Rodney C Ewing

List of Publications by Year in Descending Order

351 papers	14,929 citations	61 h-index	108 g-index
369 ext. papers	16,489 ext. citations	5.9 avg, IF	6.62 L-index

#	Paper	IF	Citations
351	Machine learning improves satellite imagery analysis of North Korean nuclear activity. *Bulletin of the Atomic Scientists*, **2022**, 78, 26-37	1.6	
350	Volatilization of BC control rods in Fukushima Daiichi nuclear reactors during meltdown: B-Li isotopic signatures in cesium-rich microparticles.. *Journal of Hazardous Materials*, **2022**, 428, 128214	12.8	0
349	Phase stability of pre-irradiated CeO 2 with swift heavy ions under high pressure up to 45 ́GPa. *Journal of the American Ceramic Society*, **2022**, 105, 2889-2902	3.8	0
348	Alpha-decay induced shortening of fission tracks simulated by in situ ion irradiation. *Geochimica Et Cosmochimica Acta*, **2021**, 299, 1-14	5.5	1
347	New highly radioactive particles derived from Fukushima Daiichi Reactor Unit 1: Properties and environmental impacts. *Science of the Total Environment*, **2021**, 773, 145639	10.2	5
346	The Role of Water and Hydroxyl Groups in the Structures of Stetindite and Coffinite, MSiO (M = Ce, U). *Inorganic Chemistry*, **2021**, 60, 718-735	5.1	5
345	Socio-technical multi-criteria evaluation of long-term spent nuclear fuel management strategies: A framework and method. *Science of the Total Environment*, **2021**, 777, 146086	10.2	2
344	The Concept of Geological Disposal of Highly Radioactive Nuclear Waste **2021**, 588-602		2
343	Fracture toughness of radiation-damaged zircon studied by nanoindentation pillar-splitting. *Applied Physics Letters*, **2021**, 119, 231903	3.4	
342	Structural evolution of Lu2-xCexTi2O7 pyrochlores under 400 keV Ne irradiation. *Journal of the American Ceramic Society*, **2020**, 103, 5525-5535	3.8	
341	Acceptance of Distinguished Public Service Award of the Mineralogical Society of America for 2019. *American Mineralogist*, **2020**, 105, 774-775	2.9	
340	Integration of the Back-end of the Nuclear Fuel Cycle: An Overview. *MRS Advances*, **2020**, 5, 253-264	0.7	1
339	Particulate plutonium released from the Fukushima Daiichi meltdowns. *Science of the Total Environment*, **2020**, 743, 140539	10.2	17
338	Nanocrystallites via Direct Melt Spinning of Fe77Ni5.5Co5.5Zr7B4Cu for Enhanced Magnetic Softness. *Physica Status Solidi (A) Applications and Materials Science*, **2020**, 217, 1900680	1.6	0
337	Facile diamond synthesis from lower diamondoids. *Science Advances*, **2020**, 6, eaay9405	14.3	9
336	Annealing of ion tracks in apatite under pressure characterized in situ by small angle x-ray scattering. *Scientific Reports*, **2020**, 10, 1367	4.9	2
335	Processing of Soft Magnetic Fine Powders Directly From As-Spun Partial Crystalline Fe77Ni5.5Co5.5Zr7B4Cu Ribbon via Ball Mill Without Devitrification. *IEEE Transactions on Magnetics* , **2020**, 56, 1-9	2	0

334	Application of Electron Microscopy to Understanding Colloid-Facilitated Transport of Radionuclides at the Mayak Production Association Facility, Near Lake Karachai, Russia **2020**, 177-200		1
333	Disorder in HoTi Zr O: pyrochlore to defect fluorite solid solution series.. *RSC Advances*, **2020**, 10, 34632-34650	3.9	17
332	Local order of orthorhombic weberite-type Y3TaO7 as determined by neutron total scattering and density functional theory calculations?. *Acta Materialia*, **2020**, 196, 704-709	8.4	11
331	Geologic Analysis of the Democratic People's Republic of Korea's Uranium Resources and Mines. *Science and Global Security*, **2020**, 28, 80-109	0.1	0
330	Predicting short-range order and correlated phenomena in disordered crystalline materials. *Science Advances*, **2020**, 6, eabc2758	14.3	14
