Denis Y W Yu

List of Publications by Year
in descending order

117 papers	6,644 citations	87723 38 h-index	66788 78 g-index
122 all docs	122 docs citations	122 times ranked	8942 citing authors

#	Article	IF	Citations
1	Poly(Ionic Liquid) as an Anion Exchange Membrane for a 3.3â€‰V <scp>Copperâ€"Lithium</scp> Battery. Energy and Environmental Materials, 2023, 6, .	7.3	6
2	Boosting capacity and operating voltage of LiVO3 as cathode for lithium-ion batteries by activating oxygen reaction in the lattice. Journal of Power Sources, 2022, 517, 230728.	4.0	7
3	Passivating oxygen atoms in SiO through pre-treatment with Na2CO3 to increase its first cycle efficiency for lithium-ion batteries. Electrochimica Acta, 2022, 404, 139777.	2.6	4
4	An Allâ€Fluorinated Electrolyte Toward High Voltage and Long Cycle Performance Dualâ€Ion Batteries. Advanced Energy Materials, 2022, 12, .	10.2	27
5	Facile electrode additive stabilizes structure of electrolytic MnO2 for mild aqueous rechargeable zinc-ion battery. Journal of Power Sources, 2022, 528, 231194.	4.0	13
6	An Allâ€Fluorinated Electrolyte Toward High Voltage and Long Cycle Performance Dualâ€Ion Batteries (Adv. Energy Mater. 19/2022). Advanced Energy Materials, 2022, 12, .	10.2	2
7	Vanadium hexacyanoferrate with two redox active sites as cathode material for aqueous Zn-ion batteries. Journal of Power Sources, 2021, 484, 229263.	4.0	39
8	Redox flow desalination based on the temperature difference as a driving force. Chemical Engineering Journal, 2021, 416, 127716.	6.6	17
9	Facile synthesis of hollow Cu3P for sodium-ion batteries anode. Rare Metals, 2021, 40, 3460-3465.	3.6	26
10	MOF-Derived CoS₂/N-Doped Carbon Composite to Induce Short-Chain Sulfur Molecule Generation for Enhanced Sodiumâ€"Sulfur Battery Performance. ACS Applied Materials & Interfaces, 2021, 13, 18010-18020.	4.0	48
11	Ultrafast Charging and Stable Cycling Dualâ€Ion Batteries Enabled via an Artificial Cathodeâ€"Electrolyte Interface. Advanced Functional Materials, 2021, 31, 2102360.	7.8	42
12	Generating Shortâ€Chain Sulfur Suitable for Efficient Sodiumâ€"Sulfur Batteries via Atomic Copper Sites on a N,Oâ€Codoped Carbon Composite. Advanced Energy Materials, 2021, 11, 2100989.	10.2	55
13	Crumpled, high-power, and safe wearable Lithium-Ion Battery enabled by nanostructured metallic textiles. Fundamental Research, 2021, 1, 399-407.	1.6	15
14	Defect-Rich Amorphous Iron-Based Oxide/Graphene Hybrid-Modified Separator toward the Efficient Capture and Catalysis of Polysulfides. ACS Applied Materials & Interfaces, 2021, 13, 41698-41706.	4.0	17
15	Dilute Aqueousâ€Aprotic Hybrid Electrolyte Enabling a Wide Electrochemical Window through Solvation Structure Engineering. Advanced Materials, 2021, 33, e2102390.	11.1	28
16	Achieving reversible Cuâ€"Al batteries by reducing self-discharge and side reactions. Electrochimica Acta, 2021, 388, 138595.	2.6	7
17	Mechanically and structurally stable Sb2Se3/carbon nanocomposite as anode for the lithium-ion batteries. Journal of Alloys and Compounds, 2021, 874, 159859.	2.8	12
18	Chelating Polymer-Coated Separators with a BaTiO₃ Filler To Improve Reversibility and Round-Trip Efficiency of a 3.3 V Copperâ€"Lithium Battery. ACS Applied Materials & Interfaces, 2021, 13, 47449-47457.	4.0	8

