

Lawrence M. Anovitz

List of Publications by Year in descending order

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papers

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docs citations

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times ranked

6148
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#	ARTICLE	IF	CITATIONS
1	Characterization and Analysis of Porosity and Pore Structures. <i>Reviews in Mineralogy and Geochemistry</i> , 2015, 80, 61-164.	4.8	729
2	Ion Adsorption at the Rutile-Water Interface: Linking Molecular and Macroscopic Properties. <i>Langmuir</i> , 2004, 20, 4954-4969.	3.5	298
3	Phase Equilibria in the System CaCO ₃ -MgCO ₃ -FeCO ₃ . <i>Journal of Petrology</i> , 1987, 28, 389-415.	2.8	296
4	Calculation and application of clinopyroxene-garnet-plagioclase-quartz geobarometers. <i>Contributions To Mineralogy and Petrology</i> , 1988, 100, 92-106.	3.1	243
5	The Role of Chemistry in Fracture Pattern Development and Opportunities to Advance Interpretations of Geological Materials. <i>Reviews of Geophysics</i> , 2019, 57, 1065-1111.	23.0	182
6	Diagenetic changes in macro- to nano-scale porosity in the St. Peter Sandstone: An (ultra) small angle neutron scattering and backscattered electron imaging analysis. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 102, 280-305.	3.9	134
7	Dynamics and Structure of Hydration Water on Rutile and Cassiterite Nanopowders Studied by Quasielastic Neutron Scattering and Molecular Dynamics Simulations. <i>Journal of Physical Chemistry C</i> , 2007, 111, 4328-4341.	3.1	132
8	The Failure of Obsidian Hydration Dating: Sources, Implications, and New Directions. <i>Journal of Archaeological Science</i> , 1999, 26, 735-752.	2.4	131
9	Film Breakdown and Nano-Porous Mg(OH) ₂ Formation from Corrosion of Magnesium Alloys in Salt Solutions. <i>Journal of the Electrochemical Society</i> , 2015, 162, C140-C149.	2.9	128
10	Dawsonite synthesis and reevaluation of its thermodynamic properties from solubility measurements: Implications for mineral trapping of CO ₂ . <i>Geochimica Et Cosmochimica Acta</i> , 2007, 71, 4438-4455.	3.9	127
11	Alkyl Chain Length and Temperature Effects on Structural Properties of Pyrrolidinium-Based Ionic Liquids: A Combined Atomistic Simulation and Small-Angle X-ray Scattering Study. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 125-130.	4.6	121
12	Thermobarometry and Pressure-Temperature Paths in the Grenville Province of Ontario. <i>Journal of Petrology</i> , 1990, 31, 197-241.	2.8	116
13	Quantum Tunneling of Water in Beryl: A New State of the Water Molecule. <i>Physical Review Letters</i> , 2016, 116, 167802.	7.8	92
14	Micro-Continuum Approaches for Modeling Pore-Scale Geochemical Processes. <i>Reviews in Mineralogy and Geochemistry</i> , 2015, 80, 217-246.	4.8	88
15	Magnetite surface charge studies to 290°C from in situ pH titrations. <i>Chemical Geology</i> , 2000, 167, 193-229.	3.3	84
16	A new approach to quantification of metamorphism using ultra-small and small angle neutron scattering. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 7303-7324.	3.9	82
17	How Porosity Increases During Incipient Weathering of Crystalline Silicate Rocks. <i>Reviews in Mineralogy and Geochemistry</i> , 2015, 80, 331-354.	4.8	81
18	Resolving Time-dependent Evolution of Pore-Scale Structure, Permeability and Reactivity using X-ray Microtomography. <i>Reviews in Mineralogy and Geochemistry</i> , 2015, 80, 247-285.	4.8	79

