

# George R Helz

## List of Publications by Year in descending order

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73  
papers

3,780  
citations

117625

34  
h-index

123424

61  
g-index

74  
all docs

74  
docs citations

74  
times ranked

2650  
citing authors

#	ARTICLE	IF	CITATIONS
1	Molybdenum(VI) speciation in sulfidic waters. <i>Geochimica Et Cosmochimica Acta</i> , 2000, 64, 1149-1158.	3.9	559
2	New model for molybdenum behavior in euxinic waters. <i>Chemical Geology</i> , 2011, 284, 323-332.	3.3	301
3	Capture of molybdenum in pyrite-forming sediments: role of ligand-induced reduction by polysulfides. <i>Geochimica Et Cosmochimica Acta</i> , 2004, 68, 547-556.	3.9	200
4	Differential Adsorption of Molybdate and Tetrathiomolybdate on Pyrite (FeS <sub>2</sub> ). <i>Environmental Science &amp; Technology</i> , 2003, 37, 285-291.	10.0	195
5	Indirect photoreduction of aqueous chromium(VI). <i>Environmental Science &amp; Technology</i> , 1992, 26, 307-312.	10.0	140
6	Oligomerization in As (III) sulfide solutions: Theoretical constraints and spectroscopic evidence. <i>Geochimica Et Cosmochimica Acta</i> , 1995, 59, 4591-4604.	3.9	131
7	Inorganic Speciation of Mercury in Sulfidic Waters: The Importance of Zero-Valent Sulfur. <i>Environmental Science &amp; Technology</i> , 1997, 31, 2148-2153.	10.0	118
8	Catalysis by mineral surfaces. <i>Geochimica Et Cosmochimica Acta</i> , 2002, 66, 3679-3692.	3.9	100
9	Molybdenum Scavenging by Iron Monosulfide. <i>Environmental Science &amp; Technology</i> , 2004, 38, 4263-4268.	10.0	95
10	The solubility of copper in sulfidic waters: Sulfide and polysulfide complexes in equilibrium with covellite. <i>Geochimica Et Cosmochimica Acta</i> , 1988, 52, 1815-1825.	3.9	87
11	Precipitation of molybdenum from euxinic waters and the role of organic matter. <i>Chemical Geology</i> , 2019, 509, 178-193.	3.3	84
12	Composition of estuarine colloidal material: major and trace elements. <i>Geochimica Et Cosmochimica Acta</i> , 1981, 45, 2501-2509.	3.9	69
13	Volatile chloro- and bromocarbons in coastal waters. <i>Limnology and Oceanography</i> , 1978, 23, 858-869.	3.1	68
14	Tungsten-molybdenum fractionation in estuarine environments. <i>Geochimica Et Cosmochimica Acta</i> , 2016, 177, 105-119.	3.9	67
15	Multinuclearity of aqueous copper and zinc bisulfide complexes: An EXAFS investigation. <i>Geochimica Et Cosmochimica Acta</i> , 1993, 57, 15-25.	3.9	66
16	What regulates rhenium deposition in euxinic basins?. <i>Chemical Geology</i> , 2012, 304-305, 131-141.	3.3	63
17	Composition of estuarine colloidal material: organic components. <i>Geochimica Et Cosmochimica Acta</i> , 1982, 46, 1619-1626.	3.9	59
18	Tungsten speciation in sulfidic waters: Determination of thiotungstate formation constants and modeling their distribution in natural waters. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 144, 157-172.	3.9	57