329	Thermodynamics of CeSiO: Implications for Actinide Orthosilicates. *Inorganic Chemistry*, **2020**, 59, 13174-13183	5.1	6
328	Coffinite formation from UO. *Scientific Reports*, **2020**, 10, 12168	4.9	8
327	Radiation effects in Mn+1AXn phases. *Applied Physics Reviews*, **2020**, 7, 041311	17.3	4
326	Abundance and distribution of radioactive cesium-rich microparticles released from the Fukushima Daiichi Nuclear Power Plant into the environment. *Chemosphere*, **2020**, 241, 125019	8.4	21
325	Mechanical and structural properties of radiation-damaged allanite-(Ce) and the effects of thermal annealing. *Physics and Chemistry of Minerals*, **2019**, 46, 921-933	1.6	5
324	Radiation-damage in multi-layered zircon: Mechanical properties. *Applied Physics Letters*, **2019**, 115, 081902	3.4	3
323	Probabilistic Performance Assessment vs. the Safety Case Approach. *MRS Advances*, **2019**, 4, 987-992	0.7	
322	Dissolution of radioactive, cesium-rich microparticles released from the Fukushima Daiichi Nuclear Power Plant in simulated lung fluid, pure-water, and seawater. *Chemosphere*, **2019**, 233, 633-644	8.4	20
321	Phase transformations of Al-bearing high-entropy alloys AlxCoCrFeNi (x = 0, 0.1, 0.3, 0.75, 1.5) at high pressure. *Applied Physics Letters*, **2019**, 114, 091902	3.4	9
320	Disorder in MAX phases at the atomic scale. *Nature Communications*, **2019**, 10, 622	17.4	13
319	Effects of irradiation temperature on the response of CeO2, ThO2, and UO2 to highly ionizing radiation. *Journal of Nuclear Materials*, **2019**, 525, 83-91	3.3	12
318	Evolution and Structure of the Scientific Basis for Nuclear Waste Management. *MRS Advances*, **2019**, 4, 959-964	0.7	2
317	Initial stages of ion beam-induced phase transformations in Gd2O3 and Lu2O3. *Applied Physics Letters*, **2018**, 112, 073904	3.4	2

316	Measurement of UO2 surface oxidation using grazing-incidence x-ray diffraction: Implications for nuclear forensics. *Journal of Nuclear Materials*, **2018**, 502, 68-75	3.3	7
315	Radiation-induced disorder in compressed lanthanide zirconates. *Physical Chemistry Chemical Physics*, **2018**, 20, 6187-6197	3.6	7
314	Uranium Dioxides and Debris Fragments Released to the Environment with Cesium-Rich Microparticles from the Fukushima Daiichi Nuclear Power Plant. *Environmental Science & Technology*, **2018**, 52, 2586-2594	10.3	47
313	Phase transformation pathways of ultrafast-laser-irradiated Ln2O3(Ln=Er□u). *Physical Review B*, **2018**, 97,	3.3	2
312	ATiO (A = Dy, Gd, Er, Yb) at High Pressure. *Inorganic Chemistry*, **2018**, 57, 2269-2277	5.1	5
311	Review of recent experimental results on the behavior of actinide-bearing oxides and related materials in extreme environments. *Progress in Nuclear Energy*, **2018**, 104, 342-358	2.3	10
310	Similar local order in disordered fluorite and aperiodic pyrochlore structures. *Acta Materialia*, **2018**, 144, 60-67	8.4	48
309	Swift-heavy ion irradiation response and annealing behavior of A2TiO5 (A = Nd, Gd, and Yb). *Journal of Solid State Chemistry*, **2018**, 258, 108-116	3.3	6
308	Role of the X and n factors in ion-irradiation induced phase transformations of Mn+1AXn phases. *Acta Materialia*, **2018**, 144, 432-446	8.4	17
307	The thermal stability and consolidation of perovskite variant Cs2SnCl6 using spark plasma sintering. *Journal of the American Ceramic Society*, **2018**, 101, 2060-2065	3.8	12
306	Radiation-induced effects on the mechanical properties of natural ZrSiO4: double cascade-overlap damage accumulation. *Physics and Chemistry of Minerals*, **2018**, 45, 435-442	1.6	2
305	Mission Impossible? Socio-Technical Integration of Nuclear Waste Geological Disposal Systems. *Sustainability*, **2018**, 10, 4390	3.6	8
