Andrew L Rose

List of Publications by Year
in descending order

75 papers	4,236 citations	81900 39 h-index	110387 64 g-index
75 all docs	75 docs citations	75 times ranked	3746 citing authors

#	Article	IF	Citations
1	Methods for reactive oxygen species (ROS) detection in aqueous environments. Aquatic Sciences, 2012, 74, 683-734.	1.5	330
2	Kinetic Model for Fe(II) Oxidation in Seawater in the Absence and Presence of Natural Organic Matter. Environmental Science & Technology, 2002, 36, 433-444.	10.0	297
3	Kinetics of iron complexation by dissolved natural organic matter in coastal waters. Marine Chemistry, 2003, 84, 85-103.	2.3	234
4	Chemiluminescence of Luminol in the Presence of Iron(II) and Oxygen:Â Oxidation Mechanism and Implications for Its Analytical Use. Analytical Chemistry, 2001, 73, 5909-5920.	6.5	161
5	Reduction of Organically Complexed Ferric Iron by Superoxide in a Simulated Natural Water. Environmental Science & Technology, 2005, 39, 2645-2650.	10.0	157
6	Kinetics of Fe(III) precipitation in aqueous solutions at pH 6.0â€"9.5 and 25Â°C. Geochimica Et Cosmochimica Acta, 2006, 70, 640-650.	3.9	144
7	Photochemical production of superoxide and hydrogen peroxide from natural organic matter. Geochimica Et Cosmochimica Acta, 2011, 75, 4310-4320.	3.9	142
8	Use of Superoxide as an Electron Shuttle for Iron Acquisition by the Marine CyanobacteriumLyngbya majuscula. Environmental Science & Technology, 2005, 39, 3708-3715.	10.0	136
9	Effect of Dissolved Natural Organic Matter on the Kinetics of Ferrous Iron Oxygenation in Seawater. Environmental Science & Technology, 2003, 37, 4877-4886.	10.0	132
10	Effects of pH, Chloride, and Bicarbonate on Cu(I) Oxidation Kinetics at Circumneutral pH. Environmental Science & Technology, 2012, 46, 1527-1535.	10.0	119
11	Kinetics of Hydrolysis and Precipitation of Ferric Iron in Seawater. Environmental Science & Technology, 2003, 37, 3897-3903.	10.0	99
12	Hydroxyl Radical Production by H₂O₂-Mediated Oxidation of Fe(II) Complexed by Suwannee River Fulvic Acid Under Circumneutral Freshwater Conditions. Environmental Science & Technology, 2013, 47, 829-835.	10.0	95
13	Measurement and Implications of Nonphotochemically Generated Superoxide in the Equatorial Pacific Ocean. Environmental Science & Technology, 2008, 42, 2387-2393.	10.0	86
14	Kinetics of Cu(II) Reduction by Natural Organic Matter. Journal of Physical Chemistry A, 2012, 116, 6590-6599.	2.5	86
15	Determination of Superoxide in Seawater Using 2-Methyl-6-(4-methoxyphenyl)-3,7-dihydroimidazo[1,2-a]pyrazin-3(7<i>H</i>)-one Chemiluminescence. Analytical Chemistry, 2008, 80, 1215-1227.	6.5	82
16	Role of superoxide in the photochemical reduction of iron in seawater. Geochimica Et Cosmochimica Acta, 2006, 70, 3869-3882.	3.9	80
17	Importance of Iron Complexation for Fenton-Mediated Hydroxyl Radical Production at Circumneutral pH. Frontiers in Marine Science, 2016, 3, .	2.5	73
18	Predicting iron speciation in coastal waters from the kinetics of sunlight-mediated iron redox cycling. Aquatic Sciences, 2003, 65, 375-383.	1.5	67

