Alberto Varzi

List of Publications by Year
in descending order

71 papers	6,506 citations	109321 35 h-index	88630 70 g-index
74 all docs	74 docs citations	74 times ranked	10061 citing authors

#	Article	IF	Citations
1	The Emergence of Aqueous Ammoniumâ€Ion Batteries. Angewandte Chemie, 2022, 134, .	2.0	16
2	The Emergence of Aqueous Ammoniumâ€Ion Batteries. Angewandte Chemie - International Edition, 2022, 61, .	13.8	65
3	Investigation of a Fluorine-Free Phosphonium-Based Ionic Liquid Electrolyte and Its Compatibility with Lithium Metal. ACS Applied Materials & Interfaces, 2022, 14, 20888-20895.	8.0	4
4	Concentrated Electrolytes Enabling Stable Aqueous Ammoniumâ€Ion Batteries. Advanced Materials, 2022, 34, .	21.0	40
5	Zincâ€Ion Hybrid Supercapacitors Employing Acetateâ€Based Waterâ€inâ€Salt Electrolytes. Small, 2022, 18, .	10.0	22
6	Green and low-cost acetate-based electrolytes for the highly reversible zinc anode. Journal of Power Sources, 2021, 485, 229329.	7.8	37
7	Nonfluorinated Ionic Liquid Electrolytes for Lithium Metal Batteries: Ionic Conduction, Electrochemistry, and Interphase Formation. Advanced Energy Materials, 2021, 11, 2003521.	19.5	37
8	Tragacanth Gum as Green Binder for Sustainable Waterâ€Processable Electrochemical Capacitor. ChemSusChem, 2021, 14, 356-362.	6.8	18
9	Embedding Heterostructured Î±â€MnS/MnO Nanoparticles in Sâ€Doped Carbonaceous Porous Framework as Highâ€Performance Anode for Lithiumâ€Ion Batteries. ChemElectroChem, 2021, 8, 918-927.	3.4	21
10	Reversible Copper Sulfide Conversion in Nonflammable Trimethyl Phosphate Electrolytes for Safe Sodiumâ€Ion Batteries. Small Structures, 2021, 2, 2100035.	12.0	30
11	Unveiling the Intricate Intercalation Mechanism in Manganese Sesquioxide as Positive Electrode in Aqueous Znâ€Metal Battery. Advanced Energy Materials, 2021, 11, 2100962.	19.5	39
12	Liquidâ€Assisted Mechanochemical Synthesis of LiIâ€Doped Sulfide Glass Electrolyte. Energy Technology, 2021, 9, 2100385.	3.8	2
13	A Thin and Uniform Fluoride-Based Artificial Interphase for the Zinc Metal Anode Enabling Reversible Zn/MnO₂ Batteries. ACS Energy Letters, 2021, 6, 3063-3071.	17.4	134
14	Unveiling the Intricate Intercalation Mechanism in Manganese Sesquioxide as Positive Electrode in Aqueous Znâ€Metal Battery (Adv. Energy Mater. 35/2021). Advanced Energy Materials, 2021, 11, 2170136.	19.5	0
15	Redoxâ€Mediated Redâ€Phosphorous Semiâ€Liquid Anode Enabling Metalâ€Free Rechargeable Naâ€Seawater Batteries with High Energy Density. Advanced Energy Materials, 2021, 11, 2102061.	19.5	13
16	On the nanoscopic structural heterogeneity of liquid <i>n</i>-alkyl carboxylic acids. Physical Chemistry Chemical Physics, 2021, 23, 20282-20287.	2.8	6
17	Highly Reversible Sodiation of Tin in Glyme Electrolytes: The Critical Role of the Solid Electrolyte Interphase and Its Formation Mechanism. ACS Applied Materials & Interfaces, 2020, 12, 3697-3708.	8.0	37
18	Caseinâ€Derived Activated Carbon: Turning Expired Milk into Active Material for Electrochemical Capacitors. Energy Technology, 2020, 8, 1901225.	3.8	2