304	A Critical Review of Existing Criteria for the Prediction of Pyrochlore Formation and Stability. *Inorganic Chemistry*, **2018**, 57, 12093-12105	5.1	45
303	Grain size effects on irradiated CeO2, ThO2, and UO2. *Acta Materialia*, **2018**, 160, 47-56	8.4	28
302	Novel Method of Quantifying Radioactive Cesium-Rich Microparticles (CsMPs) in the Environment from the Fukushima Daiichi Nuclear Power Plant. *Environmental Science & Technology*, **2018**, 52, 6390-6398	10.3	35
301	Radiation-damage-induced transitions in zircon: Percolation theory applied to hardness and elastic moduli as a function of density. *Applied Physics Letters*, **2018**, 112, 201901	3.4	7
300	Photothermal effect on Fe3O4 nanoparticles irradiated by white-light for energy-efficient window applications. *Solar Energy Materials and Solar Cells*, **2017**, 161, 247-254	6.4	48
299	Ion-irradiation-induced structural evolution in Ti4AlN3. *Scripta Materialia*, **2017**, 133, 19-23	5.6	5

298	Caesium-rich micro-particles: A window into the meltdown events at the Fukushima Daiichi Nuclear Power Plant. *Scientific Reports*, **2017**, 7, 42731	4.9	66
297	Structure and bulk modulus of Ln-doped UO2 (Ln´= La, Nd) at high pressure. *Journal of Nuclear Materials*, **2017**, 490, 28-33	3.3	7
296	Amorphization of Ta2O5 under swift heavy ion irradiation. *Nuclear Instruments & Methods in Physics Research B*, **2017**, 407, 25-33	1.2	11
295	High pressure synthesis of a hexagonal close-packed phase of the high-entropy alloy CrMnFeCoNi. *Nature Communications*, **2017**, 8, 15634	17.4	177
294	Thermal defect annealing of swift heavy ion irradiated ThO2. *Nuclear Instruments & Methods in Physics Research B*, **2017**, 405, 15-21	1.2	6
293	Pressure-induced structural modifications of rare-earth hafnate pyrochlore. *Journal of Physics Condensed Matter*, **2017**, 29, 255401	1.8	26
292	Defect accumulation in swift heavy ion-irradiated CeO2 and ThO2. *Journal of Materials Chemistry A*, **2017**, 5, 12193-12201	13	28
291	High-pressure behavior of A2B2O7 pyrochlore (A=Eu, Dy; B=Ti, Zr). *Journal of Applied Physics*, **2017**, 121, 045902	2.5	29
290	In situ TEM observation of alpha-particle induced annealing of radiation damage in Durango apatite. *Scientific Reports*, **2017**, 7, 14108	4.9	13
289	Phase transformation and chemical decomposition of nanocrystalline SnO2 under heavy ion irradiation. *Nuclear Instruments & Methods in Physics Research B*, **2017**, 407, 10-19	1.2	
288	Isotopic signature and nano-texture of cesium-rich micro-particles: Release of uranium and fission products from the Fukushima Daiichi Nuclear Power Plant. *Scientific Reports*, **2017**, 7, 5409	4.9	49
287	Uranyl peroxide nanoclusters at high-pressure. *Journal of Materials Research*, **2017**, 32, 3679-3688	2.5	5
286	Inversion in MgNiAlO Spinel: New Insight into Local Structure. *Journal of the American Chemical Society*, **2017**, 139, 10395-10402	16.4	29
285	Strain engineered pyrochlore at high pressure. *Scientific Reports*, **2017**, 7, 2236	4.9	16
284	Thermal annealing of natural, radiation-damaged pyrochlore. *Zeitschrift Fur Kristallographie - Crystalline Materials*, **2017**, 232, 25-38	1	11
283	Biomarkerless targeting and photothermal cancer cell killing by surface-electrically-charged superparamagnetic FeO composite nanoparticles. *Nanoscale*, **2017**, 9, 1457-1465	7.7	22
282	Lanthanide stannate pyrochlores (LnSnO; Ln = Nd, Gd, Er) at high pressure. *Journal of Physics Condensed Matter*, **2017**, 29, 504005	1.8	5
281	Anisotropic expansion and amorphization of Ga2O3 irradiated with 946 MeV Au ions. *Nuclear Instruments & Methods in Physics Research B*, **2016**, 374, 40-44	1.2	8

280	Role of composition, bond covalency, and short-range order in the disordering of stannate pyrochlores by swift heavy ion irradiation. *Physical Review B*, **2016**, 94,	3.3	37
