Seung M Oh

List of Publications by Citations

115 papers	7,473 citations	41 h-index	85 g-index
117 ext. papers	8,082 ext. citations	7.9 avg, IF	5.87 L-index

#	Paper	IF	Citations
115	Dissolution of Spinel Oxides and Capacity Losses in 4 V Li / Li x Mn2 O 4 Cells. *Journal of the Electrochemical Society*, **1996**, 143, 2204-2211	3.9	705
114	An amorphous red phosphorus/carbon composite as a promising anode material for sodium ion batteries. *Advanced Materials*, **2013**, 25, 3045-9	24	685
113	Failure Modes of Silicon Powder Negative Electrode in Lithium Secondary Batteries. *Electrochemical and Solid-State Letters*, **2004**, 7, A306		513
112	High-capacity anode materials for sodium-ion batteries. *Chemistry - A European Journal*, **2014**, 20, 11980-92	5.8	442
111	Sodium terephthalate as an organic anode material for sodium ion batteries. *Advanced Materials*, **2012**, 24, 3562-7	24	382
110	Tin phosphide as a promising anode material for Na-ion batteries. *Advanced Materials*, **2014**, 26, 4139-44	24	316
109	Solution-Processable Glass LiI-Li4 SnS4 Superionic Conductors for All-Solid-State Li-Ion Batteries. *Advanced Materials*, **2016**, 28, 1874-83	24	214
108	Na3 SbS4 : A Solution Processable Sodium Superionic Conductor for All-Solid-State Sodium-Ion Batteries. *Angewandte Chemie - International Edition*, **2016**, 55, 9634-8	16.4	197
107	Solid-State NMR and Electrochemical Dilatometry Study on Li[sup +] Uptake/Extraction Mechanism in SiO Electrode. *Journal of the Electrochemical Society*, **2007**, 154, A1112	3.9	162
106	Improvement of silicon powder negative electrodes by copper electroless deposition for lithium secondary batteries. *Journal of Power Sources*, **2005**, 147, 227-233	8.9	146
105	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	8.9	144
104	Failure mechanisms of LiNi0.5Mn1.5O4 electrode at elevated temperature. *Journal of Power Sources*, **2012**, 215, 312-316	8.9	137
103	Reversible Lithium Storage with High Mobility at Structural Defects in Amorphous Molybdenum Dioxide Electrode. *Advanced Functional Materials*, **2012**, 22, 3658-3664	15.6	134
102	Thermoelectrochemically Activated MoO[sub 2] Powder Electrode for Lithium Secondary Batteries. *Journal of the Electrochemical Society*, **2009**, 156, A688	3.9	134
101	Na4-M2+(P2O7)2 (2/3 7/8, M = Fe, Fe0.5Mn0.5, Mn): A Promising Sodium Ion Cathode for Na-ion Batteries. *Advanced Energy Materials*, **2013**, 3, 770-776	21.8	128
100	Reversible Lithium Storage at Highly Populated Vacant Sites in an Amorphous Vanadium Pentoxide Electrode. *Chemistry of Materials*, **2014**, 26, 5874-5881	9.6	119
99	Impedance analysis of porous carbon electrodes to predict rate capability of electric double-layer capacitors. *Journal of Power Sources*, **2014**, 267, 411-420	8.9	118

