

William D A Rickard

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6280547/publications.pdf>

Version: 2024-02-01

103
papers

6,001
citations

76294

40
h-index

74108

75
g-index

110
all docs

110
docs citations

110
times ranked

4409
citing authors

#	ARTICLE	IF	CITATIONS
1	Costs and carbon emissions for geopolymer pastes in comparison to ordinary portland cement. <i>Journal of Cleaner Production</i> , 2011, 19, 1080-1090.	4.6	1,221
2	A comparison between different foaming methods for the synthesis of light weight geopolymers. <i>Ceramics International</i> , 2014, 40, 13891-13902.	2.3	228
3	Thermal analysis of geopolymer pastes synthesised from five fly ashes of variable composition. <i>Journal of Non-Crystalline Solids</i> , 2012, 358, 1830-1839.	1.5	200
4	Assessing the suitability of three Australian fly ashes as an aluminosilicate source for geopolymers in high temperature applications. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 3390-3397.	2.6	193
5	Preparation and thermal properties of fire resistant metakaolin-based geopolymer-type coatings. <i>Journal of Non-Crystalline Solids</i> , 2011, 357, 1399-1404.	1.5	185
6	Preparation of metakaolin based geopolymer coatings on metal substrates as thermal barriers. <i>Applied Clay Science</i> , 2009, 46, 265-270.	2.6	164
7	Performance of fibre reinforced, low density metakaolin geopolymers under simulated fire conditions. <i>Applied Clay Science</i> , 2013, 73, 71-77.	2.6	156
8	Determination of the reactive component of fly ashes for geopolymer production using XRF and XRD. <i>Fuel</i> , 2010, 89, 3683-3692.	3.4	155
9	Determining the Reactivity of a Fly Ash for Production of Geopolymer. <i>Journal of the American Ceramic Society</i> , 2009, 92, 881-887.	1.9	138
10	Thermal Character of Geopolymers Synthesized from Class F Fly Ash Containing High Concentrations of Iron and Quartz. <i>International Journal of Applied Ceramic Technology</i> , 2010, 7, 81-88.	1.1	126
11	The effect of organic and inorganic fibres on the mechanical and thermal properties of aluminate activated geopolymers. <i>Composites Part B: Engineering</i> , 2015, 76, 218-228.	5.9	122
12	Fly ash based geopolymer thin coatings on metal substrates and its thermal evaluation. <i>Journal of Hazardous Materials</i> , 2010, 180, 748-752.	6.5	120
13	Thermo-mechanical and microstructural characterisation of sodium-poly(sialate-siloxo) (Na-PSS) geopolymers. <i>Journal of Materials Science</i> , 2007, 42, 3117-3123.	1.7	101
14	Quantification of the Extent of Reaction of Metakaolin-Based Geopolymers Using X-Ray Diffraction, Scanning Electron Microscopy, and Energy-Dispersive Spectroscopy. <i>Journal of the American Ceramic Society</i> , 2011, 94, 2663-2670.	1.9	101
15	High temperature behaviour of ambient cured alkali-activated materials based on ladle slag. <i>Cement and Concrete Research</i> , 2013, 43, 51-61.	4.6	101
16	Room temperature alkali activation of fly ash: The effect of Na ₂ O/SiO ₂ ratio. <i>Construction and Building Materials</i> , 2014, 69, 262-270.	3.2	98
17	Performance of solid and cellular structured fly ash geopolymers exposed to a simulated fire. <i>Cement and Concrete Composites</i> , 2014, 48, 75-82.	4.6	97
18	Nanoscale gold clusters in arsenopyrite controlled by growth rate not concentration: Evidence from atom probe microscopy. <i>American Mineralogist</i> , 2016, 101, 1916-1919.	0.9	94