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19	Evaluation of accessible mineral surface areas for improved prediction of mineral reaction rates in porous media. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 205, 31-49.	3.9	79
20	Boehmite and Gibbsite Nanoplates for the Synthesis of Advanced Alumina Products. <i>ACS Applied Nano Materials</i> , 2018, 1, 7115-7128.	5.0	79
21	Lattice Boltzmann-Based Approaches for Pore-Scale Reactive Transport. <i>Reviews in Mineralogy and Geochemistry</i> , 2015, 80, 393-431.	4.8	78
22	Pore-Size-Dependent Calcium Carbonate Precipitation Controlled by Surface Chemistry. <i>Environmental Science & Technology</i> , 2014, 48, 6177-6183.	10.0	69
23	Structure and Stability of SnO ₂ Nanocrystals and Surface-Bound Water Species. <i>Journal of the American Chemical Society</i> , 2013, 135, 6885-6895.	13.7	67
24	Thermodynamics of Cr ₂ O ₃ , FeCr ₂ O ₄ , ZnCr ₂ O ₄ , and CoCr ₂ O ₄ . <i>Journal of Chemical Thermodynamics</i> , 2007, 39, 1474-1492.	2.0	64
25	Electric Double Layer at Metal Oxide Surfaces: A Static Properties of the Cassiterite-Water Interface. <i>Langmuir</i> , 2007, 23, 4925-4937.	3.5	63
26	Suppression of the dynamic transition in surface water at low hydration levels: A study of water on rutile. <i>Physical Review E</i> , 2009, 79, 051504.	2.1	61
27	Heat capacity and phase equilibria of almandine, Fe ₃ Al ₂ Si ₃ O ₁₂ . <i>Geochimica Et Cosmochimica Acta</i> , 1993, 57, 4191-4204.	3.9	59
28	Experimental evidence for non-redox transformations between magnetite and hematite under H ₂ -rich hydrothermal conditions. <i>Earth and Planetary Science Letters</i> , 2007, 257, 60-70.	4.4	54
29	Mechanisms of rhyolitic glass hydration below the glass transition. <i>American Mineralogist</i> , 2008, 93, 1166-1178.	1.9	54
30	The heat-capacity of ilmenite and phase equilibria in the system Fe-Ti-O. <i>Geochimica Et Cosmochimica Acta</i> , 1985, 49, 2027-2040.	3.9	51
31	Effect of quartz overgrowth precipitation on the multiscale porosity of sandstone: A (U)SANS and imaging analysis. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 158, 199-222.	3.9	51
32	Ionic Transport in Nano-Porous Clays with Consideration of Electrostatic Effects. <i>Reviews in Mineralogy and Geochemistry</i> , 2015, 80, 287-329.	4.8	51
33	Compatibility of Geobarometers in the System CaO-FeO-Al ₂ O ₃ -SiO ₂ -TiO ₂ (CFAST): Implications for Garnet Mixing Models. <i>Journal of Geology</i> , 1987, 95, 633-645.	1.4	50
34	Obsidian Diffusion Dating by Secondary Ion Mass Spectrometry: A Test using Results from Mound 65, Chalco, Mexico. <i>Journal of Archaeological Science</i> , 2002, 29, 1055-1075.	2.4	49
35	Isothermal Time-Series Determination of the Rate of Diffusion of Water in Pachuca Obsidian*. <i>Archaeometry</i> , 2004, 46, 301-326.	1.3	49
36	Magnesium silicate dissolution investigated by ²⁹ Si MAS, ¹ H- ²⁹ Si CPMAS, ²⁵ Mg QCPMG, and ¹ H- ²⁵ Mg CP QCPMG NMR. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 7013.	2.8	49

