Gabin Yoon

List of Publications by Year
in descending order

53 papers	5,530 citations	87843 38 h-index	168321 53 g-index
60 all docs	60 docs citations	60 times ranked	7753 citing authors

#	Article	IF	Citations
1	Recent Progress in Electrode Materials for Sodiumâ€Ion Batteries. Advanced Energy Materials, 2016, 6, 1600943.	10.2	815
2	Highly Durable and Active PtFe Nanocatalyst for Electrochemical Oxygen Reduction Reaction. Journal of the American Chemical Society, 2015, 137, 15478-15485.	6.6	517
3	Large-Scale Synthesis of Carbon-Shell-Coated FeP Nanoparticles for Robust Hydrogen Evolution Reaction Electrocatalyst. Journal of the American Chemical Society, 2017, 139, 6669-6674.	6.6	451
4	Sodium intercalation chemistry in graphite. Energy and Environmental Science, 2015, 8, 2963-2969.	15.6	369
5	Voltage decay and redox asymmetry mitigation by reversible cation migration in lithium-rich layered oxide electrodes. Nature Materials, 2020, 19, 419-427.	13.3	328
6	Conditions for Reversible Na Intercalation in Graphite: Theoretical Studies on the Interplay Among Guest Ions, Solvent, and Graphite Host. Advanced Energy Materials, 2017, 7, 1601519.	10.2	219
7	Tailoring sodium intercalation in graphite for high energy and power sodium ion batteries. Nature Communications, 2019, 10, 2598.	5.8	195
8	Anomalous Jahnâ€"Teller behavior in a manganese-based mixed-phosphate cathode for sodium ion batteries. Energy and Environmental Science, 2015, 8, 3325-3335.	15.6	175
9	Ordered-mesoporous Nb2O5/carbon composite as a sodium insertion material. Nano Energy, 2015, 16, 62-70.	8.2	124
10	Exploiting Lithiumâ€"Ether Coâ€Intercalation in Graphite for Highâ€Power Lithiumâ€Ion Batteries. Advanced Energy Materials, 2017, 7, 1700418.	10.2	122
11	The Role of Interlayer Chemistry in Liâ€Metal Growth through a Garnetâ€Type Solid Electrolyte. Advanced Energy Materials, 2020, 10, 1903993.	10.2	119
12	Engineering Solid Electrolyte Interphase for Pseudocapacitive Anatase TiO₂ Anodes in Sodiumâ€Ion Batteries. Advanced Functional Materials, 2018, 28, 1802099.	7.8	106
13	A comparative study of graphite electrodes using the co-intercalation phenomenon for rechargeable Li, Na and K batteries. Chemical Communications, 2016, 52, 12618-12621.	2.2	99
14	Suppression of Voltage Decay through Manganese Deactivation and Nickel Redox Buffering in Highâ€Energy Layered Lithiumâ€Rich Electrodes. Advanced Energy Materials, 2018, 8, 1800606.	10.2	97
15	Lithium-free transition metal monoxides for positive electrodes in lithium-ion batteries. Nature Energy, 2017, 2, .	19.8	94
16	Stable and Highâ€Power Calciumâ€Ion Batteries Enabled by Calcium Intercalation into Graphite. Advanced Materials, 2020, 32, e1904411.	11.1	87
17	Amorphous Cobalt Phyllosilicate with Layered Crystalline Motifs as Water Oxidation Catalyst. Advanced Materials, 2017, 29, 1606893.	11.1	84
18	The Reaction Mechanism and Capacity Degradation Model in Lithium Insertion Organic Cathodes, Li₂C₆O₆, Using Combined Experimental and First Principle Studies. Journal of Physical Chemistry Letters, 2014, 5, 3086-3092.	2.1	81