#	ARTICLE	IF	CITATIONS
19	Nanogeochronology of discordant zircon measured by atom probe microscopy of Pb-enriched dislocation loops. <i>Science Advances</i> , 2016, 2, e1601318.	4.7	86
20	Atom Probe Tomography: Development and Application to the Geosciences. <i>Geostandards and Geoanalytical Research</i> , 2020, 44, 5-50.	1.7	84
21	Polarization-Induced Interface and Sr Segregation of <i>in Situ</i> Assembled $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_{3-\delta}$ Electrodes on Y_{2}O_{3} - ZrO_{2} Electrolyte of Solid Oxide Fuel Cells. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 31729-31737.	4.0	82
22	In-situ thermo-mechanical testing of fly ash geopolymer concretes made with quartz and expanded clay aggregates. <i>Cement and Concrete Research</i> , 2016, 80, 33-43.	4.6	81
23	Impact of activator type on the immobilisation of lead in fly ash-based geopolymer. <i>Journal of Hazardous Materials</i> , 2016, 305, 59-66.	6.5	76
24	Thermally Induced Microstructural Changes in Fly Ash Geopolymers: Experimental Results and Proposed Model. <i>Journal of the American Ceramic Society</i> , 2015, 98, 929-939.	1.9	74
25	Direct application of cobaltite-based perovskite cathodes on the yttria-stabilized zirconia electrolyte for intermediate temperature solid oxide fuel cells. <i>Journal of Materials Chemistry A</i> , 2016, 4, 17678-17685.	5.2	70
26	Suppressed Sr segregation and performance of directly assembled $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_{3-\delta}$ oxygen electrode on Y_{2}O_{3} - ZrO_{2} electrolyte of solid oxide electrolysis cells. <i>Journal of Power Sources</i> , 2018, 384, 125-135.	4.0	69
27	Bayer-geopolymers: An exploration of synergy between the alumina and geopolymer industries. <i>Cement and Concrete Composites</i> , 2013, 41, 29-33.	4.6	67
28	Mechanisms of deformation-induced trace element migration in zircon resolved by atom probe and correlative microscopy. <i>Geochimica Et Cosmochimica Acta</i> , 2016, 195, 158-170.	1.6	64
29	Microstructural constraints on the mechanisms of the transformation to reidite in naturally shocked zircon. <i>Contributions To Mineralogy and Petrology</i> , 2017, 172, 1.	1.2	64
30	Determination of amorphous phase levels in Portland cement clinker. <i>Powder Diffraction</i> , 2002, 17, 178-185.	0.4	59
31	Strategies to control the high temperature shrinkage of fly ash based geopolymers. <i>Thermochimica Acta</i> , 2014, 580, 20-27.	1.2	59
32	Thermal properties of spray-coated geopolymer-type compositions. <i>Journal of Thermal Analysis and Calorimetry</i> , 2012, 107, 287-292.	2.0	51
33	Smart utilization of cobaltite-based double perovskite cathodes on barrier-layer-free zirconia electrolyte of solid oxide fuel cells. <i>Journal of Materials Chemistry A</i> , 2016, 4, 19019-19025.	5.2	51
34	Dolomite: a low cost thermochemical energy storage material. <i>Journal of Materials Chemistry A</i> , 2019, 7, 1206-1215.	5.2	50
35	Nb and Pd co-doped $\text{La}_{0.57}\text{Sr}_{0.38}\text{Co}_{0.19}\text{Fe}_{0.665}\text{Nb}_{0.095}\text{Pd}_{0.05}\text{O}_{3-\delta}$ as a stable, high performance electrode for barrier-layer-free Y_{2}O_{3} - ZrO_{2} electrolyte of solid oxide fuel cells. <i>Journal of Power Sources</i> , 2018, 378, 433-442.	4.0	48
36	Precambrian reidite discovered in shocked zircon from the Stac Fada impactite, Scotland. <i>Geology</i> , 2015, 43, 899-902.	2.0	47