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37	Comment on "Structure and dynamics of liquid water on rutile TiO ₂ (110)". Physical Review B, 2012, 85, .	3.2	46
38	The CO ₂ -H ₂ O system: III. A new experimental method for determining liquid-vapor equilibria at high subcritical temperatures. American Mineralogist, 2001, 86, 1100-1111.	1.9	42
39	Multi-scale characterization of pore evolution in a combustion metamorphic complex, Hatrurim basin, Israel: Combining (ultra) small-angle neutron scattering and image analysis. Geochimica Et Cosmochimica Acta, 2013, 121, 339-362.	3.9	42
40	Precipitation in Pores: A Geochemical Frontier. Reviews in Mineralogy and Geochemistry, 2015, 80, 165-190.	4.8	42
41	Mesoscale and Hybrid Models of Fluid Flow and Solute Transport. Reviews in Mineralogy and Geochemistry, 2015, 80, 433-459.	4.8	41
42	Extraction of organic compounds from representative shales and the effect on porosity. Journal of Natural Gas Science and Engineering, 2016, 35, 646-660.	4.4	40
43	Impact of Solution Chemistry and Particle Anisotropy on the Collective Dynamics of Oriented Aggregation. ACS Nano, 2018, 12, 10114-10122.	14.6	40
44	Solvent-pore interactions in the Eagle Ford shale formation. Fuel, 2019, 238, 298-311.	6.4	40
45	Effects of maturation on multiscale (nanometer to millimeter) porosity in the Eagle Ford Shale. Interpretation, 2015, 3, SU59-SU70.	1.1	37
46	Magnetic contribution to heat capacity and entropy of nickel ferrite (NiFe ₂ O ₄). Journal of Physics and Chemistry of Solids, 2007, 68, 10-21.	4.0	36
47	Mechanisms of iron oxide transformations in hydrothermal systems. Geochimica Et Cosmochimica Acta, 2010, 74, 6141-6156.	3.9	36
48	Metastability in Near-Surface Rocks of Minerals in the System Al ₂ O ₃ -SiO ₂ -H ₂ O. Clays and Clay Minerals, 1991, 39, 225-233.	1.3	35
49	Zn ²⁺ and Sr ²⁺ adsorption at the TiO ₂ (110) "electrolyte interface: Influence of ionic strength, coverage, and anions. Journal of Colloid and Interface Science, 2006, 295, 50-64.	9.4	35
50	Experimental calibration of silicon and oxygen isotope fractionations between quartz and water at 250 Å°C by in situ microanalysis of experimental products and application to zoned low ³⁰ Si quartz overgrowths. Chemical Geology, 2016, 421, 127-142.	3.3	35
51	Phlogopite-chlorite reaction mechanisms and physical conditions during retrograde reactions in the Marble Formation, Franklin, New Jersey. Contributions To Mineralogy and Petrology, 1984, 88, 299-306.	3.1	32
52	The heat capacity of a natural monticellite and phase equilibria in the system CaO-MgO-SiO ₂ -CO ₂ . Geochimica Et Cosmochimica Acta, 1986, 50, 1475-1484.	3.9	32
53	Solubility Measurements of Crystalline NiO in Aqueous Solution as a Function of Temperature and pH. Journal of Solution Chemistry, 2011, 40, 680-702.	1.2	32
54	Spontaneous imbibition of water and determination of effective contact angles in the Eagle Ford Shale Formation using neutron imaging. Journal of Earth Science (Wuhan, China), 2017, 28, 874-887.	3.2	32

