Gauthier J-P Deblonde

List of Publications by Year
in descending order

53 papers	1,390 citations	304743 22 h-index	361022 35 g-index
54 all docs	54 docs citations	54 times ranked	1154 citing authors

#	Article	IF	Citations
1	<i>In situ</i> beam reduction of Pu(IV) and Bk(IV) as a route to trivalent transuranic coordination complexes with hydroxypyridinone chelators. Journal of Synchrotron Radiation, 2022, 29, 315-322.	2.4	1
2	Engineering lanmodulin's selectivity for actinides over lanthanides by controlling solvent coordination and second-sphere interactions. Chemical Science, 2022, 13, 6054-6066.	7.4	17
3	Efficient discrimination of transplutonium actinides by <i>in vivo</i> models. Chemical Science, 2021, 12, 5295-5301.	7.4	9
4	Probing electronic structure in berkelium and californium via an electron microscopy nanosampling approach. Nature Communications, 2021, 12, 948.	12.8	7
5	Combining the Best of Two Chelating Titans: A Hydroxypyridinoneâ€Decorated Macrocyclic Ligand for Efficient and Concomitant Complexation and Sensitized Luminescence of fâ€Elements. ChemPlusChem, 2021, 86, 483-491.	2.8	8
6	Microbe-Encapsulated Silica Gel Biosorbents for Selective Extraction of Scandium from Coal Byproducts. Environmental Science & Technology, 2021, 55, 6320-6328.	10.0	12
7	Characterization of Americium and Curium Complexes with the Protein Lanmodulin: A Potential Macromolecular Mechanism for Actinide Mobility in the Environment. Journal of the American Chemical Society, 2021, 143, 15769-15783.	13.7	22
8	The coordination properties and ionic radius of actinium: A 120-year-old enigma. Coordination Chemistry Reviews, 2021, 446, 214130.	18.8	27
9	Spectrophotometric methods to probe the solution chemistry of lanthanide complexes with macromolecules. Methods in Enzymology, 2021, 651, 1-22.	1.0	1
10	Controlling the Reduction of Chelated Uranyl to Stable Tetravalent Uranium Coordination Complexes in Aqueous Solution. Inorganic Chemistry, 2021, 60, 973-981.	4.0	11
11	Capturing an elusive but critical element: Natural protein enables actinium chemistry. Science Advances, 2021, 7, eabk0273.	10.3	19
12	Bridging Hydrometallurgy and Biochemistry: A Protein-Based Process for Recovery and Separation of Rare Earth Elements. ACS Central Science, 2021, 7, 1798-1808.	11.3	71
13	Selective and Efficient Biomacromolecular Extraction of Rare-Earth Elements using Lanmodulin. Inorganic Chemistry, 2020, 59, 11855-11867.	4.0	78
14	Open questions on the environmental chemistry of radionuclides. Communications Chemistry, 2020, 3, .	4.5	17
15	Developing scandium and yttrium coordination chemistry to advance theranostic radiopharmaceuticals. Communications Chemistry, 2020, 3, .	4.5	22
16	Hydroxypyridinone Derivatives: A Low-pH Alternative to Polyaminocarboxylates for TALSPEAK-like Separation of Trivalent Actinides from Lanthanides. ACS Omega, 2020, 5, 12996-13005.	3.5	11
17	Structural properties of ultra-small thorium and uranium dioxide nanoparticles embedded in a covalent organic framework. Chemical Science, 2020, 11, 4648-4668.	7.4	22
18	Niobium and tantalum processing in oxalic-nitric media: Nb2O5Â·nH2O and Ta2O5Â·nH2O precipitation with oxalates and nitrates recycling. Separation and Purification Technology, 2019, 226, 209-217.	7.9	20