279	Energetics of a Uranothorite (Th1−xUxSiO4) Solid Solution. *Chemistry of Materials*, **2016**, 28, 7117-7124	9.6	22
278	Acceptance of the 2015 Roebling Medal of the Mineralogical Society of America. *American Mineralogist*, **2016**, 101, 1002-1004	2.9	
277	Radioactive Cs in the estuary sediments near Fukushima Daiichi Nuclear Power Plant. *Science of the Total Environment*, **2016**, 551-552, 155-62	10.2	27
276	Mechanical properties of natural radiation-damaged titanite and temperature-induced structural reorganization: A nanoindentation and Raman spectroscopic study. *American Mineralogist*, **2016**, 101, 399-406	2.9	9
275	First experimental determination of the solubility constant of coffinite. *Geochimica Et Cosmochimica Acta*, **2016**, 181, 36-53	5.5	28
274	Probing disorder in isometric pyrochlore and related complex oxides. *Nature Materials*, **2016**, 15, 507-11	27	133
273	Policy: Reassess New Mexico's nuclear-waste repository. *Nature*, **2016**, 529, 149-51	50.4	14
272	Targeting Negative Surface Charges of Cancer Cells by Multifunctional Nanoprobes. *Theranostics*, **2016**, 6, 1887-98	12.1	207
271	Anisotropic mechanical properties of zircon and the effect of radiation damage. *Physics and Chemistry of Minerals*, **2016**, 43, 627-638	1.6	10
270	Geological Disposal of Nuclear Waste: a Primer. *Elements*, **2016**, 12, 233-237	3.8	48
269	Structural response of titanate pyrochlores to swift heavy ion irradiation. *Acta Materialia*, **2016**, 117, 207-215	8.4	46
268	Thermodynamic mixing properties of the UO2HfO2 solid solution: Density functional theory and Monte Carlo simulations. *Journal of Nuclear Materials*, **2015**, 458, 296-303	3.3	3
267	Ion-beam irradiation and 244Cm-doping investigations of the radiation response of actinide-bearing crystalline waste forms. *Journal of Materials Research*, **2015**, 30, 1516-1528	2.5	6
266	In situdefect annealing of swift heavy ion irradiated CeO2and ThO2using synchrotron X-ray diffraction and a hydrothermal diamond anvil cell. *Journal of Applied Crystallography*, **2015**, 48, 711-717	3.8	22
265	Coffinite, USiO4, Is Abundant in Nature: So Why Is It So Difficult To Synthesize?. *Inorganic Chemistry*, **2015**, 54, 6687-96	5.1	32
264	Response of Gd2Ti2O7 and La2Ti2O7 to swift-heavy ion irradiation and annealing. *Acta Materialia*, **2015**, 93, 1-11	8.4	43
263	Uranium reduction on magnetite: Probing for pentavalent uranium using electrochemical methods. *Geochimica Et Cosmochimica Acta*, **2015**, 156, 194-206	5.5	41

262	Constraints on Hf and Zr mobility in high-sulfidation epithermal systems: formation of kosnarite, KZr2(PO4)3, in the Chaquicocha gold deposit, Yanacocha district, Peru. *Mineralium Deposita*, **2015**, 50, 429-436	4.8	2
261	Ultrafast laser and swift heavy ion irradiation: Response of Gd2O3 and ZrO2 to intense electronic excitation. *Applied Physics Letters*, **2015**, 106, 171914	3.4	10
260	Role of vein-phases in nanoscale sequestration of U, Nb, Ti, and Pb during the alteration of pyrochlore. *Geochimica Et Cosmochimica Acta*, **2015**, 150, 226-252	5.5	11
259	C60 and Uion irradiation of Gd2TixZr2−xO7 pyrochlore. *Journal of Materials Research*, **2015**, 30, 2456-2466	2.5	8
258	Characterization of ion-induced radiation effects in nuclear materials using synchrotron x-ray techniques. *Journal of Materials Research*, **2015**, 30, 1366-1379	2.5	27
257	Phase transformations in Ln2O3 materials irradiated with swift heavy ions. *Physical Review B*, **2015**, 92,	3.3	32
256	Radiation Stability of Spark-Plasma-Sintered Lead Vanadate Iodoapatite. *Journal of the American Ceramic Society*, **2015**, 98, 3361-3366	3.8	13
