

# Colin G Macpherson

## List of Publications by Year in descending order

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90  
papers

6,152  
citations

76326

40  
h-index

69250

77  
g-index

93  
all docs

93  
docs citations

93  
times ranked

4563  
citing authors

#	ARTICLE	IF	CITATIONS
1	Adakites without slab melting: High pressure differentiation of island arc magma, Mindanao, the Philippines. <i>Earth and Planetary Science Letters</i> , 2006, 243, 581-593.	4.4	924
2	Amphibole "sponge" in arc crust?. <i>Geology</i> , 2007, 35, 787.	4.4	848
3	Oxygen isotope composition of mantle peridotite. <i>Earth and Planetary Science Letters</i> , 1994, 128, 231-241.	4.4	591
4	Resolution of the effects of crustal assimilation, sediment subduction, and fluid transport in island arc magmas: PbSrNdO isotope geochemistry of Grenada, Lesser Antilles. <i>Geochimica Et Cosmochimica Acta</i> , 1996, 60, 4785-4810.	3.9	176
5	Extreme 3He/4He ratios in northwest Iceland: constraining the common component in mantle plumes. <i>Earth and Planetary Science Letters</i> , 1999, 173, 53-60.	4.4	158
6	Evidence for distinct proportions of subducted oceanic crust and lithosphere in HIMU-type mantle beneath El Hierro and La Palma, Canary Islands. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 6565-6589.	3.9	146
7	Tectonic setting of Eocene boninite magmatism in the Izu "Bonin" Mariana forearc. <i>Earth and Planetary Science Letters</i> , 2001, 186, 215-230.	4.4	140
8	Pyroxenite-rich mantle formed by recycled oceanic lithosphere: Oxygen-osmium isotope evidence from Canary Island lavas. <i>Geology</i> , 2009, 37, 555-558.	4.4	116
9	Aerosol forcing of the position of the intertropical convergence zone since ad 1550. <i>Nature Geoscience</i> , 2015, 8, 195-200.	12.9	112
10	Resolving Crustal and Mantle Contributions to Continental Flood Volcanism, Yemen; Constraints from Mineral Oxygen Isotope Data. <i>Journal of Petrology</i> , 2000, 41, 1805-1820.	2.8	103
11	Titanium stable isotope investigation of magmatic processes on the Earth and Moon. <i>Earth and Planetary Science Letters</i> , 2016, 449, 197-205.	4.4	99
12	Constraining Fluid and Sediment Contributions to Subduction-Related Magmatism in Indonesia: Ijen Volcanic Complex. <i>Journal of Petrology</i> , 2007, 48, 1155-1183.	2.8	97
13	High-precision oxygen isotope microanalysis of ferromagnesian minerals by laser-fluorination. <i>Chemical Geology</i> , 1993, 105, 305-318.	3.3	96
14	Inter-element fractionation of highly siderophile elements in the Tonga Arc due to flux melting of a depleted source. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 89, 202-225.	3.9	89
15	Helium isotope ratios in mafic phenocrysts and geothermal fluids from La Palma, the Canary Islands (Spain): implications for HIMU mantle sources. <i>Geochimica Et Cosmochimica Acta</i> , 2000, 64, 2119-2132.	3.9	81
16	Hf "Nd isotope and trace element constraints on subduction inputs at island arcs: Limitations of Hf anomalies as sediment input indicators. <i>Earth and Planetary Science Letters</i> , 2011, 304, 212-223.	4.4	81
17	Variable water input controls evolution of the Lesser Antilles volcanic arc. <i>Nature</i> , 2020, 582, 525-529.	27.8	81
18	High-3He/4He, depleted mantle and low-18O, recycled oceanic lithosphere in the source of central Iceland magmatism. <i>Earth and Planetary Science Letters</i> , 2005, 233, 411-427.	4.4	77

