Alain Manceau

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Response to Comment on â€œMercury Isotope Fractionation by Internal Demethylation and Biomineralization Reactions in Seabirds: Implications for Environmental Mercury Scienceâ€ Principles and Limitations of Source Tracing and Process Tracing with Stable Isotope Signatures. Environmental Science & Technology, 2022, 56, 2065-2068.	10.0	1
2	Comment on â€œNew insights into the biomineralization of mercury selenide nanoparticles through stable isotope analysis in giant petrel tissuesâ€ Journal of Hazardous Materials, 2022, 431, 128583.	12.4	2
3	Chemical Information in the L₃ X-ray Absorption Spectra of Molybdenum Compounds by High-Energy-Resolution Detection and Density Functional Theory. Inorganic Chemistry, 2022, 61, 869-881.	4.0	3
4	Crystal Chemistry of Thallium in Marine Ferromanganese Deposits. ACS Earth and Space Chemistry, 2022, 6, 1269-1285.	2.7	9
5	Fossil Bioapatites with Extremely High Concentrations of Rare Earth Elements and Yttrium from Deep-Sea Pelagic Sediments. ACS Earth and Space Chemistry, 2022, 6, 2093-2103.	2.7	6
6	In Vivo Formation of HgSe Nanoparticles and Hgâ€“Tetraselenolate Complex from Methylmercury in Seabirdsâ€”Implications for the Hgâ€“Se Antagonism. Environmental Science & Technology, 2021, 55, 1515-1526.	10.0	75
7	Nature of High- and Low-Affinity Metal Surface Sites on Birnessite Nanosheets. ACS Earth and Space Chemistry, 2021, 5, 66-76.	2.7	11
8	Acute Toxicity of Divalent Mercury to Bacteria Explained by the Formation of Dicysteinate and Tetracysteinate Complexes Bound to Proteins in <i>Escherichia coli</i> and <i>Bacillus subtilis</i>. Environmental Science & Technology, 2021, 55, 3612-3623.	10.0	9
9	Mercury in the tissues of five cephalopods species: First data on the nervous system. Science of the Total Environment, 2021, 759, 143907.	8.0	9
10	Isotope Fractionation from <i>In Vivo</i> Methylmercury Detoxification in Waterbirds. ACS Earth and Space Chemistry, 2021, 5, 990-997.	2.7	18
11	Chemical Forms of Mercury in Blue Marlin Billfish: Implications for Human Exposure. Environmental Science and Technology Letters, 2021, 8, 405-411.	8.7	21
12	Chemical Forms of Mercury in Pilot Whales Determined from Species-Averaged Mercury Isotope Signatures. ACS Earth and Space Chemistry, 2021, 5, 1591-1599.	2.7	8
13	Cellular remains in a ~3.42-billion-year-old subseafloor hydrothermal environment. Science Advances, 2021, 7, .	10.3	34
14	Mercury Isotope Fractionation by Internal Demethylation and Biomineralization Reactions in Seabirds: Implications for Environmental Mercury Science. Environmental Science & Technology, 2021, 55, 13942-13952.	10.0	19
15	Demethylation of Methylmercury in Bird, Fish, and Earthworm. Environmental Science & Technology, 2021, 55, 1527-1534.	10.0	61
16	TEXS: in-vacuum tender X-ray emission spectrometer with 11 Johansson crystal analyzers. Journal of Synchrotron Radiation, 2020, 27, 813-826.	2.4	19
17	The Mode of Incorporation of As(-I) and Se(-I) in Natural Pyrite Revisited. ACS Earth and Space Chemistry, 2020, 4, 379-390.	2.7	18
18	The chemical species of mercury accumulated by Pseudomonas idrijaensis, a bacterium from a rock of the Idrija mercury mine, Slovenia.. Chemosphere, 2020, 248, 126002.	8.2	9

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19	Evidence for syngenetic micro-inclusions of As3+- and As5+-containing Cu sulfides in hydrothermal pyrite. American Mineralogist, 2019, 104, 300-306.	1.9	4
20	Revealing the Chemical Form of â€œInvisibleâ€•Gold in Natural Arsenian Pyrite and Arsenopyrite with High Energy-Resolution X-ray Absorption Spectroscopy. ACS Earth and Space Chemistry, 2019, 3, 1905-1914.	2.7	39