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19	The FeL model of iron acquisition: Nondissociative reduction of ferric complexes in the marine environment. Limnology and Oceanography, 2006, 51, 1744-1754.	3.1	67
20	High-temperature, point-focus, pressurised gas-phase solar receivers: A comprehensive review. Energy Conversion and Management, 2019, 185, 678-717.	9.2	63
21	Superoxide-Mediated Dissolution of Amorphous Ferric Oxyhydroxide in Seawater. Environmental Science & Technology, 2006, 40, 880-887.	10.0	61
22	Effect of Light on Iron Uptake by the Freshwater Cyanobacterium <i>Microcystis aeruginosa</i>. Environmental Science & Technology, 2011, 45, 1391-1398.	10.0	59
23	Mechanism and Kinetics of Dark Iron Redox Transformations in Previously Photolyzed Acidic Natural Organic Matter Solutions. Environmental Science & Technology, 2013, 47, 1861-1869.	10.0	59
24	Superoxide Mediated Reduction of Organically Complexed Iron(III):Â Comparison of Non-Dissociative and Dissociative Reduction Pathways. Environmental Science & Technology, 2007, 41, 3205-3212.	10.0	57
25	Production of Reactive Oxygen Species on Photolysis of Dilute Aqueous Quinone Solutions. Photochemistry and Photobiology, 2007, 83, 904-913.	2.5	56
26	Effect of Fe(II) and Fe(III) Transformation Kinetics on Iron Acquisition by a Toxic Strain of Microcystis aeruginosa. Environmental Science & Technology, 2010, 44, 1980-1986.	10.0	55
27	The Influence of Extracellular Superoxide on Iron Redox Chemistry and Bioavailability to Aquatic Microorganisms. Frontiers in Microbiology, 2012, 3, 124.	3.5	55
28	Sedimentary ironâ€"phosphorus cycling under contrasting redox conditions in a eutrophic estuary. Chemical Geology, 2015, 392, 19-31.	3.3	55
29	New method for the determination of extracellular production of superoxide by marine phytoplankton using the chemiluminescence probes MCLA and redâ€CLA. Limnology and Oceanography: Methods, 2009, 7, 682-692.	2.0	52
30	Impact of natural organic matter on H2O2-mediated oxidation of Fe(II) in a simulated freshwater system. Geochimica Et Cosmochimica Acta, 2009, 73, 2758-2768.	3.9	50
31	Novel application of a fish gill cell line assay to assess ichthyotoxicity of harmful marine microalgae. Harmful Algae, 2011, 10, 366-373.	4.8	50
32	Phthalhydrazide Chemiluminescence Method for Determination of Hydroxyl Radical Production: Modifications and Adaptations for Use in Natural Systems. Analytical Chemistry, 2011, 83, 261-268.	6.5	49
33	Decoupling between Water Column Oxygenation and Benthic Phosphate Dynamics in a Shallow Eutrophic Estuary. Environmental Science & Technology, 2013, 47, 3114-3121.	10.0	46
34	Dynamics of nonphotochemical superoxide production in the Great Barrier Reef lagoon. Limnology and Oceanography, 2010, 55, 1521-1536.	3.1	45
35	Oxygen and Superoxide-Mediated Redox Kinetics of Iron Complexed by Humic Substances in Coastal Seawater. Environmental Science & Technology, 2010, 44, 9337-9342.	10.0	45
36	Effect of divalent cations on the kinetics of Fe(III) complexation by organic ligands in natural waters. Geochimica Et Cosmochimica Acta, 2008, 72, 1335-1349.	3.9	44

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37	Iron uptake by the ichthyotoxic <i>Chattonella marina</i> (Raphidophyceae): impact of superoxide generation¹. Journal of Phycology, 2007, 43, 978-991.	2.3	43
38	Manganese and iron release from mangrove porewaters: A significant component of oceanic budgets?. Marine Chemistry, 2016, 184, 43-52.	2.3	42
39	Characteristics of the Freshwater Cyanobacterium Microcystis aeruginosa Grown in Iron-Limited Continuous Culture. Applied and Environmental Microbiology, 2012, 78, 1574-1583.	3.1	41
40	Superoxide-mediated Fe(II) formation from organically complexed Fe(III) in coastal waters. Geochimica Et Cosmochimica Acta, 2008, 72, 6079-6089.	3.9	40
41	Reactive oxygen species in the world ocean and their impacts on marine ecosystems. Redox Biology, 2022, 52, 102285.	9.0	37
42	Impact of Natural Organic Matter on H2O2-Mediated Oxidation of Fe(II) in Coastal Seawaters. Environmental Science & Technology, 2012, 46, 11078-11085.	10.0	35
43	Iron Redox Transformations in Continuously Photolyzed Acidic Solutions Containing Natural Organic Matter: Kinetic and Mechanistic Insights. Environmental Science & Technology, 2013, 47, 9190-9197.	10.0	35
44	Influence of phosphate on the oxidation kinetics of nanomolar Fe(II) in aqueous solution at circumneutral pH. Geochimica Et Cosmochimica Acta, 2011, 75, 4601-4610.	3.9	30
45	Resolving Early Stages of Homogeneous Iron(III) Oxyhydroxide Formation from Iron(III) Nitrate Solutions at pH 3 Using Time-Resolved SAXS. Langmuir, 2014, 30, 3548-3556.	3.5	29
46	An in situ XAS study of ferric iron hydrolysis and precipitation in the presence of perchlorate, nitrate, chloride and sulfate. Geochimica Et Cosmochimica Acta, 2016, 177, 150-169.	3.9	27
47	Reconciling kinetic and equilibrium observations of iron(III) solubility in aqueous solutions with a polymer-based model. Geochimica Et Cosmochimica Acta, 2007, 71, 5605-5619.	3.9	26
48	Sorption of phosphate and silicate alters dissolution kinetics of poorly crystalline iron (oxyhydr)oxide. Chemosphere, 2019, 234, 690-701.	8.2	26
49	Iron Uptake by Toxic and Nontoxic Strains of Microcystis aeruginosa. Applied and Environmental Microbiology, 2011, 77, 7068-7071.	3.1	25
50	Transformation dynamics and reactivity of dissolved and colloidal iron in coastal waters. Marine Chemistry, 2008, 110, 165-175.	2.3	24
51	Design of high-temperature atmospheric and pressurised gas-phase solar receivers: A comprehensive review on numerical modelling and performance parameters. Solar Energy, 2020, 201, 701-723.	6.1	23
52	Effect of Natural Organic Matter on Iron Uptake by the Freshwater Cyanobacterium <i>Microcystis aeruginosa</i>. Environmental Science & Technology, 2014, 48, 365-374.	10.0	22
53	Phosphorus speciation and bioavailability in diverse biochars. Plant and Soil, 2019, 443, 233-244.	3.7	22
54	A novel high-temperature (>700ÂÂ°C), volumetric receiver with a packed bed of transparent and absorbing spheres. Applied Energy, 2020, 264, 114705.	10.1	21

