Dorthe Bomholdt RavnsbÃ¦k

List of Publications by Year
in descending order

59 papers	3,327 citations	172443 29 h-index	144002 57 g-index
62 all docs	62 docs citations	62 times ranked	2642 citing authors

#	Article	IF	Citations
1	Metalâ€Organic Framework Glass Anode with an Exceptional Cyclingâ€Induced Capacity Enhancement for Lithiumâ€Ion Batteries. Advanced Materials, 2022, 34, e2110048.	21.0	83
2	nmfMapping: a cloud-based web application for non-negative matrix factorization of powder diffraction and pair distribution function datasets. Acta Crystallographica Section A: Foundations and Advances, 2022, 78, 242-248.	0.1	6
3	State of LiFePO₄ Li-Ion Battery Electrodes after 6533 Deep-Discharge Cycles Characterized by Combined Micro-XRF and Micro-XRD. ACS Applied Energy Materials, 2022, 5, 4358-4368.	5.1	2
4	Expanded solid-solution behavior and charge-discharge asymmetry in NaxCrO2 Na-ion battery electrodes. Journal of Power Sources, 2022, 535, 231317.	7.8	8
5	Crystalline Disorder, Surface Chemistry, and Their Effects on the Oxygen Evolution Reaction (OER) Activity of Mass-Produced Nanostructured Iridium Oxides. ACS Applied Energy Materials, 2021, 4, 2552-2562.	5.1	14
6	Understanding disorder in oxide-based electrode materials for rechargeable batteries. JPhys Energy, 2021, 3, 031002.	5.3	4
7	Polymorphic Purity and Structural Chargeâ€“Discharge Evolution of Î²-LiVOPO₄ Cathodes. Journal of Physical Chemistry C, 2021, 125, 24301-24309.	3.1	3
8	Synthesis and Thermal Degradation of MAl₄(OH)₁₂SO₄Â·3H₂O with M = Co²⁺, Ni²⁺, Cu²⁺, and Zn²⁺. Inorganic Chemistry, 2021, 60, 16700-16712.	4.0	6
9	Materials for hydrogen-based energy storage â€“ past, recent progress and future outlook. Journal of Alloys and Compounds, 2020, 827, 153548.	5.5	518
10	Improving capacity and rate capability of Li-ion cathode materials through ball milling and carbon coating â€“ Best practice for research purposes. Solid State Ionics, 2020, 344, 115152.	2.7	6
11	Effect of Oxygen Defects on the Structural Evolution of LiVPO₄F_{1â€“y}O_y Cathode Materials. ACS Applied Energy Materials, 2020, 3, 9750-9759.	5.1	2
12	Na-Ion storage in iron hydroxide phosphate hydrate through a reversible crystalline-to-amorphous phase transition. Nanoscale, 2020, 12, 12824-12830.	5.6	3
13	Reducing Transformation Strains during Na Intercalation in Olivine FePO₄ Cathodes by Mn Substitution. ACS Applied Energy Materials, 2019, 2, 8060-8067.	5.1	15
14	Orderâ€“disorder transition in nano-rutile TiO₂ anodes: a high capacity low-volume change Li-ion battery material. Nanoscale, 2019, 11, 12347-12357.	5.6	40
15	Full-cell hydride-based solid-state Li batteries for energy storage. International Journal of Hydrogen Energy, 2019, 44, 7875-7887.	7.1	46
16	Structural Evolution of Disordered Li_xV₂O₅ Bronzes in V₂O₅ Cathodes for Li-Ion Batteries. Chemistry of Materials, 2019, 31, 512-520.	6.7	46
17	Phase Transformation Mechanism of Li-Ion Storage in Iron(III) Hydroxide Phosphates. Journal of Physical Chemistry C, 2018, 122, 1930-1938.	3.1	7
18	All-solid-state lithium batteries â€“ The Mg2FeH6-electrode LiBH4-electrolyte system. Electrochemistry Communications, 2018, 87, 81-85.	4.7	21

