Janina Molenda

List of Publications by Year
in descending order

81 papers	1,356 citations	279798 23 h-index	434195 31 g-index
82 all docs	82 docs citations	82 times ranked	1775 citing authors

#	Article	IF	Citations
1	Achieving high energy density in a 4.5 V all nitrogen-doped graphene based lithium-ion capacitor. Journal of Materials Chemistry A, 2019, 7, 19909-19921.	10.3	65
2	Structural, Transport and Electrochemical Properties of LiFePO4 Substituted in Lithium and Iron Sublattices (Al, Zr, W, Mn, Co and Ni). Materials, 2013, 6, 1656-1687.	2.9	56
3	NaMn0.2Fe0.2Co0.2Ni0.2Ti0.2O2 high-entropy layered oxide â€" experimental and theoretical evidence of high electrochemical performance in sodium batteries. Energy Storage Materials, 2022, 47, 500-514.	18.0	49
4	Structural and electrical properties of grain boundaries in Ce0.85Gd0.15O1.925 solid electrolyte modified by addition of transition metal ions. Journal of Power Sources, 2009, 194, 2-9.	7.8	44
5	Electrochemical and high temperature physicochemical properties of orthorhombic LiMnO2. Journal of Power Sources, 2007, 173, 707-711.	7.8	41
6	Applicability of Gd-doped BaZrO3, SrZrO3, BaCeO3 and SrCeO3 proton conducting perovskites as electrolytes for solid oxide fuel cells. Open Chemistry, 2013, 11, 471-484.	1.9	40
7	Crystal structure and oxygen storage properties of BaLnMn2O5+Î´ (Ln: Pr, Nd, Sm, Gd, Dy, Er and Y) oxides. Materials Research Bulletin, 2015, 65, 116-122.	5.2	38
8	Thermochemical compatibility between selected (La,Sr)(Co,Fe,Ni)O3 cathodes and rare earth doped ceria electrolytes. Journal of Power Sources, 2007, 173, 675-680.	7.8	36
9	Evidence for Al doping in lithium sublattice of LiFePO4. Solid State Ionics, 2015, 270, 33-38.	2.7	36
10	Synthesis procedure and effect of Nd, Ca and Nb doping on structure and electrical conductivity of Li7La3Zr2O12 garnets. Solid State Ionics, 2014, 262, 617-621.	2.7	33
11	High-Performance Li-Rich Layered Transition Metal Oxide Cathode Materials for Li-Ion Batteries. Journal of the Electrochemical Society, 2019, 166, A5333-A5342.	2.9	33
12	Preparation of Nanocomposite Polymer Electrolyte via In Situ Synthesis of SiO2 Nanoparticles in PEO. Nanomaterials, 2020, 10, 157.	4.1	32
13	On fabrication procedures of Li-ion conducting garnets. Journal of Solid State Chemistry, 2017, 248, 51-60.	2.9	30
14	Composite Hybrid Quasi-Solid Electrolyte for High-Energy Lithium Metal Batteries. ACS Applied Energy Materials, 2021, 4, 7973-7982.	5.1	30
15	Electronic limitations of lithium diffusibility. From layered and spinel toward novel olivine type cathode materials. Solid State Ionics, 2005, 176, 1687-1694.	2.7	28
16	Nd-doped Ba(Ce,Zr)O3âˆ'Î´ proton conductors for application in conversion of CO2 into liquid fuels. Solid State Ionics, 2012, 225, 297-303.	2.7	27
17	Preparation and characterization of Ba-substituted Li1+xAlxGe2âˆ'x(PO4)3 (x = 0.5) solid electrolyte. Ceramics International, 2017, 43, 12616-12622.	4.8	27
18	Structural and transport properties of layered Li1+x(Mn1/3Co1/3Ni1/3)1âˆ'xO2 oxides prepared by a soft chemistry method. Journal of Power Sources, 2009, 194, 38-44.	7.8	26