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55	Superoxide-mediated reduction of organically complexed iron(III): Impact of pH and competing cations (Ca2+). Geochimica Et Cosmochimica Acta, 2007, 71, 5620-5634.	3.9	20
56	Moderate ocean warming mitigates, but more extreme warming exacerbates the impacts of zinc from engineered nanoparticles onÂaÂmarine larva. Environmental Pollution, 2017, 228, 190-200.	7.5	19
57	Development of a novel high-temperature, pressurised, indirectly-irradiated cavity receiver. Energy Conversion and Management, 2020, 204, 112175.	9.2	19
58	Seas of Superoxide. Science, 2013, 340, 1176-1177.	12.6	18
59	Crop fertilisation potential of phosphorus in hydrochars produced from sewage sludge. Science of the Total Environment, 2022, 817, 153023.	8.0	18
60	Calcium coordination environment in precursor species to calcium carbonate mineral formation. Geochimica Et Cosmochimica Acta, 2019, 259, 344-357.	3.9	12
61	The characterization of iron (III) in seawater and related toxicity to early life stages of scleractinian corals. Environmental Toxicology and Chemistry, 2018, 37, 1104-1114.	4.3	11
62	The potential of benthic iron and phosphorus fluxes to support the growth of a bloom forming toxic cyanobacterium Lyngbya majuscula, Moreton Bay, Australia. Marine and Freshwater Research, 2016, 67, 1918.	1.3	10
63	Oxic and Anoxic Organic Polymer Degradation Potential of Endophytic Fungi From the Marine Macroalga, Ecklonia radiata. Frontiers in Microbiology, 2021, 12, 726138.	3.5	10
64	The Influence of Reactive Oxygen Species on Local Redox Conditions in Oxygenated Natural Waters. Frontiers in Earth Science, 2016, 4, .	1.8	9
65	Nonclassical nucleation towards separation and recycling science: Iron and aluminium (Oxy)(hydr)oxides. Current Opinion in Colloid and Interface Science, 2020, 46, 114-127.	7.4	9
66	Landslide-induced iron mobilisation shapes benthic accumulation of nutrients, trace metals and REE fractionation in an oligotrophic alpine stream. Geochimica Et Cosmochimica Acta, 2015, 148, 1-22.	3.9	8
67	Porewater inputs drive Fe redox cycling in the water column of a temperate mangrove wetland. Estuarine, Coastal and Shelf Science, 2018, 207, 259-268.	2.1	8
68	Optical analysis of a semi-transparent packed bed of spheres for next-generation volumetric solar receivers. Energy, 2022, 252, 123985.	8.8	7
69	Pathways Contributing to the Formation and Decay of Ferrous Iron in Sunlit Natural Waters. ACS Symposium Series, 2011, , 153-176.	0.5	6
70	Response surface statistical optimisation of zeolite-X/silica by hydrothermal synthesis. Journal of Materials Science, 2019, 54, 14677-14689.	3.7	6
71	The effect of dissolved natural organic matter on the rate of removal of ferrous iron in fresh waters. Water Science and Technology: Water Supply, 2004, 4, 213-219.	2.1	4
72	Comment on â€œApplication of a superoxide (O2â^') thermal source (SOTS-1) for the determination and calibration of O2â^' fluxes in seawaterâ€•by Heller and Croot. Analytica Chimica Acta, 2011, 702, 144-145.	5.4	3

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73	Measuring total dissolved Fe concentrations in phytoplankton cultures in the presence of synthetic and organic ligands using a modified ferrozine method. Marine Chemistry, 2018, 203, 22-27.	2.3	2
74	An online calculator for marine phytoplankton iron culturing experiments. Journal of Phycology, 2013, 49, 1017-1021.	2.3	1
75	Reply to comment: Non-classical nucleation towards separation and recycling science: Iron and aluminium (oxy)(hydr)oxides. Current Opinion in Colloid and Interface Science, 2020, 46, 130.	7.4	0