Seung M Oh

List of Publications by Year
in descending order

		57719	40954
113	8,788	44	93
papers	citations	h-index	g-index

117	117	117	9466
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Dissolution of Spinel Oxides and Capacity Losses in 4â€‰Vâ€‰Liâ€‰/â€‰Li x Mn2â€‰Oâ€‰4 Cells. Journal of the Electrochemical Society, 1996, 143, 2204-2211.	1.3	805
2	An Amorphous Red Phosphorus/Carbon Composite as a Promising Anode Material for Sodium Ion Batteries. Advanced Materials, 2013, 25, 3045-3049.	11.1	770
3	Failure Modes of Silicon Powder Negative Electrode in Lithium Secondary Batteries. Electrochemical and Solid-State Letters, 2004, 7, A306.	2.2	576
4	Highâ€Capacity Anode Materials for Sodiumâ€Ion Batteries. Chemistry - A European Journal, 2014, 20, 11980-11992.	1.7	508
5	Sodium Terephthalate as an Organic Anode Material for Sodium Ion Batteries. Advanced Materials, 2012, 24, 3562-3567.	11.1	448
6	Tin Phosphide as a Promising Anode Material for Naâ€Ion Batteries. Advanced Materials, 2014, 26, 4139-4144.	11.1	356
7	Na₃SbS₄: A Solution Processable Sodium Superionic Conductor for Allâ€Solidâ€State Sodiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2016, 55, 9634-9638.	7.2	266
8	Solutionâ€Processable Glass LiIâ€Li₄SnS₄ Superionic Conductors for Allâ€Solidâ€State Liâ€Ion Batteries. Advanced Materials, 2016, 28, 1874-1883.	11.1	265
9	Solid-State NMR and Electrochemical Dilatometry Study on Li[sup +] Uptake/Extraction Mechanism in SiO Electrode. Journal of the Electrochemical Society, 2007, 154, A1112.	1.3	183
10	Reversible Lithium Storage with High Mobility at Structural Defects in Amorphous Molybdenum Dioxide Electrode. Advanced Functional Materials, 2012, 22, 3658-3664.	7.8	166
11	Impedance analysis of porous carbon electrodes to predict rate capability of electric double-layer capacitors. Journal of Power Sources, 2014, 267, 411-420.	4.0	164
12	Failure mechanisms of LiNi0.5Mn1.5O4 electrode at elevated temperature. Journal of Power Sources, 2012, 215, 312-316.	4.0	158
13	Degradation mechanisms in doped spinels of LiM0.05Mn1.95O4 (M=Li, B, Al, Co, and Ni) for Li secondary batteries. Journal of Power Sources, 2000, 89, 7-14.	4.0	155
14	Na_{4â€Î±}M_{2+Î±/2}(P₂O₇)₂ (2/3 â‰ Î± â‰ 7/8, M = Fe,) Tj ETQq0 0 0 rg Advanced Energy Materials, 2013, 3, 770-776.	10.2	155
15	Improvement of silicon powder negative electrodes by copper electroless deposition for lithium secondary batteries. Journal of Power Sources, 2005, 147, 227-233.	4.0	154
16	Thermoelectrochemically Activated MoO[sub 2] Powder Electrode for Lithium Secondary Batteries. Journal of the Electrochemical Society, 2009, 156, A688.	1.3	143
17	Reversible Lithium Storage at Highly Populated Vacant Sites in an Amorphous Vanadium Pentoxide Electrode. Chemistry of Materials, 2014, 26, 5874-5881.	3.2	137
18	Two-Dimensional Phosphorene-Derived Protective Layers on a Lithium Metal Anode for Lithium-Oxygen Batteries. ACS Nano, 2018, 12, 4419-4430.	7.3	115