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19	Preparation of thin solid electrolyte by hot-pressing and diamond wire slicing. RSC Advances, 2019, 9, 11670-11675.	3.6	25
20	Facile aqueous synthesis of high performance Na₂FeM(SO₄)₃ (M =) Tj ETQq0 0 0 rgBT /Overlock 2728-2740.	10.3	25
21	Electronic Processes in Electrode Materials of A_{<i>x</i>}MX₂â€Type. Physica Status Solidi (B): Basic Research, 1984, 122, 591-598.	1.5	24
22	Anomaly in the electronic structure of the NaxCoO2â ˆ’y cathode as a source of its step-like discharge curve. Physical Chemistry Chemical Physics, 2014, 16, 14845.	2.8	24
23	FUNCTIONAL CATHODE MATERIALS FOR Li-ION BATTERIES â€" PART III: POTENTIAL CATHODE MATERIALS Li_xNi_{1-y-z}Co_yMn_z<font AND LiMn₂O₄. Functional Materials Letters, 2009, 02, 1-7.	1.2	23
24	Sodium intercalation in Na CoO2â ˆ’ â€" Correlation between crystal structure, oxygen nonstoichiometry and electrochemical properties. Solid State Ionics, 2014, 262, 206-210.	2.7	23
25	FUNCTIONAL CATHODE MATERIALS FOR Li-ION BATTERIES â€" PART I: FUNDAMENTALS. Functional Materials Letters, 2008, 01, 91-95.	1.2	22
26	Exploring the Role of Manganese on Structural, Transport, and Electrochemical Properties of NASICON-Na₃Fe_{2â€"<i>y</i>}Mn_{<i>y</i>}(PO₄)₃â€"Cathode Materials for Na-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 43046-43055.	0	22
27	Electronic origin of difference in discharge curve between LixCoO2 and NaxCoO2 cathodes. Solid State Ionics, 2015, 271, 15-27.	2.7	20
28	Electronic and electrochemical properties of nickel bronze, NaxNiO2. Solid State Ionics, 1990, 38, 1-4.	2.7	19
29	Properties of doped ceria solid electrolytes in reducing atmospheres. Solid State Ionics, 2011, 192, 163-167.	2.7	18
30	Multi-substituted garnet-type electrolytes for solid-state lithium batteries. Ceramics International, 2020, 46, 5489-5494.	4.8	18
31	Toward elucidation of delithiation mechanism of zinc-substituted LiFePO4. Electrochimica Acta, 2013, 92, 79-86.	5.2	17
32	Overcoming transport and electrochemical limitations in the high-voltage Na0.67Ni0.33Mn0.67-yTiyO2 (0 â‰ y â‰ 0.33) cathode materials by Ti-doping. Journal of Power Sources, 2018, 404, 39-46.	7.8	16
33	Alluaudite-Na1.47Fe3(PO4)3: Structural and electrochemical properties of potential cathode material for Na-ion Batteries. Solid State Sciences, 2019, 87, 21-26.	3.2	16
34	Influence of host electronic structure on lithium intercalation process. Solid State Ionics, 2004, 175, 203-213.	2.7	15
35	Conformal, nanoscale Î³-Al2O3 coating of garnet conductors for solid-state lithium batteries. Solid State Ionics, 2019, 342, 115063.	2.7	15
36	FUNCTIONAL CATHODE MATERIALS FOR Li-ION BATTERIES â€" PART II: LiFePO₄ AND ITS COMPOSITE. Functional Materials Letters, 2008, 01, 97-104.	1.2	14

