Bruce W Arey

List of Publications by Year
in descending order

52 papers	4,768 citations	186265 28 h-index	175258 52 g-index
53 all docs	53 docs citations	53 times ranked	6062 citing authors

#	Article	IF	Citations
1	Visualizing the Distribution of Water in Nominally Anhydrous Minerals at the Atomic Scale: Insights From Atom Probe Tomography on Fayalite. Geophysical Research Letters, 2022, 49, .	4.0	0
2	High-Resolution Raman Nano-Imaging with an Imperfect Probe. Journal of Physical Chemistry C, 2022, 126, 4089-4094.	3.1	6
3	Optimization of fluorinated orthoformate based electrolytes for practical high-voltage lithium metal batteries. Energy Storage Materials, 2021, 34, 76-84.	18.0	65
4	In situ friction and wear behavior of rubber materials incorporating various fillers and/or a plasticizer in high-pressure hydrogen. Tribology International, 2021, 153, 106627.	5.9	13
5	Niche Partitioning of Microbial Communities at an Ancient Vitrified Hillfort: Implications for Vitrified Radioactive Waste Disposal. Geomicrobiology Journal, 2021, 38, 36-56.	2.0	5
6	Effects of fluorinated solvents on electrolyte solvation structures and electrode/electrolyte interphases for lithium metal batteries. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	131
7	Role of inner solvation sheath within saltâ€“solvent complexes in tailoring electrode/electrolyte interphases for lithium metal batteries. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 28603-28613.	7.1	191
8	Designing Advanced In Situ Electrode/Electrolyte Interphases for Wide Temperature Operation of 4.5 V Li||LiCoO₂ Batteries. Advanced Materials, 2020, 32, e2004898.	21.0	123
9	Advanced Electrolytes for Fastâ€Charging Highâ€Voltage Lithiumâ€Ion Batteries in Wideâ€Temperature Range. Advanced Energy Materials, 2020, 10, 2000368.	19.5	159
10	Enabling High-Voltage Lithium-Metal Batteries under Practical Conditions. Joule, 2019, 3, 1662-1676.	24.0	598
11	Monolithic solidâ€“electrolyte interphases formed in fluorinated orthoformate-based electrolytes minimize Li depletion and pulverization. Nature Energy, 2019, 4, 796-805.	39.5	621
12	Nonflammable Electrolytes for Lithium Ion Batteries Enabled by Ultraconformal Passivation Interphases. ACS Energy Letters, 2019, 4, 2529-2534.	17.4	112
13	Visualizing the iron atom exchange front in the Fe(II)-catalyzed recrystallization of goethite by atom probe tomography. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 2866-2874.	7.1	52
14	Tunable Porosity in Fused Filament 3D-Printed Blends of Intrinsically Porous Polymer and Thermoplastic Aliphatic Polyesters Polycaprolactone and Polylactic Acid. ACS Applied Polymer Materials, 2019, 1, 482-492.	4.4	10
15	Resolving Iron(II) Sorption and Oxidative Growth on Hematite (001) Using Atom Probe Tomography. Journal of Physical Chemistry C, 2018, 122, 3903-3914.	3.1	26
16	Chemically Active, Porous 3D-Printed Thermoplastic Composites. ACS Applied Materials & Interfaces, 2018, 10, 15112-15121.	8.0	73
17	Preâ€Viking Swedish hillfort glass: A prospective longâ€term alteration analogue for vitrified nuclear waste. International Journal of Applied Glass Science, 2018, 9, 540-554.	2.0	13
18	Perfect Strain Relaxation in Metamorphic Epitaxial Aluminum on Silicon through Primary and Secondary Interface Misfit Dislocation Arrays. ACS Nano, 2018, 12, 6843-6850.	14.6	17

