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	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
2	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
3	Abnormal Phenomena of Multiâ€Way Sodium Storage in Selenide Electrode. Advanced Functional Materials, 2021, 31, 2102406.	14.9	9
4	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
5	Composite Hybrid Quasi-Solid Electrolyte for High-Energy Lithium Metal Batteries. ACS Applied Energy Materials, 2021, 4, 7973-7982.	5.1	30
6	Origin of extra capacity in advanced Liâ€“Rich cathode materials for rechargeable Liâ€“Ion batteries. Chemical Engineering Journal, 2021, 424, 130293.	12.7	12
7	Environmentally friendly, inexpensive iron-titanium tunneled oxide anodes for Na-ion batteries. Energy, 2021, , 122388.	8.8	4
8	Multi-substituted garnet-type electrolytes for solid-state lithium batteries. Ceramics International, 2020, 46, 5489-5494.	4.8	18
9	Facile aqueous synthesis of high performance Na₂FeM(SO₄)₃ (M =) Tj ETQq1 1 0.784314 rgBT / 2728-2740.	10.3	25
10	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
11	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
12	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
13	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
14	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
15	Preparation of Nanocomposite Polymer Electrolyte via In Situ Synthesis of SiO2 Nanoparticles in PEO. Nanomaterials, 2020, 10, 157.	4.1	32
16	Stabilization of cubic Li7La3Zr2O12 by Al substitution in various atmospheres. Solid State Ionics, 2020, 350, 115323.	2.7	11
17	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
18	Conformal, nanoscale Î³-Al2O3 coating of garnet conductors for solid-state lithium batteries. Solid State Ionics, 2019, 342, 115063.	2.7	15

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19	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.	8.0	22
20	Preparation of thin solid electrolyte by hot-pressing and diamond wire slicing. RSC Advances, 2019, 9, 11670-11675.	3.6	25
21	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
22	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
23	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
24	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
25	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
26	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
27	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
28	Surface investigation of chemically delithiatied FePO4 as a cathode material for sodium ion batteries. Solid State Ionics, 2018, 319, 186-193.	2.7	9
29	LiNi0.6Co0.4-zTizO2 - New cathode materials for Li-ion batteries. Solid State Ionics, 2018, 320, 118-125.	2.7	8
30	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
31	On fabrication procedures of Li-ion conducting garnets. Journal of Solid State Chemistry, 2017, 248, 51-60.	2.9	30
32	In-situ structural studies of manganese spinel-based cathode materials. Electrochimica Acta, 2017, 227, 294-302.	5.2	12
33	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
34	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
35	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
36	Effect of reducing agents on low-temperature synthesis of nanostructured LiFePO4. Journal of Solid State Chemistry, 2017, 253, 367-374.	2.9	10

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37	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
38	Correlation between transport properties and lithium extraction/insertion mechanism in Fe-site substituted phosphoolivine. Solid State Ionics, 2016, 288, 184-192.	2.7	7
39	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
40	Enhancement of electrochemical performance of LiFePO₄nanoparticles by direct nanocoating with conductive carbon layers. Functional Materials Letters, 2016, 09, 1641007.	1.2	3
41	Improvement of electrochemical performance of Na0.7Co1âˆ’Mn O2â€”cathode material for rechargeable sodium-ion batteries. Solid State Ionics, 2016, 288, 213-218.	2.7	10
42	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
43	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
44	Electronic origin of difference in discharge curve between LixCoO2 and NaxCoO2 cathodes. Solid State Ionics, 2015, 271, 15-27.	2.7	20
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	Evidence for Al doping in lithium sublattice of LiFePO4. Solid State Ionics, 2015, 270, 33-38.	2.7	36
47	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
48	Oxygen storage-related properties of substituted BaLnMn₂O_{5+Î´} A-site ordered manganites. Functional Materials Letters, 2014, 07, 1440004.	1.2	10
49	Sodium intercalation in Na CoO2âˆ’ â€” Correlation between crystal structure, oxygen nonstoichiometry and electrochemical properties. Solid State Ionics, 2014, 262, 206-210.	2.7	23
50	Structural and transport properties of Li1+xV1âˆ’xO2 anode materials for Li-ion batteries. Solid State Ionics, 2014, 262, 124-127.	2.7	11
51	Correlation between electronic and electrochemical properties of NaxCoO2âˆ’y. Solid State Ionics, 2014, 268, 179-184.	2.7	9
52	Anomaly in the electronic structure of the NaxCoO2âˆ’y cathode as a source of its step-like discharge curve. Physical Chemistry Chemical Physics, 2014, 16, 14845.	2.8	24
53	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
54	Toward elucidation of delithiation mechanism of zinc-substituted LiFePO4. Electrochimica Acta, 2013, 92, 79-86.	5.2	17

