Isidora Cekic-Laskovic

List of Publications by Year
in descending order

64 papers	2,770 citations	172457 29 h-index	182427 51 g-index
65 all docs	65 docs citations	65 times ranked	2525 citing authors

#	Article	IF	Citations
1	Fluorine and Lithium: Ideal Partners for Highâ€Performance Rechargeable Battery Electrolytes. Angewandte Chemie - International Edition, 2019, 58, 15978-16000.	13.8	243
2	The passivity of lithium electrodes in liquid electrolytes for secondary batteries. Nature Reviews Materials, 2021, 6, 1036-1052.	48.7	201
3	The influence of different conducting salts on the metal dissolution and capacity fading of NCM cathode material. Electrochimica Acta, 2014, 134, 393-398.	5.2	188
4	Investigations on novel electrolytes, solvents and SEI additives for use in lithium-ion batteries: Systematic electrochemical characterization and detailed analysis by spectroscopic methods. Progress in Solid State Chemistry, 2014, 42, 65-84.	7.2	176
5	Strategies towards enabling lithium metal in batteries: interphases and electrodes. Energy and Environmental Science, 2021, 14, 5289-5314.	30.8	156
6	New insights into the structure-property relationship of high-voltage electrolyte components for lithium-ion batteries using the pKa value. Electrochimica Acta, 2015, 184, 410-416.	5.2	119
7	Synergistic Effect of Blended Components in Nonaqueous Electrolytes for Lithium Ion Batteries. Topics in Current Chemistry, 2017, 375, 37.	5.8	103
8	Vinyl sulfones as SEI-forming additives in propylene carbonate based electrolytes for lithium-ion batteries. Electrochemistry Communications, 2014, 40, 80-83.	4.7	78
9	High Voltage LiNi_{0.5}Mn_{1.5}O₄/Li₄Ti₅O₁₂ Lithium Ion Cells at Elevated Temperatures: Carbonate- versus Ionic Liquid-Based Electrolytes. ACS Applied Materials & Interfaces, 2016, 8, 25971-25978.	8.0	78
10	Interfaces and Materials in Lithium Ion Batteries: Challenges for Theoretical Electrochemistry. Topics in Current Chemistry, 2018, 376, 16.	5.8	72
11	Lifetime limit of tris(trimethylsilyl) phosphite as electrolyte additive for high voltage lithium ion batteries. RSC Advances, 2016, 6, 38342-38349.	3.6	70
12	A Roadmap for Transforming Research to Invent the Batteries of the Future Designed within the European Large Scale Research Initiative BATTERY 2030+. Advanced Energy Materials, 2022, 12, .	19.5	70
13	Impact of Selected LiPF₆ Hydrolysis Products on the High Voltage Stability of Lithium-Ion Battery Cells. ACS Applied Materials & Interfaces, 2016, 8, 30871-30878.	8.0	66
14	Understanding transport mechanisms in ionic liquid/carbonate solvent electrolyte blends. Physical Chemistry Chemical Physics, 2018, 20, 16579-16591.	2.8	62
15	Grafted polyrotaxanes as highly conductive electrolytes for lithium metal batteries. Journal of Power Sources, 2019, 409, 148-158.	7.8	59
16	Counterintuitive Role of Magnesium Salts as Effective Electrolyte Additives for High Voltage Lithiumâ€Ion Batteries. Advanced Materials Interfaces, 2016, 3, 1600096.	3.7	57
17	Phosphorus additives for improving high voltage stability and safety of lithium ion batteries. Journal of Fluorine Chemistry, 2017, 198, 24-33.	1.7	54
18	Influence of the Fluorination Degree of Organophosphates on Flammability and Electrochemical Performance in Lithium Ion Batteries: Studies on Fluorinated Compounds Deriving from Triethyl Phosphate. Journal of the Electrochemical Society, 2016, 163, A751-A757.	2.9	49

