David T Rickard

List of Publications by Year
in descending order

141 papers	10,453 citations	38720 50 h-index	31818 101 g-index
157 all docs	157 docs citations	157 times ranked	7251 citing authors

#	Article	IF	Citations
1	Chemistry of Iron Sulfides. Chemical Reviews, 2007, 107, 514-562.	23.0	1,209
2	The chemistry of the hydrogen sulfide and iron sulfide systems in natural waters. Earth-Science Reviews, 1987, 24, 1-42.	4.0	576
3	Acid volatile sulfide (AVS). Marine Chemistry, 2005, 97, 141-197.	0.9	503
4	Kinetics of pyrite formation by the H2S oxidation of iron (II) monosulfide in aqueous solutions between 25 and 125Â°C: The rate equation. Geochimica Et Cosmochimica Acta, 1997, 61, 115-134.	1.6	388
5	Kinetics of pyrite formation by the H2S oxidation of iron (II) monosulfide in aqueous solutions between 25 and 125Â°C: The mechanism. Geochimica Et Cosmochimica Acta, 1997, 61, 135-147.	1.6	344
6	Framboidal pyrite formation via the oxidation of iron (II) monosulfide by hydrogen sulphide. Geochimica Et Cosmochimica Acta, 2000, 64, 2665-2672.	1.6	333
7	Determination of natural Cu-isotope variation by plasma-source mass spectrometry: implications for use as geochemical tracers. Chemical Geology, 2000, 163, 139-149.	1.4	281
8	Removal of dissolved oxygen from water: A comparison of four common techniques. Talanta, 1994, 41, 211-215.	2.9	250
9	The solubility of FeS. Geochimica Et Cosmochimica Acta, 2006, 70, 5779-5789.	1.6	227
10	Kinetics of FeS precipitation: Part 1. Competing reaction mechanisms. Geochimica Et Cosmochimica Acta, 1995, 59, 4367-4379.	1.6	223
11	The structure of disordered mackinawite. American Mineralogist, 2003, 88, 2007-2015.	0.9	220
12	Arsenic mobility in the ambient sulfidic environment: Sorption of arsenic(V) and arsenic(III) onto disordered mackinawite. Geochimica Et Cosmochimica Acta, 2005, 69, 3483-3492.	1.6	211
13	Temperature dependence of calcite dissolution kinetics between 1 and 62Â°C at pH 2.7 to 8.4 in aqueous solutions. Geochimica Et Cosmochimica Acta, 1984, 48, 485-493.	1.6	207
14	Experimental study of the copper isotope fractionation between aqueous Cu(II) and covellite, CuS. Chemical Geology, 2004, 209, 259-269.	1.4	201
15	Experimental syntheses of framboidsâ€"a review. Earth-Science Reviews, 2005, 71, 147-170.	4.0	191
16	Metal Sulfide Cluster Complexes and their Biogeochemical Importance in the Environment. Journal of Nanoparticle Research, 2005, 7, 389-407.	0.8	191
17	Fe isotope fractionation on FeS formation in ambient aqueous solution. Earth and Planetary Science Letters, 2005, 236, 430-442.	1.8	181
18	Determination of Metal (Bi)Sulfide Stability Constants of Mn2+, Fe2+, Co2+, Ni2+, Cu2+, and Zn2+by Voltammetric Methods. Environmental Science & Technology, 1996, 30, 671-679.	4.6	167