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19	Natural Polymers as Green Binders for Highâ€Loading Supercapacitor Electrodes. ChemSusChem, 2020, 13, 763-770.	6.8	37
20	Current status and future perspectives of lithium metal batteries. Journal of Power Sources, 2020, 480, 228803.	7.8	109
21	Flexible and high temperature supercapacitor based on laser-induced graphene electrodes and ionic liquid electrolyte, a de-rated voltage analysis. Electrochimica Acta, 2020, 357, 136838.	5.2	54
22	Revisiting the energy efficiency and (potential) full-cell performance of lithium-ion batteries employing conversion/alloying-type negative electrodes. Journal of Power Sources, 2020, 473, 228583.	7.8	23
23	Halide-free water-in-salt electrolytes for stable aqueous sodium-ion batteries. Nano Energy, 2020, 77, 105176.	16.0	46
24	Metalâ€“Organic Framework Derived Fe₇S₈ Nanoparticles Embedded in Heteroatomâ€Doped Carbon with Lithium and Sodium Storage Capability. Small Methods, 2020, 4, 2000637.	8.6	46
25	Determining Realistic Electrochemical Stability Windows of Electrolytes for Electrical Doubleâ€Layer Capacitors. Batteries and Supercaps, 2020, 3, 698-707.	4.7	33
26	Artificial Solid Electrolyte Interphases for Lithium Metal Electrodes by Wet Processing: The Role of Metal Salt Concentration and Solvent Choice. ACS Applied Materials & Interfaces, 2020, 12, 32851-32862.	8.0	38
27	High loading CuS-based cathodes for all-solid-state lithium sulfur batteries with enhanced volumetric capacity. Energy Storage Materials, 2020, 27, 61-68.	18.0	64
28	Gelified acetate-based water-in-salt electrolyte stabilizing hexacyanoferrate cathode for aqueous potassium-ion batteries. Energy Storage Materials, 2020, 30, 196-205.	18.0	46
29	Ultra-thick battery electrodes for high gravimetric and volumetric energy density Li-ion batteries. Journal of Power Sources, 2019, 437, 226923.	7.8	57
30	Revisiting the Electrochemical Lithiation Mechanism of Aluminum and the Role of Liâ€rich Phases (Li 1+ x) Tj ETQq0 0 0 rgBT /Overlock 1	6.8	2
31	Superior Lithium Storage Capacity of Î±â€MnS Nanoparticles Embedded in Sâ€Doped Carbonaceous Mesoporous Frameworks. Advanced Energy Materials, 2019, 9, 1902077.	19.5	108
32	High-Power Na-Ion and K-Ion Hybrid Capacitors Exploiting Cointercalation in Graphite Negative Electrodes. ACS Energy Letters, 2019, 4, 2675-2682.	17.4	88
33	Calcium vanadate sub-microfibers as highly reversible host cathode material for aqueous zinc-ion batteries. Chemical Communications, 2019, 55, 2265-2268.	4.1	111
34	Modular development of metal oxide/carbon composites for electrochemical energy conversion and storage. Journal of Materials Chemistry A, 2019, 7, 13096-13102.	10.3	22
35	Revisiting the Electrochemical Lithiation Mechanism of Aluminum and the Role of Liâ€rich Phases (Li_{1+<i>x</i>}Al) on Capacity Fading. ChemSusChem, 2019, 12, 2609-2619.	6.8	39
36	A comprehensive insight into the volumetric response of graphite electrodes upon sodium co-intercalation in ether-based electrolytes. Electrochimica Acta, 2019, 304, 474-486.	5.2	25

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37	Lithium Batteries: Single-Ion Conducting Electrolyte Based on Electrospun Nanofibers for High-Performance Lithium Batteries (Adv. Energy Mater. 10/2019). Advanced Energy Materials, 2019, 9, 1970029.	19.5	2
38	Singleâ€Ion Conducting Electrolyte Based on Electrospun Nanofibers for Highâ€Performance Lithium Batteries. Advanced Energy Materials, 2019, 9, 1803422.	19.5	109
39	Amorphous Lithium Sulfide as Lithiumâ€Sulfur Battery Cathode with Low Activation Barrier. Energy Technology, 2019, 7, 1801013.	3.8	17
40	Electrolytes based on Nâ€Butylâ€Nâ€Methylâ€Pyrrolidinium 4,5â€Dicyanoâ€2â€(Trifluoromethyl) Imidazole for High Voltage Electrochemical Double Layer Capacitors. ChemElectroChem, 2019, 6, 552-557.	3.4	9
41	Exploring SnS nanoparticles interpenetrated with high concentration nitrogen-doped-carbon as anodes for sodium ion batteries. Electrochimica Acta, 2019, 296, 806-813.	5.2	27
42	Enabling Reversible (De)Lithiation of Aluminum by using Bis(fluorosulfonyl)imideâ€Based Electrolytes. ChemSusChem, 2019, 12, 208-212.	6.8	19
43	High energy and high voltage integrated photo-electrochemical double layer capacitor. Sustainable Energy and Fuels, 2018, 2, 968-977.	4.9	23
44	Na3Si2Y0.16Zr1.84PO12-ionic liquid hybrid electrolytes: An approach for realizing solid-state sodium-ion batteries?. Journal of Power Sources, 2018, 383, 157-163.	7.8	23
45	3D Porous Cuâ€“Zn Alloys as Alternative Anode Materials for Liâ€Ion Batteries with Superior Low <i>T</i> Performance. Advanced Energy Materials, 2018, 8, 1701706.	19.5	85
46	Comparative study of imide-based Li salts as electrolyte additives for Li-ion batteries. Journal of Power Sources, 2018, 375, 43-52.	7.8	154
47	Alternative binders for sustainable electrochemical energy storage â€“ the transition to aqueous electrode processing and bio-derived polymers. Energy and Environmental Science, 2018, 11, 3096-3127.	30.8	379
48	Portable High Voltage Integrated Harvesting-Storage Device Employing Dye-Sensitized Solar Module and All-Solid-State Electrochemical Double Layer Capacitor. Frontiers in Chemistry, 2018, 6, 443.	3.6	20
49	Fluorineâ€Free Waterâ€inâ€Salt Electrolyte for Green and Lowâ€Cost Aqueous Sodiumâ€Ion Batteries. ChemSusChem, 2018, 11, 3704-3707.	6.8	90
50	Highly porous single-ion conductive composite polymer electrolyte for high performance Li-ion batteries. Journal of Power Sources, 2018, 397, 79-86.	7.8	37
51	Cobalt Disulfide Nanoparticles Embedded in Porous Carbonaceous Micro-Polyhedrons Interlinked by Carbon Nanotubes for Superior Lithium and Sodium Storage. ACS Nano, 2018, 12, 7220-7231.	14.6	234
52	High Capacity Allâ€Solidâ€State Lithium Batteries Enabled by Pyriteâ€Sulfur Composites. Advanced Energy Materials, 2018, 8, 1801462.	19.5	89
53	Hybrid electrolytes for lithium metal batteries. Journal of Power Sources, 2018, 392, 206-225.	7.8	179
54	Radical Decomposition of Ether-Based Electrolytes for Li-S Batteries. Journal of the Electrochemical Society, 2017, 164, A1812-A1819.	2.9	23