255	Radioactive Cs in the Severely Contaminated Soils Near the Fukushima Daiichi Nuclear Power Plant. *Frontiers in Energy Research*, **2015**, 3,	3.8	28
254	Long-term storage of spent nuclear fuel. *Nature Materials*, **2015**, 14, 252-7	27	223
253	Thermodynamics of formation of coffinite, USiO4. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 6551-5	11.5	54
252	Synchrotron x-ray diffraction analysis of gadolinium and lanthanum titanate oxides irradiated by xenon and tantalum swift heavy ions. *Materials Research Society Symposia Proceedings*, **2015**, 1743, 26		2
251	Redox response of actinide materials to highly ionizing radiation. *Nature Communications*, **2015**, 6, 6133	17.4	64
250	Average structure and local configuration of excess oxygen in UO(2+x). *Scientific Reports*, **2014**, 4, 4216	4.9	27
249	Effect of spatial confinement on magnetic hyperthermia via dipolar interactions in Fe□□ nanoparticles for biomedical applications. *Materials Science and Engineering C*, **2014**, 42, 52-63	8.3	99
248	Photoluminescence and photothermal effect of Fe3O4 nanoparticles for medical imaging and therapy. *Applied Physics Letters*, **2014**, 105, 091903	3.4	82
247	Facile low temperature solid state synthesis of iodoapatite by high-energy ball milling. *RSC Advances*, **2014**, 4, 38718-38725	3.7	17
246	Carbonate orientational order and superlattice structure in vaterite. *Journal of Crystal Growth*, **2014**, 407, 78-86	1.6	12
245	Bulk Iodoapatite Ceramic Densified by Spark Plasma Sintering with Exceptional Thermal Stability. *Journal of the American Ceramic Society*, **2014**, 97, 2409-2412	3.8	37

244	Three new silver uranyl diphosphonates: structures and properties. *Inorganic Chemistry*, **2014**, 53, 2787-96	5.1	19
243	Defect accumulation in ThO2 irradiated with swift heavy ions. *Nuclear Instruments & Methods in Physics Research B*, **2014**, 326, 169-173	1.2	35
242	Swift heavy ion irradiation-induced amorphization of La2Ti2O7. *Nuclear Instruments & Methods in Physics Research B*, **2014**, 326, 145-149	1.2	19
241	Swift heavy ion-induced phase transformation in Gd2O3. *Nuclear Instruments & Methods in Physics Research B*, **2014**, 326, 121-125	1.2	26
240	Effect of orientation on ion track formation in apatite and zircon. *American Mineralogist*, **2014**, 99, 1127-1132	2.9	19
239	The coupled geochemistry of Au and As in pyrite from hydrothermal ore deposits. *Geochimica Et Cosmochimica Acta*, **2014**, 140, 644-670	5.5	257
238	Ion Beam Irradiation-Induced Amorphization of Nano-Sized KxLnyTa2O7-v Tantalate Pyrochlore. *Frontiers in Energy Research*, **2014**, 2,	3.8	1
237	Presentation of the Distinguished Public Service Award for 2013 of the Mineralogical Society of America to Pierrette Tremblay. *American Mineralogist*, **2014**, 99, 1185-1185	2.9	
236	Defect formation energy in pyrochlore: the effect of crystal size. *Materials Research Express*, **2014**, 1, 035501	1.7	5
235	Swift heavy ion track formation in Gd2Zr2Ti O7 pyrochlore: Effect of electronic energy loss. *Nuclear Instruments & Methods in Physics Research B*, **2014**, 336, 102-115	1.2	44
234	Swift Heavy Ion-Induced Decomposition and Phase Transformation in Nanocrystalline SnO2. *Materials Research Society Symposia Proceedings*, **2014**, 1715, 13		0
233	Molten salts activated by high-energy milling: A useful, low-temperature route for the synthesis of multiferroic compounds. *Journal of Alloys and Compounds*, **2014**, 584, 93-100	5.7	9
232	Dipole-interaction mediated hyperthermia heating mechanism of nanostructured Fe3O4 composites. *Materials Letters*, **2014**, 129, 57-60	3.3	9
231	Ion-irradiation-induced structural transitions in orthorhombic Ln2TiO5. *Acta Materialia*, **2013**, 61, 4191-4199	3.9	37
