

Everett L Shock

List of Publications by Year in descending order

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183
papers

15,995
citations

18436

62
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189
docs citations

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times ranked

9410
citing authors

#	ARTICLE	IF	CITATIONS
1	Calculation of the thermodynamic and transport properties of aqueous species at high pressures and temperatures: Correlation algorithms for ionic species and equation of state predictions to 5 kb and 1000Å°C. <i>Geochimica Et Cosmochimica Acta</i> , 1988, 52, 2009-2036.	1.6	917
2	Inorganic species in geologic fluids: Correlations among standard molal thermodynamic properties of aqueous ions and hydroxide complexes. <i>Geochimica Et Cosmochimica Acta</i> , 1997, 61, 907-950.	1.6	887
3	Prediction of the thermodynamic properties of aqueous metal complexes to 1000Å°C and 5 kb. <i>Geochimica Et Cosmochimica Acta</i> , 1997, 61, 1359-1412.	1.6	678
4	Calculation of the thermodynamic and transport properties of aqueous species at high pressures and temperatures: Standard partial molal properties of inorganic neutral species. <i>Geochimica Et Cosmochimica Acta</i> , 1989, 53, 2157-2183.	1.6	663
5	Energetics of overall metabolic reactions of thermophilic and hyperthermophilic Archaea and Bacteria. <i>FEMS Microbiology Reviews</i> , 2001, 25, 175-243.	3.9	648
6	Rare earth elements in hydrothermal systems: Estimates of standard partial molal thermodynamic properties of aqueous complexes of the rare earth elements at high pressures and temperatures. <i>Geochimica Et Cosmochimica Acta</i> , 1995, 59, 4329-4350.	1.6	588
7	Calculation of the thermodynamic properties of aqueous species at high pressures and temperatures. Effective electrostatic radii, dissociation constants and standard partial molal properties to 1000 Å°C and 5 kbar. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1992, 88, 803-826.	1.7	454
8	Geochemical constraints on chemolithoautotrophic metabolism by microorganisms in seafloor hydrothermal systems. <i>Geochimica Et Cosmochimica Acta</i> , 1997, 61, 4375-4391.	1.6	426
9	Calculation of the thermodynamic and transport properties of aqueous species at high pressures and temperatures: Standard partial molal properties of organic species. <i>Geochimica Et Cosmochimica Acta</i> , 1990, 54, 915-945.	1.6	337
10	Geochemical constraints on the origin of organic compounds in hydrothermal systems. <i>Origins of Life and Evolution of Biospheres</i> , 1990, 20, 331-367.	0.8	265
11	Petroleum, oil field waters, and authigenic mineral assemblages Are they in metastable equilibrium in hydrocarbon reservoirs. <i>Geochimica Et Cosmochimica Acta</i> , 1993, 57, 3295-3339.	1.6	261
12	Antimony leaching from polyethylene terephthalate (PET) plastic used for bottled drinking water. <i>Water Research</i> , 2008, 42, 551-556.	5.3	260
13	Merging Genomes with Geochemistry in Hydrothermal Ecosystems. <i>Science</i> , 2002, 296, 1077-1082.	6.0	252
14	Organic synthesis during fluid mixing in hydrothermal systems. <i>Journal of Geophysical Research</i> , 1998, 103, 28513-28527.	3.3	216
15	The Organic Composition of Carbonaceous Meteorites: The Evolutionary Story Ahead of Biochemistry. <i>Cold Spring Harbor Perspectives in Biology</i> , 2010, 2, a002105-a002105.	2.3	215
16	Archaeal and bacterial communities in geochemically diverse hot springs of Yellowstone National Park, USA. <i>Geobiology</i> , 2005, 3, 211-227.	1.1	203
17	Energetics of Amino Acid Synthesis in Hydrothermal Ecosystems. , 1998, 281, 1659-1662.		201
18	Chapter 5 Chemical environments of submarine hydrothermal systems. <i>Origins of Life and Evolution of Biospheres</i> , 1992, 22, 67-107.	0.8	191