#	ARTICLE	IF	CITATIONS
37	Corrosion behaviour of nanocomposite TiSiN coatings on steel substrates. <i>Corrosion Science</i> , 2011, 53, 3678-3687.	3.0	46
38	Time-resolved, defect-hosted, trace element mobility in deformed Witwatersrand pyrite. <i>Geoscience Frontiers</i> , 2019, 10, 55-63.	4.3	44
39	Highly Stable Sr-Free Cobaltite-Based Perovskite Cathodes Directly Assembled on a Barrier-Layer-Free $Y_{2}O_{3}-ZrO_{2}$ Electrolyte of Solid Oxide Fuel Cells. <i>ChemSusChem</i> , 2017, 10, 993-1003.	3.6	43
40	A FIB-STEM Study of Strontium Segregation and Interface Formation of Directly Assembled $La_{0.6}Sr_{0.4}Co_{0.2}Fe_{0.8}O_{3-\lambda}$ Cathode on $Y_{2}O_{3}-ZrO_{2}$ Electrolyte of Solid Oxide Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2018, 165, F417-F429.	1.3	41
41	Assessment of a spodumene ore by advanced analytical and mass spectrometry techniques to determine its amenability to processing for the extraction of lithium. <i>Minerals Engineering</i> , 2018, 119, 137-148.	1.8	41
42	Characterization of various fly ashes for preparation of geopolymers with advanced applications. <i>Advanced Powder Technology</i> , 2013, 24, 495-498.	2.0	40
43	Nanoscale distribution of Pb in monazite revealed by atom probe microscopy. <i>Chemical Geology</i> , 2018, 479, 251-258.	1.4	39
44	Enhancing chalcopyrite leaching by tetrachloroethylene-assisted removal of sulphur passivation and the mechanism of jarosite formation. <i>Hydrometallurgy</i> , 2020, 191, 105192.	1.8	39
45	Aseismic Refinement of Orogenic Gold Systems. <i>Economic Geology</i> , 2020, 115, 33-50.	1.8	38
46	Three-dimensional quantification of pore structure in coal ash-based geopolymer using conventional electron tomography. <i>Construction and Building Materials</i> , 2014, 52, 221-226.	3.2	32
47	Novel Applications of FIB-SEM-Based ToF-SIMS in Atom Probe Tomography Workflows. <i>Microscopy and Microanalysis</i> , 2020, 26, 750-757.	0.2	32
48	Palaeobiology of red and white blood cell-like structures, collagen and cholesterol in an ichthyosaur bone. <i>Scientific Reports</i> , 2017, 7, 13776.	1.6	31
49	A new kind of invisible gold in pyrite hosted in deformation-related dislocations. <i>Geology</i> , 2021, 49, 1225-1229.	2.0	30
50	Acoustic emission and microstructural changes in fly ash geopolymer concretes exposed to simulated fire. <i>Materials and Structures/Materiaux Et Constructions</i> , 2016, 49, 5243-5254.	1.3	29
51	Organic matter network in post-mature Marcellus Shale: Effects on petrophysical properties. <i>AAPG Bulletin</i> , 2018, 102, 2305-2332.	0.7	28
52	Beneficiation of Collie fly ash for synthesis of geopolymer: Part 1 – Beneficiation. <i>Fuel</i> , 2013, 106, 569-575.	3.4	25
53	Thermal properties of geopolymers. , 2009, , 315-342.		24
54	In Situ Elevated Temperature Testing of Fly Ash Based Geopolymer Composites. <i>Materials</i> , 2016, 9, 445.	1.3	23