230	A self-consistent model describing the thermodynamics of Eu(III) adsorption onto hematite. *Geochimica Et Cosmochimica Acta*, **2013**, 122, 430-447	5.5	37
229	Uranium diphosphonates templated by interlayer organic amines. *Journal of Solid State Chemistry*, **2013**, 198, 270-278	3.3	20
228	Tailoring the radiation tolerance of vanadate-phosphate fluorapatites by chemical composition control. *RSC Advances*, **2013**, 3, 15178	3.7	21
227	Multilayered YSZ/GZO films with greatly enhanced ionic conduction for low temperature solid oxide fuel cells. *Physical Chemistry Chemical Physics*, **2013**, 15, 1296-301	3.6	45

226	Np-incorporation into uranyl phases: A quantum mechanical evaluation. *Journal of Nuclear Materials*, **2013**, 434, 440-450	3.3	19
225	Electronic structure and stability of hyperstoichiometric UO2+x under pressure. *Physical Review B*, **2013**, 88,	3.3	18
224	The energetics and kinetics of uranyl reduction on pyrite, hematite, and magnetite surfaces: A powder microelectrode study. *Geochimica Et Cosmochimica Acta*, **2013**, 118, 56-71	5.5	38
223	Effect of doping on the radiation response of conductive Nb SrTiO3. *Nuclear Instruments & Methods in Physics Research B*, **2013**, 302, 40-47	1.2	14
222	Hydrogen incorporation in crystalline zircon: Insight from ab initio calculations. *American Mineralogist*, **2013**, 98, 745-751	2.9	5
221	Size dependence of radiation-induced amorphization and recrystallization of synthetic nanostructured CePO4 monazite. *Acta Materialia*, **2013**, 61, 2984-2992	8.4	29
220	Multi-scale simulation of structural heterogeneity of swift-heavy ion tracks in complex oxides. *Journal of Physics Condensed Matter*, **2013**, 25, 135001	1.8	17
219	Dual surface-functionalized Janus nanocomposites of polystyrene/Fe @SiO for simultaneous tumor cell targeting and stimulus-induced drug release. *Advanced Materials*, **2013**, 25, 3485-9	24	168
218	A versatile multicomponent assembly via cyclodextrin host-guest chemistry on graphene for biomedical applications. *Small*, **2013**, 9, 446-56	11	65
217	Sb Se under pressure. *Scientific Reports*, **2013**, 3, 2665	4.9	78
216	Displacive radiation-induced structural contraction in nanocrystalline ZrN. *Applied Physics Letters*, **2012**, 101, 041904	3.4	16
215	Swift heavy ion-induced amorphization of CaZrO3 perovskite. *Nuclear Instruments & Methods in Physics Research B*, **2012**, 286, 271-276	1.2	27
214	Swift heavy ion irradiation of diamond powder. *Nuclear Instruments & Methods in Physics Research B*, **2012**, 286, 262-265	1.2	1
213	Controlling the structure and size of Au nanocrystals by annealing and ion sputtering. *Langmuir*, **2012**, 28, 51-5	4	5
212	Structural response of A2TiO5 (A=La, Nd, Sm, Gd) to swift heavy ion irradiation. *Acta Materialia*, **2012**, 60, 4477-4486	8.4	36
211	Barium uranyl diphosphonates. *Journal of Solid State Chemistry*, **2012**, 192, 153-160	3.3	13
210	Effect of interstitial atoms on the stability and electronic structure of Re3Zn alloy: First-principles calculations. *Intermetallics*, **2012**, 24, 95-98	3.5	1
209	Thermal annealing of unetched fission tracks in apatite. *Earth and Planetary Science Letters*, **2012**, 321-322, 121-127	5.3	31

208	Origin of the rigidity in tetragonal MB (M = Cr, Mo and W) and softening of defective WB: First-principles investigations. *Computational Materials Science*, **2012**, 53, 460-463	3.2	14
207	He diffusion and closure temperatures in apatite and zircon: A density functional theory investigation. *Geochimica Et Cosmochimica Acta*, **2012**, 86, 228-238	5.5	15
206	Lead in zircon at the atomic scale. *American Mineralogist*, **2012**, 97, 1094-1102	2.9	13
205	ZrSi formation at ZrN/Si interface induced by ballistic and ionizing radiations. *Nuclear Instruments & Methods in Physics Research B*, **2012**, 286, 266-270	1.2	6