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19	Fluorinated Carbonate Electrolyte with Superior Oxidative Stability Enables Longâ€Term Cycle Stability of Na_{2/3}Ni_{1/3}Mn_{2/3}O₂ Cathodes in Sodiumâ€Ion Batteries. Advanced Energy Materials, 2021, 11, 2002737.	10.2	37
20	Improving Thermal Stability of Si-Based Anodes for Lithium-Ion Batteries by Controlling Bulk and Surface Layer Compositions. Journal of the Electrochemical Society, 2021, 168, 100527.	1.3	7
21	High-Performance NaVO₃ with Mixed Cationic and Anionic Redox Reactions for Na-Ion Battery Applications. Chemistry of Materials, 2020, 32, 8836-8844.	3.2	14
22	Hierarchical CoS₂/N-Doped Carbon@MoS₂ Nanosheets with Enhanced Sodium Storage Performance. ACS Applied Materials & Interfaces, 2020, 12, 54644-54652.	4.0	53
23	Low energy consumption flow capacitive deionization with a combination of redox couples and carbon slurry. Carbon, 2020, 170, 487-492.	5.4	39
24	Engineering Solvation Complexâ€"Membrane Interaction to Suppress Cation Crossover in 3 V Cuâ€Al Battery. Small, 2020, 16, 2003438.	5.2	11
25	SOH Estimation and SOC Recalibration of Lithium-Ion Battery with Incremental Capacity Analysis & Cubic Smoothing Spline. Journal of the Electrochemical Society, 2020, 167, 090537.	1.3	35
26	Covalent Encapsulation of Sulfur in a MOFâ€Derived S, Nâ€Doped Porous Carbon Host Realized via the Vaporâ€Infiltration Method Results in Enhanced Sodiumâ€"Sulfur Battery Performance. Advanced Energy Materials, 2020, 10, 2000931.	10.2	118
27	Slime-inspired polyacrylic acid-borax crosslinked binder for high-capacity bulk silicon anodes in lithium-ion batteries. Journal of Power Sources, 2020, 468, 228365.	4.0	33
28	Novel structurally-stable Na-rich Na₄V₂O₇ cathode material with high reversible capacity by utilization of anion redox activity. Chemical Communications, 2020, 56, 8245-8248.	2.2	8
29	Engineering cathode-electrolyte interface of graphite to enable ultra long-cycle and high-power dual-ion batteries. Journal of Power Sources, 2020, 471, 228466.	4.0	55
30	Metalâ€"Organic Framework Derived CoS₂ Wrapped with Nitrogen-Doped Carbon for Enhanced Lithium/Sodium Storage Performance. ACS Applied Materials & Interfaces, 2020, 12, 12809-12820.	4.0	82
31	Highly stable lithium-ion battery anode with polyimide coating anchored onto micron-size silicon monoxide via self-assembled monolayer. Journal of Power Sources, 2020, 453, 227874.	4.0	27
32	Lithiophilicity conversion of carbon paper with uniform Cu2+1O coating: Boosting stable Li-Cu2+1O-CP composite anode through melting infusion. Chemical Engineering Journal, 2020, 388, 124238.	6.6	5
33	In Situ Studies of Li/Cuâ€Doped Layered P2 Na<i>_x</i>MnO₂ Electrodes for Sodiumâ€Ion Batteries. Small Methods, 2019, 3, 1800092.	4.6	12
34	Demonstrating a Metalâ€Metal Battery System in Aprotic Electrolyte with Silver and Lithium. ChemElectroChem, 2019, 6, 3627-3632.	1.7	0
35	3 V Cuâ€"Al Rechargeable Battery Enabled by Highly Concentrated Aprotic Electrolyte. ACS Applied Energy Materials, 2019, 2, 4936-4942.	2.5	15
36	Joint Theoretical and Experimental Study on the Effects of the Salts in the Graphite-Based Dual-Ion Batteries. Journal of Physical Chemistry C, 2019, 123, 18132-18141.	1.5	9

