Masanobu Nakayama

List of Publications by Year
in descending order

26	585	758635 12	642321 23
papers	citations	h-index	g-index

26	26	26	684
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Understanding the ionic conductivity maximum in doped ceria: trapping and blocking. Physical Chemistry Chemical Physics, 2018, 20, 14291-14321.	1.3	116
2	Multiorbital bond formation for stable oxygen-redox reaction in battery electrodes. Energy and Environmental Science, 2020, 13, 1492-1500.	15.6	60
3	Zinc-based spinel cathode materials for magnesium rechargeable batteries: toward the reversible spinelâ€“rocksalt transition. Journal of Materials Chemistry A, 2019, 7, 12225-12235.	5.2	59
4	Structure Design of Longâ€Life Spinelâ€Oxide Cathode Materials for Magnesium Rechargeable Batteries. Advanced Materials, 2021, 33, e2007539.	11.1	52
5	Metastable Chloride Solid Electrolyte with High Formability for Rechargeable All-Solid-State Lithium Metal Batteries. , 2020, 2, 880-886.		40
6	Bayesian-optimization-guided experimental search of NASICON-type solid electrolytes for all-solid-state Li-ion batteries. Journal of Materials Chemistry A, 2020, 8, 15103-15109.	5.2	39
7	Computational investigation of the Mg-ion conductivity and phase stability of MgZr₄(PO₄)₆. RSC Advances, 2019, 9, 12590-12595.	1.7	24
8	High Formability and Fast Lithium Diffusivity in Metastable Spinel Chloride for Rechargeable Allâ€Solidâ€State Lithiumâ€Ion Batteries. Advanced Energy and Sustainability Research, 2020, 1, 2000025.	2.8	21
9	Catalytic mechanism of spinel oxides for oxidative electrolyte decomposition in Mg rechargeable batteries. Journal of Materials Chemistry A, 2021, 9, 26401-26409.	5.2	21
10	Exhaustive and informatics-aided search for fast Li-ion conductor with NASICON-type structure using material simulation and Bayesian optimization. APL Materials, 2020, 8, .	2.2	18
11	Promoting Reversible Cathode Reactions in Magnesium Rechargeable Batteries Using Metastable Cubic MgMn₂O₄ Spinel Nanoparticles. ACS Applied Nano Materials, 2021, 4, 8328-8333.	2.4	17
12	Efficient Experimental Search for Discovering a Fast Li-Ion Conductor from a Perovskite-Type Li_xLa_{(1â€“x)/3}NbO₃ (LLNO) Solid-State Electrolyte Using Bayesian Optimization. Journal of Physical Chemistry C, 2021, 125, 152-160.	1.5	17
13	High-throughput production of force-fields for solid-state electrolyte materials. APL Materials, 2020, 8, 081111.	2.2	15
14	Molecular Dynamics Simulation of Li-Ion Conduction at Grain Boundaries in NASICON-Type LiZr₂(PO₄)₃ Solid Electrolytes. Journal of Physical Chemistry C, 2021, 125, 23604-23612.	1.5	14
15	Asymmetry in the Solvationâ€“Desolvation Resistance for Li Metal Batteries. Analytical Chemistry, 2020, 92, 3499-3502.	3.2	13
16	First-Principles DFT Study on Inverse Ruddlesdenâ€“Popper Tetragonal Compounds as Solid Electrolytes for All-Solid-State Li⁺-Ion Batteries. Chemistry of Materials, 2021, 33, 5859-5871.	3.2	13
17	Descriptors for dielectric constants of perovskite-type oxides by materials informatics with first-principles density functional theory. Science and Technology of Advanced Materials, 2020, 21, 92-99.	2.8	10
18	First-Principles Density Functional Theory Calculations for Formic Acid Adsorption onto Hydro-Garnet Compounds. ACS Omega, 2020, 5, 4083-4089.	1.6	8

#	Article	IF	Citations
19	Universal solid-state oxygen redox in antifluorite lithium oxides via transition metal doping. Materials Advances, 2020, 1, 1301-1306.	2.6	7
20	Arrangement in La_{1/3}NbO₃ Obtained by First-Principles Density Functional Theory with Cluster Expansion and Monte Carlo Simulation. Journal of Physical Chemistry C, 2020, 124, 9746-9754.	1.5	6
21	Structural Transition with a Sharp Change in the Electrical Resistivity and Spinâ€“Orbit Mott Insulating State in a Rhenium Oxide, Sr₃Re₂O₉. Inorganic Chemistry, 2021, 60, 507-514.	1.9	4
22	Laplace transform impedance analysis in the two-phase coexistence reaction of spinel Li1Â+Âx Mn2O4 positive electrode. Journal of Solid State Electrochemistry, 2017, 21, 1137-1143.	1.2	3
23	Synthesis and structural characterization of U-phase, [3Ca2Al(OH)6][Na(H2O)6(SO4)2Â·6H2O] layered double hydroxide. Journal of Solid State Chemistry, 2022, 306, 122730.	1.4	3
24	Chemical Composition Dataâ€Driven Machineâ€Learning Prediction for Phase Stability and Materials Properties of Inorganic Crystalline Solids. Physica Status Solidi (B): Basic Research, 2022, 259, .	0.7	3
25	First-principles study of the morphology and surface structure of LaCoO₃ and La_{0.5}Sr_{0.5}Fe_{0.5}Co_{0.5}O₃ perovskites as air electrodes for solid oxide fuel cells. Science and Technology of Advanced Materials Methods, 2021, 1, 24-33.	0.4	1
26	Octahedral Tilting and Modulation Structure in Perovskiteâ€Related Compound La_{1/3}NbO₃. Physica Status Solidi (B): Basic Research, 2022, 259, .	0.7	1