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19	Ultra-selective ligand-driven separation of strategic actinides. Nature Communications, 2019, 10, 2438.	12.8	39
20	Combinatorial design of multimeric chelating peptoids for selective metal coordination. Chemical Science, 2019, 10, 6834-6843.	7.4	17
21	Inducing selectivity and chirality in group IV metal coordination with high-denticity hydroxypyridinones. Dalton Transactions, 2019, 48, 8238-8247.	3.3	14
22	A fluoride-free liquid-liquid extraction process for the recovery and separation of niobium and tantalum from alkaline leach solutions. Separation and Purification Technology, 2019, 215, 634-643.	7.9	34
23	Investigation of light ion fusion reactions with plasma discharges. Journal of Applied Physics, 2019, 126, .	2.5	7
24	Investigating complexation-induced chirality in Ln(III) and An(III)-3,4,3-LI(1,2-HOPO) small-molecule and siderocalin protein complexes. Acta Crystallographica Section A: Foundations and Advances, 2019, 75, a73-a73.	0.1	0
25	Spectroscopic and Computational Characterization of Diethylenetriaminepentaacetic Acid/Transplutonium Chelates: Evidencing Heterogeneity in the Heavy Actinide(III) Series. Angewandte Chemie - International Edition, 2018, 57, 4521-4526.	13.8	33
26	Spectroscopic and Computational Characterization of Diethylenetriaminepentaacetic Acid/Transplutonium Chelates: Evidencing Heterogeneity in the Heavy Actinide(III) Series. Angewandte Chemie, 2018, 130, 4611-4616.	2.0	2
27	Bond Covalency and Oxidation State of Actinide Ions Complexed with Therapeutic Chelating Agent 3,4,3-LI(1,2-HOPO). Inorganic Chemistry, 2018, 57, 5352-5363.	4.0	88
28	Toxic heavy metal â€“ Pb, Cd, Sn â€“ complexation by the octadentate hydroxypyridinonate ligand archetype 3,4,3-LI(1,2-HOPO). New Journal of Chemistry, 2018, 42, 7649-7658.	2.8	24
29	Evaluating the potential of chelation therapy to prevent and treat gadolinium deposition from MRI contrast agents. Scientific Reports, 2018, 8, 4419.	3.3	45
30	Solution Thermodynamics and Kinetics of Metal Complexation with a Hydroxypyridinone Chelator Designed for Thorium-227 Targeted Alpha Therapy. Inorganic Chemistry, 2018, 57, 14337-14346.	4.0	38
31	Electron Energy Loss Spectroscopy of Actinides at the Nanogram Scale. Microscopy and Microanalysis, 2018, 24, 444-445.	0.4	0
32	Investigating subtle 4f <i>vs.</i> 5f coordination differences using kinetically inert Eu(<scp>iii</scp>), Tb(<scp>iii</scp>), and Cm(<scp>iii</scp>) complexes of a coumarin-appended 1,4,7,10-tetraazacyclododecane-1,4,7-triacetate (DO3A) ligand. Dalton Transactions, 2018, 47, 7362-7369.	3.3	7
33	Chelation and stabilization of berkelium in oxidation state +IV. Nature Chemistry, 2017, 9, 843-849.	13.6	74
34	Interinstrumental transfer of a fast shortâ€end injection capillary electrophoresis method: Application to the separation of niobium, tantalum, and their substituted ions. Electrophoresis, 2017, 38, 2069-2074.	2.4	3
35	Cleaving Off Uranyl Oxygens through Chelation: A Mechanistic Study in the Gas Phase. Inorganic Chemistry, 2017, 56, 12930-12937.	4.0	23
36	Kinetic study of niobium and tantalum hexameric forms and their substituted ions by capillary electrophoresis in alkaline medium. Talanta, 2017, 175, 127-134.	5.5	6

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37	Leaching of niobium- and REE-bearing iron ores: Significant reduction of H2SO4 consumption using SO2 and activated carbon. Separation and Purification Technology, 2017, 189, 1-10.	7.9	14
38	Extraction of Nb(<scp>v</scp>) by quaternary ammonium-based solvents: toward organic hexaniobate systems. Dalton Transactions, 2016, 45, 19351-19360.	3.3	14
39	Engineered Recognition of Tetravalent Zirconium and Thorium by Chelatorâ€“Protein Systems: Toward Flexible Radiotherapy and Imaging Platforms. Inorganic Chemistry, 2016, 55, 11930-11936.	4.0	37
40	Active actinium. Nature Chemistry, 2016, 8, 1084-1084.	13.6	10
41	Multinuclear Solid-State NMR Investigation of Hexaniobate and Hexatantalate Compounds. Inorganic Chemistry, 2016, 55, 5946-5956.	4.0	19
42	Direct precipitation of niobium and tantalum from alkaline solutions using calcium-bearing reagents. Hydrometallurgy, 2016, 165, 345-350.	4.3	30
43	Selective recovery of niobium and tantalum from low-grade concentrates using a simple and fluoride-free process. Separation and Purification Technology, 2016, 162, 180-187.	7.9	41
44	Development of a capillary electrophoresis method for the analysis in alkaline media as polyoxoanions of two strategic metals: Niobium and tantalum. Journal of Chromatography A, 2016, 1437, 210-218.	3.7	14
45	Solubility of niobium(V) and tantalum(V) under mild alkaline conditions. Hydrometallurgy, 2015, 156, 99-106.	4.3	48
46	First investigation of polyoxoniobate and polyoxotantalate aqueous speciation by capillary zone electrophoresis. RSC Advances, 2015, 5, 64119-64124.	3.6	19
47	Recovery of yttrium and lanthanides from sulfate solutions with high concentration of iron and low rare earth content. Hydrometallurgy, 2015, 157, 356-362.	4.3	57
48	Experimental and computational exploration of the UV-visible properties of hexaniobate and hexatantalate ions. RSC Advances, 2015, 5, 7619-7627.	3.6	43
49	Solution Thermodynamic Stability of Complexes Formed with the Octadentate Hydroxypyridinonate Ligand 3,4,3-LI(1,2-HOPO): A Critical Feature for Efficient Chelation of Lanthanide(IV) and Actinide(IV) Ions. Inorganic Chemistry, 2013, 52, 8805-8811.	4.0	66
50	Receptor recognition of transferrin bound to lanthanides and actinides: a discriminating step in cellular acquisition of f-block metals. Metallomics, 2013, 5, 619.	2.4	44
51	Sensitizing Curium Luminescence through an Antenna Protein To Investigate Biological Actinide Transport Mechanisms. Journal of the American Chemical Society, 2013, 135, 2676-2683.	13.7	48
52	Solution thermodynamic evaluation of hydroxypyridinonate chelators 3,4,3-LI(1,2-HOPO) and 5-LIO(Me-3,2-HOPO) for UO₂(VI) and Th(IV) decorporation. Radiochimica Acta, 2013, 101, 359-366.	1.2	49
53	Modelling of Thorium Extraction by TBP. Procedia Chemistry, 2012, 7, 251-257.	0.7	7