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55	Electrochemical properties of chemically modified phospholivines as cathode materials for Li-ion batteries. Journal of Power Sources, 2013, 244, 565-569.	7.8	8
56	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
57	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
58	Strategies for Perspective Cathode Materials for ITâ€"SOFC. Green Energy and Technology, 2013, , 47-69.	0.6	0
59	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
60	Nd-doped Ba(Ce,Zr)O3â^'Î´ proton conductors for application in conversion of CO2 into liquid fuels. Solid State Ionics, 2012, 225, 297-303.	2.7	27
61	Possibility of modification of phospholivine by substitution in Li sublattice. Solid State Ionics, 2012, 225, 575-579.	2.7	9
62	La1â^'xBaxCo0.2Fe0.8O3â^'Î´ perovskites for application in intermediate temperature SOFCs. Solid State Ionics, 2012, 225, 437-442.	2.7	13
63	Properties of doped ceria solid electrolytes in reducing atmospheres. Solid State Ionics, 2011, 192, 163-167.	2.7	18
64	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
65	MODIFICATION OF STRUCTURAL AND TRANSPORT PROPERTIES OF LAYERED LixNi1-y-zCoyMnzO2 CATHODE MATERIALS. Functional Materials Letters, 2011, 04, 113-116.	1.2	5
66	INFLUENCE OF ALUMINUM ON PHYSICO-CHEMICAL PROPERTIES OF LITHIUM IRON PHOSPHATE. Functional Materials Letters, 2011, 04, 123-127.	1.2	6
67	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
68	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
69	Structural and transport properties of layered Li1+x(Mn1/3Co1/3Ni1/3)1â^'xO2 oxides prepared by a soft chemistry method. Journal of Power Sources, 2009, 194, 38-44.	7.8	26
70	FUNCTIONAL CATHODE MATERIALS FOR Li-ION BATTERIES â€" PART I: FUNDAMENTALS. Functional Materials Letters, 2008, 01, 91-95.	1.2	22
71	FUNCTIONAL CATHODE MATERIALS FOR Li-ION BATTERIES â€" PART II: LiFePO₄ AND ITS COMPOSITE. Functional Materials Letters, 2008, 01, 97-104.	1.2	14
72	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

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73	Electrochemical and high temperature physicochemical properties of orthorhombic LiMnO2. Journal of Power Sources, 2007, 173, 707-711.	7.8	41
74	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
75	Influence of host electronic structure on lithium intercalation process. Solid State Ionics, 2004, 175, 203-213.	2.7	15
76	Structure of point defects of YBa2Cu3Oz at high temperature. Solid State Ionics, 1992, 51, 27-40.	2.7	5
77	Electronic and electrochemical properties of nickel bronze, NaxNiO2. Solid State Ionics, 1990, 38, 1-4.	2.7	19
78	Electronic structure in relation to alkaline bronzes reactivity. Reactivity of Solids, 1988, 5, 305-314.	0.3	2
79	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
80	Composite Cathode Material for Li-Ion Batteries Based on LiFePO4 System.. , 0, , .		6
81	Cathode Electronic Structure Impact on Lithium and Sodium Batteries Parameters. , 0, , .		4