Seok Hyun Song

List of Publications by Year
in descending order

57	4,568	126907 33	149698 56
papers	citations	h-index	g-index

61	61	61	4920
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Gamma-ray irradiated graphene nanosheets/polydopamine hybrids as a superior anode material for lithium-ion batteries. Carbon Letters, 2022, 32, 305.	5.9	3
2	Enabling Stable and Nonhysteretic Oxygen Redox Capacity in Liâ€Excess Na Layered Oxides. Advanced Energy Materials, 2022, 12, .	19.5	18
3	Enabling Stable and Nonhysteretic Oxygen Redox Capacity in Liâ€Excess Na Layered Oxides (Adv. Energy) Tj ETQq1 1 0.784314 rgBT	19.5	0
4	High-energy and durable lithium metal batteries using garnet-type solid electrolytes with tailored lithium-metal compatibility. Nature Communications, 2022, 13, 1883.	12.8	67
5	Unveiling the Role of Transitionâ€Metal Ions in the Thermal Degradation of Layered Niâ€“Coâ€“Mn Cathodes for Lithium Rechargeable Batteries. Advanced Functional Materials, 2022, 32, .	14.9	21
6	Hysteresisâ€Suppressed Reversible Oxygenâ€Redox Cathodes for Sodiumâ€Ion Batteries. Advanced Energy Materials, 2022, 12, .	19.5	42
7	In situ multiscale probing of the synthesis of a Ni-rich layered oxide cathode reveals reaction heterogeneity driven by competing kinetic pathways. Nature Chemistry, 2022, 14, 614-622.	13.6	52
8	Janus Graphene Oxide Sheets with Fe₃O₄ Nanoparticles and Polydopamine as Anodes for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 14786-14795.	8.0	38
9	Critical Role of Ti⁴⁺ in Stabilizing Highâ€Voltage Redox Reactions in Liâ€Rich Layered Material. Small, 2021, 17, e2100840.	10.0	13
10	Na₂Fe₂F₇: a fluoride-based cathode for high power and long life Na-ion batteries. Energy and Environmental Science, 2021, 14, 1469-1479.	30.8	16
11	Low-cost and high-power K₄[Mn₂Fe](PO₄)₂(P₂O₇) as a novel cathode with outstanding cyclability for K-ion batteries. Journal of Materials Chemistry A, 2021, 9, 9898-9908.	10.3	9
12	Structural and Chemical Compatibilities of Li_{1â^’}_xNi_{0.5}Co_{0.2}Mn_{0.3}O₂ Cathode Material with Garnetâ€Type Solid Electrolyte for Allâ€Solidâ€State Batteries. Small, 2021, 17, e2103306.	10.0	9
13	Selective Anionic Redox and Suppressed Structural Disordering Enabling Highâ€Energy and Longâ€Life Liâ€Rich Layeredâ€Oxide Cathode. Advanced Energy Materials, 2021, 11, 2102311.	19.5	25
14	Development of a New Mixed-Polyanion Cathode with Superior Electrochemical Performances for Na-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2020, 8, 163-171.	6.7	20
15	New Insight on Openâ€Structured Sodium Vanadium Oxide as Highâ€Capacity and Long Life Cathode for Znâ€“Ion Storage: Structure, Electrochemistry, and Firstâ€Principles Calculation. Advanced Energy Materials, 2020, 10, 2001595.	19.5	54
16	Highâ€Voltageâ€Driven Surface Structuring and Electrochemical Stabilization of Niâ€Rich Layered Cathode Materials for Li Rechargeable Batteries. Advanced Energy Materials, 2020, 10, 2000521.	19.5	90
17	High-energy O3-Na_{1â^’2x}Ca_x[Ni_{0.5}Mn_{0.5}]O₂ cathodes for long-life sodium-ion batteries. Journal of Materials Chemistry A, 2020, 8, 13776-13786.	10.3	46
18	Development of K4Fe3(PO4)2(P2O7) as a novel Fe-based cathode with high energy densities and excellent cyclability in rechargeable potassium batteries. Energy Storage Materials, 2020, 28, 47-54.	18.0	32