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19	Structural Evolution during Lithium- and Magnesium-Ion Intercalation in Vanadium Oxide Nanotube Electrodes for Battery Applications. ACS Applied Nano Materials, 2018, 1, 5071-5082.	5.0	12
20	Dynamic charge-discharge phase transitions in Li3V2(PO4)3 cathodes. Journal of Power Sources, 2018, 396, 437-443.	7.8	18
21	Accommodating High Transformation Strains in Battery Electrodes via the Formation of Nanoscale Intermediate Phases: Operando Investigation of Olivine NaFePO₄. Nano Letters, 2017, 17, 1696-1702.	9.1	49
22	Metal borohydrides and derivatives â€“ synthesis, structure and properties. Chemical Society Reviews, 2017, 46, 1565-1634.	38.1	320
23	Nanoconfined NaAlH₄ Conversion Electrodes for Li Batteries. ACS Omega, 2017, 2, 1956-1967.	3.5	18
24	Fluoride substitution in LiBH₄; destabilization and decomposition. Physical Chemistry Chemical Physics, 2017, 19, 30157-30165.	2.8	30
25	Insight into Poor Cycling Stability of MgH₂Anodes. Journal of the Electrochemical Society, 2017, 164, A3138-A3143.	2.9	7
26	Synthesis, structure and properties of bimetallic sodium rare-earth (RE) borohydrides, NaRE(BH₄)₄, RE = Ce, Pr, Er or Gd. Dalton Transactions, 2017, 46, 13421-13431.	3.3	17
27	Competitive reactions during synthesis of zinc aluminum layered double hydroxides by thermal hydrolysis of urea. Journal of Materials Chemistry A, 2017, 5, 21795-21806.	10.3	43
28	Synthesis, Structure, and Li-Ion Conductivity of LiLa(BH₄)₃X, X = Cl, Br, I. Journal of Physical Chemistry C, 2017, 121, 19010-19021.	3.1	32
29	Complex Metal Hydrides for Hydrogen, Thermal and Electrochemical Energy Storage. Energies, 2017, 10, 1645.	3.1	152
30	Hydrogen Storage Stability of Nanoconfined MgH2 upon Cycling. Inorganics, 2017, 5, 57.	2.7	21
31	Barium borohydride chlorides: synthesis, crystal structures and thermal properties. Dalton Transactions, 2016, 45, 8291-8299.	3.3	8
32	Structural Investigation of Zn(II) Insertion in Bayerite, an Aluminum Hydroxide. Inorganic Chemistry, 2016, 55, 9306-9315.	4.0	22
33	Synthesis, structure and properties of new bimetallic sodium and potassium lanthanum borohydrides. Dalton Transactions, 2016, 45, 19002-19011.	3.3	22
34	Engineering the Transformation Strain in LiMn_yFe_{1â€“y}PO₄ Olivines for Ultrahigh Rate Battery Cathodes. Nano Letters, 2016, 16, 2375-2380.	9.1	45
35	Characterization of Electronic and Ionic Transport in Li₁₋_xNi₀_.₈Co_{0.15}Al_{0.05}O₂. Journal of the Electrochemical Society, 2015, 162, A1163-A1169.	2.9	9
36	Scandium functionalized carbon aerogel: Synthesis of nanoparticles and structure of a new ScOCl and properties of NaAlH4 as a function of pore size. Journal of Solid State Chemistry, 2015, 231, 190-197.	2.9	9