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19	Global Occurrence of Archaeal <i>amoA</i> Genes in Terrestrial Hot Springs. Applied and Environmental Microbiology, 2008, 74, 6417-6426.	1.4	189
20	Organic acids in hydrothermal solutions; standard molal thermodynamic properties of carboxylic acids and estimates of dissociation constants at high temperatures and pressures. Numerische Mathematik, 1995, 295, 496-580.	0.7	176
21	Composition and stability of salts on the surface of Europa and their oceanic origin. Journal of Geophysical Research, 2001, 106, 32815-32827.	3.3	174
22	Metal-organic complexes in geochemical processes: Calculation of standard partial molal thermodynamic properties of aqueous acetate complexes at high pressures and temperatures. Geochimica Et Cosmochimica Acta, 1993, 57, 4899-4922.	1.6	164
23	Quantifying inorganic sources of geochemical energy in hydrothermal ecosystems, Yellowstone National Park, USA. Geochimica Et Cosmochimica Acta, 2010, 74, 4005-4043.	1.6	160
24	Flood enhancement through flood control. Geology, 2001, 29, 875.	2.0	159
25	Microbiology and geochemistry of great boiling and mud hot springs in the United States Great Basin. Extremophiles, 2009, 13, 447-459.	0.9	157
26	A calibration of the triple oxygen isotope fractionation in the SiO ₂ -H ₂ O system and applications to natural samples. Geochimica Et Cosmochimica Acta, 2016, 186, 105-119.	1.6	154
27	Organic acid metastability in sedimentary basins. Geology, 1988, 16, 886.	2.0	148
28	Distinguishing ultramafic-from basalt-hosted submarine hydrothermal systems by comparing calculated vent fluid compositions. Journal of Geophysical Research, 2000, 105, 8319-8340.	3.3	140
29	The biological potential of Mars, the early Earth, and Europa. Journal of Geophysical Research, 1998, 103, 19359-19364.	3.3	130
30	Thermodynamic functions of hydration of hydrocarbons at 298.15 K and 0.1 MPa. Geochimica Et Cosmochimica Acta, 2000, 64, 439-468.	1.6	128
31	Reaction path modeling of enhanced in situ CO ₂ mineralization for carbon sequestration in the peridotite of the Samail Ophiolite, Sultanate of Oman. Chemical Geology, 2012, 330-331, 86-100.	1.4	127
32	Solubility and transport of platinum-group elements in supercritical fluids: summary and estimates of thermodynamic properties for ruthenium, rhodium, palladium, and platinum solids, aqueous ions, and complexes to 1000°C and 5 kbar. Geochimica Et Cosmochimica Acta, 1998, 62, 2643-2671.	1.6	123
33	Stability of peptides in high-temperature aqueous solutions. Geochimica Et Cosmochimica Acta, 1992, 56, 3481-3491.	1.6	120
34	Diversity, Abundance, and Potential Activity of Nitrifying and Nitrate-Reducing Microbial Assemblages in a Subglacial Ecosystem. Applied and Environmental Microbiology, 2011, 77, 4778-4787.	1.4	119
35	Formation of jarosite-bearing deposits through aqueous oxidation of pyrite at Meridiani Planum, Mars. Geophysical Research Letters, 2005, 32, .	1.5	117
36	The Chemistry of Carbon in Aqueous Fluids at Crustal and Upper-Mantle Conditions: Experimental and Theoretical Constraints. Reviews in Mineralogy and Geochemistry, 2013, 75, 109-148.	2.2	115