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19	Calcite dissolution kinetics: Surface speciation and the origin of the variable pH dependence. Chemical Geology, 1984, 42, 119-136.	1.4	151
20	The origin of framboids. Lithos, 1970, 3, 269-293.	0.6	150
21	Surface chemistry of disordered mackinawite (FeS). Geochimica Et Cosmochimica Acta, 2005, 69, 3469-3481.	1.6	149
22	Peer Reviewed: Chemical Dynamics of Sedimentary Acid Volatile Sulfide. Environmental Science & Technology, 2004, 38, 131A-136A.	4.6	136
23	Genesis of Precambrian sulfide ores, Skellefte District, Sweden. Economic Geology, 1975, 70, 255-274.	1.8	131
24	Aqueous Copper Sulfide Clusters as Intermediates during Copper Sulfide Formation. Environmental Science & Technology, 2002, 36, 394-402.	4.6	122
25	Evidence for aqueous clusters as intermediates during zinc sulfide formation. Geochimica Et Cosmochimica Acta, 1999, 63, 3159-3169.	1.6	120
26	Sulfur isotope partitioning during experimental formation of pyrite via the polysulfide and hydrogen sulfide pathways: implications for the interpretation of sedimentary and hydrothermal pyrite isotope records. Earth and Planetary Science Letters, 2004, 228, 495-509.	1.8	119
27	High resolution transmission electron microscopic study of synthetic nanocrystalline mackinawite. Earth and Planetary Science Letters, 2006, 241, 227-233.	1.8	110
28	MÃ¶ssbauer studies of iron sulphides. Journal of Inorganic and Nuclear Chemistry, 1969, 31, 3797-3802.	0.5	108
29	Metal Sulfide Complexes and Clusters. Reviews in Mineralogy and Geochemistry, 2006, 61, 421-504.	2.2	108
30	Understanding fossilization: Experimental pyritization of plants. Geology, 2001, 29, 123.	2.0	105
31	The composition of nanoparticulate mackinawite, tetragonal iron(II) monosulfide. Chemical Geology, 2006, 235, 286-298.	1.4	89
32	A novel iron sulphide mineral switch and its implications for Earth and planetary science. Earth and Planetary Science Letters, 2001, 189, 85-91.	1.8	87
33	The influence of experimental design on the rate of calcite dissolution. Geochimica Et Cosmochimica Acta, 1983, 47, 2281-2285.	1.6	84
34	Fossil plants from the Eocene London Clay: the use of pyrite textures to determine the mechanism of pyritization. Journal of the Geological Society, 2002, 159, 493-501.	0.9	82
35	Studies on the genesis of the Laisvall sandstone lead-zinc deposit, Sweden. Economic Geology, 1979, 74, 1255-1285.	1.8	74
36	Chemistry of Iron Sulfides in Sedimentary Environments. ACS Symposium Series, 1995, , 168-193.	0.5	74

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37	Formation of large sulfide mineral deposits along fast spreading ridges. Example from off-axial deposits at 12Â°43â€²N on the East Pacific Rise. Earth and Planetary Science Letters, 1996, 144, 147-162.	1.8	72
38	Structure of framboidal pyrite: An electron backscatter diffraction study. American Mineralogist, 2005, 90, 1693-1704.	0.9	66
39	Experimental concentration-time curves for the iron(II) sulphide precipitation process in aqueous solutions and their interpretation. Chemical Geology, 1989, 78, 315-324.	1.4	59
40	Sedimentary pyrite framboid size-frequency distributions: A meta-analysis. Palaeogeography, Palaeoclimatology, Palaeoecology, 2019, 522, 62-75.	1.0	57
41	Isotope systematics of the Kiruna magnetite ores, Sweden; Part 1, Age of the ore. Economic Geology, 1990, 85, 1770-1776.	1.8	56
42	Sedimentary Sulfides. Elements, 2017, 13, 117-122.	0.5	56
43	Fe isotope exchange between Fe(II)aq and nanoparticulate mackinawite (FeSm) during nanoparticle growth. Earth and Planetary Science Letters, 2010, 300, 174-183.	1.8	55
44	The effect of added dissolved calcium on calcite dissolution kinetics in aqueous solutions at 25Â°C. Chemical Geology, 1985, 49, 405-413.	1.4	53
45	How long does it take a pyrite framboid to form?. Earth and Planetary Science Letters, 2019, 513, 64-68.	1.8	53
46	Experimental determination of the equilibrium Fe isotope fractionation between and FeSm (mackinawite) at 25 and 2Â°C. Geochimica Et Cosmochimica Acta, 2011, 75, 2721-2734.	1.6	52
47	Sedimentary Pyrite. Developments in Sedimentology, 2012, 65, 233-285.	0.5	49
48	Some new lead isotope determinations from the proterozoic sulfide ores of central Sweden. Mineralium Deposita, 1985, 20, 1.	1.7	47
49	Voltammetric Evidence for Soluble FeS Complexes in Anoxic Estuarine Muds. Estuaries and Coasts, 1999, 22, 693.	1.7	44
50	Early Proterozoic ensialic spreading-subsidence: evidence from the Garpenberg enclave, Central Sweden. Precambrian Research, 1984, 26, 203-221.	1.2	42
51	Influence of arsenic on iron sulfide transformations. Chemical Geology, 2007, 236, 217-227.	1.4	42
52	Botanical constraints on pyrite formation. Chemical Geology, 2007, 236, 228-246.	1.4	42
53	Limiting Conditions for Synsedimentary Sulfide Ore Formation. Economic Geology, 1973, 68, 605-617.	1.8	40
54	Experimental study of Cu isotope fractionation during the reaction of aqueous Cu(II) with Fe(II) sulphides at temperatures between 40 and 200Â°C. Chemical Geology, 2011, 289, 31-38.	1.4	39