98	Si-Encapsulating Hollow Carbon Electrodes via Electroless Etching for Lithium-Ion Batteries. *Advanced Energy Materials*, **2013**, 3, 206-212	21.8	102
97	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
96	Complex capacitance analysis on rate capability of electric-double layer capacitor (EDLC) electrodes of different thickness. *Electrochimica Acta*, **2005**, 50, 2255-2262	6.7	98
95	Effect of carbon additive on electrochemical performance of LiCoO2 composite cathodes. *Journal of Power Sources*, **2002**, 111, 90-96	8.9	95
94	Carbon nanotubes (CNTs) as a buffer layer in silicon/CNTs composite electrodes for lithium secondary batteries. *Journal of Power Sources*, **2006**, 162, 1275-1281	8.9	94
93	Two-Dimensional Phosphorene-Derived Protective Layers on a Lithium Metal Anode for Lithium-Oxygen Batteries. *ACS Nano*, **2018**, 12, 4419-4430	16.7	92
92	Si□carbon core□shell composite anode in lithium secondary batteries. *Electrochimica Acta*, **2007**, 52, 7061-7067	6.7	86
91	The role of in situ generated nano-sized metal particles on the coulombic efficiency of MGeO3 (M = Cu, Fe, and Co) electrodes. *Electrochimica Acta*, **2009**, 54, 4371-4377	6.7	85
90	Complex Capacitance Analysis of Porous Carbon Electrodes for Electric Double-Layer Capacitors. *Journal of the Electrochemical Society*, **2004**, 151, A571	3.9	84
89	Fading mechanisms of carbon-coated and disproportionated Si/SiOx negative electrode (Si/SiOx/C) in Li-ion secondary batteries: Dynamics and component analysis by TEM. *Electrochimica Acta*, **2012**, 85, 369-376	6.7	80
88	Re-Deposition of Manganese Species on Spinel LiMn2O4Electrode after Mn Dissolution. *Journal of the Electrochemical Society*, **2012**, 159, A193-A197	3.9	78
87	Complex Capacitance Analysis on Leakage Current Appearing in Electric Double-layer Capacitor Carbon Electrode. *Journal of the Electrochemical Society*, **2005**, 152, A1418	3.9	74
86	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	3.9	72
85	Poly(phenanthrenequinone) as a conductive binder for nano-sized silicon negative electrodes. *Energy and Environmental Science*, **2015**, 8, 1538-1543	35.4	61
84	Surface Film Formation on LiNi0.5Mn1.5O4 Electrode in an Ionic Liquid Solvent at Elevated Temperature. *Journal of the Electrochemical Society*, **2011**, 158, A453	3.9	59
83	Li+ storage sites in non-graphitizable carbons prepared from methylnaphthalene-derived isotropic pitches. *Carbon*, **2000**, 38, 995-1001	10.4	59
82	Na3SbS4: A Solution Processable Sodium Superionic Conductor for All-Solid-State Sodium-Ion Batteries. *Angewandte Chemie*, **2016**, 128, 9786-9790	3.6	53
81	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	8.9	51

80	Electrochemical Activation of Expanded Graphite Electrode for Electrochemical Capacitor. *Journal of the Electrochemical Society*, **2008**, 155, A685	3.9	51
79	New dry carbon nanotube coating of over-lithiated layered oxide cathode for lithium ion batteries. *Journal of Materials Chemistry A*, **2014**, 2, 19670-19677	13	48
78	Electrochemical Dilatometry Study on Si-Embedded Carbon Nanotube Powder Electrodes. *Electrochemical and Solid-State Letters*, **2007**, 10, A142		45
77	Mechanism of Co3O4/graphene catalytic activity in Li-O2 batteries using carbonate based electrolytes. *Electrochimica Acta*, **2013**, 90, 63-70	6.7	44
76	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	13	44
75	A photo-cross-linkable polymeric binder for silicon anodes in lithium ion batteries. *RSC Advances*, **2013**, 3, 12625	3.7	43
74	A Bifunctional Electrolyte Additive for High-Voltage LiNiMnO Positive Electrodes. *ACS Applied Materials & Interfaces*, **2019**, 11, 11306-11316	9.5	38
73	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	3.9	38
72	Site-Selective In Situ Electrochemical Doping for Mn-Rich Layered Oxide Cathode Materials in Lithium-Ion Batteries. *Advanced Energy Materials*, **2018**, 8, 1702514	21.8	37
71	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	2.6	37
70	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	3.9	37
69	Allylic ionic liquid electrolyte-assisted electrochemical surface passivation of LiCoO2 for advanced, safe lithium-ion batteries. *Scientific Reports*, **2014**, 4, 5802	4.9	36
68	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	6.7	34
67	1,3,5-Trihydroxybenzene as a film-forming additive for high-voltage positive electrode. *Electrochemistry Communications*, **2013**, 27, 26-28	5.1	34
66	Pyrrolinium-based Ionic Liquid as a Flame Retardant for Binary Electrolytes of Lithium Ion Batteries. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 497-505	8.3	33
65	A tetradentate Ni(II) complex cation as a single redox couple for non-aqueous flow batteries. *Journal of Power Sources*, **2015**, 283, 300-304	8.9	33
64	Passivating Ability of Surface Film Derived from Vinylene Carbonate on Tin Negative Electrode. *Journal of the Electrochemical Society*, **2011**, 158, A498	3.9	33
63	Performance of electrochemically generated Li21Si5 phase for lithium-ion batteries. *Electrochimica Acta*, **2010**, 55, 8051-8055	6.7	32