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37	The transition to microbial photosynthesis in hot spring ecosystems. <i>Chemical Geology</i> , 2011, 280, 344-351.	1.4	107
38	Energetics of chemolithoautotrophy in the hydrothermal system of Vulcano Island, southern Italy. <i>Geobiology</i> , 2003, 1, 37-58.	1.1	105
39	Metal-organic complexes in geochemical processes: Estimation of standard partial molal thermodynamic properties of aqueous complexes between metal cations and monovalent organic acid ligands at high pressures and temperatures. <i>Geochimica Et Cosmochimica Acta</i> , 1995, 59, 1497-1532.	1.6	104
40	Fluid-rock interactions in the lower oceanic crust: Thermodynamic models of hydrothermal alteration. <i>Journal of Geophysical Research</i> , 1998, 103, 547-575.	3.3	104
41	Summary of the Apparent Standard Partial Molal Gibbs Free Energies of Formation of Aqueous Species, Minerals, and Gases at Pressures 1 to 5000 Bars and Temperatures 25 to 1000°C. <i>Journal of Physical and Chemical Reference Data</i> , 1995, 24, 1401-1560.	1.9	100
42	Science Potential from a Europa Lander. <i>Astrobiology</i> , 2013, 13, 740-773.	1.5	98
43	Coordinating Environmental Genomics and Geochemistry Reveals Metabolic Transitions in a Hot Spring Ecosystem. <i>PLoS ONE</i> , 2012, 7, e38108.	1.1	97
44	Correlation strategy for determining the parameters of the revised Helgeson-Kirkham-Flowers model for aqueous nonelectrolytes. <i>Geochimica Et Cosmochimica Acta</i> , 2001, 65, 3879-3900.	1.6	94
45	The energetics of organic synthesis inside and outside the cell. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2013, 368, 20120255.	1.8	94
46	Amino-acid synthesis in carbonaceous meteorites by aqueous alteration of polycyclic aromatic hydrocarbons. <i>Nature</i> , 1990, 343, 728-731.	13.7	92
47	Hydrothermal dehydration of aqueous organic compounds. <i>Geochimica Et Cosmochimica Acta</i> , 1993, 57, 3341-3349.	1.6	92
48	Thermodynamic constraints on fayalite formation on parent bodies of chondrites. <i>Meteoritics and Planetary Science</i> , 2006, 41, 1775-1796.	0.7	92
49	Chemolithotrophic Primary Production in a Subglacial Ecosystem. <i>Applied and Environmental Microbiology</i> , 2014, 80, 6146-6153.	1.4	92
50	Uranium in geologic fluids: Estimates of standard partial molal properties, oxidation potentials, and hydrolysis constants at high temperatures and pressures. <i>Geochimica Et Cosmochimica Acta</i> , 1997, 61, 4245-4266.	1.6	91
51	Microbiology and geochemistry of Little Hot Creek, a hot spring environment in the Long Valley Caldera. <i>Geobiology</i> , 2010, 8, 140-154.	1.1	91
52	Hydrothermal Processing of Cometary Volatiles—Applications to Triton. <i>Icarus</i> , 1993, 106, 464-477.	1.1	86
53	Hydrothermal ecotones and streamer biofilm communities in the Lower Geyser Basin, Yellowstone National Park. <i>Environmental Microbiology</i> , 2011, 13, 2216-2231.	1.8	85
54	The temperature dependence of the standard-state thermodynamic properties of aqueous nonelectrolytes. <i>Geochimica Et Cosmochimica Acta</i> , 2001, 65, 3919-3930.	1.6	78

