

Laurence Berthon

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Effect of metal complexation on diglycolamide radiolysis: a comparison between <i>ex situ</i> gamma and <i>in situ</i> alpha irradiation. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 9213-9228.	1.3	16
2	Influence of the First Coordination of Uranyl on Its Luminescence Properties: A Study of Uranyl Binitrate with <i>N,N</i> -Dialkyl Amide DEHiBA and Water. <i>Inorganic Chemistry</i> , 2022, 61, 890-901.	1.9	9
3	An experimental and computational look at the radiolytic degradation of TODGA and the effect on metal complexation. <i>New Journal of Chemistry</i> , 2021, 45, 12479-12493.	1.4	13
4	How Phase Modifiers Disrupt Third-phase Formation in Solvent Extraction Solutions. <i>Solvent Extraction and Ion Exchange</i> , 2021, 39, 204-232.	0.8	22
5	DEHBA (di-2-ethylhexylbutyramide) gamma radiolysis under spent nuclear fuel solvent extraction process conditions. <i>Radiation Physics and Chemistry</i> , 2020, 170, 108608.	1.4	7
6	Extraction of Nitric Acid, Americium(III), Curium(III), and Lanthanides(III) into DMDOHEMA Dissolved in Kerosene. <i>Solvent Extraction and Ion Exchange</i> , 2020, 38, 681-702.	0.8	8
7	Coordination Structures of Uranium(VI) and Plutonium(IV) in Organic Solutions with Amide Derivatives. <i>Inorganic Chemistry</i> , 2020, 59, 1823-1834.	1.9	21
8	Americium Recovery from Highly Active PUREX Raffinate by Solvent Extraction: The EXAm Process. A Review of 10 Years of R&D. <i>Solvent Extraction and Ion Exchange</i> , 2020, 38, 365-387.	0.8	29
9	Alpha radiolysis of DOTA ligand in aqueous solutions with helium ion beams. <i>Radiation Physics and Chemistry</i> , 2019, 165, 108409.	1.4	5
10	Extraction of Uranium(VI) and Plutonium(IV) with Tetra-Alkylcarbamides. <i>Solvent Extraction and Ion Exchange</i> , 2019, 37, 111-125.	0.8	17
11	Effect of chemical environment on the radiation chemistry of <i>N,N</i> -di-(2-ethylhexyl)butyramide (DEHBA) and plutonium retention. <i>Dalton Transactions</i> , 2019, 48, 14450-14460.	1.6	16
12	Exploring the Coordination of Plutonium and Mixed Plutonyl-Uranyl Complexes of Imidodiphosphinates. <i>Inorganic Chemistry</i> , 2019, 58, 6904-6917.	1.9	3
13	UO ₂ ²⁺ structure in solvent extraction phases resolved at molecular and supramolecular scales: a combined molecular dynamics, EXAFS and SWAXS approach. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 7894-7906.	1.3	28
14	Aggregation in organic phases after solvent extraction of uranyl nitrate: X-ray scattering and molecular dynamic simulations. <i>Journal of Molecular Liquids</i> , 2019, 277, 22-35.	2.3	26
15	Radiolytic stability of <i>N,N</i> -dialkyl amide: effect on Pu(IV) complexes in solution. <i>Dalton Transactions</i> , 2018, 47, 251-263.	1.6	22
16	Characterization of palladium species after ¹³⁷ Irradiation of a TBP-alkane-Pd(NO ₃) ₂ system. <i>RSC Advances</i> , 2018, 8, 21513-21527.	1.7	9
17	Understanding the synergistic effect on lanthanides(III) solvent extraction by systems combining a malonamide and a dialkyl phosphoric acid. <i>Hydrometallurgy</i> , 2017, 169, 542-551.	1.8	25
18	Determination of the Structures of Uranyl-Tri- <i>n</i> -butyl-Phosphate Aggregates by Coupling Experimental Results with Molecular Dynamic Simulations. <i>Chemistry - A European Journal</i> , 2017, 23, 16660-16670.	1.7	18

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19	Structural Characterization of Am(III)- and Pu(III)-DOTA Complexes. <i>Inorganic Chemistry</i> , 2017, 56, 12248-12259.	1.9	22