204	Amorphization of nanocrystalline monoclinic ZrO2 by swift heavy ion irradiation. *Physical Chemistry Chemical Physics*, **2012**, 14, 12295-300	3.6	33
203	Formation of nanoscale Th-coffinite. *American Mineralogist*, **2012**, 97, 681-693	2.9	11
202	Nuclear fuel in a reactor accident. *Science*, **2012**, 335, 1184-8	33.3	328
201	In situ AFM and XPS Investigation of U6+ Reduction by Fe2+ on Hematite and Pyrite. *Materials Research Society Symposia Proceedings*, **2012**, 1444, 243		
200	First principles investigation of structural, electronic, elastic and thermal properties of rare-earth-doped titanate Ln2TiO5. *AIP Advances*, **2012**, 2, 032114	1.5	9
199	Unusual rigidity and ideal strength of CrB4 and MnB4. *Applied Physics Letters*, **2012**, 100, 111907	3.4	47
198	Nuclear proliferation: Time to bury plutonium. *Nature*, **2012**, 485, 167-8	50.4	24
197	Is nuclear fission a sustainable source of energy?. *MRS Bulletin*, **2012**, 37, 417-424	3.2	5
196	Energetic stability, structural transition, and thermodynamic properties of ZnSnO3. *Applied Physics Letters*, **2011**, 98, 091914	3.4	29
195	Safe management of actinides in the nuclear fuel cycle: Role of mineralogy. *Comptes Rendus - Geoscience*, **2011**, 343, 219-229	1.4	18
194	Thermal annealing mechanisms of latent fission tracks: Apatite vs. zircon. *Earth and Planetary Science Letters*, **2011**, 302, 227-235	5.3	49
193	Scanning Transmission Electron Microscopy and Related Techniques for Research on Actinide and Radionuclide Nanomaterials **2011**, 33-62		3
192	Phase Transformation of Nanosized ZrO2 upon Thermal Annealing and Intense Radiation. *Journal of Physical Chemistry C*, **2011**, 115, 7193-7201	3.8	52
191	Trace metal nanoparticles in pyrite. *Ore Geology Reviews*, **2011**, 42, 32-46	3.2	245

190	Electronic structure and energetics of tetragonal SrCuO□ and its high-pressure superstructure phase. *Journal of Physics Condensed Matter*, **2011**, 23, 465503	1.8	2
189	Nanosized Rutile (TiO2) Thin Film upon Ion Irradiation and Thermal Annealing. *Journal of Physical Chemistry C*, **2011**, 115, 22755-22760	3.8	13
188	Energetics and concentration of defects in Gd2Ti2O7 and Gd2Zr2O7 pyrochlore at high pressure. *Acta Materialia*, **2011**, 59, 1607-1618	8.4	29
187	Thermodynamic properties of ThxU1□O2 (0 Journal of Nuclear Materials, **2011**, 412, 13-21	3.3	24
186	Ion Beam Irradiation-induced Amorphization in Nano-sized KxLnyTa2O7-v Tantalate Pyrochlore. *Materials Research Society Symposia Proceedings*, **2011**, 1298, 147		2
185	New Actinide Waste Forms with Pyrochlore and Garnet Structures. *Advances in Science and Technology*, **2010**, 73, 142-147	0.1	
184	Environmental impact of the nuclear fuel cycle: Fate of actinides. *MRS Bulletin*, **2010**, 35, 859-866	3.2	30
183	Precipitation and alteration of coffinite (USiO4nH2O) in the presence of apatite. *European Journal of Mineralogy*, **2010**, 22, 75-88	2.2	10
182	Porous fission fragment tracks in fluorapatite. *Physical Review B*, **2010**, 82,	3.3	18
181	Quantum-mechanical evaluation of Np-incorporation into studtite. *American Mineralogist*, **2010**, 95, 1151-1160	2.3	23
180	OH species, U ions, and CO/CO2 in thermally annealed metamict zircon (ZrSiO4). *American Mineralogist*, **2010**, 95, 1717-1724	2.9	4
179	Nanoscale phase transitions under extreme conditions within an ion track. *Journal of Materials Research*, **2010**, 25, 1344-1351	2.5	76
178	Time-response relationship of nano and micro particle induced lung inflammation. Quartz as reference compound. *Human and Experimental Toxicology*, **2010**, 29, 915-33	3.4	32
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