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55	Modeling nucleation and growth of zinc oxide during discharge of primary zinc-air batteries. Journal of Power Sources, 2017, 360, 136-149.	7.8	80
56	Critical Insight into the Relentless Progression Toward Graphene and Grapheneâ€Containing Materials for Lithiumâ€Ion Battery Anodes. Advanced Materials, 2017, 29, 1603421.	21.0	132
57	Ultrafast Ionic Liquid-Assisted Microwave Synthesis of SnO Microflowers and Their Superior Sodium-Ion Storage Performance. ACS Applied Materials & Interfaces, 2017, 9, 26797-26804.	8.0	29
58	ZnO/ZnFe2O4/N-doped C micro-polyhedrons with hierarchical hollow structure as high-performance anodes for lithium-ion batteries. Nano Energy, 2017, 42, 341-352.	16.0	103
59	Challenges and prospects of the role of solid electrolytes in the revitalization of lithium metal batteries. Journal of Materials Chemistry A, 2016, 4, 17251-17259.	10.3	293
60	Graphene derived carbon confined sulfur cathodes for lithium-sulfur batteries: Electrochemical impedance studies. Electrochimica Acta, 2016, 214, 129-138.	5.2	43
61	Probing the characteristics of casein as green binder for non-aqueous electrochemical double layer capacitors' electrodes. Journal of Power Sources, 2016, 326, 672-679.	7.8	24
62	Enabling high areal capacitance in electrochemical double layer capacitors by means of the environmentally friendly starch binder. Journal of Power Sources, 2015, 300, 216-222.	7.8	26
63	The role of graphene for electrochemical energy storage. Nature Materials, 2015, 14, 271-279.	27.5	2,237
64	Performance and kinetics of LiFePO4â€“carbon bi-material electrodes for hybrid devices: A comparative study between activated carbon and multi-walled carbon nanotubes. Journal of Power Sources, 2015, 273, 1016-1022.	7.8	36
65	Lithiumâ€Ion Batteries: ZnFe₂O₄â€C/LiFePO₄â€CNT: A Novel Highâ€Power Lithiumâ€Ion Battery with Excellent Cycling Performance (Adv. Energy Mater. 10/2014). Advanced Energy Materials, 2014, 4, .	19.5	5
66	ZnFe₂O₄â€C/LiFePO₄â€CNT: A Novel Highâ€Power Lithiumâ€Ion Battery with Excellent Cycling Performance. Advanced Energy Materials, 2014, 4, 1-9.	19.5	287
67	Natural Cellulose: A Green Alternative Binder for High Voltage Electrochemical Double Layer Capacitors Containing Ionic Liquid-Based Electrolytes. Journal of the Electrochemical Society, 2014, 161, A368-A375.	2.9	63
68	The effects of pristine and carboxylated multi-walled carbon nanotubes as conductive additives on the performance of LiNi0.33Co0.33Mn0.33O2 and LiFePO4 positive electrodes. Electrochimica Acta, 2012, 78, 17-26.	5.2	36
69	Study of multi-walled carbon nanotubes for lithium-ion battery electrodes. Journal of Power Sources, 2011, 196, 3303-3309.	7.8	86
70	Supported PtRu on mesoporous carbons for direct methanol fuel cells. Journal of Power Sources, 2008, 185, 615-620.	7.8	34
71	Study of Carbon Nanotubes for Lithium-Ion Batteries Application. Advances in Science and Technology, 0, , .	0.2	0