20	Synergistic Extraction of Rare Earth Elements from Phosphoric Acid Medium using a Mixture of Surfactant AOT and DEHCNPB. <i>Solvent Extraction and Ion Exchange</i> , 2017, 35, 321-331.	0.8	15
21	Radiation chemistry of the branched-chain monoamide di-2-ethylhexyl-isobutyramide. <i>Solvent Extraction and Ion Exchange</i> , 2017, 35, 480-495.	0.8	23
22	Behavior of Molybdenum (VI) in {DMDOHEMA+HDEHP/nitric acid} Liquid-Liquid Extraction Systems. <i>Solvent Extraction and Ion Exchange</i> , 2016, 34, 407-421.	0.8	8
23	Uranium Extraction by a Bifunctional Amido-Phosphonic Acid: Coordination Structure and Aggregation. <i>Solvent Extraction and Ion Exchange</i> , 2016, 34, 260-273.	0.8	13
24	Spectroscopic, electrochemical, and structural aspects of the Ce(IV)/Ce(III) DOTA redox couple chemistry in aqueous solutions. <i>Journal of Coordination Chemistry</i> , 2016, 69, 2895-2907.	0.8	10
25	Thermodynamic Description of Synergy in Solvent Extraction: I. Enthalpy of Mixing at the Origin of Synergistic Aggregation. <i>Langmuir</i> , 2016, 32, 13095-13105.	1.6	33
26	Redox behavior of gas phase Pu(IV)-monodentate ligand complexes: an investigation by electrospray ionization mass spectrometry. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2016, 310, 441-451.	0.7	6
27	Hydrophilic Clicked 2,6-Bis-triazolyl-pyridines Endowed with High Actinide Selectivity and Radiochemical Stability: Toward a Closed Nuclear Fuel Cycle. <i>Journal of the American Chemical Society</i> , 2016, 138, 7232-7235.	6.6	124
28	Extraction of Lanthanides(III) by a Mixture of a Malonamide and a Dialkyl Phosphoric Acid. <i>Solvent Extraction and Ion Exchange</i> , 2016, 34, 141-160.	0.8	28
29	Synergism in a HDEHP/TOPO Liquid-Liquid Extraction System: An Intrinsic Ligands Property?. <i>Journal of Physical Chemistry B</i> , 2016, 120, 2814-2823.	1.2	37
30	Synthesis and hydrolysis of gas-phase lanthanide and actinide oxide nitrate complexes: a correspondence to trivalent metal ion redox potentials and ionization energies. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 9942-9950.	1.3	21
31	Synergy in Extraction System Chemistry: Combining Configurational Entropy, Film Bending, and Perturbation of Complexation. <i>Langmuir</i> , 2015, 31, 7006-7015.	1.6	39
32	On the structure of thorium and americium adenosine triphosphate complexes. <i>International Journal of Radiation Biology</i> , 2014, 90, 966-974.	1.0	9
33	Liquid-Liquid Extraction of Acids and Water by a Malonamide: I-Anion Specific Effects on the Polar Core Microstructure of the Aggregated Malonamide. <i>Solvent Extraction and Ion Exchange</i> , 2014, 32, 601-619.	0.8	35
34	Complexation-Induced Supramolecular Assembly Drives Metal-Ion Extraction. <i>Chemistry - A European Journal</i> , 2014, 20, 12685-12685.	1.7	5
35	Complexation-Induced Supramolecular Assembly Drives Metal-Ion Extraction. <i>Chemistry - A European Journal</i> , 2014, 20, 12796-12807.	1.7	86
36	Investigation of actinides(III)-DOTA complexes by electrospray ionization mass spectrometry. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2014, 303, 1897.	0.7	5

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37	Elucidation of the Structure of Organic Solutions in Solvent Extraction by Combining Molecular Dynamics and X-ray Scattering. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 5346-5350.	7.2	52
38	New insights into the extraction of uranium(VI) by an N,N-dialkylamide. <i>Molecular Physics</i> , 2014, 112, 1362-1374.	0.8	44
39	Reverse aggregate nucleation induced by acids in liquid-liquid extraction processes. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 7339.	1.3	47