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37	Effect of mechanical milling on electrochemical properties of Ti45Zr38xNi17+x (x=0, 8) quasicrystals produced by rapid-quenching. Journal of Alloys and Compounds, 2013, 580, S238-S242.	5.5	14
38	La1â^'xBaxCo0.2Fe0.8O3â^'Î´ perovskites for application in intermediate temperature SOFCs. Solid State Ionics, 2012, 225, 437-442.	2.7	13
39	An alluaudite compounds Na2Fe2(SO4)3 vs. Na2.5Fe1.75(SO4)3 as earth abundant cathode materials for Na-ion batteries. Solid State Ionics, 2019, 335, 15-22.	2.7	13
40	Abnormal Ionic Conductivities in Halide NaBi₃O₄Cl₂ Induced by Absorbing Water and a Derived Oxhydryl Group. Angewandte Chemie - International Edition, 2020, 59, 8991-8997.	13.8	13
41	In-situ structural studies of manganese spinel-based cathode materials. Electrochimica Acta, 2017, 227, 294-302.	5.2	12
42	Origin of extra capacity in advanced Liâ€“Rich cathode materials for rechargeable Liâ€“Ion batteries. Chemical Engineering Journal, 2021, 424, 130293.	12.7	12
43	Electronic origin of the step-like character of the discharge curve for Na_xCoO_{2-y} cathode. Functional Materials Letters, 2014, 07, 1440009.	1.2	11
44	Structural and transport properties of Li1+xV1â^'xO2 anode materials for Li-ion batteries. Solid State Ionics, 2014, 262, 124-127.	2.7	11
45	Structural and electrochemical properties of Na0.72CoO2 as cathode material for sodium-ion batteries. Journal of Solid State Electrochemistry, 2015, 19, 3605-3612.	2.5	11
46	Correlation between electronic structure, transport and electrochemical properties of a LiNi_{1â^'yâ^'z}Co_yMn_zO₂ cathode material. Physical Chemistry Chemical Physics, 2017, 19, 25697-25706.	2.8	11
47	Deposition of thin Î´-MnO2 functional layers on carbon foam/sulfur composites for synergistically inhibiting polysulfides shuttling and increasing sulfur utilization. Electrochimica Acta, 2019, 305, 247-255.	5.2	11
48	Stabilization of cubic Li7La3Zr2O12 by Al substitution in various atmospheres. Solid State Ionics, 2020, 350, 115323.	2.7	11
49	INVESTIGATION OF GdBaCo2-xFexO5.5-Î´ AS A CATHODE MATERIAL FOR INTERMEDIATE TEMPERATURE SOLID OXIDE FUEL CELLS. Functional Materials Letters, 2011, 04, 157-160.	1.2	10
50	Oxygen storage-related properties of substituted BaLnMn₂O_{5+Î´} A-site ordered manganites. Functional Materials Letters, 2014, 07, 1440004.	1.2	10
51	Improvement of electrochemical performance of Na0.7Co1â^'Mn O2â€"cathode material for rechargeable sodium-ion batteries. Solid State Ionics, 2016, 288, 213-218.	2.7	10
52	Effect of reducing agents on low-temperature synthesis of nanostructured LiFePO4. Journal of Solid State Chemistry, 2017, 253, 367-374.	2.9	10
53	Phase diagram of NaFeyCo1-yO2 and evolution of its physico- and electrochemical properties with changing iron content. Journal of Power Sources, 2019, 419, 42-51.	7.8	10
54	Possibility of modification of phosphoolivine by substitution in Li sublattice. Solid State Ionics, 2012, 225, 575-579.	2.7	9

