

# Bruce W Arey

## List of Publications by Year in descending order

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Version: 2024-02-01

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	Monolithic solidâ€ electrolyte interphases formed in fluorinated orthoformate-based electrolytes minimize Li depletion and pulverization. <i>Nature Energy</i> , 2019, 4, 796-805.	39.5	621
2	Enabling High-Voltage Lithium-Metal Batteries under Practical Conditions. <i>Joule</i> , 2019, 3, 1662-1676.	24.0	598
3	Facile synthesized nanorod structured vanadium pentoxide for high-rate lithium batteries. <i>Journal of Materials Chemistry</i> , 2010, 20, 9193.	6.7	316
4	In Situ One-Step Synthesis of Hierarchical Nitrogen-Doped Porous Carbon for High-Performance Supercapacitors. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 7214-7222.	8.0	306
5	Hydrothermal Dehydration of Aqueous Fructose Solutions in a Closed System. <i>Journal of Physical Chemistry C</i> , 2007, 111, 15141-15145.	3.1	266
6	Role of inner solvation sheath within saltâ€ solvent complexes in tailoring electrode/electrolyte interphases for lithium metal batteries. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 28603-28613.	7.1	191
7	Nano-structured Li <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> /carbon composite for high-rate lithium-ion batteries. <i>Electrochemistry Communications</i> , 2010, 12, 1674-1677.	4.7	173
8	Imaging Hydrated Microbial Extracellular Polymers: Comparative Analysis by Electron Microscopy. <i>Applied and Environmental Microbiology</i> , 2011, 77, 1254-1262.	3.1	168
9	Advanced Electrolytes for Fastâ€ Charging Highâ€ Voltage Lithiumâ€ Ion Batteries in Wideâ€ Temperature Range. <i>Advanced Energy Materials</i> , 2020, 10, 2000368.	19.5	159
10	Determining the location and nearest neighbours of aluminium in zeolites with atom probe tomography. <i>Nature Communications</i> , 2015, 6, 7589.	12.8	139
11	Hydrothermal Syntheses of Colloidal Carbon Spheres from Cyclodextrins. <i>Journal of Physical Chemistry C</i> , 2008, 112, 14236-14240.	3.1	131
12	Effects of fluorinated solvents on electrolyte solvation structures and electrode/electrolyte interphases for lithium metal batteries. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	131
13	Designing Advanced In Situ Electrode/Electrolyte Interphases for Wide Temperature Operation of 4.5 V Li   LiCoO <sub>2</sub> Batteries. <i>Advanced Materials</i> , 2020, 32, e2004898.	21.0	123
14	Nanosheet-structured LiV <sub>3</sub> O <sub>8</sub> with high capacity and excellent stability for high energy lithium batteries. <i>Journal of Materials Chemistry</i> , 2011, 21, 10077.	6.7	112
15	Nonflammable Electrolytes for Lithium Ion Batteries Enabled by Ultraconformal Passivation Interphases. <i>ACS Energy Letters</i> , 2019, 4, 2529-2534.	17.4	112
16	Template free synthesis of LiV <sub>3</sub> O <sub>8</sub> nanorods as a cathode material for high-rate secondary lithium batteries. <i>Journal of Materials Chemistry</i> , 2011, 21, 1153-1161.	6.7	105
17	High-rate cathodes based on Li <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> nanobelts prepared via surfactant-assisted fabrication. <i>Journal of Power Sources</i> , 2011, 196, 3646-3649.	7.8	100
18	Reaction of water-saturated supercritical CO <sub>2</sub> with forsterite: Evidence for magnesite formation at low temperatures. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 91, 271-282.	3.9	97