40	Liquid-Liquid Extraction of Acids by a Malonamide: II-Anion Specific Effects in the Aggregate-Enhanced Extraction Isotherms. <i>Solvent Extraction and Ion Exchange</i> , 2014, 32, 620-636.	0.8	18
41	Periodic Behavior of Lanthanide Coordination within Reverse Micelles. <i>Chemistry - A European Journal</i> , 2013, 19, 2663-2675.	1.7	67
42	Experimental and theoretical study of the degradation of malonamide extractant molecules under ionizing radiation. <i>RSC Advances</i> , 2012, 2, 3954.	1.7	6
43	Effect of the Structure of Amido-polynitrogen Molecules on the Complexation of Actinides. <i>Procedia Chemistry</i> , 2012, 7, 13-19.	0.7	9
44	Complexation of Ln(III) and Am(III) with the Hydrosoluble TEDGA: Speciation and Thermodynamics Studies. <i>Procedia Chemistry</i> , 2012, 7, 20-26.	0.7	29
45	Influence of Extracted Solute on the Organization of a Monoamide Organic Solution. <i>Procedia Chemistry</i> , 2012, 7, 27-32.	0.7	4
46	Modelling of Americium Stripping in the EXAm Process. <i>Procedia Chemistry</i> , 2012, 7, 404-410.	0.7	9
47	Use of electrospray ionization mass spectrometry for the characterization of actinide complexes in solution. <i>IOP Conference Series: Materials Science and Engineering</i> , 2010, 9, 012059.	0.3	10
48	Influence of the extracted solute on the aggregation of malonamide extractant in organic phases: Consequences for phase stability. <i>Comptes Rendus Chimie</i> , 2010, 13, 1326-1334.	0.2	35
49	Aggregation in Organic Solutions of Malonamides: Consequences for Water Extraction. <i>Solvent Extraction and Ion Exchange</i> , 2009, 27, 607-637.	0.8	76
50	Electrospray Ionization Mass Spectrometry Investigation of BTBP as Lanthanide(III) and Actinide(III) Complexes. <i>Solvent Extraction and Ion Exchange</i> , 2009, 27, 663-682.	0.8	53
51	Radiolysis of solvents containing C5-BTBP: identification of degradation products and their dependence on absorbed dose and dose rate. <i>Dalton Transactions</i> , 2009, , 6421.	1.6	32
52	Thermo-responsive Metal-chelating Surfactants: Properties and Use in Cloud Point Extraction of Uranyl Nitrate. <i>Tenside, Surfactants, Detergents</i> , 2009, 46, 100-104.	0.5	4
53	Third-phase Formation in Liquid/Liquid Extraction. <i>Ion Exchange and Solvent Extraction</i> , 2009, , 381-428.	0.3	10
54	Radiolysis of Solvents Used in Nuclear Fuel Reprocessing. <i>Ion Exchange and Solvent Extraction</i> , 2009, , 429-513.	0.3	11

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55	Aggregation in Solvent Extraction Systems Containing a Malonamide, a Dialkylphosphoric Acid and their Mixtures. <i>Separation Science and Technology</i> , 2008, 43, 2572-2605.	1.3	75
56	Stability of [MeBu3N][Tf2N] under gamma irradiation. <i>Dalton Transactions</i> , 2008, , 924-931.	1.6	82
57	Mass spectrometry and theoretical investigation of di-alkylphosphoric acid-lanthanide complexes. <i>Radiochimica Acta</i> , 2008, 96, .	0.5	11
58	Self-assembling properties of malonamide extractants used in separation processes. <i>Radiochimica Acta</i> , 2008, 96, 265-272.	0.5	42
59	Solvent Penetration and Sterical Stabilization of Reverse Aggregates based on the DIAMEX Process Extracting Molecules: Consequences for the Third Phase Formation. <i>Solvent Extraction and Ion Exchange</i> , 2007, 25, 545-576.	0.8	88
60	Relation between the hydrophile/hydrophobe ratio of malonamide extractants and the stability of the organic phase: investigation at high extractant concentrations. <i>Physical Chemistry Chemical Physics</i> , 2007, 9, 3776.	1.3	48
