

Mark Bowden

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9006210/publications.pdf>

Version: 2024-02-01

86
papers

3,195
citations

172386

29
h-index

161767

54
g-index

87
all docs

87
docs citations

87
times ranked

4338
citing authors

#	ARTICLE	IF	CITATIONS
1	Metallic technetium sequestration in nickel core/shell microstructure during Fe(OH) ₂ transformation with Ni doping. <i>Journal of Hazardous Materials</i> , 2022, 425, 127779.	6.5	3
2	Analysis of Intermediates and Products from the Dehydrogenation of Mg(BH ₄) ₂ . <i>Journal of Physical Chemistry A</i> , 2022, 126, 444-452.	1.1	6
3	A Review of Bismuth(III)-Based Materials for Remediation of Contaminated Sites. <i>ACS Earth and Space Chemistry</i> , 2022, 6, 883-908.	1.2	6
4	Thermal stability and structural studies on the mixtures of Mg(BH ₄) ₂ and glymes. <i>Dalton Transactions</i> , 2022, 51, 7268-7273.	1.6	2
5	A sobering examination of the feasibility of aqueous aluminum batteries. <i>Energy and Environmental Science</i> , 2022, 15, 2460-2469.	15.6	27
6	Cost and potential of metal-organic frameworks for hydrogen back-up power supply. <i>Nature Energy</i> , 2022, 7, 448-458.	19.8	28
7	Hydrogen storage in complex hydrides: past activities and new trends. <i>Progress in Energy</i> , 2022, 4, 032009.	4.6	23
8	Microstructural evolution and precipitation in ⁶ LiAlO ₂ during ion irradiation. <i>Journal of Applied Physics</i> , 2022, 131, .	1.1	6
9	Spontaneous Lithiation of Binary Oxides during Epitaxial Growth on LiCoO ₂ . <i>Nano Letters</i> , 2022, 22, 5530-5537.	4.5	4
10	High temperature transition aluminas in γ -Al ₂ O ₃ / δ -Al ₂ O ₃ stability range: Review. <i>Journal of Catalysis</i> , 2021, 393, 357-368.	3.1	55
11	Niche Partitioning of Microbial Communities at an Ancient Vitrified Hillfort: Implications for Vitrified Radioactive Waste Disposal. <i>Geomicrobiology Journal</i> , 2021, 38, 36-56.	1.0	5
12	Mg(BH ₄) ₂ -Based Hybrid Metal-Organic Borohydride System Exhibiting Enhanced Chemical Stability in Melt. <i>ACS Applied Energy Materials</i> , 2021, 4, 1704-1713.	2.5	5
13	Role of peracetic acid on the disruption of lignin packing structure and its consequence on lignin depolymerisation. <i>Green Chemistry</i> , 2021, 23, 8468-8479.	4.6	11
14	A Focused Ion Beam-Scanning Transmission Electron Microscopy with Energy-Dispersive X-ray Spectroscopy Study on Technetium Incorporation within Iron Oxides through Fe(OH) ₂ (s) Mineral Transformation. <i>ACS Earth and Space Chemistry</i> , 2021, 5, 525-534.	1.2	5
15	Spontaneous phase segregation of Sr ₂ NiO ₃ and SrNi ₂ O ₃ during SrNiO ₃ heteroepitaxy. <i>Science Advances</i> , 2021, 7, .	4.7	12
16	Thermal Conversion of Unsolvated Mg(B ₃ H ₈) ₂ to BH ₄ ⁻ in the Presence of MgH ₂ . <i>ACS Applied Energy Materials</i> , 2021, 4, 3737-3747.	2.5	17
17	Effects of Glymes on the Distribution of Mg(B10H10) and Mg(B12H12) from the Thermolysis of Mg(BH ₄) ₂ . <i>Inorganics</i> , 2021, 9, 41.	1.2	9
18	Incorporation of Ti in epitaxial Fe ₂ TiO ₄ thin films. <i>Journal of Physics Condensed Matter</i> , 2021, 33, 314004.	0.7	1