#	Article	IF	Citations
19	Siâ€Encapsulating Hollow Carbon Electrodes via Electroless Etching for Lithiumâ€Ion Batteries. Advanced Energy Materials, 2013, 3, 206-212.	10.2	113
20	Complex capacitance analysis on rate capability of electric-double layer capacitor (EDLC) electrodes of different thickness. Electrochimica Acta, 2005, 50, 2255-2262.	2.6	112
21	Effect of carbon additive on electrochemical performance of LiCoO2 composite cathodes. Journal of Power Sources, 2002, 111, 90-96.	4.0	109
22	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.	5.2	109
23	Carbon nanotubes (CNTs) as a buffer layer in silicon/CNTs composite electrodes for lithium secondary batteries. Journal of Power Sources, 2006, 162, 1275-1281.	4.0	105
24	Siâ€“carbon coreâ€“shell composite anode in lithium secondary batteries. Electrochimica Acta, 2007, 52, 7061-7067.	2.6	97
25	Fading mechanisms of carbon-coated and disproportionated Si/SiO negative electrode (Si/SiO /C) in Li-ion secondary batteries: Dynamics and component analysis by TEM. Electrochimica Acta, 2012, 85, 369-376.	2.6	95
26	Complex Capacitance Analysis of Porous Carbon Electrodes for Electric Double-Layer Capacitors. Journal of the Electrochemical Society, 2004, 151, A571.	1.3	91
27	The role of in situ generated nano-sized metal particles on the coulombic efficiency of MGeO3 (M = Cu,) Tj ETQq1 1 0.784314 rgBT /Ov	2.6	88
28	Re-Deposition of Manganese Species on Spinel LiMn₂O₄Electrode after Mn Dissolution. Journal of the Electrochemical Society, 2012, 159, A193-A197.	1.3	88
29	Complex Capacitance Analysis on Leakage Current Appearing in Electric Double-layer Capacitor Carbon Electrode. Journal of the Electrochemical Society, 2005, 152, A1418.	1.3	85
30	Na₃SbS₄: A Solution Processable Sodium Superionic Conductor for Allâ€Solidâ€State Sodiumâ€Ion Batteries. Angewandte Chemie, 2016, 128, 9786-9790.	1.6	85
31	The Role of Metallic Fe and Carbon Matrix in Fe[sub 2]O[sub 3]/Fe/Carbon Nanocomposite for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2010, 157, A412.	1.3	76
32	Poly(phenanthrenequinone) as a conductive binder for nano-sized silicon negative electrodes. Energy and Environmental Science, 2015, 8, 1538-1543.	15.6	75
33	A Bifunctional Electrolyte Additive for High-Voltage LiNi_{0.5}Mn_{1.5}O₄ Positive Electrodes. ACS Applied Materials & Interfaces, 2019, 11, 11306-11316.	4.0	69
34	Li+ storage sites in non-graphitizable carbons prepared from methylnaphthalene-derived isotropic pitches. Carbon, 2000, 38, 995-1001.	5.4	68
35	Surface Film Formation on LiNi0.5Mn1.5O4 Electrode in an Ionic Liquid Solvent at Elevated Temperature. Journal of the Electrochemical Society, 2011, 158, A453.	1.3	60
36	Electrochemical Activation of Expanded Graphite Electrode for Electrochemical Capacitor. Journal of the Electrochemical Society, 2008, 155, A685.	1.3	58

#	Article	IF	Citations
37	Siteâ€Selective In Situ Electrochemical Doping for Mnâ€Rich Layered Oxide Cathode Materials in Lithiumâ€Ion Batteries. Advanced Energy Materials, 2018, 8, 1702514.	10.2	57
38	A photo-cross-linkable polymeric binder for silicon anodes in lithium ion batteries. RSC Advances, 2013, 3, 12625.	1.7	53
39	New dry carbon nanotube coating of over-lithiated layered oxide cathode for lithium ion batteries. Journal of Materials Chemistry A, 2014, 2, 19670-19677.	5.2	53
40	Electrochemical stability of bis(trifluoromethanesulfonyl)imide-based ionic liquids at elevated temperature as a solvent for a titanium oxide bronze electrode. Journal of Power Sources, 2009, 194, 1068-1074.	4.0	52
41	Mechanism of Co3O4/graphene catalytic activity in Liâ€“O2 batteries using carbonate based electrolytes. Electrochimica Acta, 2013, 90, 63-70.	2.6	48
42	Solventless synthesis of an iron-oxide/graphene nanocomposite and its application as an anode in high-rate Li-ion batteries. Journal of Materials Chemistry A, 2013, 1, 15442.	5.2	48
43	Electrochemical Dilatometry Study on Si-Embedded Carbon Nanotube Powder Electrodes. Electrochemical and Solid-State Letters, 2007, 10, A142.	2.2	46
44	Pyrrolinium-based Ionic Liquid as a Flame Retardant for Binary Electrolytes of Lithium Ion Batteries. ACS Sustainable Chemistry and Engineering, 2016, 4, 497-505.	3.2	46
45	Allylic ionic liquid electrolyte-assisted electrochemical surface passivation of LiCoO2 for advanced, safe lithium-ion batteries. Scientific Reports, 2014, 4, 5802.	1.6	44
46	Comparative Study on Surface Films from Ionic Liquids Containing Saturated and Unsaturated Substituent for LiCoO[sub 2]. Journal of the Electrochemical Society, 2010, 157, A136.	1.3	42
47	Effect of fluoroethylene carbonate on electrochemical battery performance and the surface chemistry of amorphous MoO2 lithium-ion secondary battery negative electrodes. Electrochimica Acta, 2014, 132, 338-346.	2.6	42
48	Thermal Degradation of Solid Electrolyte Interphase (SEI) Layers by Phosphorus Pentafluoride (PF₅) Attack. Journal of the Electrochemical Society, 2017, 164, A2418-A2425.	1.3	42
49	A tetradentate Ni(II) complex cation as a single redox couple for non-aqueous flow batteries. Journal of Power Sources, 2015, 283, 300-304.	4.0	41
50	Direct Access to Mesoporous Crystalline TiO₂/Carbon Composites with Large and Uniform Pores for Use as Anode Materials in Lithium Ion Batteries. Macromolecular Chemistry and Physics, 2011, 212, 383-390.	1.1	40
51	N-ferrocenylphthalimide; A single redox couple formed by attaching a ferrocene moiety to phthalimide for non-aqueous flow batteries. Journal of Power Sources, 2018, 395, 60-65.	4.0	40
52	Performance Improvement of Nano-Sized Zinc Oxide Electrode by Embedding in Carbon Matrix for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2013, 160, A11-A14.	1.3	39
53	1,3,5-Trihydroxybenzene as a film-forming additive for high-voltage positive electrode. Electrochemistry Communications, 2013, 27, 26-28.	2.3	39
54	Performance of electrochemically generated Li21Si5 phase for lithium-ion batteries. Electrochimica Acta, 2010, 55, 8051-8055.	2.6	37