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37	An Aqueous Rechargeable Fluoride Ion Battery with Dual Fluoride Electrodes. Journal of the Electrochemical Society, 2019, 166, A2419-A2424.	1.3	19
38	Unlocking the True Capability of Graphite-Based Dual-Ion Batteries with Ethyl Methyl Carbonate Electrolyte. ACS Applied Energy Materials, 2019, 2, 7512-7517.	2.5	26
39	Direct conversion of metal-organic frameworks into selenium/selenide/carbon composites with high sodium storage capacity. Nano Energy, 2019, 58, 392-398.	8.2	70
40	Polypyrrole and Carbon Nanotube Coâ€Composited Titania Anodes with Enhanced Sodium Storage Performance in Etherâ€Based Electrolyte. Advanced Sustainable Systems, 2019, 3, 1800154.	2.7	5
41	Continuous desalination with a metal-free redox-mediator. Journal of Materials Chemistry A, 2019, 7, 13941-13947.	5.2	38
42	Confined annealing-induced transformation of tin oxide into sulfide for sodium storage applications. Journal of Materials Chemistry A, 2019, 7, 11877-11885.	5.2	18
43	Reversible Interaction of Sb with an Active Se Matrix Enhances the Cycle Stability of Electrodes for Lithium-Ion Batteries. Chemistry of Materials, 2019, 31, 2469-2475.	3.2	23
44	Polyimide capping layer on improving electrochemical stability of silicon thin-film for Li-ion batteries. Materials Today Energy, 2019, 12, 297-302.	2.5	20
45	Probing the Reversibility of Silicon Monoxide Electrodes for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2019, 166, A5210-A5214.	1.3	24
46	Stainless steel as low-cost high-voltage cathode via stripping/deposition in metal-lithium battery. Electrochimica Acta, 2019, 298, 186-193.	2.6	15
47	Na₂SeO₃: A Na-Ion Battery Positive Electrode Material with High Capacity. Journal of the Electrochemical Society, 2019, 166, A5075-A5080.	1.3	14
48	Electrolyte Effects on the Intercalation of PF6 - into Graphite Positive Electrode for Dual-Ion Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
49	Quantifying Reaction Products of Silicon Monoxide Electrodes during Initial Cycle in Lithium-Ion Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
50	Onion-like Synergetic Multilayer Coating for High-Stability Silicon Monoxide Anode in Lithium-Ion Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
51	2.5 V Battery with Stripping/Plating of Stainless Steel. ECS Meeting Abstracts, 2019, , .	0.0	0
52	Carbonâ€Supported Nickel Selenide Hollow Nanowires as Advanced Anode Materials for Sodiumâ€Ion Batteries. Small, 2018, 14, 1702669.	5.2	87
53	Damage development of sintered SiC ceramics with the depth variation in Ar ion-irradiation at 600â€¯â„ƒ. Journal of the European Ceramic Society, 2018, 38, 2289-2296.	2.8	19
54	Designing high-power graphite-based dual-ion batteries. Electrochimica Acta, 2018, 263, 34-39.	2.6	38

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55	Vacuum Calcination Induced Conversion of Selenium/Carbon Wires to Tubes for Highâ€Performance Sodiumâ€“Selenium Batteries. Advanced Functional Materials, 2018, 28, 1706609.	7.8	69
56	Leveraging Titanium to Enable Silicon Anodes in Lithiumâ€Ion Batteries. Small, 2018, 14, e1802051.	5.2	37
57	Robust Micron-Sized Silicon Secondary Particles Anchored by Polyimide as High-Capacity, High-Stability Li-Ion Battery Anode. ACS Applied Materials & Interfaces, 2018, 10, 34132-34139.	4.0	23
58	Polyimide-cellulose interaction in Sb anode enables fast charging lithium-ion battery application. Materials Today Energy, 2018, 9, 295-302.	2.5	18
59	Vapor-Infiltration Approach toward Selenium/Reduced Graphene Oxide Composites Enabling Stable and High-Capacity Sodium Storage. ACS Nano, 2018, 12, 7397-7405.	7.3	60
60	Stabilizing Na0.7MnO2 cathode for Na-ion battery via a single-step surface coating and doping process. Journal of Power Sources, 2018, 391, 106-112.	4.0	37
61	Activating abnormal capacity in stoichiometric NaVO3 as cathode material for sodium-ion battery. Journal of Power Sources, 2018, 400, 377-382.	4.0	24
62	Phaseâ€Pure P2â€Na_{0.7(1âˆ’<i>x</i>)}[Li_{<i>x</i>}Mn_{1âˆ’<i>x</i>}]O_{Î´} as a Cathode Material for Naâ€Ion Batteries. ChemElectroChem, 2017, 4, 1287-1294.	1.7	8
63	GeO₂ Thin Film Deposition on Graphene Oxide by the Hydrogen Peroxide Route: Evaluation for Lithium-Ion Battery Anode. ACS Applied Materials & Interfaces, 2017, 9, 9152-9160.	4.0	46
64	Conversion of 1T-MoSe₂to 2H-MoS_{2x}Se_{2âˆ’2x}mesoporous nanospheres for superior sodium storage performance. Nanoscale, 2017, 9, 1484-1490.	2.8	104
65	Mesoporous C-coated SnO_xnanosheets on copper foil as flexible and binder-free anodes for superior sodium-ion batteries. Journal of Materials Chemistry A, 2017, 5, 2243-2250.	5.2	33
66	Insights from Studying the Origins of Reversible and Irreversible Capacities on Silicon Electrodes. Journal of the Electrochemical Society, 2017, 164, A6206-A6212.	1.3	17
67	Crack-resistant polyimide coating for high-capacity battery anodes. Journal of Power Sources, 2017, 366, 226-232.	4.0	14
68	Water-enabled crystallization of mesoporous SnO₂ as a binder-free electrode for enhanced sodium storage. Journal of Materials Chemistry A, 2017, 5, 23967-23975.	5.2	30
69	Improving the cycling stability of Sn 4 P 3 anode for sodium-ion battery. Journal of Power Sources, 2017, 364, 420-425.	4.0	68
70	Quantifying Contributions to Reversible and Irreversible Capacities of Silicon Electrodes. ECS Meeting Abstracts, 2017, , .	0.0	0
71	High-Voltage High-Power Battery Cathode Based on PF6 - Intercalation into Graphite. ECS Meeting Abstracts, 2017, , .	0.0	0
72	P2-Type Na_{<i>x</i>}Cu_{0.15}Ni_{0.20}Mn_{0.65}O₂ Cathodes with High Voltage for High-Power and Long-Life Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 31661-31668.	4.0	77

