Mathew Joseph

List of Publications by Year
in descending order

35 papers	357 citations	759233 12 h-index	888059 17 g-index
35 all docs	35 docs citations	35 times ranked	287 citing authors

#	Article	IF	Citations
1	Complexation Behavior of the Tri-n-butyl Phosphate Ligand with Pu(IV) and Zr(IV): A Computational Study. Journal of Physical Chemistry A, 2016, 120, 4201-4210.	2.5	39
2	High temperature vapour pressure studies on graphite using laser pulse heating. Carbon, 2002, 40, 2031-2034.	10.3	28
3	Preparation of thin film of CaZrO3 by pulsed laser deposition. Solid State Ionics, 2001, 144, 339-346.	2.7	21
4	Physicochemical properties and radiolytic degradation studies on tri-iso-amyl phosphate (TiAP). Radiochimica Acta, 2017, 105, 249-261.	1.2	20
5	Boron isotope enrichment in nanosecond pulsed laser-ablation plume. Applied Physics A: Materials Science and Processing, 2003, 76, 153-156.	2.3	19
6	Determination of boron isotope ratio in boron carbide using a laser mass spectrometric method. Rapid Communications in Mass Spectrometry, 2004, 18, 231-234.	1.5	17
7	Laser-induced-vaporisation mass-spectrometry studies on UO2, UC, and ThO2. High Temperatures - High Pressures, 2002, 34, 411-424.	0.3	17
8	Solubility of tri-iso-amyl phosphate in supercritical carbon dioxide and its application to selective extraction of uranium. Separation Science and Technology, 2017, 52, 2224-2237.	2.5	15
9	Dissolution and characterisation studies on Uâ€“Zr and Uâ€“Puâ€“Zr alloys in nitric acid medium. Journal of Radioanalytical and Nuclear Chemistry, 2017, 311, 789-800.	1.5	15
10	Laser mass spectrometric studies on rare earth doped UO2. International Journal of Mass Spectrometry, 2006, 253, 98-103.	1.5	14
11	Ligand sensitized luminescence of uranyl by benzoic acid in acetonitrile medium: A new luminescent uranyl benzoate specie. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 138, 509-516.	3.9	14
12	Characteristics of amorphous VO₂thin films prepared by pulsed laser deposition. Journal of Materials Science, 2004, 39, 2869-2871.	3.7	13
13	Studies on neutron spectrum characterization for the Pneumatic Fast Transfer System (PFTS) of KAMINI reactor. Applied Radiation and Isotopes, 2017, 124, 49-55.	1.5	12
14	Laser induced vaporization mass spectrometric studies on UO2 and graphite. Journal of Nuclear Materials, 1997, 247, 21-27.	2.7	11
15	Studies Related to the Processing of Uâ€“Zr and Uâ€“Puâ€“Zr Metallic Fuels Using Tri-iso-amyl Phosphate (TiAP) as Extractant. Solvent Extraction and Ion Exchange, 2016, 34, 422-438.	2.0	10
16	Fast burn-up measurement in simulated nuclear fuel using ICP-MS. Radiochimica Acta, 2018, 106, 885-895.	1.2	10
17	Determination of Thermal Parameters of Vanadium Oxide Uncooled Microbolometer Infrared Detector. Journal of Infrared, Millimeter and Terahertz Waves, 2003, 24, 327-334.	0.6	9
18	Quasi-non-destructive isotopic ratio measurement of boron in irradiated control rod B4C pellets using a home-built reflectron time-of-flight mass spectrometer. International Journal of Mass Spectrometry, 2012, 309, 148-153.	1.5	9

#	Article	IF	Citations
19	Development of a Laser Induced Vaporization Mass Spectrometric Facility. Instrumentation Science and Technology, 1998, 26, 81-94.	1.8	7
20	Laser-induced breakdown spectroscopy for simultaneous determination of lighter lanthanides in actinide matrix in aqueous medium. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2022, 190, 106393.	2.9	7
21	Effect of laser parameters on the measurement of U/Nd ratio using pulsed laser deposition followed by isotopic dilution mass spectrometry. International Journal of Mass Spectrometry, 2015, 387, 51-55.	1.5	6
22	Studies on purification of ⁸⁹Sr from irradiated yttria target by multi-column extraction chromatography using DtBuCH18-C-6/XAD-7 resin. Radiochimica Acta, 2019, 107, 479-487.	1.2	6
23	Laser ablation of La0.9Sr0.1Ga0Â·8Mg0.2O2.85 â€" plume and film characterization. Ionics, 2004, 10, 32-38.	2.4	5
24	DEVELOPMENT OF AN ION MOBILITY SPECTROMETER FOR DETECTION OF EXPLOSIVES. Instrumentation Science and Technology, 2013, 41, 96-108.	1.8	5
25	Effect of mass distribution and collection angle in pulsed laser deposited films â€" a sampling method for chemical characterization of spent nuclear fuel. Journal of Analytical Atomic Spectrometry, 2020, 35, 2840-2851.	3.0	5
26	Laser-mass spectrometric studies on measurement of isotopic ratios â€" A comparative study using ps and ns pulsed lasers. International Journal of Mass Spectrometry, 2014, 367, 16-20.	1.5	4
27	Direct burn-up determination of fast reactor mixed oxide (MOX) fuel by preferential evaporation of interfering elements. Journal of Radioanalytical and Nuclear Chemistry, 2017, 311, 1593-1603.	1.5	4
28	Preferential removal of Sm by evaporation from Ndâ€"Sm mixture and its application in direct burn-up determination of spent nuclear fuel. Journal of Radioanalytical and Nuclear Chemistry, 2016, 309, 563.	1.5	3
29	Luminescent versus non-luminescent uranylâ€"picolinate complexes. Journal of Radioanalytical and Nuclear Chemistry, 2018, 318, 2145-2156.	1.5	3
30	Determination of intensity ratios of Nd, Cs, Zr and Sr against U and burn-up in simulated nuclear fuels by LA-ICPMS. Journal of Analytical Atomic Spectrometry, 2022, 37, 910-918.	3.0	3
31	Design, installation and preliminary flux measurements at the Fast Flux Experimental Facility (FFEF) of the Fast Breeder Test Reactor (FBTR). Journal of Radioanalytical and Nuclear Chemistry, 2019, 320, 255-263.	1.5	2
32	Characterization of gamma irradiated PUREX solvent â€" A systematic study. Separation Science and Technology, 2020, 55, 1485-1494.	2.5	2
33	Radiochemical purification of ¹⁴⁴Ce from its in-grown daughter ¹⁴⁴Pr and other fission products. Journal of Nuclear and Radiochemical Sciences, 2019, 19, 1-7.	0.7	1
34	Quantitative determination of 137Cs and 90Sr in dissolver solutions without pre-separation using Isotope Dilution Thermal Ionization Mass Spectrometry. Journal of Analytical Atomic Spectrometry, 0, , .	3.0	1
35	Thermodynamic data of U3Ga5 from calorimetric measurements. Journal of Thermal Analysis and Calorimetry, 2017, 129, 241-247.	3.6	0