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55	Implications of post-thrusting extension and underplating for P-T-t paths in granulite terranes: A Grenville example. <i>Geology</i> , 1990, 18, 466.	4.4	31
56	Tracer Film Growth Study of Hydrogen and Oxygen from the Corrosion of Magnesium in Water. <i>Journal of the Electrochemical Society</i> , 2014, 161, C395-C404.	2.9	30
57	Low-temperature isotopic exchange in obsidian: Implications for diffusive mechanisms. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 3795-3806.	3.9	28
58	Anisotropic dynamics of water ultraconfined in macroscopically oriented channels of single-crystal beryl: A multifrequency analysis. <i>Physical Review E</i> , 2013, 88, 052306.	2.1	28
59	Strong Anisotropic Dynamics of Ultra-Confined Water. <i>Journal of Physical Chemistry B</i> , 2014, 118, 13414-13419.	2.6	28
60	4. Characterization and Analysis of Porosity and Pore Structures. , 2015, , 61-164.		28
61	Effects of Coupled Chemo-Mechanical Processes on the Evolution of Pore-Size Distributions in Geological Media. <i>Reviews in Mineralogy and Geochemistry</i> , 2015, 80, 45-60.	4.8	27
62	Thermodynamic properties of sodalite at temperatures from 15 K to 1000 K. <i>Journal of Chemical Thermodynamics</i> , 1995, 27, 1119-1132.	2.0	26
63	Sol-gel synthesis of nanocrystalline fayalite (Fe ₂ SiO ₄). <i>American Mineralogist</i> , 2012, 97, 653-656.	1.9	26
64	Lanthanide-Containing Zirconotitanate Solid Solutions. <i>Journal of Solid State Chemistry</i> , 1996, 127, 231-239.	2.9	25
65	Crystalline Copper Phosphates: Synthesis and Thermal Stability. <i>Journal of the American Ceramic Society</i> , 1997, 80, 3133-3138.	3.8	25
66	Effects of Ionic Strength, Salt, and pH on Aggregation of Boehmite Nanocrystals: Tumbler Small-Angle Neutron and X-ray Scattering and Imaging Analysis. <i>Langmuir</i> , 2018, 34, 15839-15853.	3.5	25
67	Dry melting of high albite. <i>American Mineralogist</i> , 1999, 84, 1830-1842.	1.9	24
68	Experimental determination of the activity-composition relations and phase equilibria of H ₂ O-CO ₂ -NaCl fluids at 500°C, 500 bars. <i>Geochimica Et Cosmochimica Acta</i> , 2004, 68, 3557-3567.	3.9	24
69	Sorption Phase of Supercritical CO ₂ in Silica Aerogel: Experiments and Mesoscale Computer Simulations. <i>Journal of Physical Chemistry C</i> , 2014, 118, 15525-15533.	3.1	24
70	Evaluation of Nanoscale Accessible Pore Structures for Improved Prediction of Gas Production Potential in Chinese Marine Shales. <i>Energy & Fuels</i> , 2018, 32, 12447-12461.	5.1	24
71	THE APPLICATION OF HRTEM TECHNIQUES AND NANOSIMS TO CHEMICALLY AND ISOTOPICALLY CHARACTERIZE GEOBACTER SULFURREDUCTENS SURFACES. <i>Canadian Mineralogist</i> , 2005, 43, 1631-1641.	1.0	23
72	Relationship between mineralogy and porosity in seals relevant to geologic CO ₂ sequestration. <i>Environmental Geosciences</i> , 2014, 21, 39-57.	0.6	23