#	ARTICLE	IF	CITATIONS
19	A Polymer-in-Salt Electrolyte with Enhanced Oxidative Stability for Lithium Metal Polymer Batteries. ACS Applied Materials & Interfaces, 2021, 13, 31583-31593.	4.0	28
20	In-situ Observation of Ordering Transformations in γ -Al ₂ O ₃ . Microscopy and Microanalysis, 2021, 27, 1956-1957.	0.2	1
21	Understanding the Electronic Structure Evolution of Epitaxial LaNi _{1-x} Fe _x O ₃ Thin Films for Water Oxidation. Nano Letters, 2021, 21, 8324-8331.	4.5	31
22	Simultaneous immobilization of aqueous co-contaminants using a bismuth layered material. Journal of Environmental Radioactivity, 2021, 237, 106711.	0.9	5
23	Cluster defects in gibbsite nanoplates grown at acidic to neutral pH. Nanoscale, 2021, 13, 17373-17385.	2.8	5
24	The controlling role of atmosphere in dawsonite versus gibbsite precipitation from tetrahedral aluminate species. Dalton Transactions, 2021, 50, 13438-13446.	1.6	1
25	Theory-Guided Inelastic Neutron Scattering of Crystalline Alkaline Aluminate Salts Bearing Principal Motifs of Solution-State Species. Inorganic Chemistry, 2021, 60, 16223-16232.	1.9	4
26	The onset of alloying in Cu-Ni powders under high-shear consolidation. Materials and Design, 2021, 211, 110151.	3.3	9
27	Structural and reorientational dynamics of tetrahydroborate (BH ₄ ⁻) and tetrahydrofuran (THF) in a Mg(BH ₄) ₂ ·3THF adduct: neutron-scattering characterization. Physical Chemistry Chemical Physics, 2020, 22, 368-378.	1.3	6
28	Mg ²⁺ Diffusion-Induced Structural and Property Evolution in Epitaxial Fe ₃ O ₄ Thin Films. ACS Nano, 2020, 14, 14887-14894.	7.3	6
29	Hole-Trapping-Induced Stabilization of Ni ⁴⁺ in SrNiO ₃ /LaFeO ₃ Superlattices. Advanced Materials, 2020, 32, e2005003.	11.1	26
30	Heterolytic Scission of Hydrogen Within a Crystalline Frustrated Lewis Pair. Inorganic Chemistry, 2020, 59, 15295-15301.	1.9	8
31	Enabling Ether-Based Electrolytes for Long Cycle Life of Lithium-Ion Batteries at High Charge Voltage. ACS Applied Materials & Interfaces, 2020, 12, 54893-54903.	4.0	35
32	Water-dispersible nanocolloids and higher temperatures promote the release of carbon from riparian soil. Vadose Zone Journal, 2020, 19, e20077.	1.3	2
33	Quantification of High-Temperature Transition Al ₂ O ₃ and Their Phase Transformations**. Angewandte Chemie, 2020, 132, 21903-21911.	1.6	3
34	Molecular Intermediate in the Directed Formation of a Zeolitic Metal-Organic Framework. Journal of the American Chemical Society, 2020, 142, 17598-17606.	6.6	13
35	Quantification of High-Temperature Transition Al ₂ O ₃ and Their Phase Transformations**. Angewandte Chemie - International Edition, 2020, 59, 21719-21727.	7.2	28
36	Nanoscale observations of Fe-induced ferrihydrite transformation. Environmental Science: Nano, 2020, 7, 2953-2967.	2.2	21