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19	Oxalate-Based High-Capacity Conversion Anode for Potassium Storage. ACS Sustainable Chemistry and Engineering, 2020, 8, 3743-3750.	6.7	15
20	P2â€K_{0.75}[Ni_{1/3}Mn_{2/3}]O₂ Cathode Material for High Power and Long Life Potassiumâ€Ion Batteries. Advanced Energy Materials, 2020, 10, 1903605.	19.5	50
21	A new lithium diffusion model in layered oxides based on asymmetric but reversible transition metal migration. Energy and Environmental Science, 2020, 13, 1269-1278.	30.8	39
22	Development of Na2FePO4F/Conducting-Polymer composite as an exceptionally high performance cathode material for Na-ion batteries. Journal of Power Sources, 2019, 432, 1-7.	7.8	29
23	Hollanditeâ€Type VO_{1.75}(OH)_{0.5}: Effective Sodium Storage for Highâ€Performance Sodiumâ€Ion Batteries. Advanced Energy Materials, 2019, 9, 1900603.	19.5	16
24	Are type 316L stainless steel coin cells stable in nonaqueous carbonate solutions containing NaPF₆ or KPF₆ salt?. Journal of Materials Chemistry A, 2019, 7, 26250-26260.	10.3	8
25	Conversionâ€Based Cathode Materials for Rechargeable Sodium Batteries. Advanced Energy Materials, 2018, 8, 1702646.	19.5	62
26	Suppression of Voltage Decay through Manganese Deactivation and Nickel Redox Buffering in Highâ€Energy Layered Lithiumâ€Rich Electrodes. Advanced Energy Materials, 2018, 8, 1800606.	19.5	97
27	Exceptional effect of glassy lithium fluorophosphate on Mn-rich olivine cathode material for high-performance Li ion batteries. Journal of Power Sources, 2018, 374, 55-60.	7.8	4
28	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.	6.7	41
29	Lithium-free transition metal monoxides for positive electrodes in lithium-ion batteries. Nature Energy, 2017, 2, .	39.5	94
30	Ultraconcentrated Sodium Bis(fluorosulfonyl)imide-Based Electrolytes for High-Performance Sodium Metal Batteries. ACS Applied Materials & Interfaces, 2017, 9, 3723-3732.	8.0	177
31	High Power Cathode Material Na₄VO(PO₄)₂ with Open Framework for Na Ion Batteries. Chemistry of Materials, 2017, 29, 3363-3366.	6.7	18
32	Development of a new alluaudite-based cathode material with high power and long cyclability for application in Na ion batteries in real-life. Journal of Materials Chemistry A, 2017, 5, 22334-22340.	10.3	20
33	In Situ Tracking Kinetic Pathways of Li⁺/Na⁺ Substitution during Ion-Exchange Synthesis of Li_xNa_{1.5â€“x}VOPO₄F_{0.5}. Journal of the American Chemical Society, 2017, 139, 12504-12516.	13.7	28
34	NaFâ€“FeF2 nanocomposite: New type of Na-ion battery cathode material. Nano Research, 2017, 10, 4388-4397.	10.4	17
35	Tailoring a New 4Vâ€Class Cathode Material for Naâ€Ion Batteries. Advanced Energy Materials, 2016, 6, 1502147.	19.5	65
36	Understanding Origin of Voltage Hysteresis in Conversion Reaction for Na Rechargeable Batteries: The Case of Cobalt Oxides. Advanced Functional Materials, 2016, 26, 5042-5050.	14.9	61