21	Comment on â€œRoles of Hydration and Magnetism on the Structure of Ferrihydrite from First Principlesâ€• ACS Earth and Space Chemistry, 2019, 3, 1576-1580.	2.7	8
22	Frontispiece: Mercury(II) Binding to Metallothionein in Mytilus edulis revealed by High Energy-Resolution XANES Spectroscopy. Chemistry - A European Journal, 2019, 25, .	3.3	0
23	Divalent Mercury in Dissolved Organic Matter Is Bioavailable to Fish and Accumulates as Dithiolate and Tetrathiolate Complexes. Environmental Science & Technology, 2019, 53, 4880-4891.	10.0	30
24	Thiols in Natural Organic Matter: Molecular Forms, Acidity, and Reactivity with Mercury(II) from First-Principles Calculations and High Energy-Resolution X-ray Absorption Near-Edge Structure Spectroscopy. ACS Earth and Space Chemistry, 2019, 3, 2795-2807.	2.7	9
25	Mercury(II) Binding to Metallothionein in <i>Mytilus edulis</i> revealed by High Energyâ€Resolution XANES Spectroscopy. Chemistry - A European Journal, 2019, 25, 997-1009.	3.3	23
26	Mercury Trithiolate Binding (HgS₃) to a de Novo Designed Cyclic Decapeptide with Three Preoriented Cysteine Side Chains. Inorganic Chemistry, 2018, 57, 2705-2713.	4.0	14
27	Biogenesis of Mercuryâ€“Sulfur Nanoparticles in Plant Leaves from Atmospheric Gaseous Mercury. Environmental Science & Technology, 2018, 52, 3935-3948.	10.0	75
28	Chemical Forms of Mercury in Pyrite: Implications for Predicting Mercury Releases in Acid Mine Drainage Settings. Environmental Science & Technology, 2018, 52, 10286-10296.	10.0	37
29	Comment on â€œCrystal growth and aggregation in suspensions of Î´-MnO2 nanoparticles: implications for surface reactivityâ€•by F. F. Marafatto, B. Lanson and J. PeÃ±a, Environ. Sci.: Nano, 2018, 5, 497. Environmental Science: Nano, 2018, 5, 2198-2200.	4.3	2
30	High energy-resolution x-ray spectroscopy at ultra-high dilution with spherically bent crystal analyzers of 0.5 m radius. Review of Scientific Instruments, 2017, 88, 013108.	1.3	62
31	Nucleation of mercury sulfide by dealkylation. Scientific Reports, 2016, 6, 39359.	3.3	21
32	Chemical Forms of Mercury in Human Hair Reveal Sources of Exposure. Environmental Science & Technology, 2016, 50, 10721-10729.	10.0	53
33	Structure, Bonding, and Stability of Mercury Complexes with Thiolate and Thioether Ligands from High-Resolution XANES Spectroscopy and First-Principles Calculations. Inorganic Chemistry, 2015, 54, 11776-11791.	4.0	57
34	Comment on â€œMolecular controls on Cu and Zn isotopic fractionation in Feâ€“Mn crustsâ€•by Little et al.. Earth and Planetary Science Letters, 2015, 411, 310-312.	4.4	9
35	Formation of Mercury Sulfide from Hg(II)â€“Thiolate Complexes in Natural Organic Matter. Environmental Science & Technology, 2015, 49, 9787-9796.	10.0	111
36	Estimating the number of pure chemical componentsÂin a mixture by X-ray absorption spectroscopy. Journal of Synchrotron Radiation, 2014, 21, 1140-1147.	2.4	39

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37	PDF analysis of ferrihydrite: Critical assessment of the under-constrained akdalaite model. American Mineralogist, 2014, 99, 102-108.	1.9	27
38	High-level ab initio calculation of the stability of mercuryâ€“thiolate complexes. Theoretical Chemistry Accounts, 2014, 133, 1.	1.4	14
39	Mineralogy and crystal chemistry of Mn, Fe, Co, Ni, and Cu in a deep-sea Pacific polymetallic nodule. American Mineralogist, 2014, 99, 2068-2083.	1.9	106
40	Short-range and long-range order of phyllomanganate nanoparticles determined using high-energy X-ray scattering. Journal of Applied Crystallography, 2013, 46, 193-209.	4.5	70
41	Incorporation of Ge in ferrihydrite: Implications for the structure of ferrihydrite. American Mineralogist, 2013, 98, 848-858.	1.9	19
42	Determination of Mn valence states in mixed-valent manganates by XANES spectroscopy. American Mineralogist, 2012, 97, 816-827.	1.9	256