#	ARTICLE	IF	CITATIONS
37	Dynamic Lattice Oxygen Participation on Perovskite LaNiO_3 during Oxygen Evolution Reaction. <i>Journal of Physical Chemistry C</i> , 2020, 124, 15386-15390.	1.5	49
38	Emerging investigator series: ion diffusivities in nanoconfined interfacial water films contribute to mineral carbonation thresholds. <i>Environmental Science: Nano</i> , 2020, 7, 1068-1081.	2.2	19
39	Reversible Oxidation Quantified by Optical Properties in Epitaxial Fe_2CrO_4 Films on (001) MgAl_2O_4 . <i>ACS Omega</i> , 2020, 5, 3240-3249.	1.6	7
40	Kinetics of Co-Mingled Tc and Cr Removal during Mineral Transformation of Ferrous Hydroxide. <i>ACS Earth and Space Chemistry</i> , 2020, 4, 218-228.	1.2	5
41	Surface Hydration and Hydroxyl Configurations of Gibbsite and Boehmite Nanoplates. <i>Journal of Physical Chemistry C</i> , 2020, 124, 5275-5285.	1.5	21
42	Kinetics and Mechanisms of ZnO to ZIF-8 Transformations in Supercritical CO_2 Revealed by In-Situ XRD Diffraction. <i>ChemSusChem</i> , 2020, 13, 2602-2612.	3.6	11
43	Inference of principal species in caustic aluminate solutions through solid-state spectroscopic characterization. <i>Dalton Transactions</i> , 2020, 49, 5869-5880.	1.6	10
44	Tuning the Electronic Structure of LaNiO_3 through Alloying with Strontium to Enhance Oxygen Evolution Activity. <i>Advanced Science</i> , 2019, 6, 1901073.	5.6	76
45	Solid-state hydrogen rich boron-nitrogen compounds for energy storage. <i>Chemical Society Reviews</i> , 2019, 48, 5350-5380.	18.7	82
46	Brownmillerite phase formation and evolution in epitaxial strontium ferrite heterostructures. <i>Applied Physics Letters</i> , 2019, 114, .	1.5	24
47	Anomalously low activation energy of nanoconfined MgCO_3 precipitation. <i>Chemical Communications</i> , 2019, 55, 6835-6837.	2.2	25
48	Structural Intergrowth in Al_2O_3 . <i>Journal of Physical Chemistry C</i> , 2019, 123, 9454-9460.	1.5	14
49	Strain Effect on Oxygen Evolution Reaction Activity of Epitaxial NdNiO_3 Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 12941-12947.	4.0	67
50	Electronic Structure and Band Alignment of $\text{LaMnO}_3/\text{SrTiO}_3$ Polar/Nonpolar Heterojunctions. <i>Advanced Materials Interfaces</i> , 2019, 6, 1801428.	1.9	22
51	http://www.w3.org/1998/Math/MathML $L^a S^1 \hat{a}^x x^3$	0.9	33
52	Size and Morphology Controlled Synthesis of Boehmite Nanoplates and Crystal Growth Mechanisms. <i>Crystal Growth and Design</i> , 2018, 18, 3596-3606.	1.4	82
53	<i>In Situ</i> TEM and AFM Investigation of Morphological Controls during the Growth of Single Crystal BaWO_4 . <i>Crystal Growth and Design</i> , 2018, 18, 1367-1375.	1.4	20
54	Boehmite and Gibbsite Nanoplates for the Synthesis of Advanced Alumina Products. <i>ACS Applied Nano Materials</i> , 2018, 1, 7115-7128.	2.4	79