#	ARTICLE	IF	CITATIONS
55	Solar wind contributions to Earth's oceans. <i>Nature Astronomy</i> , 2021, 5, 1275-1285.	4.2	22
56	Visualization of Diffusion within Nanoarrays. <i>Analytical Chemistry</i> , 2016, 88, 6689-6695.	3.2	20
57	The effects of particle angularity on low-stress three-body abrasion-corrosion of 316L stainless steel. <i>Corrosion Science</i> , 2016, 111, 690-702.	3.0	20
58	Volcanic SiO ₂ -cristobalite: A natural product of chemical vapor deposition. <i>American Mineralogist</i> , 2020, 105, 510-524.	0.9	20
59	Applications of advanced analytical and mass spectrometry techniques to the characterisation of micaceous lithium-bearing ores. <i>Minerals Engineering</i> , 2018, 116, 182-195.	1.8	19
60	Direct Observation of Nanoparticulate Goethite Recrystallization by Atom Probe Analysis of Isotopic Tracers. <i>Environmental Science & Technology</i> , 2019, 53, 13126-13135.	4.6	19
61	Nanoscale constraints on the shock-induced transformation of zircon to reidite. <i>Chemical Geology</i> , 2019, 507, 85-95.	1.4	19
62	High performance anode with dendritic porous structure for low temperature solid oxide fuel cells. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 17849-17856.	3.8	18
63	Effect of Volatile Boron Species on the Electrocatalytic Activity of Cathodes of Solid Oxide Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2014, 161, F1163-F1170.	1.3	17
64	Optimising Ambient Setting Bayer Derived Fly Ash Geopolymers. <i>Materials</i> , 2016, 9, 392.	1.3	17
65	Positive Effect of Incorporating Er _{0.4} Bi _{1.6} O ₃ on the Performance and Stability of La ₂ NiO ₄ ⁺ Cathode. <i>Journal of the Electrochemical Society</i> , 2019, 166, F796-F804.	1.3	17
66	Effect of Pd doping on the activity and stability of directly assembled La _{0.95} Co _{0.19} Fe _{0.76} Pd _{0.05} O _{3-δ} cathodes of solid oxide fuel cells. <i>Solid State Ionics</i> , 2018, 316, 38-46.	1.3	16
67	Analysis of Natural Rutile (TiO ₂) by Laser-assisted Atom Probe Tomography. <i>Microscopy and Microanalysis</i> , 2019, 25, 539-546.	0.2	16
68	Generation of amorphous carbon and crystallographic texture during low-temperature subseismic slip in calcite fault gouge. <i>Geology</i> , 2018, 46, 163-166.	2.0	15
69	Active, durable bismuth oxide-manganite composite oxygen electrodes: Interface formation induced by cathodic polarization. <i>Journal of Power Sources</i> , 2018, 397, 16-24.	4.0	15
70	Nanoscale Isotopic Dating of Monazite. <i>Geostandards and Geoanalytical Research</i> , 2020, 44, 637-652.	1.7	15
71	Facile co-synthesis and utilization of ultrafine and highly active PrBa _{0.8} Ca _{0.2} Co ₂ O ₅ + δ -Gd _{0.2} Ce _{0.8} O _{1.9} composite cathodes for solid oxide fuel cells. <i>Electrochimica Acta</i> , 2022, 403, 139673.	2.6	15
72	The effect of pre-treatment on the thermal performance of fly ash geopolymers. <i>Thermochimica Acta</i> , 2013, 573, 130-137.	1.2	14

#	ARTICLE	IF	CITATIONS
73	Understanding the Chemical and Structural Properties of Multiple-Cation Mixed Halide Perovskite. <i>Journal of Physical Chemistry C</i> , 2019, 123, 26718-26726.	1.5	14
74	Effects of waste glass sand on the thermal behavior and strength of fly ash and GGBS based alkali activated mortar exposed to elevated temperature. <i>Construction and Building Materials</i> , 2022, 316, 125864.	3.2	14
75	The Influence of Short Fibres and Foaming Agents on the Physical and Thermal Behaviour of Geopolymer Composites. <i>Advances in Science and Technology</i> , 0, , .	0.2	13
76	Nebula sulfidation and evidence for migration of "free-floating" refractory metal nuggets revealed by atom probe microscopy. <i>Geology</i> , 2017, 45, 847-850.	2.0	13
77	Defining the Potential of Nanoscale ReOs Isotope Systematics Using Atom Probe Microscopy. <i>Geostandards and Geoanalytical Research</i> , 2018, 42, 279-299.	1.7	13
78	A new method for dating impact events " Thermal dependency on nanoscale Pb mobility in monazite shock twins. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 314, 381-396.	1.6	13
79	Mineralogy of Al-substituted goethites. <i>Powder Diffraction</i> , 2006, 21, 289-299.	0.4	12
80	Dislocations in minerals: Fast-diffusion pathways or trace-element traps?. <i>Earth and Planetary Science Letters</i> , 2022, 584, 117517.	1.8	12
81	Other Potential Applications for Alkali-Activated Materials. <i>RILEM State-of-the-Art Reports</i> , 2014, , 339-379.	0.3	11
82	Hall's Petch Slope in Ultrafine Grained Al-Mg Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 4047-4057.	1.1	11
83	Standardizing Spatial Reconstruction Parameters for the Atom Probe Analysis of Common Minerals. <i>Microscopy and Microanalysis</i> , 2022, 28, 1221-1230.	0.2	11
84	A Review on Geopolymer Technology for Lunar Base Construction. <i>Materials</i> , 2022, 15, 4516.	1.3	11
85	Life on the edge: Microbial biomineralization in an arsenic- and lead-rich deep-sea hydrothermal vent. <i>Chemical Geology</i> , 2020, 533, 119438.	1.4	10
86	Disorientation control on trace element segregation in fluid-affected low-angle boundaries in olivine. <i>Contributions To Mineralogy and Petrology</i> , 2021, 176, 1.	1.2	10
87	Xenotime at the Nanoscale: U-Pb Geochronology and Optimisation of Analyses by Atom Probe Tomography. <i>Geostandards and Geoanalytical Research</i> , 2021, 45, 443-456.	1.7	10
88	Assessment of Residual Strain in Zirconia-Toughened Alumina Using Neutron Diffraction. <i>Journal of the American Ceramic Society</i> , 1993, 76, 2133-2135.	1.9	9
89	Characterization of Ceramic Materials with BIGDIFF: A Synchrotron Radiation Debye-Scherrer Powder Diffractometer. <i>Journal of the American Ceramic Society</i> , 1997, 80, 1373-1381.	1.9	9
90	Lunar samples record an impact 4.2 billion years ago that may have formed the Serenitatis Basin. <i>Communications Earth & Environment</i> , 2021, 2, .	2.6	9