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55	Geochemical constraints on chemolithoautotrophic reactions in hydrothermal systems. <i>Origins of Life and Evolution of Biospheres</i> , 1995, 25, 141-159.	0.8	75
56	Hydrothermal hydration of Martian crust: Illustration via geochemical model calculations. <i>Journal of Geophysical Research</i> , 1997, 102, 9135-9143.	3.3	72
57	Spatial and temporal variability of biomarkers and microbial diversity reveal metabolic and community flexibility in Streamer Biofilm Communities in the Lower Geyser Basin, Yellowstone National Park. <i>Geobiology</i> , 2013, 11, 549-569.	1.1	71
58	A geochemical model for the formation of hydrothermal carbonates on Mars. <i>Nature</i> , 1995, 377, 406-408.	13.7	70
59	Energy for biologic sulfate reduction in a hydrothermally formed ocean on Europa. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	70
60	Geobiological feedbacks and the evolution of thermoacidophiles. <i>ISME Journal</i> , 2018, 12, 225-236.	4.4	70
61	Do amino acids equilibrate in hydrothermal fluids?. <i>Geochimica Et Cosmochimica Acta</i> , 1990, 54, 1185-1189.	1.6	66
62	Aldehydes in hydrothermal solution: Standard partial molal thermodynamic properties and relative stabilities at high temperatures and pressures. <i>Geochimica Et Cosmochimica Acta</i> , 1993, 57, 3835-3846.	1.6	66
63	High-temperature life without photosynthesis as a model for Mars. <i>Journal of Geophysical Research</i> , 1997, 102, 23687-23694.	3.3	66
64	Prediction of the vapor-liquid distribution constants for volatile nonelectrolytes in water up to its critical temperature. <i>Geochimica Et Cosmochimica Acta</i> , 2003, 67, 4981-5009.	1.6	65
65	Chemical Environments of Submarine Hydrothermal Systems. , 1992, , 67-107.		65
66	Abiotic synthesis of polycyclic aromatic hydrocarbons on Mars. <i>Journal of Geophysical Research</i> , 1999, 104, 14033-14049.	3.3	64
67	Modeling the Habitat Range of Phototrophs in Yellowstone National Park: Toward the Development of a Comprehensive Fitness Landscape. <i>Frontiers in Microbiology</i> , 2012, 3, 221.	1.5	64
68	A model for low-temperature biogeochemistry of sulfur, carbon, and iron on Europa. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	61
69	Metal-organic complexes in geochemical processes: temperature dependence of the standard thermodynamic properties of aqueous complexes between metal cations and dicarboxylate ligands. <i>Geochimica Et Cosmochimica Acta</i> , 1999, 63, 2547-2577.	1.6	60
70	Ecological differentiation in planktonic and sediment-associated chemotrophic microbial populations in Yellowstone hot springs. <i>FEMS Microbiology Ecology</i> , 2016, 92, fiw137.	1.3	60
71	Coupled organic synthesis and mineral alteration on meteorite parent bodies. <i>Meteoritics and Planetary Science</i> , 2004, 39, 1577-1590.	0.7	59
72	A thermodynamic assessment of the potential synthesis of condensed hydrocarbons during cooling and dilution of volcanic gases. <i>Journal of Geophysical Research</i> , 2000, 105, 539-559.	3.3	57

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73	Formate as an Energy Source for Microbial Metabolism in Chemosynthetic Zones of Hydrothermal Ecosystems. <i>Astrobiology</i> , 2007, 7, 873-890.	1.5	57
74	Merging isotopes and community genomics in a siliceous sinter-depositing hot spring. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	57
75	A geochemical model of non-ideal solutions in the methane-ethane-propane-nitrogen-acetylene system on Titan. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 115, 217-240.	1.6	55
76	An abiotic origin for hydrocarbons in the Allan Hills 84001 martian meteorite through cooling of magmatic and impact-generated gases. <i>Meteoritics and Planetary Science</i> , 2000, 35, 629-638.	0.7	54
77	Quantitative Habitability. <i>Astrobiology</i> , 2007, 7, 839-851.	1.5	54
78	Summary and implications of reported amino acid concentrations in the Murchison meteorite. <i>Geochimica Et Cosmochimica Acta</i> , 1990, 54, 3159-3173.	1.6	53
79	Prerequisites for explosive cryovolcanism on dwarf planet-class Kuiper belt objects. <i>Icarus</i> , 2015, 246, 48-64.	1.1	53
80	Chapter 10 Future research. <i>Origins of Life and Evolution of Biospheres</i> , 1992, 22, 181-190.	0.8	50
81	Thermodynamics of strecker synthesis in hydrothermal systems. <i>Origins of Life and Evolution of Biospheres</i> , 1995, 25, 161-173.	0.8	50
82	A "Follow the Energy" Approach for Astrobiology. <i>Astrobiology</i> , 2007, 7, 819-823.	1.5	50
83	Corrections to "Organic acid metastability in sedimentary basins". <i>Geology</i> , 1989, 17, 572.	2.0	49
84	Geochemical bioenergetics during low-temperature serpentinization: An example from the Samail ophiolite, Sultanate of Oman. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2017, 122, 1821-1847.	1.3	49
85	Application of Thermodynamic Calculations to Geochemical Processes Involving Organic Acids. , 1994, , 270-318.		49
86	Database of Thermodynamic Properties for Aqueous Organic Compounds. <i>International Journal of Thermophysics</i> , 2004, 25, 351-360.	1.0	48
87	Infinite dilution partial molar properties of aqueous solutions of nonelectrolytes. II. equations for the standard thermodynamic functions of hydration of volatile nonelectrolytes over wide ranges of conditions including subcritical temperatures. <i>Geochimica Et Cosmochimica Acta</i> , 2000, 64, 2779-2795.	1.6	47
88	Thermodynamics of Organic Transformations in Hydrothermal Fluids. <i>Reviews in Mineralogy and Geochemistry</i> , 2013, 76, 311-350.	2.2	47
89	Bioavailability of nanoparticulate hematite to <i>Arabidopsis thaliana</i> . <i>Environmental Pollution</i> , 2013, 174, 150-156.	3.7	46
90	Carbonaceous Chondrite Meteorites: the Chronicle of a Potential Evolutionary Path between Stars and Life. <i>Origins of Life and Evolution of Biospheres</i> , 2017, 47, 249-260.	0.8	46

