Gregg J Lumetta

List of Publications by Year
in descending order

43	1,292	430442	395343
papers	citations	18 h-index	33 g-index

52	52	52	1001
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A newly proposed isotherm model to predict Cs exchange with crystalline silicotitanate in tank waste simulants. Separation Science and Technology, 2022, 57, 1714-1723.	1.3	4
2	Optical Spectroscopic Investigation of Hexavalent Actinide Ions in n-Dodecane Solutions of Tri-butyl Phosphate. Solvent Extraction and Ion Exchange, 2021, 39, 56-73.	0.8	2
3	Sensor Fusion: Comprehensive Real-Time, On-Line Monitoring for Process Control via Visible, Near-Infrared, and Raman Spectroscopy. ACS Sensors, 2020, 5, 2467-2475.	4.0	23
4	Countercurrent Actinide Lanthanide Separation Process (ALSEP) Demonstration Test with a Simulated PUREX Raffinate in Centrifugal Contactors on the Laboratory Scale. Applied Sciences (Switzerland), 2020, 10, 7217.	1.3	14
5	Evolution of Acid-Dependent Am³⁺ and Eu³⁺ Organic Coordination Environment: Effects on the Extraction Efficiency. Inorganic Chemistry, 2020, 59, 4453-4467.	1.9	19
6	Molar absorptivities of U(VI), U(IV), and Pu(III) in nitric acid solutions of various concentrations relevant to developing nuclear fuel recycling flowsheets. Journal of Radioanalytical and Nuclear Chemistry, 2020, 324, 773-789.	0.7	3
7	Overcoming Oxidation State-Dependent Spectral Interferences: Online Monitoring of U(VI) Reduction to U(IV) via Raman and UVâ€“vis Spectroscopy. Industrial & Engineering Chemistry Research, 2020, 59, 8894-8901.	1.8	13
8	Simulant testing of a co-decontamination (CoDCon) flowsheet for a product with a controlled uranium-to-plutonium ratio. Separation Science and Technology, 2019, 54, 1977-1984.	1.3	23
9	In Situ Monitoring and Kinetic Analysis of the Extraction of Nitric Acid by Tributyl Phosphate in N-Dodecane Using Raman Spectroscopy. Solvent Extraction and Ion Exchange, 2019, 37, 157-172.	0.8	8
10	Closing the Nuclear Fuel Cycle with a Simplified Minor Actinide Lanthanide Separation Process (ALSEP) and Additive Manufacturing. Scientific Reports, 2019, 9, 12842.	1.6	37
11	Electric Potentials of Metastable Salt Clusters. Journal of Physical Chemistry C, 2019, 123, 14010-14023.	1.5	4
12	Innerversusouter sphere metal-monoamide complexation: ramifications for tetravalent & hexavalent actinide selectivity. New Journal of Chemistry, 2018, 42, 5415-5424.	1.4	16
13	Effect of HEH[EHP] impurities on the ALSEP solvent extraction process. Solvent Extraction and Ion Exchange, 2018, 36, 22-40.	0.8	9
14	Organic and Aqueous Redox Speciation of Cu(III) Periodate Oxidized Transuranium Actinides. Industrial & Engineering Chemistry Research, 2018, 57, 1277-1283.	1.8	10
15	In situ microscopy across scales for the characterization of crystal growth mechanisms: the case of europium oxalate. CrystEngComm, 2018, 20, 2822-2833.	1.3	10
16	Review of the Scientific Understanding of Radioactive Waste at the U.S. DOE Hanford Site. Environmental Science & Technology, 2018, 52, 381-396.	4.6	130
17	Revisiting complexation thermodynamics of transplutonium elements up to einsteinium. Chemical Communications, 2018, 54, 10578-10581.	2.2	20
18	Extraction Behavior of Ln(III) Ions by T2EHDGA/n-Dodecane from Nitric Acid and Sodium Nitrate Solutions. Solvent Extraction and Ion Exchange, 2018, 36, 331-346.	0.8	21