#	ARTICLE	IF	CITATIONS
91	Pre-nucleation geochemical heterogeneity within glassy anatectic inclusions and the role of water in glass preservation. <i>Contributions To Mineralogy and Petrology</i> , 2021, 176, 1.	1.2	8
92	Corrosion and Damage Resistant Nitride Coatings for Steel. <i>Journal of the American Ceramic Society</i> , 2012, 95, 2997-3004.	1.9	7
93	Atom probe microscopy of zinc isotopic enrichment in ZnO nanorods. <i>AIP Advances</i> , 2017, 7, .	0.6	7
94	Crystallography of refractory metal nuggets in carbonaceous chondrites: A transmission Kikuchi diffraction approach. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 216, 42-60.	1.6	7
95	Developing Atom Probe Tomography of Phyllosilicates in Preparation for Extra-Terrestrial Sample Return. <i>Geostandards and Geoanalytical Research</i> , 2021, 45, 427-441.	1.7	5
96	Variability of sulfur isotopes and trace metals in pyrites from the upper oceanic crust of the South China Sea basin, implications for sulfur and trace metal cycling in subsurface. <i>Chemical Geology</i> , 2022, 606, 120982.	1.4	5
97	Microstructural and Chemical Investigations of Presolar Silicates from Diverse Stellar Environments. <i>Astrophysical Journal</i> , 2022, 925, 110.	1.6	4
98	Ion-transfer electrochemistry at arrays of nanoscale interfaces between two immiscible electrolyte solutions arranged in hexagonal format. <i>Journal of Electroanalytical Chemistry</i> , 2022, 909, 116113.	1.9	3
99	Correlative Analysis using FIB-ToF-SIMS and Atom Probe Tomography on Geological Materials. <i>Microscopy and Microanalysis</i> , 2016, 22, 684-685.	0.2	2
100	Low Stress Abrasion-Corrosion of High-Cr White Cast Iron: Combined Effects of Particle Angularity and Chloride Ions. <i>Journal of the Electrochemical Society</i> , 2019, 166, C382-C393.	1.3	1
101	Substructural phenomena in Cu wire bond after laser assisted manufacturing in electronic packaging. <i>Materials Letters</i> , 2020, 259, 126833.	1.3	1
102	Rapid prototyping of grating magneto-optical traps using a focused ion beam. <i>Optics Express</i> , 2021, 29, 37733.	1.7	1
103	Three-body abrasion-corrosion behaviour of as printed and solution annealed additively manufactured 316L stainless steel. <i>Corrosion</i> , 0, , .	0.5	0