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19	Intrinsically Safe Gel Polymer Electrolyte Comprising Flame-Retarding Polymer Matrix for Lithium Ion Battery Application. ACS Applied Materials & Interfaces, 2018, 10, 42348-42355.	8.0	49
20	A propylene carbonate based gel polymer electrolyte for extended cycle life and improved safety performance of lithium ion batteries. Journal of Power Sources, 2018, 397, 343-351.	7.8	47
21	Supramolecular Self-Assembly of Methylated Rotaxanes for Solid Polymer Electrolyte Application. ACS Macro Letters, 2018, 7, 881-885.	4.8	46
22	Electrolyte solvents for high voltage lithium ion batteries: ion correlation and specific anion effects in adiponitrile. Physical Chemistry Chemical Physics, 2018, 20, 25701-25715.	2.8	41
23	Influence of LiPF₆on the Aluminum Current Collector Dissolution in High Voltage Lithium Ion Batteries after Long-Term Charge/Discharge Experiments. Journal of the Electrochemical Society, 2017, 164, A1474-A1479.	2.9	40
24	Highâ€Throughput Experimentation and Computational Freeway Lanes for Accelerated Battery Electrolyte and Interface Development Research. Advanced Energy Materials, 2022, 12, 2102678.	19.5	40
25	1,3,2-Dioxathiolane-2,2-dioxide as film-forming agent for propylene carbonate based electrolytes for lithium-ion batteries. Electrochimica Acta, 2014, 125, 101-106.	5.2	38
26	Face to Face at the Cathode Electrolyte Interphase: From Interface Features to Interphase Formation and Dynamics. Advanced Materials Interfaces, 2022, 9, .	3.7	38
27	An oxo-verdazyl radical for a symmetrical non-aqueous redox flow battery. Journal of Materials Chemistry A, 2020, 8, 22280-22291.	10.3	34
28	Fluor und Lithium: Ideale Partner fÃ¼r Elektrolyte in wiederaufladbaren Hochleistungsbatterien. Angewandte Chemie, 2019, 131, 16124-16147.	2.0	31
29	Alternative Singleâ€Solvent Electrolytes Based on Cyanoesters for Safer Lithiumâ€Ion Batteries. ChemSusChem, 2016, 9, 1704-1711.	6.8	30
30	Fluorinated Electrolyte Compound as a Bi-Functional Interphase Additive for Both, Anodes and Cathodes in Lithium-Ion Batteries. Journal of the Electrochemical Society, 2018, 165, A3525-A3530.	2.9	29
31	Fluorinated Cyclic Phosphorus(III)-Based Electrolyte Additives for High Voltage Application in Lithium-Ion Batteries: Impact of Structureâ€“Reactivity Relationships on CEI Formation and Cell Performance. ACS Applied Materials & Interfaces, 2019, 11, 16605-16618.	8.0	27
32	Impact of Trifluoromethylation of Adiponitrile on Aluminum Dissolution Behavior in Dinitrile-Based Electrolytes. Journal of the Electrochemical Society, 2018, 165, A3773-A3781.	2.9	25
33	Trimethylsiloxy based metal complexes as electrolyte additives for high voltage application in lithium ion cells. Electrochimica Acta, 2017, 235, 332-339.	5.2	24
34	Conventional Electrolyte and Inactive Electrode Materials in Lithiumâ€Ion Batteries: Determining Cumulative Impact of Oxidative Decomposition at High Voltage. ChemSusChem, 2020, 13, 5301-5307.	6.8	24
35	LiPF₆ Stabilizer and Transition-Metal Cation Scavenger: A Bifunctional Bipyridine-Based Ligand for Lithium-Ion Battery Application. Chemistry of Materials, 2019, 31, 4025-4033.	6.7	22
36	Innovative, Nonâ€Corrosive LiTFSI Cyanoesterâ€Based Electrolyte for Safer 4â€…V Lithiumâ€Ion Batteries. ChemElectroChem, 2017, 4, 304-309.	3.4	19