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19	Incorporating spectroscopic on-line monitoring as a method of detection for a Lewis cell setup. Analyst, The, 2017, 142, 2426-2433.	1.7	3
20	An Advanced TALSPEAK Concept for Separating Minor Actinides. Part 1. Process Optimization and Flowsheet Development. Solvent Extraction and Ion Exchange, 2017, 35, 377-395.	0.8	26
21	An Advanced TALSPEAK Concept for Separating Minor Actinides. Part 2. Flowsheet Test with Actinide-spiked Simulant. Solvent Extraction and Ion Exchange, 2017, 35, 396-407.	0.8	25
22	Electrochemistry and Spectroelectrochemistry of the Pu (III/IV) and (IV/VI) Couples in Nitric Acid Systems. Electroanalysis, 2017, 29, 2744-2751.	1.5	10
23	Nitric Acid and Water Extraction by T2EHDGA inn-Dodecane. Solvent Extraction and Ion Exchange, 2017, 35, 586-603.	0.8	31
24	Multivariate Analysis for Quantification of Plutonium(IV) in Nitric Acid Based on Absorption Spectra. Analytical Chemistry, 2017, 89, 9354-9359.	3.2	41
25	Accomplishing Equilibrium in ALSEP: Demonstrations of Modified Process Chemistry on 3-D Printed Enhanced Annular Centrifugal Contactors. Procedia Chemistry, 2016, 21, 167-173.	0.7	15
26	Neodymium(III) Complexes of Dialkylphosphoric and Dialkylphosphonic Acids Relevant to Liquidâ€“Liquid Extraction Systems. Inorganic Chemistry, 2016, 55, 1633-1641.	1.9	34
27	Americium(III) oxidation by copper(III) periodate in nitric acid solution as compared with the action of Bi(V) compounds of sodium, lithium, and potassium. Radiochimica Acta, 2015, 103, 541-552.	0.5	19
28	An Advanced TALSPEAK Concept Using 2-Ethylhexylphosphonic Acid Mono-2-Ethylhexyl Ester as the Extractant. Solvent Extraction and Ion Exchange, 2015, 33, 211-223.	0.8	27
29	Minor actinide separation in the reprocessing of spent nuclear fuels. , 2015, , 289-312.		24
30	Actinide Lanthanide Separation Processâ€”ALSEP. Industrial & Engineering Chemistry Research, 2014, 53, 1624-1631.	1.8	161
31	The Actinide-Lanthanide Separation Concept. Solvent Extraction and Ion Exchange, 2014, 32, 333-347.	0.8	89
32	Combining CMPO and HEH[EHP] for Separating Trivalent Lanthanides from the Transuranic Elements. Solvent Extraction and Ion Exchange, 2013, 31, 567-577.	0.8	20
33	The TRUSPEAK Concept: Combining CMPO and HDEHP for Separating Trivalent Lanthanides from the Transuranic Elements. Solvent Extraction and Ion Exchange, 2013, 31, 223-236.	0.8	44
34	Study of the Interaction between HDEHP and CMPO and Its Effect on the Extraction of Selected Lanthanides. Industrial & Engineering Chemistry Research, 2012, 51, 10433-10444.	1.8	61
35	Separating and Stabilizing Phosphate from High-Level Radioactive Waste: Process Development and Spectroscopic Monitoring. Environmental Science & Technology, 2012, 46, 6190-6197.	4.6	10
36	Lipophilic ternary complexes in liquidâ€“liquid extraction of trivalent lanthanides. Journal of Coordination Chemistry, 2012, 65, 741-753.	0.8	13

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37	Advanced separation techniques for nuclear fuel reprocessing and radioactive waste treatment. , 2011, , .		72
38	Combining Octyl(phenyl)-N,N-diisobutyl-carbamoylmethylphosphine Oxide and Bis-(2-ethylhexyl)phosphoric Acid Extractants for Recovering Transuranic Elements from Irradiated Nuclear Fuel. ACS Symposium Series, 2010, , 107-118.	0.5	20
39	Review: Solvent Systems Combining Neutral and Acidic Extractants for Separating Trivalent Lanthanides from the Transuranic Elements. Solvent Extraction and Ion Exchange, 2010, 28, 287-312.	0.8	111
40	Characterization of High Phosphate Radioactive Tank Waste and Simulant Development. Environmental Science & Technology, 2009, 43, 7843-7848.	4.6	15
41	Significance of the Nuclear Fuel Cycle in the 21stCentury. ACS Symposium Series, 2006, , 3-20.	0.5	19
42	Solvent Modification in Ion-Pair Extraction: Effect on Sodium Nitrate Transport in Nitrobenzene Using a Crown Ether. Journal of Solution Chemistry, 2005, 34, 1145-1166.	0.6	2
43	Studies of the Fundamental Chemistry of Hanford Tank Sludges. , 2003, , 177.		2