#	Article	IF	Citations
55	A Comparative Study on Thermal Stability of Two Solid Electrolyte Interphase (SEI) Films on Graphite Negative Electrode. Journal of the Electrochemical Society, 2013, 160, A1539-A1543.	1.3	37
56	Increase of both solubility and working voltage by acetyl substitution on ferrocene for non-aqueous flow battery. Electrochemistry Communications, 2016, 69, 72-75.	2.3	37
57	Passivating Ability of Surface Film Derived from Vinylene Carbonate on Tin Negative Electrode. Journal of the Electrochemical Society, 2011, 158, A498.	1.3	36
58	Dissolution of cathodeâ€"electrolyte interphase deposited on LiNi0.5Mn1.5O4 for lithium-ion batteries. Journal of Power Sources, 2021, 503, 230051.	4.0	35
59	Thermoâ€electrochemical Activation of an Inâ€"Cu Intermetallic Electrode for the Anode in Lithium Secondary Batteries. Advanced Functional Materials, 2008, 18, 3010-3017.	7.8	31
60	Impedance Analysis for Hydrogen Adsorption Pseudocapacitance and Electrochemically Active Surface Area of Pt Electrode. Langmuir, 2009, 25, 11947-11954.	1.6	31
61	Compositional Change of Surface Film Deposited on LiNi0.5Mn1.5O4Positive Electrode. Journal of the Electrochemical Society, 2014, 161, A519-A523.	1.3	31
62	Polymer-derived carbon nanofiber network supported SnO2 nanocrystals: a superior lithium secondary battery material. Journal of Materials Chemistry, 2011, 21, 19302.	6.7	30
63	Electrochemical activation behaviors studied with graphitic carbon electrodes of different interlayer distance. Electrochimica Acta, 2011, 56, 9931-9936.	2.6	27
64	Unusual Conversion-type Lithiation in LiVO₃ Electrode for Lithium-Ion Batteries. Chemistry of Materials, 2016, 28, 5314-5320.	3.2	27
65	A Firstâ€Cycle Coulombic Efficiency Higher than 100â€‰% Observed for a Li₂MO₃ (M=Mo or Ru) Electrode. Angewandte Chemie - International Edition, 2014, 53, 10654-10657.	7.2	26
66	Thermal Behavior of Solid Electrolyte Interphase Films Deposited on Graphite Electrodes with Different States-of-Charge. Journal of the Electrochemical Society, 2015, 162, A892-A896.	1.3	25
67	Mechanical Damage of Surface Films and Failure of Nano-Sized Silicon Electrodes in Lithium Ion Batteries. Journal of the Electrochemical Society, 2017, 164, A6103-A6109.	1.3	25
68	A comparative study on the solubility and stability of p -phenylenediamine-based organic redox couples for non-aqueous flow batteries. Journal of Power Sources, 2017, 348, 264-269.	4.0	24
69	An azamacrocyclic electrolyte additive to suppress metal deposition in lithium-ion batteries. Electrochemistry Communications, 2015, 58, 25-28.	2.3	23
70	Autonomous Graphene Vessel for Suctioning and Storing Liquid Body of Spilled Oil. Scientific Reports, 2016, 6, 22339.	1.6	23
71	Tris(pentafluorophenyl)silane as an Electrolyte Additive for 5 V LiNi_{0.5}Mn_{1.5}O₄Positive Electrode. Journal of the Electrochemical Society, 2016, 163, A898-A903.	1.3	23
72	Damascene Cu electrodeposition on metal organic chemical vapor deposition-grown Ru thin film barrier. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 2649.	1.6	21