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37	Data Management Plans: the Importance of Data Management in the BIGâ€MAP Project**. Batteries and Supercaps, 2021, 4, 1803-1812.	4.7	19
38	Hostâ€Guest Interactions Enhance the Performance of Viologen Electrolytes for Aqueous Organic Redox Flow Batteries. Batteries and Supercaps, 2021, 4, 923-928.	4.7	18
39	Butyronitrile-Based Electrolytes for Fast Charging of Lithium-Ion Batteries. Energies, 2019, 12, 2869.	3.1	17
40	Magnesium-based additives for the cathode slurry to enable high voltage application of lithium-ion batteries. Electrochimica Acta, 2017, 228, 9-17.	5.2	16
41	Influence of the Fluorination Degree of Organophosphates on Flammability and Electrochemical Performance in Lithium Ion Batteries. Journal of the Electrochemical Society, 2018, 165, A1935-A1942.	2.9	15
42	Evaluation of Allylboronic Acid Pinacol Ester as Effective Shutdown Overcharge Additive for Lithium Ion Cells. Journal of the Electrochemical Society, 2017, 164, A168-A172.	2.9	14
43	Shutdown potential adjustment of modified carbene adducts as additives for lithium ion battery electrolytes. Journal of Power Sources, 2017, 367, 72-79.	7.8	14
44	Propylene carbonate-nitrile solvent blends for thermally stable gel polymer lithium ion battery electrolytes. Journal of Power Sources, 2020, 478, 229047.	7.8	14
45	Acyclic Acetals in Propylene Carbonate-Based Electrolytes for Advanced and Safer Graphite-Based Lithium Ion Batteries. Journal of the Electrochemical Society, 2020, 167, 040509.	2.9	14
46	Acetonitrile-based electrolytes for lithium-ion battery application. Current Topics in Electrochemistry, 0, 20, 1.	1.0	14
47	Nonâ€Flammable Fluorinated Phosphorus(III)â€Based Electrolytes for Advanced Lithiumâ€Ion Battery Performance. ChemElectroChem, 2020, 7, 1499-1508.	3.4	13
48	Supramolecular Viologenâ€"Cyclodextrin Electrolytes for Aqueous Organic Redox Flow Batteries. ACS Applied Energy Materials, 2021, 4, 12353-12364.	5.1	11
49	Ester Modified Pyrrolidinium Based Ionic Liquids as Electrolyte Component Candidates in Rechargeable Lithium Batteries. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2015, 641, 2536-2542.	1.2	10
50	Methyl-group functionalization of pyrazole-based additives for advanced lithium ion battery electrolytes. Journal of Power Sources, 2020, 461, 228159.	7.8	10
51	Tetrahydrothiophene 1-oxide as highly effective co-solvent for propylene carbonate-based electrolytes. Journal of Power Sources, 2019, 437, 226881.	7.8	9
52	Interfacing Siâ€Based Electrodes: Impact of Liquid Electrolyte and Its Components. Advanced Materials Interfaces, 2022, 9, .	3.7	9
53	Interfaces and Materials in Lithium Ion Batteries: Challenges for Theoretical Electrochemistry. Topics in Current Chemistry Collections, 2018, , 23-51.	0.5	8
54	Toward adequate control of internal interfaces utilizing nitrile-based electrolytes. Journal of Chemical Physics, 2020, 152, 174701.	3.0	8

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55	Editorial to the Special Issue: How to Reinvent the Ways to Invent the Batteries of the Future â€“ the Battery 2030+ Largeâ€Scale Research Initiative Roadmap. Advanced Energy Materials, 2022, 12, .	19.5	6
56	Learning the laws of lithium-ion transport in electrolytes using symbolic regression. , 2022, 1, 440-447.		6
57	Understanding the Effectiveness of Phospholane Electrolyte Additives in Lithiumâ€Ion Batteries under Highâ€Voltage Conditions. ChemElectroChem, 2021, 8, 972-982.	3.4	5
58	Nickel Network Derived from a Block Copolymer Template for MnO₂ Electrodes as Dimensionally Stabilized Lithiumâ€Ion Battery Anodes. Energy Technology, 2017, 5, 715-724.	3.8	4
59	Electrolytes: From a Thorn Comes a Rose, and from a Rose, a Thorn. Israel Journal of Chemistry, 2021, 61, 85-93.	2.3	4
60	Influence of lithium-cyclo-difluoromethane-1,1-bis(sulfonyl)imide as electrolyte additive on the reversibility of lithium metal batteries. Journal of Applied Electrochemistry, 2016, 46, 339-348.	2.9	3
61	Impact of single vs. blended functional electrolyte additives on interphase formation and overall lithium ion battery performance. Journal of Solid State Electrochemistry, 2020, 24, 3145-3156.	2.5	3
62	Advanced Battery Materials and Interfaces: A European Perspective. Advanced Materials Interfaces, 2022, 9, .	3.7	1
63	(Invited) Impact of Functional Electrolyte Additives (Single, Multifunctional and Blended) on Advanced Performance of Nonaqueous Electrolytes. ECS Meeting Abstracts, 2019, , .	0.0	0
64	Semi-Interpenetrating Networks for All-Solid-State Lithium Metal Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0