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73	Anodic nanoporous SnO2 grown on Cu foils as superior binder-free Na-ion battery anodes. Journal of Power Sources, 2016, 307, 634-640.	4.0	64
74	Low-temperature direct synthesis of layered m-LiMnO2 for lithium-ion battery applications. Journal of Alloys and Compounds, 2016, 659, 248-254.	2.8	15
75	Hierarchical nanotubes assembled from MoS 2 -carbon monolayer sandwiched superstructure nanosheets for high-performance sodium ion batteries. Nano Energy, 2016, 22, 27-37.	8.2	333
76	Enhancing Cycling Stability of Tin Dioxide Anode for Lithium-Ion Batteries with a Conductive-Stretchable Polyimide Matrix. ECS Meeting Abstracts, 2016, , .	0.0	0
77	Insights from Studying the Origins of Reversible and Irreversible Capacities on Silicon Electrodes. ECS Meeting Abstracts, 2016, , .	0.0	0
78	Copper Substituted P2-Type Na0.67CuxMn1-XO2: A Stable High-Power Sodium-Ion Battery Cathode. ECS Meeting Abstracts, 2016, , .	0.0	0
79	Effect of Particle Size on the Stability of Dense Si Electrodes. ECS Meeting Abstracts, 2016, , .	0.0	0
80	Enhanced Stability of P2-Na2/3MnO2 through Li Addition. ECS Meeting Abstracts, 2016, , .	0.0	0
81	In Situ Carbon-Doped Mo(Se_{0.85}S_{0.15})₂Hierarchical Nanotubes as Stable Anodes for High-Performance Sodium-Ion Batteries. Small, 2015, 11, 5667-5674.	5.2	101
82	Suppressing Vertical Displacement of Lithiated Silicon Particles in High Volumetric Capacity Battery Electrodes. ChemElectroChem, 2015, 2, 1090-1095.	1.7	36
83	Pyrite FeS₂ microspheres wrapped by reduced graphene oxide as high-performance lithium-ion battery anodes. Journal of Materials Chemistry A, 2015, 3, 7945-7949.	5.2	134
84	Antimony and antimony oxide@graphene oxide obtained by the peroxide route as anodes for lithium-ion batteries. Main Group Metal Chemistry, 2015, 38, .	0.6	15
85	Nanostructured porous manganese carbonate spheres with capacitive effects on the high lithium storage capability. Nanoscale, 2015, 7, 10146-10151.	2.8	55
86	Sodium storage capability of spinel Li4Mn5O12. Electrochimica Acta, 2015, 185, 76-82.	2.6	10
87	History Effects in Lithiumâ€“Oxygen Batteries: How Initial Seeding Influences the Discharge Capacity. ChemSusChem, 2014, 7, 1283-1288.	3.6	19
88	Thermal stability of lithium-rich manganese-based cathode. Solid State Ionics, 2014, 268, 242-246.	1.3	22
89	Iron(<scp>iii</scp>) sulfate: a stable, cost effective electrode material for sodium ion batteries. Chemical Communications, 2014, 50, 2249-2251.	2.2	34
90	Impact of active material surface area on thermal stability of LiCoO2 cathode. Journal of Power Sources, 2014, 257, 286-292.	4.0	64