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73	Capillary pressure & saturation relationships for gas shales measured using a water activity meter. <i>Journal of Natural Gas Science and Engineering</i> , 2016, 33, 1342-1352.	4.4	23
74	Thermobarometric constraints on the structural evolution of the Coast Mountains batholith, central southeastern Alaska. <i>Canadian Journal of Earth Sciences</i> , 1991, 28, 912-928.	1.3	22
75	Solubility and surface adsorption characteristics of metal oxides. , 2004, , 493-595.		22
76	Wet oxidation of stainless steels: New insights into hydrogen ingress. <i>Corrosion Science</i> , 2011, 53, 1633-1638.	6.6	22
77	Framboidal iron oxide: Chondrite-like material from the black mat, Murray Springs, Arizona. <i>Earth and Planetary Science Letters</i> , 2012, 319-320, 251-258.	4.4	22
78	Obsidian hydration: A new paleothermometer. <i>Geology</i> , 2006, 34, 517.	4.4	20
79	SANS coupled with fluid invasion approaches for characterization of overall nanopore structure and mesopore connectivity of organic-rich marine shales in China. <i>International Journal of Coal Geology</i> , 2020, 217, 103343.	5.0	20
80	The CO ₂ -H ₂ O system. II. calculated thermodynamic mixing properties for 400°C, 0-400 MPa. <i>Geochimica Et Cosmochimica Acta</i> , 1999, 63, 2393-2408.	3.9	19
81	Tracer Film Growth Study of the Corrosion of Magnesium Alloys AZ31B and ZE10A in 0.01% NaCl Solution. <i>Journal of the Electrochemical Society</i> , 2017, 164, C367-C375.	2.9	19
82	Correlating inter-particle forces and particle shape to shear-induced aggregation/fragmentation and rheology for dilute anisotropic particle suspensions: A complementary study via capillary rheometry and in-situ small and ultra-small angle X-ray scattering. <i>Journal of Colloid and Interface Science</i> , 2020, 576, 47-58.	9.4	18
83	Wellbore Cement Porosity Evolution in Response to Mineral Alteration during CO ₂ Flooding. <i>Environmental Science & Technology</i> , 2017, 51, 692-698.	10.0	17
84	The effects of burial diagenesis on multiscale porosity in the St. Peter Sandstone: An imaging, small-angle, and ultra-small-angle neutron scattering analysis. <i>Marine and Petroleum Geology</i> , 2018, 92, 352-371.	3.3	17
85	The effect of changes in relative humidity on the hydration rate of Pachuca obsidian. <i>Journal of Non-Crystalline Solids</i> , 2006, 352, 5652-5662.	3.1	16
86	Adsorption of Ions on Zirconium Oxide Surfaces from Aqueous Solutions at High Temperatures. <i>Journal of Solution Chemistry</i> , 2009, 38, 907-924.	1.2	16
87	Connecting particle interactions to agglomerate morphology and rheology of boehmite nanocrystal suspensions. <i>Journal of Colloid and Interface Science</i> , 2020, 572, 328-339.	9.4	16
88	Nano-scale synthesis of the complex silicate minerals forsterite and enstatite. <i>Journal of Colloid and Interface Science</i> , 2017, 495, 94-101.	9.4	15
89	Oxidation and associated pore structure modification during experimental alteration of granite. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 292, 532-556.	3.9	15
90	Heat capacity measurements for cryolite (Na ₃ AlF ₆) and reactions in the system Na-Fe-Al-Si-O-F. <i>Geochimica Et Cosmochimica Acta</i> , 1987, 51, 3087-3103.	3.9	14

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91	O and H diffusion in uraninite: Implications for fluid-uraninite interactions, nuclear waste disposal, and nuclear forensics. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 3677-3686.	3.9	14
92	Rapid Diffusion and Nanosegregation of Hydrogen in Magnesium Alloys from Exposure to Water. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 38125-38134.	8.0	14
93	Influence of microstructure on replacement and porosity generation during experimental dolomitization of limestones. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 303, 137-158.	3.9	14
94	Quantifying Fluid-Wettable Effective Pore Space in the Utica and Bakken Oil Shale Formations. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL087896.	4.0	12
95	Precise Measurement of the Activity/Composition Relations of H ₂ O-N ₂ and H ₂ O-CO ₂ Fluids at 500°C, 500 Bars. <i>Geochimica Et Cosmochimica Acta</i> , 1998, 62, 815-829.	3.9	11
96	Small-angle neutron scattering study of the wet and dry high-temperature oxidation of alumina- and chromia-forming stainless steels. <i>Corrosion Science</i> , 2012, 58, 121-132.	6.6	11
97	Vibrational Behavior of Water Adsorbed on Forsterite (Mg ₂ SiO ₄) Surfaces. <i>ACS Earth and Space Chemistry</i> , 2020, 4, 1050-1063.	2.7	11
98	Self-Assembled Colloidal Crystals from ZrO ₂ Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2006, 110, 19456-19460.	2.6	10
99	Solubility of Zinc Silicate and Zinc Ferrite in Aqueous Solution to High Temperatures. <i>Journal of Solution Chemistry</i> , 2009, 38, 869-892.	1.2	10
100	Comparison of Short-Term Oxidation Behavior of Model and Commercial Chromia-Forming Ferritic Stainless Steels in Dry and Wet Air. <i>Oxidation of Metals</i> , 2012, 78, 1-16.	2.1	10
101	Solvothermal Synthesis and Surface Chemistry To Control the Size and Morphology of Nanoquartz. <i>Crystal Growth and Design</i> , 2015, 15, 5327-5331.	3.0	10
102	Coupled antiferromagnetic spin- $\frac{1}{2}$ in green diopside in green diopside Physical Review B, 2016, 93, .	3.2	10
103	Structure and dynamics of water on the forsterite surface. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 27822-27829.	2.8	10
104	Fast Rotational Diffusion of Water Molecules in a 2D Hydrogen Bond Network at Cryogenic Temperatures. <i>Physical Review Letters</i> , 2018, 120, 196001.	7.8	10
105	Controls of Microstructure and Chemical Reactivity on the Replacement of Limestone by Fluorite Studied Using Spatially Resolved Small Angle X-ray and Neutron Scattering. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 1998-2016.	2.7	10
106	Effect of fine-tuning pore structures on the dynamics of confined water. <i>Journal of Chemical Physics</i> , 2019, 150, 204706.	3.0	10
107	Grain detachment and transport clogging during mineral dissolution in carbonate rocks with permeable grain boundaries. <i>Geochimica Et Cosmochimica Acta</i> , 2020, 280, 202-220.	3.9	10
108	Pore pressure during metamorphism of carbonate rock: effect of volumetric properties of H ₂ O-CO ₂ mixtures. <i>Contributions To Mineralogy and Petrology</i> , 2002, 144, 305-313.	3.1	9