#	Article	IF	Citations
19	Graphitic Carbon Materials for Advanced Sodiumâ€Ion Batteries. Small Methods, 2019, 3, 1800227.	4.6	81
20	Deposition and Stripping Behavior of Lithium Metal in Electrochemical System: Continuum Mechanics Study. Chemistry of Materials, 2018, 30, 6769-6776.	3.2	74
21	Charge-transfer complexes for high-power organic rechargeable batteries. Energy Storage Materials, 2019, 20, 462-469.	9.5	70
22	High-performance supercapacitors based on defect-engineered carbon nanotubes. Carbon, 2014, 80, 246-254.	5.4	68
23	Hierarchical Surface Atomic Structure of a Manganeseâ€Based Spinel Cathode for Lithiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2015, 54, 1153-1158.	7.2	68
24	High-energy and durable lithium metal batteries using garnet-type solid electrolytes with tailored lithium-metal compatibility. Nature Communications, 2022, 13, 1883.	5.8	67
25	Highly Stable Iron- and Manganese-Based Cathodes for Long-Lasting Sodium Rechargeable Batteries. Chemistry of Materials, 2016, 28, 7241-7249.	3.2	66
26	Factors Affecting the Exfoliation of Graphite Intercalation Compounds for Graphene Synthesis. Chemistry of Materials, 2015, 27, 2067-2073.	3.2	65
27	High-Dielectric Polymer Coating for Uniform Lithium Deposition in Anode-Free Lithium Batteries. ACS Energy Letters, 2021, 6, 4416-4425.	8.8	63
28	Understanding Origin of Voltage Hysteresis in Conversion Reaction for Na Rechargeable Batteries: The Case of Cobalt Oxides. Advanced Functional Materials, 2016, 26, 5042-5050.	7.8	61
29	New 4V-Class and Zero-Strain Cathode Material for Na-Ion Batteries. Chemistry of Materials, 2017, 29, 7826-7832.	3.2	61
30	Theoretical Evidence for Low Charging Overpotentials of Superoxide Discharge Products in Metalâ€"Oxygen Batteries. Chemistry of Materials, 2015, 27, 8406-8413.	3.2	59
31	A new high-voltage calcium intercalation host for ultra-stable and high-power calcium rechargeable batteries. Nature Communications, 2021, 12, 3369.	5.8	59
32	Lithium-excess olivine electrode for lithium rechargeable batteries. Energy and Environmental Science, 2016, 9, 2902-2915.	15.6	49
33	Pliable Lithium Superionic Conductor for All-Solid-State Batteries. ACS Energy Letters, 2021, 6, 2006-2015.	8.8	46
34	Restoration of thermally reduced graphene oxide by atomic-level selenium doping. NPG Asia Materials, 2016, 8, e338-e338.	3.8	45
35	Anionic Redox Activity Regulated by Transition Metal in Lithiumâ€Rich Layered Oxides. Advanced Energy Materials, 2020, 10, 2001207.	10.2	45
36	Moisture Barrier Composites Made of Nonâ€Oxidized Graphene Flakes. Small, 2015, 11, 3124-3129.	5.2	41

#	Article	IF	Citations
37	Na₃V(PO₄)₂: A New Layered-Type Cathode Material with High Water Stability and Power Capability for Na-Ion Batteries. Chemistry of Materials, 2018, 30, 3683-3689.	3.2	41
38	Using Firstâ€Principles Calculations for the Advancement of Materials for Rechargeable Batteries. Advanced Functional Materials, 2017, 27, 1702887.	7.8	40
39	Surface enriched graphene hollow spheres towards building ultra-high power sodium-ion capacitor with long durability. Energy Storage Materials, 2020, 25, 702-713.	9.5	39
40	A new lithium diffusion model in layered oxides based on asymmetric but reversible transition metal migration. Energy and Environmental Science, 2020, 13, 1269-1278.	15.6	39
41	Native Defects in Li₁₀GeP₂S₁₂ and Their Effect on Lithium Diffusion. Chemistry of Materials, 2018, 30, 4995-5004.	3.2	33
42	Simple and Effective Gas-Phase Doping for Lithium Metal Protection in Lithium Metal Batteries. Chemistry of Materials, 2017, 29, 9182-9191.	3.2	32
43	<i>In Situ</i> Tracking Kinetic Pathways of Li⁺/Na⁺ Substitution during Ion-Exchange Synthesis of Li_{<i>x</i>}Na_{1.5â€“<i>x</i>}VOPO₄F_{0.5}. Journal of the American Chemical Society, 2017, 139, 12504-12516.	6.6	28
44	Extremely large, non-oxidized graphene flakes based on spontaneous solvent insertion into graphite intercalation compounds. Carbon, 2018, 139, 309-316.	5.4	23
45	Atomistic Investigation of Doping Effects on Electrocatalytic Properties of Cobalt Oxides for Water Oxidation. Advanced Science, 2018, 5, 1801632.	5.6	17
46	Carbon-free high-performance cathode for solid-state Li-O ₂ battery. Science Advances, 2022, 8, eabm8584.	4.7	15
47	Activating layered LiNi 0.5 Co 0.2 Mn 0.3 O 2 as a host for Mg intercalation in rechargeable Mg batteries. Materials Research Bulletin, 2017, 96, 524-532.	2.7	14
48	Pseudocapacitive Behavior and Ultrafast Kinetics from Solvated Ion Cointercalation into MoS₂ for Its Alkali Ion Storage. ACS Applied Energy Materials, 2019, 2, 3726-3735.	2.5	9
49	Chemical Origins of Electrochemical Overpotential in Surfaceâ€Conversion Nanocomposite Cathodes. Advanced Energy Materials, 2019, 9, 1900503.	10.2	6
50	A bifunctional auxiliary electrode for safe lithium metal batteries. Journal of Materials Chemistry A, 2019, 7, 24807-24813.	5.2	4
51	Calciumâ€Ion Batteries: Stable and Highâ€Power Calciumâ€Ion Batteries Enabled by Calcium Intercalation into Graphite (Adv. Mater. 4/2020). Advanced Materials, 2020, 32, 2070029.	11.1	3
52	An exceptionally large energy cathode with the Kâ€“SO₄â€“Cu conversion reaction for potassium rechargeable batteries. Journal of Materials Chemistry A, 2021, 9, 5475-5484.	5.2	3
53	Structural Effect on the Oxygen Evolution Reaction in the Electrochemical Catalyst FePt. New Physics: Sae Mulli, 2015, 65, 878-882.	0.0	0