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91	The oxidation state of hydrothermal systems on early Enceladus. <i>Icarus</i> , 2008, 197, 157-163.	1.1	45
92	5. Environmental Aqueous Geochemistry of Actinides. , 1999, , 221-254.		44
93	Hydrous Pyrolysis of Polycyclic Aromatic Hydrocarbons and Implications for the Origin of PAH in Hydrothermal Petroleum. <i>Energy & Fuels</i> , 1999, 13, 401-410.	2.5	44
94	Estimation of the Krichevskii parameter for aqueous nonelectrolytes. <i>Journal of Supercritical Fluids</i> , 2001, 20, 91-103.	1.6	44
95	Evidence for high-temperature <i>in situ</i> nifH transcription in an alkaline hot spring of Lower Geyser Basin, Yellowstone National Park. <i>Environmental Microbiology</i> , 2012, 14, 1272-1283.	1.8	44
96	Korarchaeota Diversity, Biogeography, and Abundance in Yellowstone and Great Basin Hot Springs and Ecological Niche Modeling Based on Machine Learning. <i>PLoS ONE</i> , 2012, 7, e35964.	1.1	43
97	Principles of Geobiochemistry. <i>Elements</i> , 2015, 11, 395-401.	0.5	43
98	Group Contribution Values of the Infinite Dilution Thermodynamic Functions of Hydration for Aliphatic Noncyclic Hydrocarbons, Alcohols, and Ketones at 298.15 K and 0.1 MPa. <i>Journal of Chemical & Engineering Data</i> , 2001, 46, 1016-1019.	1.0	42
99	Minerals as Energy Sources for Microorganisms. <i>Economic Geology</i> , 2009, 104, 1235-1248.	1.8	42
100	Organic functional group transformations in water at elevated temperature and pressure: Reversibility, reactivity, and mechanisms. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 104, 194-209.	1.6	42
101	Speciation and solubility of palladium in aqueous magmatic-hydrothermal solutions. <i>Geology</i> , 1990, 18, 925.	2.0	41
102	Comparative Genomic Analysis of Phylogenetically Closely Related <i>Hydrogenobaculum</i> sp. Isolates from Yellowstone National Park. <i>Applied and Environmental Microbiology</i> , 2013, 79, 2932-2943.	1.4	39
103	Microbial substrate preference dictated by energy demand rather than supply. <i>Nature Geoscience</i> , 2017, 10, 577-581.	5.4	39
104	The central role of ketones in reversible and irreversible hydrothermal organic functional group transformations. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 98, 48-65.	1.6	38
105	Stable isotope labeling confirms mixotrophic nature of streamer biofilm communities at alkaline hot springs. <i>Frontiers in Microbiology</i> , 2015, 6, 42.	1.5	38
106	Geochemical energy sources that support the subsurface biosphere. <i>Geophysical Monograph Series</i> , 2004, , 153-165.	0.1	37
107	High pH microbial ecosystems in a newly discovered, ephemeral, serpentinizing fluid seep at YanartaÅ (Chimera), Turkey. <i>Frontiers in Microbiology</i> , 2015, 5, 723.	1.5	37
108	Calculation of the Relative Chemical Stabilities of Proteins as a Function of Temperature and Redox Chemistry in a Hot Spring. <i>PLoS ONE</i> , 2011, 6, e22782.	1.1	36