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109	Isotherm measurements of high-pressure metal hydrides for hydrogen compressors. <i>JPhys Energy</i> , 2021, 3, 034004.	5.3	9
110	Degradation of Adsorbed Bisphenol A by Soluble Mn(III). <i>Environmental Science & Technology</i> , 2021, 55, 13014-13023.	10.0	9
111	Mineral Metastability in the System Al ₂ O ₃ -SiO ₂ -H ₂ O: A Reply*. <i>Clays and Clay Minerals</i> , 1994, 42, 102-105.	1.3	8
112	Thermodynamic properties of two iron silicates. Heat capacities of deerite from the temperature 10 K to 700 K and of grunerite from 10 K to 1000 K. <i>Journal of Chemical Thermodynamics</i> , 1995, 27, 1097-1118.	2.0	8
113	Solubility of Litharge (PbO) in Alkaline Media at Elevated Temperatures. <i>Journal of Solution Chemistry</i> , 2005, 34, 1407-1428.	1.2	8
114	Direct Detection of Residual Cyanide in Cassava Using Spectroscopic Techniques. <i>Journal of Agricultural and Food Chemistry</i> , 2007, 55, 10135-10140.	5.2	8
115	Tracer study of oxygen and hydrogen uptake by Mg alloys in air with water vapor. <i>Scripta Materialia</i> , 2015, 106, 38-41.	5.2	8
116	Inelastic and deep inelastic neutron spectroscopy of water molecules under ultra-confinement. <i>Journal of Physics: Conference Series</i> , 2018, 1055, 012002.	0.4	7
117	High-pressure cell for neutron reflectometry of supercritical and subcritical fluids at solid interfaces. <i>Review of Scientific Instruments</i> , 2012, 83, 045108.	1.3	6
118	Role of Mineralogy in Controlling Fracture Formation. <i>ACS Earth and Space Chemistry</i> , 2021, 5, 3104-3114.	2.7	6
119	Facile emulsion mediated synthesis of phase-pure diopside nanoparticles. <i>Scientific Reports</i> , 2018, 8, 3099.	3.3	5
120	Surface energy of fayalite and its effect on Fe-Si-O oxygen buffers and the olivine-spinel transition. <i>American Mineralogist</i> , 2018, 103, 1599-1603.	1.9	5
121	Temporal Evolution of Corrosion Film Nano-Porosity and Magnesium Alloy Hydrogen Penetration in NaCl Solution. <i>Journal of the Electrochemical Society</i> , 2020, 167, 131513.	2.9	5
122	Experimental investigation of the breakdown of dolomite in rock cores at 100 MPa, 650-750 ÅC. <i>American Mineralogist</i> , 2007, 92, 510-517.	1.9	4
123	Neutron Radiography of Fluid Flow for Geothermal Energy Research. <i>Physics Procedia</i> , 2015, 69, 464-471.	1.2	4
124	Magnetic ground state and magnetic excitations in black diopside Cu_{18}O_6 . <i>Physical Review B</i> , 2019, 100, .	3.2	4
125	Frustrated Coulombic and Cation Size Effects on Nanoscale Boehmite Aggregation: A Tumbler Small- and Ultra-Small-Angle Neutron Scattering Study. <i>Journal of Physical Chemistry C</i> , 2022, 126, 4391-4414.	3.1	4
126	Compounds and Solid Solutions of Cobalt, Copper Phosphates. <i>Journal of the American Ceramic Society</i> , 2005, 81, 2799-2804.	3.8	3