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19	Lapita Migrants in the Pacific's Oldest Cemetery: Isotopic Analysis at Teouma, Vanuatu. <i>American Antiquity</i> , 2007, 72, 645-656.	1.1	72
20	Shifting Gender Relations at Khok Phanom Di, Thailand. <i>Current Anthropology</i> , 2007, 48, 301-314.	1.6	69
21	Trace Element and Isotope Geochemistry of the Volcanic Rocks of Bequia, Grenadine Islands, Lesser Antilles Arc: a Study of Subduction Enrichment and Intra-crustal Contamination. <i>Journal of Petrology</i> , 1996, 37, 117-143.	2.8	68
22	High $^3\text{He}/^4\text{He}$ ratios in the Manus backarc basin: Implications for mantle mixing and the origin of plumes in the western Pacific Ocean. <i>Geology</i> , 1998, 26, 1007.	4.4	65
23	Plio-Pleistocene intra-plate magmatism from the southern Sulu Arc, Semporna peninsula, Sabah, Borneo: Implications for high-Nb basalt in subduction zones. <i>Journal of Volcanology and Geothermal Research</i> , 2010, 190, 25-38.	2.1	65
24	Extreme platinum-group element fractionation and variable Os isotope compositions in Philippine Sea Plate basalts: Tracing mantle source heterogeneity. <i>Chemical Geology</i> , 2008, 248, 213-238.	3.3	63
25	Resolving Sediment Subduction and Crustal Contamination in the Lesser Antilles Island Arc: a Combined $^4\text{He}/^3\text{He}$ - $^{87}\text{Sr}/^{86}\text{Sr}$ Isotope Approach. <i>Journal of Petrology</i> , 2002, 43, 143-170.	2.8	62
26	Magma mush chemistry at subduction zones, revealed by new melt major element inversion from calcic amphiboles. <i>American Mineralogist</i> , 2017, 102, 1353-1367.	1.9	60
27	Long-term preservation of slab signatures in the mantle inferred from hydrogen isotopes. <i>Nature Geoscience</i> , 2012, 5, 224-228.	12.9	57
28	Osmium isotopes in Baffin Island and West Greenland picrites: Implications for the $^{187}\text{Os}/^{188}\text{Os}$ composition of the convecting mantle and the nature of high $^3\text{He}/^4\text{He}$ mantle. <i>Earth and Planetary Science Letters</i> , 2009, 278, 267-277.	4.4	56
29	Persistent northward North Atlantic tropical cyclone track migration over the past five centuries. <i>Scientific Reports</i> , 2016, 6, 37522.	3.3	53
30	The role of arc migration in the development of the Lesser Antilles: A new tectonic model for the Cenozoic evolution of the eastern Caribbean. <i>Geology</i> , 2019, 47, 891-895.	4.4	53
31	Evidence for an $^{18}\text{O}$ -depleted mantle plume from contrasting $^{18}\text{O}/^{16}\text{O}$ ratios of back-arc lavas from the Manus Basin and Mariana Trough. <i>Earth and Planetary Science Letters</i> , 2000, 176, 171-183.	4.4	52
32	Lithosphere erosion and crustal growth in subduction zones: Insights from initiation of the nascent East Philippine Arc. <i>Geology</i> , 2008, 36, 311.	4.4	52
33	Carbon isotope variations of $\text{CO}_2$ in Central Lau Basin basalts and ferrobasalts. <i>Earth and Planetary Science Letters</i> , 1994, 121, 263-276.	4.4	51
34	Oxygen isotope geochemistry of lavas from an oceanic to continental arc transition, Kermadec-Hikurangi margin, SW Pacific. <i>Earth and Planetary Science Letters</i> , 1998, 160, 609-621.	4.4	50
35	The $\text{CO}_2$ -He-Ar- $\text{H}_2\text{O}$ systematics of the manus back-arc basin: resolving source composition from degassing and contamination effects. <i>Geochimica Et Cosmochimica Acta</i> , 2004, 68, 1837-1855.	3.9	49
36	Assimilation of sediments embedded in the oceanic arc crust: myth or reality?. <i>Earth and Planetary Science Letters</i> , 2014, 395, 51-60.	4.4	45