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19	Solubility of cadmium sulfide (greenockite) in sulfidic waters at 25.degree.C. Environmental Science & Technology, 1992, 26, 2462-2468.	10.0	53
20	Solubility product constants of covellite and a poorly crystalline copper sulfide precipitate at 298 K. Geochimica Et Cosmochimica Acta, 1989, 53, 229-236.	3.9	51
21	Molybdenum Burial Mechanism in Sulfidic Sediments: Iron-Sulfide Pathway. ACS Earth and Space Chemistry, 2018, 2, 565-576.	2.7	50
22	Voltammetry of Copper Sulfide Particles and Nanoparticles:Â Investigation of the Cluster Hypothesis. Environmental Science & Technology, 2005, 39, 7492-7498.	10.0	48
23	Reduced sulfur species in a stratified seawater lake (Rogoznica Lake, Croatia); seasonal variations and argument for organic carriers of reactive sulfur. Geochimica Et Cosmochimica Acta, 2009, 73, 3738-3751.	3.9	46
24	A study of speciation of Sb in bisulfide solutions by X-ray absorption spectroscopy.. Applied Geochemistry, 2000, 15, 879-889.	3.0	45
25	Liquid chromatographic determination of nitrilotriacetic acid, ethylenediaminetetraacetic acid, and related aminopolycarboxylic acids using an amperometric detector. Analytical Chemistry, 1988, 60, 301-305.	6.5	44
26	Copper speciation in sulfidic solutions at low sulfur activity: Further evidence for cluster complexes?. Geochimica Et Cosmochimica Acta, 1994, 58, 2971-2983.	3.9	44
27	Controls on the stability of sulfide sols: Colloidal covellite as an example. Geochimica Et Cosmochimica Acta, 1979, 43, 1645-1650.	3.9	43
28	Role of Amide Nitrogen in Water Chlorination:â€‰ Proton NMR Evidence. Environmental Science & Technology, 1999, 33, 3568-3573.	10.0	40
29	Incompleteness of Wastewater Dechlorination. Environmental Science & Technology, 1995, 29, 1018-1022.	10.0	39
30	Stabilities of thiomolybdate complexes of iron; implications for retention of essential trace elements (Fe, Cu, Mo) in sulfidic waters. Metallomics, 2014, 6, 1131-1140.	2.4	38
31	Metalâˆ™Thiometalate Transport of Biologically Active Trace Elements in Sulfidic Environments. 1. Experimental Evidence for Copper Thioarsenite Complexing. Environmental Science & Technology, 2000, 34, 1477-1482.	10.0	36
32	Rates of Reduction of N-Chlorinated Peptides by Sulfite:Â Relevance to Incomplete Dechlorination of Wastewaters. Environmental Science & Technology, 1998, 32, 516-522.	10.0	35
33	Antimony Speciation in Alkaline Sulfide Solutions:Â Role of Zerovalent Sulfur. Environmental Science & Technology, 2002, 36, 943-948.	10.0	35
34	Voltammetric characterization of metal sulfide particles and nanoparticles in model solutions and natural waters. Analytica Chimica Acta, 2007, 594, 44-51.	5.4	35
35	Processes controlling the regional distribution of <sup>210</sup> Pb, <sup>226</sup> Ra and anthropogenic zinc in estuarine sediments. Earth and Planetary Science Letters, 1985, 76, 23-34.	4.4	34
36	Detection of Sewage Organic Chlorination Products That Are Resistant to Dechlorination with Sulfite. Environmental Science & Technology, 1998, 32, 3640-3645.	10.0	33

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37	Making chlorine greener: investigation of alternatives to sulfite for dechlorination. <i>Water Research</i> , 2004, 38, 2505-2514.	11.3	32
38	Processes controlling Fe, Mn and Zn in sediments of northern Chesapeake Bay. <i>Estuarine, Coastal and Shelf Science</i> , 1985, 21, 1-16.	2.1	30
39	Aquia Aquifer Dissolved Cl <sup>-</sup> and <sup>36</sup> Cl/Cl: Implications for Flow Velocities. <i>Water Resources Research</i> , 1996, 32, 1163-1171.	4.2	30
40	Temporal and Seasonal Variations of Hydrogen Peroxide Levels in Estuarine Waters. <i>Estuarine, Coastal and Shelf Science</i> , 1995, 40, 495-503.	2.1	29
41	Sediment profiles of less commonly determined elements measured by Laser Ablation ICP-MS. <i>Marine Pollution Bulletin</i> , 2009, 59, 182-192.	5.0	28
42	Entrapment of zinc and other trace elements in a rapidly flushed industrialized harbor. <i>Environmental Science &amp; Technology</i> , 1982, 16, 820-825.	10.0	27
43	Making chlorine greener: Performance of alternative dechlorination agents in wastewater. <i>Chemosphere</i> , 2005, 60, 381-388.	8.2	27
44	EDTA as a kinetic inhibitor of copper(II) sulfide precipitation. <i>Water Research</i> , 1983, 17, 167-172.	11.3	25
45	Trace Element Profiles in Sediments as Proxies of Dead Zone History; Rhenium Compared to Molybdenum. <i>Environmental Science &amp; Technology</i> , 2013, 47, 1257-1264.	10.0	23
46	Organic-rich colloidal material in estuaries and its alteration by chlorination. <i>Environmental Science &amp; Technology</i> , 1980, 14, 673-679.	10.0	21
47	Osmium Isotopes Demonstrate Distal Transport of Contaminated Sediments in Chesapeake Bay. <i>Environmental Science &amp; Technology</i> , 2000, 34, 2528-2534.	10.0	21
48	Accumulation Mechanism for Metal Chalcogenide Nanoparticles at Hg <sup>0</sup> Electrodes: Copper Sulfide Example. <i>Analytical Chemistry</i> , 2008, 80, 742-749.	6.5	21
49	Organic chloramines in disinfected wastewaters: Rates of reduction by sulfite and toxicity. <i>Environmental Toxicology and Chemistry</i> , 1999, 18, 1899-1904.	4.3	20
50	Prospect of determining copper sulfide nanoparticles by voltammetry: A potential artifact in supersaturated solutions. <i>Journal of Electroanalytical Chemistry</i> , 2006, 590, 207-214.	3.8	19
51	Evidence for dissolved polymeric mercury(II)-sulfur complexes?. <i>Chemical Geology</i> , 2007, 243, 122-127.	3.3	18
52	Chlorine speciation in seawater; a metastable equilibrium model for Cl <sup>0</sup> and Br <sup>0</sup> species. <i>Chemosphere</i> , 1981, 10, 41-57.	8.2	17
53	Production of Macromolecular Chloramines by Chlorine-Transfer Reactions. <i>Environmental Science &amp; Technology</i> , 2004, 38, 1753-1758.	10.0	16
54	Activity of zero-valent sulfur in sulfidic natural waters. <i>Geochemical Transactions</i> , 2014, 15, 13.	0.7	16