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19	Uranium in Framboidal Pyrite from a Naturally Bioreduced Alluvial Sediment. <i>Environmental Science &amp; Technology</i> , 2009, 43, 8528-8534.	10.0	85
20	Chemically Active, Porous 3D-Printed Thermoplastic Composites. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 15112-15121.	8.0	73
21	Optimization of fluorinated orthoformate based electrolytes for practical high-voltage lithium metal batteries. <i>Energy Storage Materials</i> , 2021, 34, 76-84.	18.0	65
22	Reactive Ballistic Deposition of Porous TiO <sub>2</sub> Films: Growth and Characterization. <i>Journal of Physical Chemistry C</i> , 2007, 111, 4765-4773.	3.1	56
23	Direct observation of ice nucleation events on individual atmospheric particles. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 29721-29731.	2.8	55
24	Visualizing the iron atom exchange front in the Fe(II)-catalyzed recrystallization of goethite by atom probe tomography. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 2866-2874.	7.1	52
25	Fayalite dissolution and siderite formation in water-saturated supercritical CO <sub>2</sub> . <i>Chemical Geology</i> , 2012, 332-333, 124-135.	3.3	51
26	Geochemical and mineralogical investigation of uranium in multi-element contaminated, organic-rich subsurface sediment. <i>Applied Geochemistry</i> , 2014, 42, 77-85.	3.0	40
27	Tc(VII) and Cr(VI) Interaction with Naturally Reduced Ferruginous Smectite from a Redox Transition Zone. <i>Environmental Science &amp; Technology</i> , 2017, 51, 9042-9052.	10.0	38
28	Formation of submicron magnesite during reaction of natural forsterite in H <sub>2</sub> O-saturated supercritical CO <sub>2</sub> . <i>Geochimica Et Cosmochimica Acta</i> , 2014, 134, 197-209.	3.9	36
29	Residual Waste from Hanford Tanks 241-C-203 and 241-C-204. 1. Solids Characterization. <i>Environmental Science &amp; Technology</i> , 2006, 40, 3749-3754.	10.0	28
30	Kinetics and mechanisms of cadmium carbonate heteroepitaxial growth at the calcite $\text{CaCO}_3 + \text{Cd}^{2+} + \text{CO}_3^{2-} \rightarrow \text{Ca}_x\text{Cd}_{1-x}\text{CO}_3$	3.9	26
31	Tip-Enhanced Raman Nanographs: Mapping Topography and Local Electric Fields. <i>Nano Letters</i> , 2015, 15, 2385-2390.	9.1	26
32	Resolving Iron(II) Sorption and Oxidative Growth on Hematite (001) Using Atom Probe Tomography. <i>Journal of Physical Chemistry C</i> , 2018, 122, 3903-3914.	3.1	26
33	Dynamics of Magnesite Formation at Low Temperature and High pCO <sub>2</sub> in Aqueous Solution. <i>Environmental Science &amp; Technology</i> , 2015, 49, 10736-10744.	10.0	25
34	Inorganic tin aluminophosphate nanocomposite for reductive separation of pertechnetate. <i>Environmental Science: Nano</i> , 2016, 3, 1003-1013.	4.3	24
35	RedOx-controlled sorption of iodine anions by hydrotalcite composites. <i>RSC Advances</i> , 2016, 6, 76042-76055.	3.6	23
36	Carbon dioxide-assisted fabrication of highly uniform submicron-sized colloidal carbon spheres via hydrothermal carbonization using soft drink. <i>Colloid and Polymer Science</i> , 2012, 290, 1567-1573.	2.1	17

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37	Manganese-calcium intermixing facilitates heteroepitaxial growth at the calcite-water interface. <i>Chemical Geology</i> , 2017, 470, 152-163.	3.3	17
38	Perfect Strain Relaxation in Metamorphic Epitaxial Aluminum on Silicon through Primary and Secondary Interface Misfit Dislocation Arrays. <i>ACS Nano</i> , 2018, 12, 6843-6850.	14.6	17
39	Enhancing magnesite formation at low temperature and high CO <sub>2</sub> pressure: The impact of seed crystals and minor components. <i>Chemical Geology</i> , 2015, 395, 119-125.	3.3	16
40	Characterization of Nanoporous WO <sub>3</sub> Films Grown via Ballistic Deposition. <i>Journal of Physical Chemistry C</i> , 2012, 116, 10649-10655.	3.1	15
41	Adsorption Kinetics in Nanoscale Porous Coordination Polymers. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 21712-21716.	8.0	14
42	Pre-erecting Swedish hillfort glass: A prospective long-term alteration analogue for vitrified nuclear waste. <i>International Journal of Applied Glass Science</i> , 2018, 9, 540-554.	2.0	13
43	In situ friction and wear behavior of rubber materials incorporating various fillers and/or a plasticizer in high-pressure hydrogen. <i>Tribology International</i> , 2021, 153, 106627.	5.9	13
44	Pb nanowire formation on Al/lead zirconate titanate surfaces in high-pressure hydrogen. <i>Journal of Applied Physics</i> , 2012, 112, .	2.5	10
45	Tunable Porosity in Fused Filament 3D-Printed Blends of Intrinsically Porous Polymer and Thermoplastic Aliphatic Polyesters Polycaprolactone and Polylactic Acid. <i>ACS Applied Polymer Materials</i> , 2019, 1, 482-492.	4.4	10
46	High-Resolution Raman Nano-Imaging with an Imperfect Probe. <i>Journal of Physical Chemistry C</i> , 2022, 126, 4089-4094.	3.1	6
47	Effect of extent of natural subsurface bioreduction on Fe-mineralogy of subsurface sediments. <i>Journal of Physics: Conference Series</i> , 2010, 217, 012047.	0.4	5
48	Niche Partitioning of Microbial Communities at an Ancient Vitrified Hillfort: Implications for Vitrified Radioactive Waste Disposal. <i>Geomicrobiology Journal</i> , 2021, 38, 36-56.	2.0	5
49	Characterization of Solids in Residual Wastes from Underground Storage Tanks at the Hanford Site, Washington, U.S.A.. <i>Materials Research Society Symposia Proceedings</i> , 2006, 985, 1.	0.1	2
50	&lt;em&gt;In Situ&/em&gt; Characterization of Boehmite Particles in Water Using Liquid SEM. <i>Journal of Visualized Experiments</i> , 2017, , .	0.3	2
51	Identification of Fragile Microscopic Structures during Mineral Transformations in Wet Supercritical CO <sub>2</sub> . <i>Microscopy and Microanalysis</i> , 2013, 19, 268-275.	0.4	1
52	Visualizing the Distribution of Water in Nominally Anhydrous Minerals at the Atomic Scale: Insights From Atom Probe Tomography on Fayalite. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	0