43	Zn sorption modifies dynamically the layer and interlayer structure of vernadite. Geochimica Et Cosmochimica Acta, 2012, 85, 302-313.	3.9	110
44	Quantitative analysis of sulfur functional groups in natural organic matter by XANES spectroscopy. Geochimica Et Cosmochimica Acta, 2012, 99, 206-223.	3.9	146
45	Critical evaluation of the revised akdalaite model for ferrihydrite--Reply. American Mineralogist, 2012, 97, 255-256.	1.9	17
46	Mercuryâ€Sequestering Pseudopeptides with a Tris(cysteine) Environment in Water. European Journal of Inorganic Chemistry, 2012, 2012, 3835-3843.	2.0	26
47	Metallothionein-Like Multinuclear Clusters of Mercury(II) and Sulfur in Peat. Environmental Science & Technology, 2011, 45, 7298-7306.	10.0	59
48	Structure of nanocrystalline phyllomanganates produced by freshwater fungi. American Mineralogist, 2010, 95, 1608-1616.	1.9	138
49	The nature of Cu bonding to natural organic matter. Geochimica Et Cosmochimica Acta, 2010, 74, 2556-2580.	3.9	162
50	Zinc distribution and speciation in <i>Arabidopsis halleri</i>â€ƒÃ—â€ƒ<i>Arabidopsis lyrata</i> progenies presenting various zinc accumulation capacities. New Phytologist, 2009, 184, 581-595.	7.3	114
51	Formation of Znâ€“Ca phyllomanganate nanoparticles in grass roots. Geochimica Et Cosmochimica Acta, 2008, 72, 2478-2490.	3.9	74
52	Formation of Metallic Copper Nanoparticles at the Soilâˆ’Root Interface. Environmental Science & Technology, 2008, 42, 1766-1772.	10.0	221
53	Relationships between Hg(ii)â€“S bond distance and Hg(ii) coordination in thiolates. Dalton Transactions, 2008, , 1421.	3.3	73
54	Natural speciation of Ni, Zn, Ba, and As in ferromanganese coatings on quartz using X-ray fluorescence, absorption, and diffraction. Geochimica Et Cosmochimica Acta, 2007, 71, 95-128.	3.9	204

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55	Chemical and structural control of the partitioning of Co, Ce, and Pb in marine ferromanganese oxides. Geochimica Et Cosmochimica Acta, 2007, 71, 984-1008.	3.9	249
56	Ba and Ni speciation in a nodule of binary Mn oxide phase composition from Lake Baikal. Geochimica Et Cosmochimica Acta, 2007, 71, 1967-1981.	3.9	73
57	Formation of todorokite from vernadite in Ni-rich hemipelagic sediments. Geochimica Et Cosmochimica Acta, 2007, 71, 5698-5716.	3.9	145
58	Structure of the synthetic K-rich phyllomanganate birnessite obtained by high-temperature decomposition of KMnO4. Microporous and Mesoporous Materials, 2007, 98, 267-282.	4.4	72
59	Structural model for the biogenic Mn oxide produced by Pseudomonas putida. American Mineralogist, 2006, 91, 489-502.	1.9	288
60	Zinc sorption to biogenic hexagonal-birnessite particles within a hydrated bacterial biofilm. Geochimica Et Cosmochimica Acta, 2006, 70, 27-43.	3.9	177
61	Nanometer-sized, divalent-Mn, hydrous silicate domains in geothermal brine precipitates. American Mineralogist, 2005, 90, 371-381.	1.9	13
62	Zinc mobility and speciation in soil covered by contaminated dredged sediment using micrometer-scale and bulk-averaging X-ray fluorescence, absorption and diffraction techniques. Geochimica Et Cosmochimica Acta, 2005, 69, 1173-1198.	3.9	89
63	Natural speciation of Mn, Ni, and Zn at the micrometer scale in a clayey paddy soil using X-ray fluorescence, absorption, and diffraction. Geochimica Et Cosmochimica Acta, 2005, 69, 4007-4034.	3.9	109
64	Zinc Sorption by a Bacterial Biofilm. Environmental Science & Technology, 2005, 39, 8288-8294.	10.0	105
65	Beamline 10.3.2 at ALS: a hard X-ray microprobe for environmental and materials sciences. Journal of Synchrotron Radiation, 2004, 11, 239-247.	2.4	245
66	Natural speciation of Zn at the micrometer scale in a clayey soil using X-ray fluorescence, absorption, and diffraction. Geochimica Et Cosmochimica Acta, 2004, 68, 2467-2483.	3.9	156
