Greg M Yaxley

List of Publications by Year in Descending Order

77 papers	6,076 citations	38 h-index	77 g-index
83 ext. papers	6,803 ext. citations	6 avg, IF	5.68 L-index

#	Paper	IF	Citations
77	Carbonatites: Classification, Sources, Evolution, and Emplacement. *Annual Review of Earth and Planetary Sciences*, **2022**, 50,	15.3	5
76	COH-fluid induced metasomatism of peridotites in the forearc mantle. *Contributions To Mineralogy and Petrology*, **2022**, 177, 1	3.5	0
75	Evolution of Carbonatite Magmas in the Upper Mantle and Crust. *Elements*, **2021**, 17, 315-320	3.8	2
74	Ni-in-garnet geothermometry in mantle rocks: a high pressure experimental recalibration between 1100 and 1325 °C. *Contributions To Mineralogy and Petrology*, **2021**, 176, 1	3.5	1
73	Experimental recalibration of the Cr-in-clinopyroxene geobarometer: improved precision and reliability above 4.5 GPa. *Contributions To Mineralogy and Petrology*, **2021**, 176, 1	3.5	4
72	Experimental investigation of the composition of incipient melts in upper mantle peridotites in the presence of CO2 and H2O. *Lithos*, **2021**, 396-397, 106224	2.9	5
71	Micro-characterisation of cassiterite by geology, texture and zonation: A case study of the Karagwe Ankole Belt, Rwanda. *Ore Geology Reviews*, **2020**, 124, 103609	3.2	10
70	Investigation of Fluid-driven Carbonation of a Hydrated, Forearc Mantle Wedge using Serpentinite Cores in High-pressure Experiments. *Journal of Petrology*, **2020**, 61,	3.9	6
69	Reduced methane-bearing fluids as a source for diamond. *Scientific Reports*, **2020**, 10, 6961	4.9	4
68	CO2-Rich Melts in Earth **2019**, 129-162		6
67	Reconciling petrological and isotopic mixing mechanisms in the Pitcairn mantle plume using stable Fe isotopes. *Earth and Planetary Science Letters*, **2019**, 521, 60-67	5.3	21
66	Kimberlites from Source to Surface: Insights from Experiments. *Elements*, **2019**, 15, 393-398	3.8	10
65	Melt inclusions in phenocrysts track enriched upper mantle source for Cenozoic Tengchong volcanic field, Yunnan Province, SW China. *Lithos*, **2019**, 324-325, 180-201	2.9	11
64	Methane-bearing fluids in the upper mantle: an experimental approach. *Contributions To Mineralogy and Petrology*, **2019**, 174, 1	3.5	15
63	Alkali-carbonate melts from the base of cratonic lithospheric mantle: Links to kimberlites. *Chemical Geology*, **2018**, 483, 261-274	4.2	51
62	Phase relations and melting of nominally □dry□ residual eclogites with variable CaO/Na2O from 3 to 5 GPa and 1250 to 1500 °C; implications for refertilisation of upwelling heterogeneous mantle. *Lithos*, **2018**, 314-315, 506-519	2.9	7
61	An experimental investigation of C□O□H fluid-driven carbonation of serpentinites under forearc conditions. *Earth and Planetary Science Letters*, **2018**, 496, 178-188	5.3	25