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109	Kinetics and Mechanisms of Dehydration of Secondary Alcohols Under Hydrothermal Conditions. <i>ACS Earth and Space Chemistry</i> , 2018, 2, 821-832.	1.2	36
110	The absence of endogenic methane on Titan and its implications for the origin of atmospheric nitrogen. <i>Icarus</i> , 2009, 204, 637-644.	1.1	35
111	Subsurface processes influence oxidant availability and chemoautotrophic hydrogen metabolism in Yellowstone hot springs. <i>Geobiology</i> , 2018, 16, 674-692.	1.1	35
112	Group Contribution Values for the Thermodynamic Functions of Hydration of Aliphatic Esters at 298.15 K, 0.1 MPa. <i>Journal of Chemical & Engineering Data</i> , 2004, 49, 1152-1167.	1.0	34
113	Standard state Gibbs energies of hydration of hydrocarbons at elevated temperatures as evaluated from experimental phase equilibria studies. <i>Geochimica Et Cosmochimica Acta</i> , 2000, 64, 2811-2833.	1.6	33
114	Second Cross Virial Coefficients for Interactions Involving Water. <i>Critical Data Compilation. Journal of Chemical & Engineering Data</i> , 2003, 48, 808-821.	1.0	33
115	Thermodynamic constraints on the geochemistry of low-temperature, continental, serpentinization-generated fluids. <i>Numerische Mathematik</i> , 2020, 320, 185-235.	0.7	32
116	Volumes of aqueous alcohols, ethers, and ketones to T= 523 K and p= 28 MPa. <i>Journal of Chemical Thermodynamics</i> , 1999, 31, 1195-1229.	1.0	31
117	Halocarbons in the environment: estimates of thermodynamic properties for aqueous chloroethylene species and their stabilities in natural settings. <i>Geochimica Et Cosmochimica Acta</i> , 1999, 63, 3429-3441.	1.6	31
118	Group Contribution Values for the Thermodynamic Functions of Hydration at 298.15 K, 0.1 MPa. 3. Aliphatic Monoethers, Diethers, and Polyethers. <i>Journal of Chemical & Engineering Data</i> , 2006, 51, 276-290.	1.0	31
119	The Molecular Basis for Life in Extreme Environments. <i>Annual Review of Biophysics</i> , 2021, 50, 343-372.	4.5	31
120	Hydrothermal Systems as Environments for the Emergence of Life. <i>Novartis Foundation Symposium</i> , 1996, 202, 40-60.	1.2	28
121	Sphalerite is a geochemical catalyst for carbon-hydrogen bond activation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 11642-11645.	3.3	27
122	Chapter 7 Hydrothermal organic synthesis experiments. <i>Origins of Life and Evolution of Biospheres</i> , 1992, 22, 135-146.	0.8	26
123	Group Contribution Values for the Thermodynamic Functions of Hydration at 298.15 K, 0.1 MPa. 2. Aliphatic Thiols, Alkyl Sulfides, and Polysulfides. <i>Journal of Chemical & Engineering Data</i> , 2005, 50, 246-253.	1.0	26
124	Rapid transport of anthropogenic lead through soils in southeast Missouri. <i>Applied Geochemistry</i> , 2008, 23, 2156-2170.	1.4	26
125	Estimation of standard partial molal entropies of aqueous ions at 25°C and 1 bar. <i>Geochimica Et Cosmochimica Acta</i> , 1992, 56, 3895-3908.	1.6	25
126	Sodium chloride as a geophysical probe of a subsurface ocean on Enceladus. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	25