61	Nonionic metal-chelating surfactants mediated solvent-free thermo-induced separation of uranyl. <i>New Journal of Chemistry</i> , 2007, 31, 1424.	1.4	17
62	Liquid-liquid extraction: An adsorption isotherm at divided interface?. <i>Comptes Rendus Chimie</i> , 2007, 10, 1034-1041.	0.2	43
63	Influence of gamma irradiation on hydrophobic room-temperature ionic liquids [BuMelm]PF6 and [BuMelm](CF3SO2)2N. <i>Dalton Transactions</i> , 2006, , 2526.	1.6	159
64	Photo-oxidation of tertiary amides, main degradation products of large malonamides. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2004, 162, 81-88.	2.0	1
65	Factorial designs as tools to study the influence of thermal oxidation factors on substituted malonamide destruction. <i>Journal of Analytical and Applied Pyrolysis</i> , 2004, 72, 299-307.	2.6	0
66	Supramolecular organisation of tri-n-butyl phosphate in organic diluent on approaching third phase transition. <i>Physical Chemistry Chemical Physics</i> , 2004, 6, 799.	1.3	121
67	Europium(III) Interaction with a Polyaza-Aromatic Extractant Studied by Time-Resolved Laser-Induced Luminescence: A Thermodynamical Approach. <i>Inorganic Chemistry</i> , 2004, 43, 6745-6751.	1.9	73
68	Photo-oxidation of two malonamides, extractant models for minor actinides in nuclear fuel reprocessing. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2003, 158, 55-62.	2.0	5
69	Effect of n-Octanol on the Structure at the Supramolecular Scale of Concentrated Dimethyldioctylhexylethoxymalonamide Extractant Solutions. <i>Langmuir</i> , 2003, 19, 6638-6644.	1.6	71
70	Trivalent Lanthanide Interactions with a Terdentate Bis(dialkyltriazinyl)pyridine Ligand Studied by Electrospray Ionization Mass Spectrometry. <i>Inorganic Chemistry</i> , 2003, 42, 2215-2226.	1.9	82
71	Use of Electrospray Mass Spectrometry (ESI-MS) for the Study of Europium(III) Complexation with Bis(dialkyltriazinyl)pyridines and Its Implications in the Design of New Extracting Agents. <i>Inorganic Chemistry</i> , 2002, 41, 7031-7041.	1.9	89
72	Sanex-Btp Process Development Studies. <i>Journal of Nuclear Science and Technology</i> , 2002, 39, 309-312.	0.7	83

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73	DIAMEX PROCESS FOR MINOR ACTINIDE PARTITIONING: HYDROLYTIC AND RADIOLYTIC DEGRADATIONS OF MALONAMIDE EXTRACTANTS. Separation Science and Technology, 2001, 36, 709-728.	1.3	77
74	Thermal oxidation of two malonamides, extractants for minor actinides in nuclear fuel reprocessing. Journal of Analytical and Applied Pyrolysis, 2001, 58-59, 589-603.	2.6	5
75	Recent Advances in the Treatment of Nuclear Wastes by the Use of Diamide and Picolinamide Extractants. Separation Science and Technology, 1995, 30, 2075-2099.	1.3	123
76	EXTRACTION BY N,N,N',N'-TETRAALKYL -2 ALKYL PROPANE -1,3 DIAMIDES. I. H ₂ O, HNO ₃ and HClO ₄ . Solvent Extraction and Ion Exchange, 1994, 12, 261-296.	0.8	103
77	EXTRACTION BY N,N,N',N'-TETRAALKYL -2 ALKYL PROPANE -1,3 DIAMIDES. H. U(VI) and Pu(IV). Solvent Extraction and Ion Exchange, 1994, 12, 297-323.	0.8	81
78	Diamides as Actinide Extractants for Various Waste Treatments. Separation Science and Technology, 1993, 28, 155-175.	1.3	76
79	Malonamides as New Extractants for Nuclear Waste Solutions. Separation Science and Technology, 1991, 26, 1229-1244.	1.3	215
80	Extraction of Uranium(VI) and Plutonium(IV) by New Tri Alkylcarbamides. Solvent Extraction and Ion Exchange, 0, , 1-22.	0.8	2
81	Evidence of Supramolecular Origin of Selectivity in Solvent Extraction of Bifunctional Amidophosphonate Extractants with Different Configurations. Solvent Extraction and Ion Exchange, 0, , 1-23.	0.8	6