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55	Dechlorination of wastewater and cooling water. <i>Environmental Science &amp; Technology</i> , 1984, 18, 48A-55A.	10.0	15
56	Beryllium-10 in Chesapeake Bay sediments: An indicator of sediment provenance. <i>Estuarine, Coastal and Shelf Science</i> , 1992, 34, 459-469.	2.1	15
57	Influence of infrequent floods on the trace metal composition of estuarine sediments. <i>Marine Chemistry</i> , 1986, 20, 1-11.	2.3	14
58	Distinct Microbial Behavior of Re Compared to Tc: Evidence Against Microbial Re Fixation in Aquatic Sediments. <i>Geomicrobiology Journal</i> , 2009, 26, 470-483.	2.0	14
59	Apparent ionization constant of hypochlorous acid in sea water. <i>Environmental Science &amp; Technology</i> , 1976, 10, 384-386.	10.0	13
60	Improving the Recoveries of Unstable N-Chloramines Determined by Liquid Chromatography-Postcolumn Electrochemical Detection. <i>Journal of Chromatographic Science</i> , 2002, 40, 447-455.	1.4	13
61	The Fate and Effects of Chlorine in Coastal Waters: Summary and Recommendations. <i>Chesapeake Science</i> , 1977, 18, 97.	0.5	10
62	<sup>36</sup> Cl: A tracer in groundwater in the aquia formation of Southern Maryland. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 1987, 29, 372-375.	1.4	10
63	Dechlorination kinetics at alkaline pH of N-chloropiperidine, a genotoxin in chlorinated municipal wastewater. <i>Water Research</i> , 1998, 32, 2615-2620.	11.3	10
64	Precipitation of PbS from solutions containing EDTA. <i>Journal of Crystal Growth</i> , 1984, 66, 401-411.	1.5	9
65	Extraordinary stability of copper(I) tetrathiomolybdate complexes: Possible implications for aquatic ecosystems. <i>Environmental Toxicology and Chemistry</i> , 2011, 30, 97-102.	4.3	8
66	Cause of the chalcophile trace element enrichments marking the Holocene to Anthropocene transition in northern Chesapeake Bay sediments. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 82, 79-91.	3.9	8
67	The Re/Mo redox proxy reconsidered. <i>Geochimica Et Cosmochimica Acta</i> , 2022, 317, 507-522.	3.9	7
68	Processes Affecting the Vertical Distribution of Trace Components in the Chesapeake Bay. <i>ACS Symposium Series</i> , 1975, , 176-185.	0.5	2
69	Mineralization of organic matter and other chemical effects of chlorination. <i>Water Research</i> , 1986, 20, 1031-1039.	11.3	2
70	Fate of sulfur(IV) dechlorinating agents in natural waters: effect of suspended sediments. <i>Environmental Science &amp; Technology</i> , 1988, 22, 1171-1177.	10.0	2
71	Anthropogenic C1 and C2 Halocarbons: Potential Application as Coastal Water-Mass Tracers. , 1980, , 435-444.		0
72	Tungsten. <i>Encyclopedia of Earth Sciences Series</i> , 2017, , 1-4.	0.1	0

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73	Tungsten. Encyclopedia of Earth Sciences Series, 2018, , 1455-1458.	0.1	0