60	Timescales between mantle metasomatism and kimberlite ascent indicated by diffusion profiles in garnet crystals from peridotite xenoliths. *Earth and Planetary Science Letters*, **2018**, 481, 143-153	5.3	18
59	An experimental study of trace element distribution during partial melting of mantle heterogeneities. *Chemical Geology*, **2017**, 462, 74-87	4.2	9
58	The concurrent emergence and causes of double volcanic hotspot tracks on the Pacific plate. *Nature*, **2017**, 545, 472-476	50.4	28
57	Redox preconditioning deep cratonic lithosphere for kimberlite genesis - evidence from the central Slave Craton. *Scientific Reports*, **2017**, 7, 30	4.9	42
56	Mantle melting versus mantle metasomatism – the chicken or the egg-dilemma. *Chemical Geology* , **2017**, 455, 120-130	4.2	21
55	Multiple mantle sources of continental magmatism: Insights from high-Ti picrites of Karoo and other large igneous provinces. *Chemical Geology*, **2017**, 455, 22-31	4.2	31
54	The provenance of Borneo's enigmatic alluvial diamonds: A case study from Cempaka, SE Kalimantan. *Gondwana Research*, **2016**, 38, 251-272	5.1	12
53	Major zircon megacryst suites of the Indo-Pacific lithospheric margin (ZIP) and their petrogenetic and regional implications. *Mineralogy and Petrology*, **2016**, 110, 399-420	1.6	15
52	Carbonate-silicate liquid immiscibility in the mantle propels kimberlite magma ascent. *Geochimica Et Cosmochimica Acta*, **2015**, 158, 48-56	5.5	77
51	Crystallization of platinum-group minerals from silicate melts: Evidence from Cr-spinel-hosted inclusions in volcanic rocks. *Geology*, **2015**, 43, 903-906	5	45
50	Relationships between oxygen fugacity and metasomatism in the Kaapvaal subcratonic mantle, represented by garnet peridotite xenoliths in the Wesselton kimberlite, South Africa. *Lithos*, **2015**, 212-215, 443-452	2.9	19
49	Continuous eclogite melting and variable refertilisation in upwelling heterogeneous mantle. *Scientific Reports*, **2014**, 4, 6099	4.9	40
48	The role of detrital zircons in Hadean crustal research. *Lithos*, **2014**, 190-191, 313-327	2.9	46
47	Experimental Study of the Influence of Water on Melting and Phase Assemblages in the Upper Mantle. *Journal of Petrology*, **2014**, 55, 2067-2096	3.9	96
46	Eoarchean within-plate basalts from southwest Greenland: REPLY. *Geology*, **2014**, 42, e331-e331	5	1
45	Detrital zircon U-Pb-Hf and O isotope character of the Cahill Formation and Nourlangie Schist, Pine Creek Orogen: Implications for the tectonic correlation and evolution of the North Australian Craton. *Precambrian Research*, **2014**, 246, 35-53	3.9	12
44	Melting and Phase Relations of Carbonated Eclogite at 9-21 GPa and the Petrogenesis of Alkali-Rich Melts in the Deep Mantle. *Journal of Petrology*, **2013**, 54, 1555-1583	3.9	90
43	The discovery of kimberlites in Antarctica extends the vast Gondwanan Cretaceous province. *Nature Communications*, **2013**, 4, 2921	17.4	30

42	Eoarchean within-plate basalts from southwest Greenland. *Geology*, **2013**, 41, 327-330	5	26
41	Quantitative mapping of the oxidative effects of mantle metasomatism. *Geology*, **2013**, 41, 683-686	5	20
40	Metapyroxenite in the mantle transition zone revealed from majorite inclusions in diamonds. *Geology*, **2013**, 41, 883-886	5	32
39	Solidus of alkaline carbonatite in the deep mantle. *Geology*, **2013**, 41, 79-82	5	121
38	An oxygen fugacity profile through the Siberian Craton □Fe K-edge XANES determinations of Fe3 +/□e in garnets in peridotite xenoliths from the Udachnaya East kimberlite. *Lithos*, **2012**, 140-141, 142-151	2.9	77
37	New constraints from U□b, Lu□f and Sm□d isotopic data on the timing of sedimentation and felsic magmatism in the Larsemann Hills, Prydz Bay, East Antarctica. *Precambrian Research*, **2012**, 206-207, 87-108	3.9	51
36	An Experimental Study of Carbonated Eclogite at 3{middle dot}5-5{middle dot}5 GPa--Implications for Silicate and Carbonate Metasomatism in the Cratonic Mantle. *Journal of Petrology*, **2012**, 53, 727-759	3.9	93
35	Lu□f isotope evidence for the provenance of Permian detritus in accretionary complexes of western Patagonia and the northern Antarctic Peninsula region. *Journal of South American Earth Sciences*, **2011**, 32, 485-496	2	30
34	Continent Formation in the Archean and Chemical Evolution of the Cratonic Lithosphere: Melt-Rock Reaction Experiments at 3-4 GPa and Petrogenesis of Archean Mg-Diorites (Sanukitoids). *Journal of Petrology*, **2010**, 51, 1237-1266	3.9	148
33	A XANES calibration for determining the oxidation state of iron in mantle garnet. *Chemical Geology*, **2010**, 278, 31-37	4.2	51
32	Experimental phase and melting relations of metapelite in the upper mantle: implications for the petrogenesis of intraplate magmas. *Contributions To Mineralogy and Petrology*, **2010**, 160, 569-589	3.5	66
31	The composition of near-solidus melts of peridotite in the presence of CO2 and H2O between 40 and 60□kbar. *Lithos*, **2009**, 112, 274-283	2.9	213
30	Compositional data analysis for elemental data in forensic science. *Forensic Science International*, **2009**, 188, 81-90	2.6	21
29	Magnesium stable isotope composition of Earth's upper mantle. *Earth and Planetary Science Letters* , **2009**, 282, 306-313	5.3	133
28	Evidence for subduction at 3.8 Ga: Geochemistry of arc-like metabasalts from the southern edge of the Isua Supracrustal Belt. *Chemical Geology*, **2009**, 261, 83-98	4.2	102
27	Detrital zircon age constraints on the provenance of sandstones on Hatton Bank and Edoras Bank, NE Atlantic. *Journal of the Geological Society*, **2009**, 166, 137-146	2.7	13
26	Late Paleozoic□Early Triassic magmatism on the western margin of Gondwana: Collahuasi area, Northern Chile. *Gondwana Research*, **2008**, 13, 407-427	5.1	43
25	Magmatic evolution and tectonic setting of metabasites from L□zow-Holm Complex, East Antarctica. *Geological Society Special Publication*, **2008**, 308, 211-233	1.7	9