#	ARTICLE	IF	CITATIONS
55	Cr(VI) Effect on Tc-99 Removal from Hanford Low-Activity Waste Simulant by Ferrous Hydroxide. Environmental Science & Technology, 2018, 52, 11752-11759.	4.6	11
56	Band alignment and electrocatalytic activity at the $\text{La}_{0.88}\text{Sr}_{0.12}\text{FeO}_3/\text{SrTiO}_3(001)$ heterojunction. Applied Physics Letters, 2018, 112, .	1.5	18
57	Tuning Bifunctional Oxygen Electrocatalysts by Changing the Site Rare-Earth Element in Perovskite Nickelates. Advanced Functional Materials, 2018, 28, 1803712.	7.8	122
58	In Situ ^{27}Al NMR Spectroscopy of Aluminate in Sodium Hydroxide Solutions above and below Saturation with Respect to Gibbsite. Inorganic Chemistry, 2018, 57, 11864-11873.	1.9	33
59	Linking surface chemistry to photovoltage in Sr-substituted LaFeO_3 for water oxidation. Journal of Materials Chemistry A, 2018, 6, 22170-22178.	5.2	27
60	Tunable Manipulation of Mineral Carbonation Kinetics in Nanoscale Water Films via Citrate Additives. Environmental Science & Technology, 2018, 52, 7138-7148.	4.6	22
61	Electronic and Optical Properties of a Semiconducting Spinel (Fe_2CrO_4). Advanced Functional Materials, 2017, 27, 1605040.	7.8	23
62	Complete Decomposition of Li_2CO_3 in Li^+O_2 Batteries Using IrB_4C as Noncarbon-Based Oxygen Electrode. Nano Letters, 2017, 17, 1417-1424.	4.5	104
63	Trace Uranium Partitioning in a Multiphase Nano- FeOOH System. Environmental Science & Technology, 2017, 51, 4970-4977.	4.6	44
64	Enhanced ^{99}Tc retention in glass waste form using Tc(IV)-incorporated Fe minerals. Journal of Nuclear Materials, 2017, 495, 455-462.	1.3	21
65	Reduction and Simultaneous Removal of ^{99}Tc and Cr by $\text{Fe}(\text{OH})_2(\text{s})$ Mineral Transformation. Environmental Science & Technology, 2017, 51, 8635-8642.	4.6	68
66	Laboratory study of the influence of scCO_2 injection on metals migration, precipitation, and microbial growth. International Journal of Greenhouse Gas Control, 2016, 47, 71-85.	2.3	3
67	Complex and liquid hydrides for energy storage. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	81
68	Hole-induced insulator-to-metal transition in $\text{La}_{1-x}\text{Sr}_x\text{FeO}_3$. Applied Physics Letters, 2016, 109, 162101.	1.1	74
69	Heterolysis of H_2 Across a Classical Lewis Pair, 2,6-Lutidine- BCl_3 : Synthesis, Characterization, and Mechanism. Chemistry - A European Journal, 2015, 21, 15713-15719.	1.7	6
70	Perovskite Sr^{δ} -Doped LaCrO_3 as a New p-Type Transparent Conducting Oxide. Advanced Materials, 2015, 27, 5191-5195.	11.1	160
71	An improved X-ray diffraction method for cellulose crystallinity measurement. Carbohydrate Polymers, 2015, 123, 476-481.	5.1	205
72	Impacts of Organic Ligands on Forsterite Reactivity in Supercritical CO_2 Fluids. Environmental Science & Technology, 2015, 49, 4724-4734.	4.6	26

#	ARTICLE	IF	CITATIONS
73	Unraveling the Origin of Structural Disorder in High Temperature Transition Al_2O_3 : Structure of $\hat{\gamma}$ - Al_2O_3 . Chemistry of Materials, 2015, 27, 7042-7049.	3.2	51
74	Investigating commercial cellulase performances toward specific biomass recalcitrance factors using reference substrates. Applied Microbiology and Biotechnology, 2014, 98, 4409-4420.	1.7	19
75	Structure of $\hat{\gamma}$ -Alumina: Toward the Atomic Level Understanding of Transition Alumina Phases. Journal of Physical Chemistry C, 2014, 118, 18051-18058.	1.5	72
76	Low viscosity alkanolguanidine and alkanolamidine liquids for CO_2 capture. RSC Advances, 2013, 3, 566-572.	1.7	64
77	Methods to stabilize and destabilize ammonium borohydride. Dalton Transactions, 2013, 42, 680-687.	1.6	22
78	in Situ High-Pressure X-ray Diffraction Study. Environmental Science & Technology, 2013, 47, 174-181.	4.6	79
79	Kinetic and thermodynamic investigation of hydrogen release from ethane 1,2-diamineborane. Energy and Environmental Science, 2011, 4, 4187.	15.6	70
80	Control of hydrogen release and uptake in amine borane molecular complexes: thermodynamics of ammonia borane, ammonium borohydride, and the diammoniate of diborane. Faraday Discussions, 2011, 151, 157.	1.6	36
81	Controlling growth, structure, and intermixing at the $\text{LaAlO}_3/\text{SrTiO}_3$ interface as the film stoichiometry is varied. Physical Review B, 2011, 83, .	1.1	108
82	The diammoniate of diborane: crystal structure and hydrogen release. Chemical Communications, 2010, 46, 8564.	2.2	47
83	Structure and thermal decomposition of methylamine borane. Inorganica Chimica Acta, 2008, 361, 2147-2153.	1.2	59
84	The Effects of Chemical Additives on the Induction Phase in Solid-State Thermal Decomposition of Ammonia Borane. Chemistry of Materials, 2008, 20, 5332-5336.	3.2	188
85	Calcium Amidotrihydroborate: A Hydrogen Storage Material. Angewandte Chemie - International Edition, 2007, 46, 8995-8997.	7.2	224
86	Selective Interactions of Soil Organic Matter Compounds with Calcite and the Role of Aqueous Ca. ACS Earth and Space Chemistry, 0, , .	1.2	4