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37	Highly Stable Iron- and Manganese-Based Cathodes for Long-Lasting Sodium Rechargeable Batteries. Chemistry of Materials, 2016, 28, 7241-7249.	6.7	66
38	Lithium-excess olivine electrode for lithium rechargeable batteries. Energy and Environmental Science, 2016, 9, 2902-2915.	30.8	49
39	Thermal structural stability of a multi-component olivine electrode for lithium ion batteries. CrystEngComm, 2016, 18, 7463-7470.	2.6	5
40	Recent Progress in Electrode Materials for Sodiumâ€ion Batteries. Advanced Energy Materials, 2016, 6, 1600943.	19.5	815
41	A New Perspective on Liâ€“SO₂ Batteries for Rechargeable Systems. Angewandte Chemie - International Edition, 2015, 54, 9663-9667.	13.8	37
42	RÃ¼cktitelbild: A New Perspective on Li-SO2Batteries for Rechargeable Systems (Angew. Chem. 33/2015). Angewandte Chemie, 2015, 127, 9860-9860.	2.0	0
43	Unexpected discovery of low-cost maricite NaFePO₄as a high-performance electrode for Na-ion batteries. Energy and Environmental Science, 2015, 8, 540-545.	30.8	299
44	Anomalous Jahnâ€“Teller behavior in a manganese-based mixed-phosphate cathode for sodium ion batteries. Energy and Environmental Science, 2015, 8, 3325-3335.	30.8	175
45	A Family of Highâ€Performance Cathode Materials for Naâ€ion Batteries, Na₃(VO_{1â^'x}PO₄)₂ F_{1+2x} (0 â‰¤ Ti ETQq1 1 0.7843 14.9 271 24, 4603-4614.
46	Alluaudite LiMnPO4: a new Mn-based positive electrode for Li rechargeable batteries. Journal of Materials Chemistry A, 2014, 2, 8632-8636.	10.3	32
47	Size-selective synthesis of mesoporous LiFePO₄/C microspheres based on nucleation and growth rate control of primary particles. Journal of Materials Chemistry A, 2014, 2, 5922-5927.	10.3	35
48	LiFePO4 with an alluaudite crystal structure for lithium ion batteries. Energy and Environmental Science, 2013, 6, 830.	30.8	61
49	Understanding the Electrochemical Mechanism of the New Iron-Based Mixed-Phosphate Na₄Fe₃(PO₄)₂(P₂O₇) in a Na Rechargeable Battery. Chemistry of Materials, 2013, 25, 3614-3622.	6.7	237
50	A new catalyst-embedded hierarchical air electrode for high-performance Liâ€“O2 batteries. Energy and Environmental Science, 2013, 6, 3570.	30.8	152
51	Defect-free solvothermally assisted synthesis of microspherical mesoporous LiFePO4/C. RSC Advances, 2013, 3, 3421.	3.6	40
52	New Iron-Based Mixed-Polyanion Cathodes for Lithium and Sodium Rechargeable Batteries: Combined First Principles Calculations and Experimental Study. Journal of the American Chemical Society, 2012, 134, 10369-10372.	13.7	395
53	A combined first principles and experimental study on Na3V2(PO4)2F3 for rechargeable Na batteries. Journal of Materials Chemistry, 2012, 22, 20535.	6.7	306
54	Polymorphism and phase transformations of Li2â^'xFeSiO4(0â©½xâ©½2) from first principles. Physical Review B, 2011, 84, .	3.2	35

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55	Neutron and X-ray Diffraction Study of Pyrophosphate-Based Li_{2â€“x}MP₂O₇ (M = Fe, Co) for Lithium Rechargeable Battery Electrodes. Chemistry of Materials, 2011, 23, 3930-3937.	6.7	106
56	Anelasticity and Damping of Thin Aluminum Films on Silicon Substrates. Journal of Microelectromechanical Systems, 2004, 13, 230-237.	2.5	38
57	Recycling of Li(Ni,Co,Mn)O2 via a chlorination technique. Korean Journal of Chemical Engineering, 0, , 1.	2.7	7