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37	Intertropical convergence zone variability in the Neotropics during the Common Era. <i>Science Advances</i> , 2020, 6, eaax3644.	10.3	45
38	Absence of a high time-integrated $^3\text{He}/(\text{U}+\text{Th})$ source in the mantle beneath continents. <i>Geology</i> , 2005, 33, 733.	4.4	42
39	Oxygen isotope variations in Lau Basin lavas. <i>Chemical Geology</i> , 1998, 144, 177-194.	3.3	41
40	Re-Os isotope studies of Mindanao adakites: Implications for sources of metals and melts. <i>Geology</i> , 2005, 33, 957.	4.4	41
41	Moving peoples, changing diets: isotopic differences highlight migration and subsistence changes in the Upper Mun River Valley, Thailand. <i>Journal of Archaeological Science</i> , 2013, 40, 1681-1688.	2.4	41
42	Mobility histories of 7th–9th century AD people buried at early medieval Bamburgh, Northumberland, England. <i>American Journal of Physical Anthropology</i> , 2013, 151, 462-476.	2.1	37
43	Adakites without a slab: Remelting of hydrous basalt in the crust and shallow mantle of Borneo to produce the Miocene Sintang Suite and Bau Suite magmatism of West Sarawak. <i>Lithos</i> , 2019, 344-345, 100-121.	1.4	35
44	Andean surface uplift constrained by radiogenic isotopes of arc lavas. <i>Nature Communications</i> , 2018, 9, 969.	12.8	34
45	Unravelling the complexity of magma plumbing at Mount St. Helens: a new trace element partitioning scheme for amphibole. <i>Contributions To Mineralogy and Petrology</i> , 2019, 174, 1.	3.1	34
46	$\text{CO}_2$ , $^{13}\text{C}/^{12}\text{C}$ and $\text{H}_2\text{O}$ variability in natural basaltic glasses: a study comparing stepped heating and FTIR spectroscopic techniques. <i>Geochimica Et Cosmochimica Acta</i> , 1999, 63, 1805-1813.	3.9	30
47	Nucleogenic neon in high $^3\text{He}/^4\text{He}$ lavas from the Manus back-arc basin: a new perspective on He–Ne decoupling. <i>Earth and Planetary Science Letters</i> , 2001, 194, 53-66.	4.4	30
48	Insights from Pb and O isotopes into along-arc variations in subduction inputs and crustal assimilation for volcanic rocks in Java, Sunda arc, Indonesia. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 139, 205-226.	3.9	29
49	Seeing through the Effects of Crustal Assimilation to Assess the Source Composition beneath the Southern Lesser Antilles Arc. <i>Journal of Petrology</i> , 2015, 56, 815-844.	2.8	29
50	Petrogenesis of Quaternary Intraplate Volcanism, Sana'a, Yemen: Implications for Plume-Lithosphere Interaction and Polybaric Melt Hybridization. <i>Journal of Petrology</i> , 1997, 38, 1359-1390.	2.8	29
51	Community Diversity at Ban Lum Khao, Thailand: Isotopic Evidence from the Skeletons. <i>Asian Perspectives</i> , 2009, 48, 79-97.	0.1	28
52	Age and petrology of the Usun Apau and Linau Balui volcanics: Windows to central Borneo's interior. <i>Journal of Asian Earth Sciences</i> , 2013, 76, 372-388.	2.3	27
53	Along-Arc Heterogeneity in Local Seismicity across the Lesser Antilles Subduction Zone from a Dense Ocean-Bottom Seismometer Network. <i>Seismological Research Letters</i> , 2020, 91, 237-247.	1.9	26
54	Geochemical and Sr–O isotopic constraints on magmatic differentiation at Gede Volcanic Complex, West Java, Indonesia. <i>Contributions To Mineralogy and Petrology</i> , 2010, 159, 885-908.	3.1	25

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55	Foreland Magmatism during the Arabia-Eurasia Collision: Pliocene-Quaternary Activity of the Karacadağ Volcanic Complex, SW Turkey. <i>Journal of Petrology</i> , 2014, 55, 1753-1777.	2.8	25
56	Sources, degassing, and contamination of CO <sub>2</sub> , H <sub>2</sub> O, He, Ne, and Ar in basaltic glasses from Kolbeinsey Ridge, North Atlantic. <i>Geochimica Et Cosmochimica Acta</i> , 2005, 69, 5729-5746.	3.9	24
57	Intrinsic or extrinsic population growth in Iron Age northeast Thailand? The evidence from isotopic analysis. <i>Journal of Archaeological Science</i> , 2011, 38, 665-671.	2.4	24
58	Isotopic tracing of the impact of mobility on infectious disease: The origin of people with treponematosi buried in hull, England, in the late medieval period. <i>American Journal of Physical Anthropology</i> , 2013, 150, 273-285.	2.1	24
59	Geochemical evolution of magmatism in an arc-arc collision: the Halmahera and Sangihe arcs, eastern Indonesia. <i>Geological Society Special Publication</i> , 2003, 219, 207-220.	1.3	23
60	Untangling differentiation in arc lavas: Constraints from unusual minor and trace element variations at Salak Volcano, Indonesia. <i>Chemical Geology</i> , 2008, 255, 360-376.	3.3	21
61	Subduction history of the Caribbean from upper-mantle seismic imaging and plate reconstruction. <i>Nature Communications</i> , 2021, 12, 4211.	12.8	21
62	Earth's deepest earthquake swarms track fluid ascent beneath nascent arc volcanoes. <i>Earth and Planetary Science Letters</i> , 2019, 521, 25-36.	4.4	20
63	Evidence from plutonic xenoliths for magma differentiation, mixing and storage in a volatile-rich crystal mush beneath St. Eustatius, Lesser Antilles. <i>Contributions To Mineralogy and Petrology</i> , 2019, 174, 39.	3.1	20
64	Wide-Angle Seismic Imaging of Two Modes of Crustal Accretion in Mature Atlantic Ocean Crust. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2019JB019100.	3.4	20
65	Timing and tectonic controls in the evolving orogen of SE Asia and the western Pacific and some implications for ore generation. <i>Geological Society Special Publication</i> , 2002, 204, 49-67.	1.3	19
66	The principles of helium exploration. <i>Petroleum Geoscience</i> , 2022, 28, .	1.5	19
67	No slab-derived CO <sub>2</sub> in Mariana Trough arc basalts: Implications for carbon subduction and for temporary storage of CO <sub>2</sub> beneath slow spreading ridges. <i>Geochemistry, Geophysics, Geosystems</i> , 2010, 11, .	2.5	18
68	Mantle flow, volatiles, slab surface temperatures and melting dynamics in the north Tonga arc-Lau back-arc basin. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	18
69	Evolution of the East Philippine Arc: experimental constraints on magmatic phase relations and adakitic melt formation. <i>Contributions To Mineralogy and Petrology</i> , 2011, 162, 835-848.	3.1	17
70	Magmatic Enclaves and Andesitic Lavas from Mt. Lamington, Papua New Guinea: Implications for Recycling of Earlier-fractionated Minerals through Magma Recharge. <i>Journal of Petrology</i> , 2015, 56, 2223-2256.	2.8	17
71	Linear volcanic segments in the central Sunda Arc, Indonesia, identified using Hough Transform analysis: Implications for arc lithosphere control upon volcano distribution. <i>Earth and Planetary Science Letters</i> , 2013, 369-370, 24-33.	4.4	16
72	Polybaric melting of a single mantle source during the Neogene Siverek phase of the Karacadağ Volcanic Complex, SE Turkey. <i>Lithos</i> , 2012, 146-147, 152-163.	1.4	15