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127	A high-pressure flow through test vessel for neutron imaging and neutron diffraction-based strain measurement of geological materials. <i>Review of Scientific Instruments</i> , 2020, 91, 084502.	1.3	3
128	A Quantitative Approach to the Analysis of Reactive Mineralogy and Surface Area. <i>ACS Earth and Space Chemistry</i> , 0, , .	2.7	3
129	Multiscale (nano to mm) Porosity in the Eagle Ford Shale: Changes as a Function of Maturity. , 2014, , .		2
130	Feasibility of Using Glass-Fiber-Reinforced Polymer Pipelines for Hydrogen Delivery. , 2016, , .		2
131	Oxygen diffusion and exchange in dolomite rock at 700 Å°C, 100 MPa. <i>American Mineralogist</i> , 2016, 101, 1898-1905.	1.9	2
132	Exploring Particle Aggregation Using Small Angle Scattering Techniques. <i>ACS Symposium Series</i> , 2020, , 201-257.	0.5	2
133	One-Dimensional Glassy Behavior of Ultraconfined Water Strings. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 7798-7804.	4.6	2
134	Quantification of mechanical compaction and cementation during contact metamorphism of sandstone. <i>Journal of Structural Geology</i> , 2020, 136, 104062.	2.3	2
135	High-field spin-flop state in green diopside. <i>Physical Review B</i> , 2021, 103, .	3.2	2
136	Mineralogy, microfabric and pore evolution in late-middle Ordovician mudstone of the Utica/Point Pleasant sub-basin of Ohio, West Virginia, and Pennsylvania. <i>Marine and Petroleum Geology</i> , 2021, 134, 105345.	3.3	2
137	Sol-gel synthesis of nano-scale, end-member albite feldspar (NaAlSi ₃ O ₈). <i>Journal of Colloid and Interface Science</i> , 2021, 603, 459-467.	9.4	2
138	Water Migration and Swelling in Engineered Barrier Materials for Radioactive Waste Disposal. <i>Nuclear Technology</i> , 2021, 207, 1237-1256.	1.2	2
139	The pore wall structure of porous semi-crystalline anatase TiO ₂ . <i>Journal of Applied Crystallography</i> , 2011, 44, 1238-1245.	4.5	1
140	Neutron imaging for geothermal energy systems. , 2013, , .		1
141	Nano- to Microscale Pore Characterization of the Utica Shale. , 2014, , .		1
142	3. Effects of Coupled Chemo-Mechanical Processes on the Evolution of Pore-Size Distributions in Geological Media. , 2015, , 45-60.		1
143	Optical and mechanical consequences of microstructural alteration of alpha platinum dioxide films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1999, 17, 1036-1039.	2.1	0
144	Development of In Situ Techniques for Torsion and Tension Testing in Hydrogen Environment. , 2011, , .		0

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145	Diagenesis and kerogen release in oil- and gas-bearing shales. Acta Crystallographica Section A: Foundations and Advances, 2014, 70, C63-C63.	0.1	0
146	EXPERIMENTAL CALIBRATION OF FRACTIONATION OF SILICON ISOTOPES BETWEEN QUARTZ AND WATER. , 2017, , .		0
147	Effect of Fluid Properties on Contact Angles in the Eagle Ford Shale Measured with Spontaneous Imbibition. ACS Omega, 2021, 6, 32618-32630.	3.5	0
148	Experimental Limestone Dissolution and Changes in Multiscale Structure Using Small- and Ultrasmall-Angle Neutron Scattering. ACS Earth and Space Chemistry, 2022, 6, 974-986.	2.7	0