24	The South Patagonian batholith: 150 my of granite magmatism on a plate margin. *Lithos*, **2007**, 97, 373-394	2.9	207
23	High-pressure partial melting of gabbro and its role in the Hawaiian magma source. *Contributions To Mineralogy and Petrology*, **2007**, 154, 371-383	3.5	62
22	Foreword: The Roles of Petrology and Experimental Petrology in Understanding Global Tectonics. *Journal of Petrology*, **2007**, 49, 587-589	3.9	1
21	Phase Relations and Melting of Anhydrous K-bearing Eclogite from 1200 to 1600°C and 3 to 5 GPa. *Journal of Petrology*, **2007**, 49, 771-795	3.9	126
20	Detrital apatite geochemistry and its application in provenance studies **2007**,		13
19	. *Science*,	33.3	
18	The Amount of Recycled Crust in Sources of Mantle-Derived Melts. *Science*, **2007**, 316, 412-417	33.3	210
17	Magnesium isotopic composition of olivine from the Earth, Mars, Moon, and pallasite parent body. *Geophysical Research Letters*, **2006**, 33,	4.9	26
16	Magnesium isotopic analysis of olivine by laser-ablation multi-collector ICP-MS: composition dependent matrix effects and a comparison of the Earth and Moon. *Journal of Analytical Atomic Spectrometry*, **2006**, 21, 50-54	3.7	35
15	Varying behaviour of Li in metasomatised spinel peridotite xenoliths from western Victoria, Australia. *Lithos*, **2004**, 75, 55-66	2.9	48
14	Phase relations of carbonate-bearing eclogite assemblages from 2.5 to 5.5 GPa: implications for petrogenesis of carbonatites. *Contributions To Mineralogy and Petrology*, **2004**, 146, 606-619	3.5	227
13	Origins of compositional heterogeneity in olivine-hosted melt inclusions from the Baffin Island picrites. *Contributions To Mineralogy and Petrology*, **2004**, 148, 426-442	3.5	35
12	Primary magmas and mantle temperatures. *European Journal of Mineralogy*, **2001**, 13, 437-451	2.2	125
11	SIMS determination of trace element partition coefficients between garnet, clinopyroxene and hydrous basaltic liquids at 2–7.5 GPa and 1080–1200°C. *Lithos*, **2000**, 53, 165-187	2.9	445
10	Experimental study of the phase and melting relations of homogeneous basalt + peridotite mixtures and implications for the petrogenesis of flood basalts. *Contributions To Mineralogy and Petrology*, **2000**, 139, 326-338	3.5	186
9	Noble gases in pyroxenites and metasomatised peridotites from the Newer Volcanics, southeastern Australia: implications for mantle metasomatism. *Chemical Geology*, **2000**, 168, 49-73	4.2	60
8	The distribution of lithium in peridotitic and pyroxenitic mantle lithologies an indicator of magmatic and metasomatic processes. *Chemical Geology*, **2000**, 166, 47-64	4.2	159
7	In situ origin for glass in mantle xenoliths from southeastern Australia: insights from trace element compositions of glasses and metasomatic phases. *Earth and Planetary Science Letters*, **1999**, 172, 97-109	5.3	63

6	Carbonatite Metasomatism in the Southeastern Australian Lithosphere. *Journal of Petrology*, **1998**, 39, 1917-1930	3.9	314
5	Glasses in mantle xenoliths from western Victoria, Australia, and their relevance to mantle processes. *Earth and Planetary Science Letters*, **1997**, 148, 433-446	5.3	88
4	Prediction of siderophile element metal-silicate partition coefficients to 20 GPa and 2800°C: the effects of pressure, temperature, oxygen fugacity, and silicate and metallic melt compositions. *Physics of the Earth and Planetary Interiors*, **1997**, 100, 115-134	2.3	205
3	Experimental reconstruction of sodic dolomitic carbonatite melts from metasomatised lithosphere. *Contributions To Mineralogy and Petrology*, **1996**, 124, 359-369	3.5	60
2	Experimental demonstration of refractory carbonate-bearing eclogite and siliceous melt in the subduction regime. *Earth and Planetary Science Letters*, **1994**, 128, 313-325	5.3	145
1	Evidence for carbonatite metasomatism in spinel peridotite xenoliths from western Victoria, Australia. *Earth and Planetary Science Letters*, **1991**, 107, 305-317	5.3	350