#	Article	IF	Citations
73	Effective passivation of a high-voltage positive electrode by 5-hydroxy-1H-indazole additives. Journal of Materials Chemistry A, 2014, 2, 14628-14633.	5.2	21
74	Passivating film artificially built on LiNi0.5Mn1.5O4 by molecular layer deposition of (pentafluorophenylpropyl)trimethoxysilane. Journal of Power Sources, 2018, 392, 159-167.	4.0	21
75	A Calculation Model to Assess Two Irreversible Capacities Evolved in Silicon Negative Electrodes. Journal of the Electrochemical Society, 2015, 162, A1579-A1584.	1.3	19
76	An EVS (electrochemical voltage spectroscopy) study for the comparison of graphitization behaviors of two petroleum needle cokes. Carbon, 2000, 38, 1261-1269.	5.4	17
77	N-(Î±-ferrocenyl)ethylphthalimide as a single redox couple for non-aqueous flow batteries. Journal of Power Sources, 2019, 421, 1-5.	4.0	17
78	Carbon fabric as a current collector for electroless-plated Cu6Sn5 negative electrode for lithium-ion batteries. Journal of Alloys and Compounds, 2017, 692, 583-588.	2.8	16
79	Solid Permeable Interface (SPI) on a High-Voltage Positive Electrode of Lithium-Ion Batteries. Journal of the Electrochemical Society, 2018, 165, A575-A583.	1.3	16
80	The feasibility of a pyrrolidinium-based ionic liquid solvent for non-graphitic carbon electrodes. Electrochemistry Communications, 2011, 13, 1256-1259.	2.3	14
81	The Investigation of Electrolyte Oxidation and Film Deposition Characteristics at High Potentials in a Carbonate-Based Electrolyte Using Pt Electrode. Journal of the Electrochemical Society, 2018, 165, A1095-A1098.	1.3	14
82	Electrode Performances of Amorphous Molybdenum Oxides of Different Molybdenum Valence for Lithiumâ€ion Batteries. Israel Journal of Chemistry, 2015, 55, 604-610.	1.0	13
83	Ni(II)-chelated thio-crown complex as a single redox couple for non-aqueous flow batteries. Electrochemistry Communications, 2017, 85, 36-39.	2.3	13
84	Effects of Interlayer Distance and van der Waals Energy on Electrochemical Activation of Partially Reduced Graphite Oxide. Electrochimica Acta, 2015, 173, 827-833.	2.6	12
85	Copper Oxide as a Hydrogen Fluoride Scavenger for High-Voltage LiNi0.5Mn1.5O4Positive Electrode. Journal of the Electrochemical Society, 2017, 164, A2677-A2682.	1.3	11
86	Counter anion effects on the energy density of Ni(II)-chelated tetradentate azamacrocyclic complex cation as single redox couple for non-aqueous flow batteries. Electrochimica Acta, 2019, 308, 227-230.	2.6	11
87	Bi-functional effects of lengthening aliphatic chain of phthalimide-based negative redox couple and its non-aqueous flow battery performance at stack cell. APL Materials, 2018, 6, .	2.2	10
88	Concentration Gradient Induced Delithiation Failure of MoO₃ for Li-Ion Batteries. Nano Letters, 2022, 22, 761-767.	4.5	10
89	Composites: An Amorphous Red Phosphorus/Carbon Composite as a Promising Anode Material for Sodium Ion Batteries (Adv. Mater. 22/2013). Advanced Materials, 2013, 25, 3010-3010.	11.1	9
90	Surface Modification of LiCoO₂ by NASICON-Type Ceramic Materials for Lithium Ion Batteries. Journal of Nanoscience and Nanotechnology, 2017, 17, 4977-4982.	0.9	9