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37	Na3Ti2(PO4)3 as a sodium-bearing anode for rechargeable aqueous sodium-ion batteries. Electrochemistry Communications, 2014, 44, 12-15.	4.7	63
38	Hydrogen reversibility of LiBH₄â€“MgH₂â€“Al composites. Physical Chemistry Chemical Physics, 2014, 16, 8970-8980.	2.8	23
39	Hydrogen Storage Capacity Loss in a LiBH₄â€“Al Composite. Journal of Physical Chemistry C, 2013, 117, 7423-7432.	3.1	45
40	Investigation of MBH4â€“VCl2, MÂ=ÂLi, Na or K. International Journal of Hydrogen Energy, 2013, 38, 8376-8383.	7.1	7
41	NMR Study of Molecular Dynamics in Complex Metal Borohydride LiZn₂(BH₄)₅. Journal of Physical Chemistry C, 2013, 117, 21139-21147.	3.1	14
42	Mechanism for reversible hydrogen storage in LiBH4â€“Al. Journal of Applied Physics, 2012, 111, 112621.	2.5	27
43	Improved hydrogen storage kinetics of nanoconfined LiBH₄-MgH₂ reactive hydride composites catalyzed with nickel Nanoparticles. Materials Research Society Symposia Proceedings, 2012, 1441, 1.	0.1	5
44	Potassium Zinc Borohydrides Containing Triangular [Zn(BH₄)₃]^{â^'} and Tetrahedral [Zn(BH₄)_xCl_{4â€“x}]^{2â€“} Anions. Journal of Physical Chemistry C, 2012, 116, 1563-1571.	3.1	34
45	LiCe(BH₄)₃Cl, a New Lithium-Ion Conductor and Hydrogen Storage Material with Isolated Tetranuclear Anionic Clusters. Chemistry of Materials, 2012, 24, 1654-1663.	6.7	128
46	Screening of Metal Borohydrides by Mechanochemistry and Diffraction. Angewandte Chemie - International Edition, 2012, 51, 3582-3586.	13.8	83
47	A mixed-cation mixed-anion borohydride NaY(BH4)2Cl2. International Journal of Hydrogen Energy, 2012, 37, 8428-8438.	7.1	33
48	The Effect of H₂ Partial Pressure on the Reaction Progression and Reversibility of Lithium-Containing Multicomponent Destabilized Hydrogen Storage Systems. Journal of the American Chemical Society, 2011, 133, 13534-13538.	13.7	23
49	Reorientational Motion in Alkali-Metal Borohydrides: NMR Data for RbBH₄ and CsBH₄ and Systematics of the Activation Energy Variations. Journal of Physical Chemistry C, 2011, 115, 10305-10309.	3.1	33
50	Iodide substitution in lithium borohydride, LiBH4â€“LiI. Journal of Alloys and Compounds, 2011, 509, 8299-8305.	5.5	80
51	Tailoring properties of borohydrides for hydrogen storage: A review. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1754-1773.	1.8	236
52	Chloride substitution in sodium borohydride. Journal of Solid State Chemistry, 2011, 184, 1858-1866.	2.9	44
53	Pressure and Temperature Influence on the Desorption Pathway of the LiBH₄â^'MgH₂ Composite System. Journal of Physical Chemistry C, 2010, 114, 15212-15217.	3.1	127
54	Mixedâ€Anion and Mixedâ€Cation Borohydride KZn(BH₄)Cl₂: Synthesis, Structure and Thermal Decomposition. European Journal of Inorganic Chemistry, 2010, 2010, 1608-1612.	2.0	48

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55	Tuning hydrogen storage properties and reactivity: Investigation of the LiBH4â€“NaAlH4 system. Journal of Physics and Chemistry of Solids, 2010, 71, 1144-1149.	4.0	42
56	Thermal Polymorphism and Decomposition of Y(BH₄)₃. Inorganic Chemistry, 2010, 49, 3801-3809.	4.0	96
57	Structure and Characterization of KSc(BH₄)₄. Journal of Physical Chemistry C, 2010, 114, 19540-19549.	3.1	95
58	NaSc(BH₄)₄: A Novel Scandium-Based Borohydride. Journal of Physical Chemistry C, 2010, 114, 1357-1364.	3.1	137
59	Structure and Dynamics for LiBH₄â^'LiCl Solid Solutions. Chemistry of Materials, 2009, 21, 5772-5782.	6.7	135