62	Increase of both solubility and working voltage by acetyl substitution on ferrocene for non-aqueous flow battery. *Electrochemistry Communications*, **2016**, 69, 72-75	5.1	30
61	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	3.9	30
60	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	8.9	29
59	Polymer-derived carbon nanofiber network supported SnO2 nanocrystals: a superior lithium secondary battery material. *Journal of Materials Chemistry*, **2011**, 21, 19302		28
58	Compositional Change of Surface Film Deposited on LiNi0.5Mn1.5O4Positive Electrode. *Journal of the Electrochemical Society*, **2014**, 161, A519-A523	3.9	27
57	Thermal Degradation of Solid Electrolyte Interphase (SEI) Layers by Phosphorus Pentafluoride (PF5) Attack. *Journal of the Electrochemical Society*, **2017**, 164, A2418-A2425	3.9	27
56	Impedance analysis for hydrogen adsorption pseudocapacitance and electrochemically active surface area of Pt electrode. *Langmuir*, **2009**, 25, 11947-54	4	27
55	Thermo-electrochemical Activation of an In□Cu Intermetallic Electrode for the Anode in Lithium Secondary Batteries. *Advanced Functional Materials*, **2008**, 18, 3010-3017	15.6	26
54	Electrochemical activation behaviors studied with graphitic carbon electrodes of different interlayer distance. *Electrochimica Acta*, **2011**, 56, 9931-9936	6.7	22
53	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	8.9	20
52	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	3.9	20
51	Tris(pentafluorophenyl)silane as an Electrolyte Additive for 5 V LiNi0.5Mn1.5O4Positive Electrode. *Journal of the Electrochemical Society*, **2016**, 163, A898-A903	3.9	20
50	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		20
49	Effective passivation of a high-voltage positive electrode by 5-hydroxy-1H-indazole additives. *Journal of Materials Chemistry A*, **2014**, 2, 14628-14633	13	18
48	Unusual Conversion-type Lithiation in LiVO3 Electrode for Lithium-Ion Batteries. *Chemistry of Materials*, **2016**, 28, 5314-5320	9.6	18
47	A first-cycle coulombic efficiency higher than 100% observed for a Li2MO3 (M = Mo or Ru) electrode. *Angewandte Chemie - International Edition*, **2014**, 53, 10654-7	16.4	17
46	Autonomous Graphene Vessel for Suctioning and Storing Liquid Body of Spilled Oil. *Scientific Reports*, **2016**, 6, 22339	4.9	16
45	Passivating film artificially built on LiNi0.5Mn1.5O4 by molecular layer deposition of (pentafluorophenylpropyl)trimethoxysilane. *Journal of Power Sources*, **2018**, 392, 159-167	8.9	16

44	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	3.9	16
43	An azamacrocyclic electrolyte additive to suppress metal deposition in lithium-ion batteries. *Electrochemistry Communications*, **2015**, 58, 25-28	5.1	15
42	An EVS (electrochemical voltage spectroscopy) study for the comparison of graphitization behaviors of two petroleum needle cokes. *Carbon*, **2000**, 38, 1261-1269	10.4	15
41	N-(□ferrocenyl)ethylphthalimide as a single redox couple for non-aqueous flow batteries. *Journal of Power Sources*, **2019**, 421, 1-5	8.9	14
40	A Calculation Model to Assess Two Irreversible Capacities Evolved in Silicon Negative Electrodes. *Journal of the Electrochemical Society*, **2015**, 162, A1579-A1584	3.9	13
39	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	5.7	13
38	Electrode Performances of Amorphous Molybdenum Oxides of Different Molybdenum Valence for Lithium-ion Batteries. *Israel Journal of Chemistry*, **2015**, 55, 604-610	3.4	12
37	Solid Permeable Interface (SPI) on a High-Voltage Positive Electrode of Lithium-Ion Batteries. *Journal of the Electrochemical Society*, **2018**, 165, A575-A583	3.9	12
36	The feasibility of a pyrrolidinium-based ionic liquid solvent for non-graphitic carbon electrodes. *Electrochemistry Communications*, **2011**, 13, 1256-1259	5.1	12
35	Ni(II)-chelated thio-crown complex as a single redox couple for non-aqueous flow batteries. *Electrochemistry Communications*, **2017**, 85, 36-39	5.1	11
34	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, A1093-A1098	3.9	11
33	Dissolution of cathode□electrolyte interphase deposited on LiNi0.5Mn1.5O4 for lithium-ion batteries. *Journal of Power Sources*, **2021**, 503, 230051	8.9	10
32	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, 047901	5.7	8
31	Copper Oxide as a Hydrogen Fluoride Scavenger for High-Voltage LiNi0.5Mn1.5O4Positive Electrode. *Journal of the Electrochemical Society*, **2017**, 164, A2677-A2682	3.9	8
30	Effects of Interlayer Distance and van der Waals Energy on Electrochemical Activation of Partially Reduced Graphite Oxide. *Electrochimica Acta*, **2015**, 173, 827-833	6.7	8
29	Surface Modification of LiCoO2 by NASICON-Type Ceramic Materials for Lithium Ion Batteries. *Journal of Nanoscience and Nanotechnology*, **2017**, 17, 4977-4982	1.3	7
28	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	6.7	7
27	Grafting Nitrophenyl Groups on Carbon Surfaces by Diazonium Chemistry to Suppress Irreversible Reactions in High-Voltage LiNi0.5Mn1.5O4Positive Electrodes. *Journal of the Electrochemical Society*, **2018**, 165, A1372-A1376	3.9	7