#	Article	IF	Citations
91	Relationship between Particle Hardness of <scp>LiNi₁</scp>_/<scp>₃Co₁</scp>_/<scp>₃Mn<sub>1< and its Electrochemical Stability at High Temperature. Bulletin of the Korean Chemical Society, 2016, 37, 1298-1304.	1.0	8
92	Novel siliconâ€“tungsten oxideâ€“carbon composite as advanced negative electrode for lithium-ion batteries. Solid State Ionics, 2018, 314, 41-45.	1.3	8
93	Grafting Nitrophenyl Groups on Carbon Surfaces by Diazonium Chemistry to Suppress Irreversible Reactions in High-Voltage LiNi_{0.5}Mn_{1.5}O₄Positive Electrodes. Journal of the Electrochemical Society, 2018, 165, A1372-A1376.	1.3	8
94	An Azamacrocyclic Ligand-Functionalized Transition-Metal Scavenging Polymer for 5.0 V Class High-Energy Lithium-Ion Batteries. ACS Applied Energy Materials, 2021, 4, 128-133.	2.5	8
95	Potential-dependent Complex Capacitance Analysis for Porous Carbon Electrodes. Journal of the Korean Electrochemical Society, 2003, 6, 255-260.	0.1	8
96	Ultrathin NiO nanoflakes perpendicularly oriented on carbon nanotubes as lithium ion battery anode. Journal of Materials Research, 2013, 28, 2577-2583.	1.2	7
97	Degradation of surface film on LiCoO2 electrode by hydrogen fluoride attack at moderately elevated temperature. Electrochimica Acta, 2018, 277, 59-66.	2.6	6
98	Co-activated Conversion Reaction of MoO2:CoMoO3 as a Negative Electrode Material for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 9814-9819.	4.0	6
99	Amorphous Vanadium Titanates as a Negative Electrode for Lithium-ion Batteries. Journal of Electrochemical Science and Technology, 2016, 7, 306-315.	0.9	5
100	Highly flexible TiO2-coated stainless steel fabric electrode prepared by liquid-phase deposition. Journal of Power Sources, 2016, 330, 204-210.	4.0	4
101	Artificially-built solid electrolyte interphase via surface-bonded vinylene carbonate derivative on graphite by molecular layer deposition. Journal of Power Sources, 2017, 370, 131-137.	4.0	4
102	A comparative study of increased lithium storage with low resistance at structural defects in amorphous titanium dioxide electrode. Electrochimica Acta, 2021, 398, 139358.	2.6	4
103	A comparative study of polarization during the initial lithiation step in tungsten-oxide negative electrodes for lithium-ion batteries. Solid State Ionics, 2017, 311, 1-5.	1.3	3
104	Permeable characteristics of surface film deposited on LiMn2O4 positive electrode revealed by redox-active indicator. Nano Convergence, 2021, 8, 21.	6.3	3
105	Communicationâ€"Aliphatic Chain Substitution for Enhancing Energy Density of <i>p</i>-Benzoquinone Redox Couple for Non-Aqueous Flow Batteries. Journal of the Electrochemical Society, 2020, 167, 020551.	1.3	3
106	Effect of Pre-Cycling Rate on the Passivating Ability of Surface Films on Li4Ti5O12 Electrodes. Journal of Electrochemical Science and Technology, 2017, 8, 15-24.	0.9	3
107	Effect of Radicalâ€“Solvent Interaction on Battery Performance in Benzophenone-Based Charge Storage Systems. Journal of the Electrochemical Society, 2020, 167, 160526.	1.3	3
108	Tris(pentafluorophenyl)silane as a Solid Electrolyte Interphase (SEI)-Forming Agent for Graphite Electrodes. Journal of the Electrochemical Society, 2017, 164, A1887-A1892.	1.3	2

#	Article	IF	Citations
109	Hydrothermally synthesized tin (IV) sulfide as a negative electrode for sodium-ion batteries and its sodiation mechanism. Journal of Electroanalytical Chemistry, 2018, 808, 137-140.	1.9	2
110	Ordered mesoporous tungsten oxideâ€“carbon nanocomposite for use as a highly reversible negative electrode in lithium-ion batteries. Journal of Alloys and Compounds, 2020, 832, 154816.	2.8	2
111	A comparative study of reaction mechanism of MoS2 negative electrode materials for sodium-ion batteries. Journal of Alloys and Compounds, 2021, 876, 160182.	2.8	2
112	Amorphous Vanadium Titanates as a Negative Electrode for Lithium-ion Batteries. Journal of Electrochemical Science and Technology, 2016, 7, 306-315.	0.9	1
113	Surface Film Degradation on LiCoO2 Electrode by Hydrogen Fluoride Attack at Moderately Elevated Temperature and CuO Addition to Mitigate the Degradation. Journal of the Electrochemical Society, 2019, 166, A195-A200.	1.3	0