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91	Activating Vanadiumâ€™s Highest Oxidation State in the NASICON Structure. ECS Transactions, 2014, 58, 41-46.	0.3	6
92	A novel ionic liquid for Li ion batteries â€“ uniting the advantages of guanidinium and piperidinium cations. RSC Advances, 2014, 4, 1996-2003.	1.7	18
93	Nanocrystalline tin disulfide coating of reduced graphene oxide produced by the peroxostannate deposition route for sodium ion battery anodes. Journal of Materials Chemistry A, 2014, 2, 8431.	5.2	114
94	Enhanced cycling stability of o-LiMnO2 cathode modified by lithium boron oxide coating for lithium-ion batteries. Journal of Solid State Electrochemistry, 2014, 18, 1915-1922.	1.2	9
95	Electrochemical characterization of novel layered Cu2MS4 materials for Li-ion batteries (M=Mo). Electrochimica Acta, 2014, 115, 337-343.	2.6	29
96	Co3O4/nitrogen modified graphene electrode as Li-ion battery anode with high reversible capacity and improved initial cycle performance. Nano Energy, 2014, 3, 134-143.	8.2	72
97	Bulk antimony sulfide with excellent cycle stability as next-generation anode for lithium-ion batteries. Scientific Reports, 2014, 4, 4562.	1.6	235
98	Synthesis of Cobalt Phosphides and Their Application as Anodes for Lithium Ion Batteries. ACS Applied Materials & Interfaces, 2013, 5, 1093-1099.	4.0	178
99	High-capacity antimony sulphide nanoparticle-decorated graphene composite as anode for sodium-ion batteries. Nature Communications, 2013, 4, 2922.	5.8	471
100	Cu doped V2O5 flowers as cathode material for high-performance lithium ion batteries. Nanoscale, 2013, 5, 4937.	2.8	161
101	Controlled synthesis of hierarchical graphene-wrapped TiO₂@Co₃O₄coaxial nanobelt arrays for high-performance lithium storage. Journal of Materials Chemistry A, 2013, 1, 273-281.	5.2	135
102	Thermodynamic study of lithium-ion battery materials. Materials Research Society Symposia Proceedings, 2012, 1388, 1.	0.1	2
103	Conversion of Hydroperoxoantimonate Coated Graphenes to Sb₂S₃@Graphene for a Superior Lithium Battery Anode. Chemistry of Materials, 2012, 24, 4750-4757.	3.2	142
104	Self-assembly of well-ordered whisker-like manganese oxide arrays on carbon fiber paper and its application as electrode material for supercapacitors. Journal of Materials Chemistry, 2012, 22, 8634.	6.7	249
105	Controlled growth of SnO2@Fe2O3 double-sided nanocombs as anodes for lithium-ion batteries. Nanoscale, 2012, 4, 4459.	2.8	60
106	Seed-assisted synthesis of highly ordered TiO2@Î±-Fe2O3 core/shell arrays on carbon textiles for lithium-ion battery applications. Energy and Environmental Science, 2012, 5, 6559.	15.6	421
107	Oneâ€Step Solvothermal Synthesis of Singleâ€Crystalline TiOF₂ Nanotubes with High Lithiumâ€Ion Battery Performance. Chemistry - A European Journal, 2012, 18, 4026-4030.	1.7	31
108	Structural Analysis of Li2MnO3 and Related Li-Mn-O Materials. Journal of the Electrochemical Society, 2011, 158, A1015.	1.3	152

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109	Surface Modification of Li-Excess Mn-based Cathode Materials. Journal of the Electrochemical Society, 2010, 157, A1177.	1.3	108
110	Electrochemical Activities in Li[sub 2]MnO[sub 3]. Journal of the Electrochemical Society, 2009, 156, A417.	1.3	362
111	Impurities in LiFePO[sub 4] and Their Influence on Material Characteristics. Journal of the Electrochemical Society, 2008, 155, A526.	1.3	68
112	Study of LiFePO[sub 4] by Cyclic Voltammetry. Journal of the Electrochemical Society, 2007, 154, A253.	1.3	297
113	Effect of Electrode Parameters on LiFePO[sub 4] Cathodes. Journal of the Electrochemical Society, 2006, 153, A835.	1.3	109
114	A comparison of the strength of multilayers, thin films and nanocrystalline compacts. Scripta Materialia, 2004, 50, 729-732.	2.6	26
115	The yield strength of thin copper films on Kapton. Journal of Applied Physics, 2004, 95, 2991-2997.	1.1	255
116	Flow and fracture of free-standing Ag and Cu thin films and Ag/Cu multilayers. International Journal of Fracture, 2003, 119/120, 359-364.	1.1	9
117	P2â€Na 2/3 Ni 2/3 Te 1/3 O 2 cathode for Naâ€ion batteries with high voltage and excellent stability. Energy and Environmental Materials, 0, , .	7.3	3