Christopher J Bartel

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/4884380/publications.pdf

Version: 2024-02-01

32 papers

2,296 citations

20 h-index 31 g-index

41 all docs

41 docs citations

41 times ranked

3017 citing authors

#	Article	IF	CITATIONS
1	Expanding the Ambient-Pressure Phase Space of CaFe ₂ O ₄ -Type Sodium Postspinel Host–Guest Compounds. ACS Organic & Inorganic Au, 2022, 2, 8-22.	4.0	5
2	Performance comparison of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mrow><mml:mi>r</mml:mi><td>nrow><mn 2.4</mn </td><td>nl:mŋ>2</td></mml:mrow></mml:msup></mml:math>	nrow> <mn 2.4</mn 	nl:mŋ>2
3	Intercalation of Ca into a Highly Defective Manganese Oxide at Room Temperature. Chemistry of Materials, 2022, 34, 836-846.	6.7	10
4	Review of computational approaches to predict the thermodynamic stability of inorganic solids. Journal of Materials Science, 2022, 57, 10475-10498.	3.7	39
5	Solid-State Calcium-lon Diffusion in Ca _{1.5} Ba _{0.5} Si ₅ O ₃ N ₆ . Chemistry of Materials, 2022, 34, 128-139.	6.7	7
6	Toward autonomous design and synthesis of novel inorganic materials. Materials Horizons, 2021, 8, 2169-2198.	12.2	61
7	Observing and Modeling the Sequential Pairwise Reactions that Drive Solidâ€State Ceramic Synthesis. Advanced Materials, 2021, 33, e2100312.	21.0	51
8	Probabilistic Deep Learning Approach to Automate the Interpretation of Multi-phase Diffraction Spectra. Chemistry of Materials, 2021, 33, 4204-4215.	6.7	45
9	Operando X-ray Diffraction Studies of the Mg-lon Migration Mechanisms in Spinel Cathodes for Rechargeable Mg-lon Batteries. Journal of the American Chemical Society, 2021, 143, 10649-10658.	13.7	24
10	Toward the Development of a High-Voltage Mg Cathode Using a Chromium Sulfide Host., 2021, 3, 1213-1220.		12
11	Synthetic accessibility and stability rules of NASICONs. Nature Communications, 2021, 12, 5752.	12.8	47
12	Layered Transition Metal Oxides as Ca Intercalation Cathodes: A Systematic Firstâ€Principles Evaluation. Advanced Energy Materials, 2021, 11, 2101698.	19.5	8
13	Data-centric approach to improve machine learning models for inorganic materials. Patterns, 2021, 2, 100382.	5.9	7
14	First-principles study of CaB ₁₂ H ₁₂ as a potential solid-state conductor for Ca. Physical Chemistry Chemical Physics, 2020, 22, 27600-27604.	2.8	8
15	A critical examination of compound stability predictions from machine-learned formation energies. Npj Computational Materials, 2020, 6, .	8.7	119
16	Highâ€Throughput Analysis of Materials for Chemical Looping Processes. Advanced Energy Materials, 2020, 10, 2000685.	19.5	18
17	Inorganic Halide Double Perovskites with Optoelectronic Properties Modulated by Sublattice Mixing. Journal of the American Chemical Society, 2020, 142, 5135-5145.	13.7	62
18	Selective metathesis synthesis of MgCr ₂ S ₄ by control of thermodynamic driving forces. Materials Horizons, 2020, 7, 1310-1316.	12.2	27

#	Article	IF	CITATIONS
19	Computational investigation of chalcogenide spinel conductors for all-solid-state Mg batteries. Chemical Communications, 2020, 56, 1952-1955.	4.1	31
20	Kinetically Controlled Low-Temperature Solid-State Metathesis of Manganese Nitride Mn ₃ N ₂ . Chemistry of Materials, 2019, 31, 7248-7254.	6.7	26
21	The role of decomposition reactions in assessing first-principles predictions of solid stability. Npj Computational Materials, 2019, 5, .	8.7	63
22	A map of the inorganic ternary metal nitrides. Nature Materials, 2019, 18, 732-739.	27.5	274
23	High-Throughput Equilibrium Analysis of Active Materials for Solar Thermochemical Ammonia Synthesis. ACS Applied Materials & Samp; Interfaces, 2019, 11, 24850-24858.	8.0	21
24	New tolerance factor to predict the stability of perovskite oxides and halides. Science Advances, 2019, 5, eaav0693.	10.3	778
25	Particle atomic layer deposition of alumina for sintering yttriaâ€stabilized cubic zirconia. Journal of the American Ceramic Society, 2019, 102, 2283-2293.	3.8	8
26	Characterization of products derived from the high temperature flash pyrolysis of microalgae and rice hulls. Chemical Engineering Science, 2019, 196, 527-537.	3.8	15
27	Redox-Mediated Stabilization in Zinc Molybdenum Nitrides. Journal of the American Chemical Society, 2018, 140, 4293-4301.	13.7	53
28	Helium interactions with alumina formed by atomic layer deposition show potential for mitigating problems with excess helium in spent nuclear fuel. Journal of Nuclear Materials, 2018, 499, 301-311.	2.7	8
29	Physical descriptor for the Gibbs energy of inorganic crystalline solids and temperature-dependent materials chemistry. Nature Communications, 2018, 9, 4168.	12.8	152
30	Machine learning for heterogeneous catalyst design and discovery. AICHE Journal, 2018, 64, 2311-2323.	3.6	258
31	Aluminum Nitride Hydrolysis Enabled by Hydroxyl-Mediated Surface Proton Hopping. ACS Applied Materials & Description (1988) (198	8.0	21
32	Hydrolysis protection and sintering of aluminum nitride powders with yttria nanofilms. Journal of the American Ceramic Society, 0, , .	3.8	4