67	Mn, Fe, Zn and As speciation in a fast-growing ferromanganese marine nodule. Geochimica Et Cosmochimica Acta, 2004, 68, 3125-3136.	3.9	142
68	Analysis of the Major Fe Bearing Mineral Phases in Recent Lake Sediments by EXAFS Spectroscopy. Aquatic Geochemistry, 2003, 9, 1-17.	1.3	22
69	Structure of Synthetic K-rich Birnessite Obtained by High-Temperature Decomposition of KMnO4. I. Two-Layer Polytype from 800 Â°C Experiment. Chemistry of Materials, 2003, 15, 4666-4678.	6.7	169
70	Molecular-Scale Speciation of Zn and Ni in Soil Ferromanganese Nodules from Loess Soils of the Mississippi Basin. Environmental Science & Technology, 2003, 37, 75-80.	10.0	171
71	Structure of heavy-metal sorbed birnessite: Part 1. Results from X-ray diffraction. American Mineralogist, 2002, 87, 1631-1645.	1.9	115
72	Structure of heavy-metal sorbed birnessite: Part 2. Results from electron diffraction. American Mineralogist, 2002, 87, 1646-1661.	1.9	42

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73	Structure of synthetic Na-birnessite: Evidence for a triclinic one-layer unit cell. American Mineralogist, 2002, 87, 1662-1671.	1.9	152
74	Deciphering Ni sequestration in soil ferromanganese nodules by combining X-ray fluorescence, absorption, and diffraction at micrometer scales of resolution. American Mineralogist, 2002, 87, 1494-1499.	1.9	102
75	Arsenic(III) Oxidation by Birnessite and Precipitation of Manganese(II) Arsenate. Environmental Science & Technology, 2002, 36, 493-500.	10.0	294
76	Quantitative Zn speciation in a contaminated dredged sediment by Î¼-PIXE, Î¼-SXRF, EXAFS spectroscopy and principal component analysis. Geochimica Et Cosmochimica Acta, 2002, 66, 1549-1567.	3.9	154
77	Structure of heavy metal sorbed birnessite. Part III: Results from powder and polarized extended X-ray absorption fine structure spectroscopy. Geochimica Et Cosmochimica Acta, 2002, 66, 2639-2663.	3.9	242
78	7. Quantitative Speciation of Heavy Metals in Soils and Sediments by Synchrotron X-ray Techniques. , 2002, , 341-428.		103
79	Accumulation Forms of Zn and Pb inPhaseolus vulgarisin the Presence and Absence of EDTA. Environmental Science & Technology, 2001, 35, 2854-2859.	10.0	185
80	Structure of H-exchanged hexagonal birnessite and its mechanism of formation from Na-rich monoclinic buserite at low pH. American Mineralogist, 2000, 85, 826-838.	1.9	191
81	Structure of synthetic monoclinic Na-rich birnessite and hexagonal birnessite; II, Results from chemical studies and EXAFS spectroscopy. American Mineralogist, 1997, 82, 962-978.	1.9	256
82	Structure of synthetic monoclinic Na-rich birnessite and hexagonal birnessite; I, Results from X-ray diffraction and selected-area electron diffraction. American Mineralogist, 1997, 82, 946-961.	1.9	353
83	Removal of Selenocyanate in Water by Precipitation:Â Characterization of Copperâ^'Selenium Precipitate by X-ray Diffraction, Infrared, and X-ray Absorption Spectroscopy. Environmental Science & Technology, 1997, 31, 968-976.	10.0	42
84	Structure and Mechanisms of Formation of FeOOH(NO3) Oligomers in the Early Stages of Hydrolysis. Langmuir, 1997, 13, 3240-3246.	3.5	59
85	Structural mechanism of Co (super 2+) oxidation by the phyllomanganate buserite. American Mineralogist, 1997, 82, 1150-1175.	1.9	235
86	Reaction Rates and Products of Manganese Oxidation at the Sediment-Water Interface. Advances in Chemistry Series, 1995, , 111-134.	0.6	61
87	Structure and Stability of Cd2+ Surface Complexes on Ferric Oxides. Journal of Colloid and Interface Science, 1994, 168, 73-86.	9.4	215
88	Structure and mechanisms of formation of iron oxide hydroxide (chloride) polymers. Langmuir, 1994, 10, 316-319.	3.5	147