26	Potential-dependent Complex Capacitance Analysis for Porous Carbon Electrodes. *Journal of the Korean Electrochemical Society*, **2003**, 6, 255-260		7
25	Ultrathin NiO nanoflakes perpendicularly oriented on carbon nanotubes as lithium ion battery anode. *Journal of Materials Research*, **2013**, 28, 2577-2583	2.5	6
24	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	24	6
23	Relationship between Particle Hardness of LiNi1/3Co1/3Mn1/3O2 and its Electrochemical Stability at High Temperature. *Bulletin of the Korean Chemical Society*, **2016**, 37, 1298-1304	1.2	6
22	Degradation of surface film on LiCoO2 electrode by hydrogen fluoride attack at moderately elevated temperature. *Electrochimica Acta*, **2018**, 277, 59-66	6.7	4
21	Highly flexible TiO2-coated stainless steel fabric electrode prepared by liquid-phase deposition. *Journal of Power Sources*, **2016**, 330, 204-210	8.9	4
20	Novel silicon–tungsten oxide–carbon composite as advanced negative electrode for lithium-ion batteries. *Solid State Ionics*, **2018**, 314, 41-45	3.3	4
19	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	6.1	4
18	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	8.9	3
17	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	3.3	3
16	Amorphous Vanadium Titanates as a Negative Electrode for Lithium-ion Batteries. *Journal of Electrochemical Science and Technology*, **2016**, 7, 306-315	3.2	3
15	Tris(pentafluorophenyl)silane as a Solid Electrolyte Interphase (SEI)-Forming Agent for Graphite Electrodes. *Journal of the Electrochemical Society*, **2017**, 164, A1887-A1892	3.9	2
14	Communication—Aliphatic Chain Substitution for Enhancing Energy Density of p-Benzoquinone Redox Couple for Non-Aqueous Flow Batteries. *Journal of the Electrochemical Society*, **2020**, 167, 020551	3.9	2
13	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	3.2	2
12	Co-activated Conversion Reaction of MoO:CoMoO as a Negative Electrode Material for Lithium-Ion Batteries. *ACS Applied Materials & Interfaces*, **2021**, 13, 9814-9819	9.5	2
11	Ordered mesoporous tungsten oxide–carbon nanocomposite for use as a highly reversible negative electrode in lithium-ion batteries. *Journal of Alloys and Compounds*, **2020**, 832, 154816	5.7	1
10	A First-Cycle Coulombic Efficiency Higher than 100 % Observed for a Li2MO3 (M=Mo or Ru) Electrode. *Angewandte Chemie*, **2014**, 126, 10830-10833	3.6	1
9	Amorphous Vanadium Titanates as a Negative Electrode for Lithium-ion Batteries. *Journal of Electrochemical Science and Technology*, **2016**, 7, 306-315	3.2	1

8	A comparative study of increased lithium storage with low resistance at structural defects in amorphous titanium dioxide electrode. *Electrochimica Acta*, **2021**, 398, 139358	6.7	1
7	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	4.1	1
6	Advanced Batteries for Electric Vehicles and Energy Storage Systems579-596		1
5	Concentration Gradient Induced Delithiation Failure of MoO for Li-Ion Batteries.. *Nano Letters*, **2022**, 22, 761-767	11.5	0
4	Effect of RadicalSolvent Interaction on Battery Performance in Benzophenone-Based Charge Storage Systems. *Journal of the Electrochemical Society*, **2020**, 167, 160526	3.9	0
3	Permeable characteristics of surface film deposited on LiMnO positive electrode revealed by redox-active indicator. *Nano Convergence*, **2021**, 8, 21	9.2	
2	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	3.9	
1	A comparative study of reaction mechanism of MoS2 negative electrode materials for sodium-ion batteries. *Journal of Alloys and Compounds*, **2021**, 876, 160182	5.7	