

Chinthaka M Silva

List of Publications by Year in descending order

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304602

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citing authors

#	ARTICLE	IF	CITATIONS
1	Radiation-Induced Changes in Single Crystal Calcite and Dolomite: Mineral Analogues of Light Water Reactor, Nuclear Power Plant Concrete Aggregates. <i>Journal of Physical Chemistry C</i> , 2022, 126, 634-646.	1.5	3
2	Role of electronic energy loss on defect production and interface stability: Comparison between ceramic materials and high-entropy alloys. <i>Current Opinion in Solid State and Materials Science</i> , 2022, 26, 101001.	5.6	16
3	Laser-induced thermal decomposition of uranium triiodide and ammonium uranium fluoride. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2021, 329, 1427-1437.	0.7	4
4	Effects of low-temperature neutron irradiation on the microstructure and tensile properties of duplex 2304 stainless steel and its electron-beam welds. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 823, 141780.	2.6	6
5	A microscopic and crystallographic study of proton irradiated alloy 718. <i>Journal of Nuclear Materials</i> , 2021, 551, 152954.	1.3	3
6	Temperature and time effects of post-weld heat treatments on tensile properties and microstructure of Zircaloy-4. <i>Journal of Nuclear Materials</i> , 2021, 551, 152952.	1.3	4
7	Microstructural and crystallographic effects of sol-gel synthesized Ti-doped UO ₂ sintered under reducing conditions. <i>Journal of Nuclear Materials</i> , 2021, 552, 153003.	1.3	3
8	An evaluation of tri-valent oxide (Cr ₂ O ₃) as a grain enlarging dopant for UO ₂ nuclear fuels fabricated under reducing environment. <i>Journal of Nuclear Materials</i> , 2021, 553, 153053.	1.3	9
9	Fabrication of yttrium hydride for high-temperature moderator application. <i>Journal of Nuclear Materials</i> , 2020, 539, 152335.	1.3	30
10	Brittle nature and the related effects of zirconium hydrides in Zircaloy-4. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 767, 138396.	2.6	19
11	Investigation of sol-gel feedstock additions and process variables on the density and microstructure of UN microspheres. <i>Journal of Nuclear Materials</i> , 2019, 520, 78-86.	1.3	7
12	Site specific dependencies of hydrogen concentrations in zirconium hydrides. <i>Scripta Materialia</i> , 2019, 158, 136-140.	2.6	15
13	Radiation-Induced Changes in Quartz, A Mineral Analog of Nuclear Power Plant Concrete Aggregates. <i>Inorganic Chemistry</i> , 2018, 57, 3329-3338.	1.9	17
14	Characterization of different forms of Zr-2.5Nb samples before and after neutron irradiation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 716, 296-307.	2.6	15
15	Investigation of mechanical and microstructural properties of Zircaloy-4 under different experimental conditions. <i>Journal of Nuclear Materials</i> , 2018, 499, 546-557.	1.3	19
16	Microstructure and mechanical properties of titanium aluminum carbides neutron irradiated at 400–700 Å°C. <i>Journal of the European Ceramic Society</i> , 2017, 37, 2353-2363.	2.8	12
17	Characterization of alloy 718 subjected to different thermomechanical treatments. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 691, 195-202.	2.6	30
18	Quantification of process variables for carbothermic synthesis of UC _{1-x} N _x fuel microspheres. <i>Journal of Nuclear Materials</i> , 2017, 483, 176-191.	1.3	22

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19	Corrigendum to "Microstructure and mechanical properties of titanium aluminum carbides neutron irradiated at 400–700 °C". Eur. Ceram. Soc., 37(6) (2017) 2353–2363]. Journal of the European Ceramic Society, 2017, 37, 3225.		0
20	Phase stability, swelling, microstructure and strength of Ti ₃ SiC ₂ -TiC ceramics after low dose neutron irradiation. Journal of Nuclear Materials, 2017, 483, 44-53.	1.3	31
21	Uniform corrosion of FeCrAl alloys in LWR coolant environments. Journal of Nuclear Materials, 2016, 479, 36-47.	1.3	158
22	Irradiation performance of AGR-1 high temperature reactor fuel. Nuclear Engineering and Design, 2016, 306, 2-13.	0.8	41
23	Structural study of the ammonium octafluoroneptunate, [NH ₄] ₄ NpF ₈ . Inorganica Chimica Acta, 2016, 448, 93-96.	1.2	5
24	Experimental oxygen potentials for U _{1-x} Pr _y O _{2±x} and thermodynamic assessment of the U-Pr-O system. Journal of Nuclear Materials, 2016, 470, 111-118.	1.3	5
25	Detection and analysis of particles with failed SiC in AGR-1 fuel compacts. Nuclear Engineering and Design, 2016, 306, 36-46.	0.8	38
26	Anisotropic swelling and microcracking of neutron irradiated Ti ₃ AlC ₂ -Ti ₅ Al ₂ C ₃ materials. Scripta Materialia, 2016, 114, 74-78.	2.6	43
27	Application of X-ray microcomputed tomography in the characterization of irradiated nuclear fuel and material specimens. Journal of Microscopy, 2015, 260, 163-174.	0.8	9
28	LAMDA: Irradiated-Materials Microscopy at Oak Ridge National Laboratory. Microscopy and Microanalysis, 2015, 21, 1003-1004.	0.2	41
29	High temperature steam oxidation of SiC coating layer of TRISO fuel particles. Journal of Nuclear Materials, 2015, 460, 160-165.	1.3	32
30	Chemical reactivity of CVC and CVD SiC with UO ₂ at high temperatures. Journal of Nuclear Materials, 2015, 460, 52-59.	1.3	10
31	Synthesis of Phase-Pure U ₂ N ₃ Microspheres and Its Decomposition into UN. Inorganic Chemistry, 2015, 54, 293-298.	1.9	11
32	Progress on matrix SiC processing and properties for fully ceramic microencapsulated fuel form. Journal of Nuclear Materials, 2015, 457, 9-17.	1.3	54
33	Characteristics of uranium carbonitride microparticles synthesized using different reaction conditions. Journal of Nuclear Materials, 2014, 454, 405-412.	1.3	16
34	First elevated-temperature performance testing of coated particle fuel compacts from the AGR-1 irradiation experiment. Nuclear Engineering and Design, 2014, 271, 131-141.	0.8	33
35	Fabrication and characterization of driver-fuel particles, designed-to-fail fuel particles, and fuel compacts for the US AGR-3/4 irradiation test. Nuclear Engineering and Design, 2014, 271, 123-130.	0.8	12
36	Carbothermic synthesis of 820-µm uranium nitride kernels: Literature review, thermodynamics, analysis, and related experiments. Journal of Nuclear Materials, 2014, 448, 404-411.	1.3	23