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19	In Situ Characterization of Boehmite Particles in Water Using Liquid SEM. Journal of Visualized Experiments, 2017, , .	0.3	2
20	Manganese-calcium intermixing facilitates heteroepitaxial growth at the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si3.gif" overflow="scroll"><mml:mfenced open="(" close=")"><mml:mrow><mml:mn>10</mml:mn><mml:mover accent="false"><mml:mn>1</mml:mn><mml:mo>Â¯</mml:mo></mml:mover><mml:mn>4</mml:mn></mml:mrow></mml:mfenced></r calcite-water interface. Chemical Geology, 2017, 470, 152-163.	3.3	17
21	Tc(VII) and Cr(VI) Interaction with Naturally Reduced Ferruginous Smectite from a Redox Transition Zone. Environmental Science & Technology, 2017, 51, 9042-9052.	10.0	38
22	Inorganic tin aluminophosphate nanocomposite for reductive separation of pertechnetate. Environmental Science: Nano, 2016, 3, 1003-1013.	4.3	24
23	RedOx-controlled sorption of iodine anions by hydrotalcite composites. RSC Advances, 2016, 6, 76042-76055.	3.6	23
24	Direct observation of ice nucleation events on individual atmospheric particles. Physical Chemistry Chemical Physics, 2016, 18, 29721-29731.	2.8	55
25	Enhancing magnesite formation at low temperature and high CO2 pressure: The impact of seed crystals and minor components. Chemical Geology, 2015, 395, 119-125.	3.3	16
26	Determining the location and nearest neighbours of aluminium in zeolites with atom probe tomography. Nature Communications, 2015, 6, 7589.	12.8	139
27	Tip-Enhanced Raman Nanographs: Mapping Topography and Local Electric Fields. Nano Letters, 2015, 15, 2385-2390.	9.1	26
28	Dynamics of Magnesite Formation at Low Temperature and High pCO₂ in Aqueous Solution. Environmental Science & Technology, 2015, 49, 10736-10744.	10.0	25
29	Adsorption Kinetics in Nanoscale Porous Coordination Polymers. ACS Applied Materials & Interfaces, 2015, 7, 21712-21716.	8.0	14
30	Kinetics and mechanisms of cadmium carbonate heteroepitaxial growth at the calcite <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:mo stretchy="false">(</mml:mo><mml:mn>10</mml:mn><mml:mspace width="0.12em" /><mml:mover) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	3.9	26
31	Geochemical and mineralogical investigation of uranium in multi-element contaminated, organic-rich subsurface sediment. Applied Geochemistry, 2014, 42, 77-85.	3.0	40
32	Formation of submicron magnesite during reaction of natural forsterite in H2O-saturated supercritical CO2. Geochimica Et Cosmochimica Acta, 2014, 134, 197-209.	3.9	36
33	In Situ One-Step Synthesis of Hierarchical Nitrogen-Doped Porous Carbon for High-Performance Supercapacitors. ACS Applied Materials & Interfaces, 2014, 6, 7214-7222.	8.0	306
34	Identification of Fragile Microscopic Structures during Mineral Transformations in Wet Supercritical CO2. Microscopy and Microanalysis, 2013, 19, 268-275.	0.4	1
35	Pb nanowire formation on Al/lead zirconate titanate surfaces in high-pressure hydrogen. Journal of Applied Physics, 2012, 112, .	2.5	10
36	Fayalite dissolution and siderite formation in water-saturated supercritical CO2. Chemical Geology, 2012, 332-333, 124-135.	3.3	51

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37	Characterization of Nanoporous WO3 Films Grown via Ballistic Deposition. Journal of Physical Chemistry C, 2012, 116, 10649-10655.	3.1	15
38	Reaction of water-saturated supercritical CO2 with forsterite: Evidence for magnesite formation at low temperatures. Geochimica Et Cosmochimica Acta, 2012, 91, 271-282.	3.9	97
39	Carbon dioxide-assisted fabrication of highly uniform submicron-sized colloidal carbon spheres via hydrothermal carbonization using soft drink. Colloid and Polymer Science, 2012, 290, 1567-1573.	2.1	17
40	Template free synthesis of LiV₃O₈nanorods as a cathode material for high-rate secondary lithium batteries. Journal of Materials Chemistry, 2011, 21, 1153-1161.	6.7	105
41	Imaging Hydrated Microbial Extracellular Polymers: Comparative Analysis by Electron Microscopy. Applied and Environmental Microbiology, 2011, 77, 1254-1262.	3.1	168
42	Nanosheet-structured LiV3O8 with high capacity and excellent stability for high energy lithium batteries. Journal of Materials Chemistry, 2011, 21, 10077.	6.7	112
43	High-rate cathodes based on Li3V2(PO4)3 nanobelts prepared via surfactant-assisted fabrication. Journal of Power Sources, 2011, 196, 3646-3649.	7.8	100
44	Effect of extent of natural subsurface bioreduction on Fe-mineralogy of subsurface sediments. Journal of Physics: Conference Series, 2010, 217, 012047.	0.4	5
45	Nano-structured Li3V2(PO4)3/carbon composite for high-rate lithium-ion batteries. Electrochemistry Communications, 2010, 12, 1674-1677.	4.7	173
46	Facile synthesized nanorod structured vanadium pentoxide for high-rate lithium batteries. Journal of Materials Chemistry, 2010, 20, 9193.	6.7	316
47	Uranium in Framboidal Pyrite from a Naturally Bioreduced Alluvial Sediment. Environmental Science & Technology, 2009, 43, 8528-8534.	10.0	85
48	Hydrothermal Syntheses of Colloidal Carbon Spheres from Cyclodextrins. Journal of Physical Chemistry C, 2008, 112, 14236-14240.	3.1	131
49	Hydrothermal Dehydration of Aqueous Fructose Solutions in a Closed System. Journal of Physical Chemistry C, 2007, 111, 15141-15145.	3.1	266
50	Reactive Ballistic Deposition of Porous TiO2Films:â€‰ Growth and Characterization. Journal of Physical Chemistry C, 2007, 111, 4765-4773.	3.1	56
51	Residual Waste from Hanford Tanks 241-C-203 and 241-C-204. 1. Solids Characterization. Environmental Science & Technology, 2006, 40, 3749-3754.	10.0	28
52	Characterization of Solids in Residual Wastes from Underground Storage Tanks at the Hanford Site, Washington, U.S.A.. Materials Research Society Symposia Proceedings, 2006, 985, 1.	0.1	2