Isidora Cekic-Laskovic

List of Publications by Year
in descending order

64	2,770	172457	182427
papers	citations	29 h-index	51 g-index

65	65	65	2525
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Highâ€Throughput Experimentation and Computational Freeway Lanes for Accelerated Battery Electrolyte and Interface Development Research. Advanced Energy Materials, 2022, 12, 2102678.	19.5	40
2	Face to Face at the Cathode Electrolyte Interphase: From Interface Features to Interphase Formation and Dynamics. Advanced Materials Interfaces, 2022, 9, .	3.7	38
3	Interfacing Siâ€Based Electrodes: Impact of Liquid Electrolyte and Its Components. Advanced Materials Interfaces, 2022, 9, .	3.7	9
4	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
5	Advanced Battery Materials and Interfaces: A European Perspective. Advanced Materials Interfaces, 2022, 9, .	3.7	1
6	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
7	Learning the laws of lithium-ion transport in electrolytes using symbolic regression. , 2022, 1, 440-447.		6
8	Electrolytes: From a Thorn Comes a Rose, and from a Rose, a Thorn. Israel Journal of Chemistry, 2021, 61, 85-93.	2.3	4
9	Strategies towards enabling lithium metal in batteries: interphases and electrodes. Energy and Environmental Science, 2021, 14, 5289-5314.	30.8	156
10	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
11	Understanding the Effectiveness of Phospholane Electrolyte Additives in Lithiumâ€Ion Batteries under Highâ€Voltage Conditions. ChemElectroChem, 2021, 8, 972-982.	3.4	5
12	The passivity of lithium electrodes in liquid electrolytes for secondary batteries. Nature Reviews Materials, 2021, 6, 1036-1052.	48.7	201
13	Data Management Plans: the Importance of Data Management in the BIGâ€MAP Project**. Batteries and Supercaps, 2021, 4, 1803-1812.	4.7	19
14	Supramolecular Viologenâ€“Cyclodextrin Electrolytes for Aqueous Organic Redox Flow Batteries. ACS Applied Energy Materials, 2021, 4, 12353-12364.	5.1	11
15	Propylene carbonate-nitrile solvent blends for thermally stable gel polymer lithium ion battery electrolytes. Journal of Power Sources, 2020, 478, 229047.	7.8	14
16	An oxo-verdazyl radical for a symmetrical non-aqueous redox flow battery. Journal of Materials Chemistry A, 2020, 8, 22280-22291.	10.3	34
17	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
18	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

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19	Toward adequate control of internal interfaces utilizing nitrile-based electrolytes. Journal of Chemical Physics, 2020, 152, 174701.	3.0	8
20	Nonâ€Flammable Fluorinated Phosphorus(III)â€Based Electrolytes for Advanced Lithiumâ€Ion Battery Performance. ChemElectroChem, 2020, 7, 1499-1508.	3.4	13
21	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
22	Methyl-group functionalization of pyrazole-based additives for advanced lithium ion battery electrolytes. Journal of Power Sources, 2020, 461, 228159.	7.8	10
23	Fluor und Lithium: Ideale Partner fÃ¼r Elektrolyte in wiederaufladbaren Hochleistungsbatterien. Angewandte Chemie, 2019, 131, 16124-16147.	2.0	31
24	Fluorine and Lithium: Ideal Partners for Highâ€Performance Rechargeable Battery Electrolytes. Angewandte Chemie - International Edition, 2019, 58, 15978-16000.	13.8	243
25	Tetrahydrothiophene 1-oxide as highly effective co-solvent for propylene carbonate-based electrolytes. Journal of Power Sources, 2019, 437, 226881.	7.8	9
26	Butyronitrile-Based Electrolytes for Fast Charging of Lithium-Ion Batteries. Energies, 2019, 12, 2869.	3.1	17
27	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
28	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
29	Grafted polyrotaxanes as highly conductive electrolytes for lithium metal batteries. Journal of Power Sources, 2019, 409, 148-158.	7.8	59
30	(Invited) Impact of Functional Electrolyte Additives (Single, Multifunctional and Blended) on Advanced Performance of Nonaqueous Electrolytes. ECS Meeting Abstracts, 2019, , .	0.0	0
31	Semi-Interpenetrating Networks for All-Solid-State Lithium Metal Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
32	Interfaces and Materials in Lithium Ion Batteries: Challenges for Theoretical Electrochemistry. Topics in Current Chemistry, 2018, 376, 16.	5.8	72
33	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
34	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
35	Interfaces and Materials in Lithium Ion Batteries: Challenges for Theoretical Electrochemistry. Topics in Current Chemistry Collections, 2018, , 23-51.	0.5	8
36	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

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37	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
38	Supramolecular Self-Assembly of Methylated Rotaxanes for Solid Polymer Electrolyte Application. ACS Macro Letters, 2018, 7, 881-885.	4.8	46
39	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
40	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
41	Understanding transport mechanisms in ionic liquid/carbonate solvent electrolyte blends. Physical Chemistry Chemical Physics, 2018, 20, 16579-16591.	2.8	62
42	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
43	Phosphorus additives for improving high voltage stability and safety of lithium ion batteries. Journal of Fluorine Chemistry, 2017, 198, 24-33.	1.7	54
44	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
45	Trimethylsiloxy based metal complexes as electrolyte additives for high voltage application in lithium ion cells. Electrochimica Acta, 2017, 235, 332-339.	5.2	24
46	Synergistic Effect of Blended Components in Nonaqueous Electrolytes for Lithium Ion Batteries. Topics in Current Chemistry, 2017, 375, 37.	5.8	103
47	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
48	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
49	Innovative, Nonâ€Corrosive LiTFSI Cyanoesterâ€Based Electrolyte for Safer 4â€…V Lithiumâ€Ion Batteries. ChemElectroChem, 2017, 4, 304-309.	3.4	19
50	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
51	Alternative Singleâ€Solvent Electrolytes Based on Cyanoesters for Safer Lithiumâ€Ion Batteries. ChemSusChem, 2016, 9, 1704-1711.	6.8	30
52	Counterintuitive Role of Magnesium Salts as Effective Electrolyte Additives for High Voltage Lithiumâ€Ion Batteries. Advanced Materials Interfaces, 2016, 3, 1600096.	3.7	57
53	Lifetime limit of tris(trimethylsilyl) phosphite as electrolyte additive for high voltage lithium ion batteries. RSC Advances, 2016, 6, 38342-38349.	3.6	70
54	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

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55	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
56	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
57	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
58	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
59	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
60	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
61	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
62	Vinyl sulfones as SEI-forming additives in propylene carbonate based electrolytes for lithium-ion batteries. Electrochemistry Communications, 2014, 40, 80-83.	4.7	78
63	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
64	Acetonitrile-based electrolytes for lithium-ion battery application. Current Topics in Electrochemistry, 0, 20, 1.	1.0	14