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55	Correlation between electronic and electrochemical properties of NaxCoO2âˆ'y. Solid State Ionics, 2014, 268, 179-184.	2.7	9
56	Surface investigation of chemically delithiatied FePO4 as a cathode material for sodium ion batteries. Solid State Ionics, 2018, 319, 186-193.	2.7	9
57	Abnormal Phenomena of Multiâ€Way Sodium Storage in Selenide Electrode. Advanced Functional Materials, 2021, 31, 2102406.	14.9	9
58	Electrochemical properties of chemically modified phosphoolivines as cathode materials for Li-ion batteries. Journal of Power Sources, 2013, 244, 565-569.	7.8	8
59	LiNi0.6Co0.4-zTizO2 - New cathode materials for Li-ion batteries. Solid State Ionics, 2018, 320, 118-125.	2.7	8
60	The effect of O3â€"P3â€"Pâ€²3 phases coexistence in NaxFe0.3Co0.7O2 cathode material on its electronic and electrochemical properties. Experimental and theoretical studies. Journal of Power Sources, 2020, 449, 227471.	7.8	8
61	Enhanced electrochemical behavior of Na0.66Li0.22Ti0.78O2/C layered P2-type composite anode material for Na-ion batteries. Composites Part B: Engineering, 2021, 213, 108729.	12.0	8
62	Correlation between transport properties and lithium extraction/insertion mechanism in Fe-site substituted phosphoolivine. Solid State Ionics, 2016, 288, 184-192.	2.7	7
63	Platelet-shape LiFePO4/Fe2P/C composite material as a high-rate positive electrode for Li-ion batteries. Solid State Ionics, 2019, 335, 113-120.	2.7	7
64	Composite Cathode Material for Li-Ion Batteries Based on LiFePO4 System.. , 0, , .		6
65	INFLUENCE OF ALUMINUM ON PHYSICO-CHEMICAL PROPERTIES OF LITHIUM IRON PHOSPHATE. Functional Materials Letters, 2011, 04, 123-127.	1.2	6
66	Structure of point defects of YBa2Cu3Oz at high temperature. Solid State Ionics, 1992, 51, 27-40.	2.7	5
67	MODIFICATION OF STRUCTURAL AND TRANSPORT PROPERTIES OF LAYERED LixNi1-y-zCoyMnzO2 CATHODE MATERIALS. Functional Materials Letters, 2011, 04, 113-116.	1.2	5
68	Impact of crystal structure singularity on transport and electrochemical properties of Li_{<i>x</i>}(Li_{<i>y</i>}Fe_{<i>z</i>}V1âˆ'yâˆ'z)O₂Ââ€" electrode material for lithium batteries. Functional Materials Letters, 2016, 09, 1641006.	1.2	4
69	Electronic structure â€˜engineeringâ€™ in the development of materials for Li-ion and Na-ion batteries. Advances in Natural Sciences: Nanoscience and Nanotechnology, 2017, 8, 015007.	1.5	4
70	Cathode Electronic Structure Impact on Lithium and Sodium Batteries Parameters. , 0, , .		4
71	Environmentally friendly, inexpensive iron-titanium tunneled oxide anodes for Na-ion batteries. Energy, 2021, , 122388.	8.8	4
72	Enhancement of electrochemical performance of LiFePO₄nanoparticles by direct nanocoating with conductive carbon layers. Functional Materials Letters, 2016, 09, 1641007.	1.2	3

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73	Highâ€Power and Highâ€Energy Cuâ€Substituted Li x Ni 0.88â€“ y Co y Mn 0.1 Cu 0.02 O 2 Cathode Material for Liâ€Ion Batteries. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900951.	1.8	3
74	Electronic structure in relation to alkaline bronzes reactivity. Reactivity of Solids, 1988, 5, 305-314.	0.3	2
75	Beneficial effect of phase transition on kinetics of deintercalation/intercalation process in lithiumâ€“manganese spinel. Journal of Solid State Electrochemistry, 2019, 23, 837-846.	2.5	2
76	The impact of oxygen evolution and cation migration on the cycling stability of a Li-rich Li[Li_{0.2}Mn_{0.6}Ni_{0.1}Co_{0.1}]O₂ positive electrode. Journal of Materials Chemistry A, 2020, 8, 18143-18153.	10.3	2
77	Transport and Electrochemical Properties of Na _{<i>x</i>} Fe _{1â€“ <i>y</i>} Mn _{<i>y</i>} O ₂ â€Cathode Materials for Naâ€Ion batteries. Experimental and Theoretical Studies. Energy Technology, 2022, 10, 2101105.	3.8	2
78	Operando XRD studies as a tool for determination of transport parameters of mobile ions in electrode materials. Journal of Power Sources, 2017, 369, 1-5.	7.8	1
79	Abnormal Ionic Conductivities in Halide NaBi 3 O 4 Cl 2 Induced by Absorbing Water and a Derived Oxhydryl Group. Angewandte Chemie, 2020, 132, 9076-9082.	2.0	1
80	Strategies for Perspective Cathode Materials for ITâ€“SOFC. Green Energy and Technology, 2013, , 47-69.	0.6	0
81	Synthesis and characterization of Li(LiyFezV1âˆ’yâˆ’z)O2âˆ’Î´ â€” cathode material for Li-ion batteries. Solid State Ionics, 2016, 288, 171-175.	2.7	0