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55	Isotopic composition of phanerozoic ore leads from the Swedish segment of the Fennoscandian Shield. Mineralium Deposita, 1984, 19, 249.	1.7	36
56	Electrochemical Evidence for Metal Polysulfide Complexes: Tetrasulfide (S2-4) Reactions with Mn2+, Fe2+, Co2+, Ni2+, Cu2+, and Zn2+. Electroanalysis, 2001, 13, 21-29.	1.5	36
57	Electrochemical Evidence for Pentasulfide Complexes with Mn2+, Fe2+, Co2+, Ni2+, Cu2+ and Zn2+. Aquatic Geochemistry, 1999, 5, 29-57.	1.5	34
58	Hydrocarbons associated with leadâ€“zinc ores at Laisvall, Sweden. Nature, 1975, 255, 131-133.	13.7	32
59	â€œAmorphous Nickel Sulfideâ€•Is Hydrated Nanocrystalline NiS with a Coreâˆ'Shell Structure. Inorganic Chemistry, 2009, 48, 11486-11488.	1.9	32
60	Lead and sulfur isotopic compositions of galena from the Laisvall sandstone lead-zinc deposit, Sweden. Economic Geology, 1981, 76, 2042-2046.	1.8	31
61	Covellite formation in low temperature aqueous solutions. Mineralium Deposita, 1972, 7, 180-188.	1.7	30
62	Fluid migration and coal-rank development in foreland basins. Geology, 1998, 26, 679.	2.0	30
63	Multiple sulfur isotopes discriminate organoclastic and methane-based sulfate reduction by sub-seafloor pyrite formation. Geochimica Et Cosmochimica Acta, 2022, 316, 309-330.	1.6	28
64	Sulfur isotope systematics in the Aasen pyrite-barite deposits, Skellefte District, Sweden. Economic Geology, 1979, 74, 1060-1068.	1.8	27
65	Mineralogy and sulphur isotope geochemistry of the Broken Spur sulphides, 29Â°N, Mid-Atlantic Ridge. Geological Society Special Publication, 1995, 87, 175-189.	0.8	26
66	Mechanism of chalcopyrite formation from iron monosulphides in aqueous solutions (< 100Â°C, pH) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.4	24
67	The Svecokarelian anomalous ore lead line. Gff, 1978, 100, 19-30.	0.4	23
68	Nucleic Acids Bind to Nanoparticulate iron (II) Monosulphide in Aqueous Solutions. Origins of Life and Evolution of Biospheres, 2008, 38, 257-270.	0.8	23
69	Kinetics and mechanism of chalcopyrite formation from Fe(II) disulphide in aqueous solution (<200Â°C). Geochimica Et Cosmochimica Acta, 1994, 58, 3795-3802.	1.6	21
70	Synthesis of Smythite â€“ Rhombohedral Fe3S4. Nature, 1968, 218, 356-357.	13.7	19
71	Ore lead isotope variations in the Proterozoic massive pyrite deposit at Nï¿½sliden, Skellefte district, Sweden. Mineralium Deposita, 1984, 19, 145.	1.7	18
72	Scandinavian metallogenesis. Geo Journal, 1979, 3, 235.	1.7	17