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127	Deamination reaction mechanisms of protonated amines under hydrothermal conditions. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 244, 113-128.	1.6	24
128	Theoretical Predictions Versus Environmental Observations on Serpentinization Fluids: Lessons From the Samail Ophiolite in Oman. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2020JB020756.	1.4	24
129	A Metastable Equilibrium Model for the Relative Abundances of Microbial Phyla in a Hot Spring. <i>PLoS ONE</i> , 2013, 8, e72395.	1.1	23
130	Lipid Biomarker Record of the Serpentinite-Hosted Ecosystem of the Samail Ophiolite, Oman and Implications for the Search for Biosignatures on Mars. <i>Astrobiology</i> , 2020, 20, 830-845.	1.5	23
131	Probing the geological source and biological fate of hydrogen in Yellowstone hot springs. <i>Environmental Microbiology</i> , 2019, 21, 3816-3830.	1.8	22
132	Second Cross Virial Coefficients for Interactions Involving Water. Correlations and Group Contribution Values. <i>Journal of Chemical & Engineering Data</i> , 2003, 48, 1463-1470.	1.0	21
133	Organic Oxidations Using Geomimicry. <i>Journal of Organic Chemistry</i> , 2015, 80, 12159-12165.	1.7	21
134	Effects of iron-containing minerals on hydrothermal reactions of ketones. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 223, 107-126.	1.6	21
135	Erratum to <i>Geochim. Cosmochim.</i> . <i>Geochimica Et Cosmochimica Acta</i> , 1989, 53, 215.	1.6	20
136	Prediction of the Gibbs energies and an improved equation of state for water at extreme conditions from ab initio energies with classical simulations. <i>Geochimica Et Cosmochimica Acta</i> , 2001, 65, 4067-4075.	1.6	20
137	Mechanisms of decarboxylation of phenylacetic acids and their sodium salts in water at high temperature and pressure. <i>Geochimica Et Cosmochimica Acta</i> , 2020, 269, 597-621.	1.6	20
138	Seeds of life?. <i>Nature</i> , 2002, 416, 380-381.	13.7	19
139	Hydrothermal Photochemistry as a Mechanistic Tool in Organic Geochemistry: The Chemistry of Dibenzyl Ketone. <i>Journal of Organic Chemistry</i> , 2014, 79, 7861-7871.	1.7	19
140	Production of Carboxylic Acids from Aldehydes under Hydrothermal Conditions: A Kinetics Study of Benzaldehyde. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 170-191.	1.2	18
141	Seasonal hydrologic and geologic forcing drive hot spring geochemistry and microbial biodiversity. <i>Environmental Microbiology</i> , 2021, 23, 4034-4053.	1.8	17
142	Catalysing methane production. <i>Nature</i> , 1994, 368, 499-500.	13.7	16
143	Group Contribution Values for the Thermodynamic Functions of Hydration at 298.15 K, 0.1 MPa. 4. Aliphatic Nitriles and Dinitriles. <i>Journal of Chemical & Engineering Data</i> , 2006, 51, 1481-1490.	1.0	16
144	Carbon Oxidation State in Microbial Polar Lipids Suggests Adaptation to Hot Spring Temperature and Redox Gradients. <i>Frontiers in Microbiology</i> , 2020, 11, 229.	1.5	16

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145	Soil Lead Distribution and Environmental Justice in the Phoenix Metropolitan Region. <i>Environmental Justice</i> , 2012, 5, 206-213.	0.8	15
146	Geobiochemistry of metabolism: Standard state thermodynamic properties of the citric acid cycle. <i>Geochimica Et Cosmochimica Acta</i> , 2016, 195, 293-322.	1.6	15
147	Effects of trace element concentrations on culturing thermophiles. <i>Extremophiles</i> , 2012, 16, 317-331.	0.9	14
148	Mineral-assisted production of benzene under hydrothermal conditions: Insights from experimental studies on C 6 cyclic hydrocarbons. <i>Journal of Volcanology and Geothermal Research</i> , 2017, 346, 21-27.	0.8	14
149	The Early Earth vs. The Origin of Life. , 2000, , 527-544.		12
150	Estimation of standard-state entropies of association for aqueous metal-organic complexes and chelates at 25Â°C and 1 bar. <i>Geochimica Et Cosmochimica Acta</i> , 2001, 65, 3931-3953.	1.6	11
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