Architecture for Highly Efficient Photoelectrochemical Water Splitting. *Angewandte Chemie*, **2017**, 129, 6683-6688	3.6	15
38	Unraveling the Mechanisms of Lithium Metal Plating/Stripping via In Situ/Operando Analytical Techniques. *Advanced Energy Materials*, **2021**, 11, 2003004	21.8	15
37	Enhancement of electrochemical properties by polysulfide trapping in a graphene-coated sulfur cathode on patterned current collector. *Chemical Communications*, **2016**, 52, 3203-6	5.8	14
36	Morphological conversion of dipolar core□shell Au□Co nanoparticles into beaded Au□Co3O4 nanowires. *Journal of Materials Chemistry*, **2011**, 21, 14163		14
35	Vertically aligned iron oxide nanotube arrays and porous magnetite nanostructures as three-dimensional electrodes for lithium ion microbatteries. *RSC Advances*, **2012**, 2, 12177	3.7	13
34	Soft template strategy to synthesize iron oxide-titania yolk-shell nanoparticles as high-performance anode materials for lithium-ion battery applications. *Chemistry - A European Journal*, **2015**, 21, 7954-61	4.8	12
33	Uniform lithium deposition on N-doped carbon-coated current collectors. *Chemical Communications* , **2019**, 55, 10124-10127	5.8	11
32	Multidimensional Anodized Titanium Foam Photoelectrode for Efficient Utilization of Photons in Mesoscopic Solar Cells. *Small*, **2017**, 13, 1701458	11	10
31	3,4-dihydroxy-L-phenylalanine as a cell adhesion molecule in serum-free cell culture. *Biotechnology Progress*, **2012**, 28, 1055-60	2.8	10
30	Immunoregulation of Macrophages by Controlling Winding and Unwinding of Nanohelical Ligands. *Advanced Functional Materials*, **2021**, 31, 2103409	15.6	10
29	SnO2 nanotube arrays embedded in a carbon layer for high-performance lithium-ion battery applications. *New Journal of Chemistry*, **2015**, 39, 2541-2546	3.6	9
28	Design considerations for lithium-sulfur batteries: mass transport of lithium polysulfides. *Nanoscale* , **2020**, 12, 15466-15472	7.7	8

27	Operando Identification of the Chemical and Structural Origin of Li-Ion Battery Aging at Near-Ambient Temperature. *Journal of the American Chemical Society*, **2020**, 142, 13406-13414	16.4	8
26	Dynamic Ligand Screening by Magnetic Nanoassembly Modulates Stem Cell Differentiation. *Advanced Materials*, **2021**, e2105460	24	8
25	The effects of radio frequency sputtering of TiO2 on Li[Li0.07Nio.38Co0.15Mn0.4]O2 cathode for lithium ion batteries. *Journal of Nanoscience and Nanotechnology*, **2013**, 13, 7924-31	1.3	6
24	Regulating lithium nucleation and growth by zinc modified current collectors. *Nano Research*, **2020**, 13, 45-51	10	6
23	Operando Visualization of Morphological Evolution in Mg Metal Anode: Insight into Dendrite Suppression for Stable Mg Metal Batteries. *ACS Energy Letters*, **2022**, 7, 162-170	20.1	6
22	Directly integrated all-solid-state flexible lithium batteries on polymer substrate. *Journal of Power Sources*, **2020**, 455, 227978	8.9	5
21	Photoelectrochemical Behavior of Compact and Inverse Opal Tungsten Trioxide Films: Surface Area and Charge Transfer Properties. *Journal of the Electrochemical Society*, **2015**, 162, H449-H452	3.9	5
20	Atomic Structure Modification of Fe-N-C Catalysts via Morphology Engineering of Graphene for Enhanced Conversion Kinetics of Lithium–Sulfur Batteries. *Advanced Functional Materials*,2110857	15.6	5
19	Lithium–sulfur redox: challenges and opportunities. *Current Opinion in Electrochemistry*, **2021**, 25, 100652	7.2	5
18	Thermodynamics and Na kinetics in P2-type oxygen redox Mn-Ni binary layered oxides manipulated via Li substitution. *Energy Storage Materials*, **2021**, 42, 97-108	19.4	5
17	Operando Synchrotron-Based X-ray Study of Prussian Blue and Its Analogue as Cathode Materials for Sodium-Ion Batteries. *Journal of Physical Chemistry C*, **2020**, 124, 16332-16337	3.8	4
16	The keys for effective distribution of intergranular voids of peapod-like MnO@C core-shell for lithium ion batteries. *Journal of Alloys and Compounds*, **2020**, 817, 152760	5.7	4
15	Enhancing the of Performance of Lithium-Sulfur Batteries through Electrochemical Impregnation of Sulfur in Hierarchical Mesoporous Carbon Nanoparticles. *ChemElectroChem*, **2020**, 7, 3653-3655	4.3	4
14	Anionic Redox Reactions in Cathodes for Sodium-Ion Batteries. *ChemElectroChem*, **2021**, 8, 625-643	4.3	4
13	SnSe nanocrystals decorated on carbon nanotubes for high-performance lithium-ion battery anodes. *Journal of Alloys and Compounds*, **2021**, 892, 162057	5.7	4
12	Unlocking the Intrinsic Origin of the Reversible Oxygen Redox Reaction in Sodium-Based Layered Oxides. *ChemElectroChem*, **2021**, 8, 1464-1472	4.3	3
11	Nitrogen and sulfur co-doped graphene nanoribbons with well-ordered stepped edges for high-performance potassium-ion battery anodes. *Energy Storage Materials*, **2022**, 48, 325-334	19.4	3
10	Enabling Stable and Nonhysteretic Oxygen Redox Capacity in Li-Excess Na Layered Oxides. *Advanced Energy Materials*,2103384	21.8	2

9	Understanding the Impacts of Li Stripping Overpotentials at the Counter Electrode by Three-Electrode Coin Cell Measurements. *Analytical Chemistry*, **2021**, 93, 15459-15467	7.8	2
8	Understanding the Effects of Interfacial Lithium Ion Concentration on Lithium Metal Anode.. *Advanced Science*, **2021**, e2104145	13.6	2
7	Structural and Chemical Compatibilities of Li Ni Co Mn O Cathode Material with Garnet-Type Solid Electrolyte for All-Solid-State Batteries. *Small*, **2021**, 17, e2103306	11	1
6	Electrolyte screening studies for Li metal batteries. *Chemical Communications*, **2020**, 56, 11883-11886	5.8	0
5	A phase-convertible fast ionic conductor with a monolithic plastic crystalline host. *Journal of Materials Chemistry A*, **2021**, 9, 10838-10845	13	0
4	Understandings about functionalized porous carbon via scanning transmission x-ray microscopy (STXM) for high sulfur utilization in lithium-sulfur batteries. *Nano Energy*, **2022**, 107446	17.1	0
3	Ultra-fast and efficient calcium co-intercalation host enabled by hierarchically 3D porous carbon nanotemplates. *Journal of Industrial and Engineering Chemistry*, **2021**, 96, 397-403	6.3	
2	Magnetic Nanocoils: Remote Control of Time-Regulated Stretching of Ligand-Presenting Nanocoils In Situ Regulates the Cyclic Adhesion and Differentiation of Stem Cells (Adv. Mater. 11/2021). *Advanced Materials*, **2021**, 33, 2170084	24	
1	Enabling Stable and Nonhysteretic Oxygen Redox Capacity in Li-Excess Na Layered Oxides (Adv. Energy Mater. 11/2022). *Advanced Energy Materials*, **2022**, 12, 2270045	21.8	