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73	Mineralization controls in the sandstone lead-zinc deposits at Vassbo, Sweden. Economic Geology, 1979, 74, 1239-1249.	1.8	17
74	Colloform gold in coal from southern Wales. Geology, 1994, 22, 35.	2.0	17
75	Metastable Sedimentary Iron Sulfides. Developments in Sedimentology, 2012, 65, 195-231.	0.5	17
76	Origin of interstitial water compositions in postglacial black clays (northeastern Sweden). Chemical Geology, 1984, 42, 147-158.	1.4	16
77	Isotope systematics of the Kiruna magnetite ores, Sweden; Part 2, Evidence for a secondary event 400 m.y. after ore formation. Economic Geology, 1992, 87, 1121-1129.	1.8	16
78	A Uâ€“Th calcite isochron age from an active geothermal field in New Zealand. Journal of Volcanology and Geothermal Research, 1998, 81, 327-333.	0.8	16
79	Sulphide mylonites from the RenstrÃ¶m VMS deposit, Northern Sweden. Mineralogical Magazine, 1993, 57, 83-91.	0.6	15
80	Mineralogy and sulphur isotope characteristics of a massive sulphide boulder, Galapagos Rift, 85Â°55â€²W. Geological Society Special Publication, 1995, 87, 207-222.	0.8	15
81	Comment on â€œDetermination of Metal (Bi)Sulfide Stability Constants of Mn2+, Fe2+, Co2+, Ni2+, Cu2+, and Zn2+by Voltammetric Methodsâ€. Environmental Science & Technology, 1996, 30, 3638-3639.	4.6	15
82	Structure of framboidal pyrite: a single crystal X-ray diffraction study. European Journal of Mineralogy, 2006, 18, 93-98.	0.4	14
83	The composition of nanoparticulate nickel sulfide. Chemical Geology, 2010, 277, 207-213.	1.4	14
84	Sedimentary Iron Biogeochemistry. Developments in Sedimentology, 2012, 65, 85-119.	0.5	14
85	Determination of stability constants for metalâ€“ligand complexes using the voltammetric oxidation wave of the anion/ligand and the DeFord and Hume formalism. Talanta, 2000, 51, 11-20.	2.9	13
86	Arthritis and endogenous glucocorticoids: the emerging role of the 11Â-HSD enzymes. Annals of the Rheumatic Diseases, 2007, 67, 1201-1203.	0.5	13
87	Genesis of an early Proterozoic zinc deposit in high-grade metamorphic terrane, Saxberget, central Sweden. Economic Geology, 1990, 85, 714-736.	1.8	12
88	Provenance and age of bacteria-like structures on mid-Palaeozoic plant fossils. International Journal of Astrobiology, 2006, 5, 109-142.	0.9	12
89	Noble gas isotopes in 25 000 years of hydrothermal fluids from 13Â°N on the East Pacific Rise. Geological Society Special Publication, 1995, 87, 133-143.	0.8	11
90	Response to Comment on â€œDetermination of Metal (Bi)Sulfide Stability Constants of Mn2+, Fe2+, Co2+, Ni2+, Cu2+, and Zn2+by Voltammetric Methodsâ€. Environmental Science & Technology, 1996, 30, 3640-3641.	4.6	11

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91	Microbial Sulfate Reduction in Sediments. Developments in Sedimentology, 2012, 65, 319-351.	0.5	10
92	FeS-Induced Radical Formation and Its Effect on Plasmid DNA. Aquatic Geochemistry, 2011, 17, 545-566.	1.5	9
93	The Broadlandsâ€“Ohaaki geothermal system, New Zealand Part 1. Strontium isotope distribution in well BrO-29. Chemical Geology, 2000, 163, 247-265.	1.4	7
94	Sedimentary Sulfides. Developments in Sedimentology, 2012, , 543-604.	0.5	7
95	The Sedimentary Sulfur System: Biogeochemistry and Evolution through Geologic Time. , 2014, , 267-326.		7
96	Chemistry and geochemistry of solutions at high temperatures and pressures: An introduction to the symposium. Physics and Chemistry of the Earth, 1981, 13-14, 1-8.	0.3	6
97	Arsenic Uptake by Pyrite at Ambient Environmental Conditions: A Continuous-Flow Experiment. ACS Symposium Series, 2005, , 60-76.	0.5	6
98	The Evolution of the Sedimentary Sulfur Cycle. Developments in Sedimentology, 2012, 65, 685-766.	0.5	6
99	An apparatus for the study of fast precipitation reactions. Mineralogical Magazine, 1989, 53, 527-530.	0.6	5
100	Acid volatile sulfide: Authors' closing comments. Marine Chemistry, 2005, 97, 213-215.	0.9	5
101	8. Metal Sulfide Complexes and Clusters. , 2006, , 421-504.		5
102	Mineralogy and Sulfur Isotopic Composition of the Middle Valley Massive Sulfide Deposit, Northern Juan de Fuca Ridge. , 0, , .		5
103	Gold in South Wales coal. Nature, 1993, 364, 395-395.	13.7	4
104	Sub-aqueous sulfur volcanoes at Waiotapu, New Zealand. Geothermics, 1999, 28, 729-738.	1.5	4
105	European Phanerozoic metallogenesis. Mineralium Deposita, 1999, 34, 417-421.	1.7	4
106	Sulfur Chemistry in Aqueous Solutions. Developments in Sedimentology, 2012, 65, 31-83.	0.5	4
107	Metal Sequestration by Sedimentary Iron Sulfides. Developments in Sedimentology, 2012, , 287-317.	0.5	4
108	Euxinic Systems. Developments in Sedimentology, 2012, , 495-542.	0.5	4