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37	Stability of SiC-matrix microencapsulated fuel constituents at relevant LWR conditions. Journal of Nuclear Materials, 2014, 448, 389-398.	1.3	83
38	Silicon Carbide Oxidation in Steam up to 2ÂMPa. Journal of the American Ceramic Society, 2014, 97, 2331-2352.	1.9	197
39	Preparation of UC _{0.07} ~ _{0.10} N _{0.90} ~ _{0.93} spheres for TRISO coated fuel particles. Journal of Nuclear Materials, 2014, 448, 399-403.	1.3	28
40	Multi-tier Analysis of SiC Breaches in Safety-Tested AGR-1 TRISO Fuel Particles. Microscopy and Microanalysis, 2014, 20, 1812-1813.	0.2	2
41	Evaluation of sintering effects on SiC-incorporated UO ₂ kernels under Ar and Ar~4%H ₂ environments. Journal of Nuclear Materials, 2013, 443, 596-602.	1.3	2
42	Crystal and Electronic Structures of Neptunium Nitrides Synthesized Using a Fluoride Route. Journal of the American Chemical Society, 2012, 134, 3111-3119.	6.6	20
43	Characterization of zirconium carbides using electron microscopy, optical anisotropy, Auger depth profiles, X-ray diffraction, and electron density calculated by charge flipping method. Journal of Solid State Chemistry, 2012, 194, 91-99.	1.4	23
44	Synthesis and Characterization of Th ₂ N ₂ (NH) Isomorphous to Th ₂ N ₃ . Inorganic Chemistry, 2012, 51, 3332-3340.	1.9	9
45	X-ray absorption fine structure spectroscopic study of uranium nitrides. Journal of Radioanalytical and Nuclear Chemistry, 2012, 292, 989-994.	0.7	26
46	Preparation of uranium fuel kernels with silicon carbide nanoparticles using the internal gelation process. Journal of Nuclear Materials, 2012, 427, 245-248.	1.3	10
47	Fluoride-Conversion Synthesis of Homogeneous Actinide Oxide Solid Solutions. Inorganic Chemistry, 2011, 50, 11004-11010.	1.9	5
48	Structural Studies of Technetium~Zirconium Alloys by X-ray Diffraction, High-Resolution Electron Microscopy, and First-Principles Calculations. Inorganic Chemistry, 2010, 49, 1433-1438.	1.9	14
49	Review of technetium chemistry research conducted at the University of Nevada Las Vegas. Journal of Radioanalytical and Nuclear Chemistry, 2009, 282, 605-609.	0.7	12
50	Preparation of technetium metal by thermal treatment under argon/H ₂ O. Journal of Radioanalytical and Nuclear Chemistry, 2009, 279, 43-48.	0.7	12
51	Fabrication and characterization of uranium~thorium~zirconium hydrides. Journal of Nuclear Materials, 2009, 392, 151-157.	1.3	9
52	Synthesis and Nanoscale Characterization of (NH ₄) ₄ ThF ₈ and ThNF. Inorganic Chemistry, 2009, 48, 5736-5746.	1.9	14
53	Reaction Sequence and Kinetics of Uranium Nitride Decomposition. Inorganic Chemistry, 2009, 48, 10635-10642.	1.9	76
54	Micro-structural characterization of precipitation-synthesized fluorapatite nano-material by transmission electron microscopy using different sample preparation techniques. Micron, 2008, 39, 269-274.	1.1	27

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55	Oxidative ammonolysis of uranium(IV) fluorides to uranium(VI) nitride. <i>Journal of Nuclear Materials</i> , 2008, 374, 75-78.	1.3	33
56	Investigation of Nanostructure and Thermal Behavior of Zinc-Substituted Fluorapatite. <i>Inorganic Chemistry</i> , 2008, 47, 7757-7767.	1.9	6
57	Microscopic Characterization of Uranium Nitrides Synthesized by Oxidative Ammonolysis of Uranium Tetrafluoride. <i>Chemistry of Materials</i> , 2008, 20, 3076-3084.	3.2	35
58	Application of Electron Microscopy in the Observation of Technetium and Technetium Dioxide Nanostructures. <i>Inorganic Chemistry</i> , 2008, 47, 11738-11744.	1.9	9
59	Uranium/technetium separation for the UREX process – synthesis and characterization of solid reprocessing forms. <i>Radiochimica Acta</i> , 2008, 96, 527-533.	0.5	24