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109	Aqueous Metalâ€“Sulfide Chemistry. Developments in Sedimentology, 2012, 65, 121-194.	0.5	4
110	Djurleite Synthesis in Low Temperature Aqueous Solution.. Acta Chemica Scandinavica, 1970, 24, 2236-2238.	0.7	4
111	Fluid inclusions in sphalerite at Laisvall, Sweden. Gff, 1978, 100, 177-180.	0.4	3
112	The chemistry and geochemistry of solutions at high temperatures and pressures. Gff, 1980, 102, 90-90.	0.4	3
113	Pentlandite and violarite in the NottrÃ¤sk deposit, northeastern Sweden. Gff, 1980, 101, 255-260.	0.4	3
114	Early Proterozoic Subaerial Volcanism and Its Relationship to Broken Hill-type Mineralization in Central Sweden. Geological Society Special Publication, 1987, 33, 81-93.	0.8	3
115	Comment and Reply on "Pb-Zn ore deposits of the northern Caledonides: Products of continental-scale fluid mixing and tectonic expulsion during continental collision". Geology, 1989, 17, 1059.	2.0	3
116	The Geochemistry of Sulfidic Sedimentary Rocks. Developments in Sedimentology, 2012, 65, 605-632.	0.5	3
117	Studies of the genesis of the Laisvall sandstone lead-zinc deposit, Sweden; reply. Economic Geology, 1981, 76, 2052-2060.	1.8	3
118	Congruence and genesis. Gff, 1977, 99, 143-148.	0.4	2
119	Ore geology textbooks in the eighties. Geological Magazine, 1988, 125, 89-95.	0.9	2
120	A special issue devoted to current research on mineral deposits of Europe; preface. Economic Geology, 1989, 84, 997-1002.	1.8	2
121	Microbial Sulfide Oxidation inÂSediments. Developments in Sedimentology, 2012, 65, 353-372.	0.5	2
122	K:KART; a minicomputer program for two- and three dimensional representations of topographic and isopach maps. Economic Geology, 1979, 74, 1250-1254.	1.8	2
123	A double-edged retirement honour. Nature, 2018, 560, 553-553.	13.7	2
124	Pyrrhotite mineralogy of the NottrÃ¤sk deposit, northeastern Sweden. Gff, 1980, 102, 83-89.	0.4	1
125	Isotopic constraints on the source of lead in the Laisvall sandstone lead-zinc deposit, Sweden. Gff, 1981, 103, 126-126.	0.4	1
126	Account of a Deep Hole. Geological Magazine, 1988, 125, 659-661.	0.9	1

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127	Sedimentary Sulfur Isotope Biogeochemistry. Developments in Sedimentology, 2012, , 419-473.	0.5	1
128	Fossil Bacteria. Developments in Sedimentology, 2012, 65, 633-683.	0.5	1
129	Iron Isotope Fractionation In Sedimentary Sulfides. Developments in Sedimentology, 2012, 65, 475-493.	0.5	1
130	The Many Faces of Foolâ€™s Gold. American Scientist, 2016, 104, 174.	0.1	1
131	Genesis of Precambrian sulfide ores, Skellefte District, Sweden; a reply. Economic Geology, 1976, 71, 674-678.	1.8	1
132	Inside the Earth. Nature, 1979, 282, 362-363.	13.7	0
133	Proterozoic Volcanogenic Mineralization Styles. Geological Society Special Publication, 1987, 33, 23-35.	0.8	0
134	The origin of hydrothermal sulfur in volcanic terranes. Chemical Geology, 1988, 70, 137.	1.4	0
135	Carbonate-hosted ore deposits and the British Geological Survey. Geological Magazine, 1990, 127, 595-598.	0.9	0
136	Title is missing!. Geological Magazine, 1991, 128, 398-399.	0.9	0
137	Citation for presentation of the 2004 Clair C. Patterson award to George Luther. Geochimica Et Cosmochimica Acta, 2006, 70, S13.	1.6	0
138	Peter Deines (1936â€"2009). Chemical Geology, 2009, 266, 113.	1.4	0
139	Microbial Ecology of Sulfidic Sediments. Developments in Sedimentology, 2012, , 373-418.	0.5	0
140	Review of I.A.M. Ahmed and K.A. Hudson-Edwards (eds.) (2017): Redox-reactive minerals: Properties, reactions and applications in natural systems and clean technologies. EMU Notes in Mineralogy, 17. European Journal of Mineralogy, 2018, 30, 653-654.	0.4	0
141	Antimony, Gold and Jupiter's Wolf. By Peter Wothers. Oxford University Press, 2019. Hardback, 273Âpp. Price GBP 20.00, USD 25.95. ISBN 9780199652723.. Acta Crystallographica Section C, Structural Chemistry, 2020, 76, 203-204.	0.2	0