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73	Economic change after the agricultural revolution in Southeast Asia?. <i>Antiquity</i> , 2014, 88, 112-125.	1.0	15
74	Using isotopic evidence to assess the impact of migration and the two-layer hypothesis in prehistoric Northeast Thailand. <i>American Journal of Physical Anthropology</i> , 2015, 158, 141-150.	2.1	15
75	Tectonic strain recorded by magnetic fabrics (AMS) in plutons, including Mt Kinabalu, Borneo: A tool to explore past tectonic regimes and syn-magmatic deformation. <i>Journal of Structural Geology</i> , 2019, 119, 50-60.	2.3	15
76	Deciphering variable mantle sources and hydrous inputs to arc magmas in Kamchatka. <i>Earth and Planetary Science Letters</i> , 2021, 562, 116848.	4.4	13
77	Oxygen isotope heterogeneity of the mantle beneath the Canary Islands: a discussion of the paper of Gurenko et al.. <i>Contributions To Mineralogy and Petrology</i> , 2012, 164, 177-183.	3.1	12
78	Project VoiLA: Volatile Recycling in the Lesser Antilles. <i>Eos</i> , 2019, 100, .	0.1	11
79	Upper Plate Stress Controls the Distribution of Mariana Arc Volcanoes. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2019JB017391.	3.4	9
80	Academic authors' perceptions of the instructional design and development process for distance education: A case study. <i>Distance Education</i> , 1998, 19, 124-141.	3.9	6
81	Internal structure and emplacement mechanism of composite plutons: evidence from Mt Kinabalu, Borneo. <i>Journal of the Geological Society</i> , 2017, 174, 180-191.	2.1	6
82	Multi-isotope evidence of population aggregation in the Natufian and scant migration during the early Neolithic of the Southern Levant. <i>Scientific Reports</i> , 2021, 11, 11857.	3.3	6
83	Generation of the Mt Kinabalu Granite by Crustal Contamination of Intraplate Magma Modelled by Equilibrated Major Element Assimilation with Fractional Crystallization (EME-AFC). <i>Journal of Petrology</i> , 2019, 60, 1461-1487.	2.8	5
84	Identifying the ingredients of hydrous arc magmas: insights from Mt Lamington, Papua New Guinea. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2019, 377, 20180018.	3.4	4
85	Multi-isotopic study of diet and mobility in the northeastern Nile Delta. <i>Archaeological and Anthropological Sciences</i> , 2021, 13, 1.	1.8	4
86	Sidon on the breadth of the wild sea: Movement and diet on the Mediterranean coast in the Middle Bronze Age. <i>American Journal of Biological Anthropology</i> , 2022, 177, 116-133.	1.1	4
87	Convergence-aligned foreland magmatism in the Arabia-Anatolia Collision: geochronological evidence from the Karacadağ Volcanic Complex, south-east Turkey. <i>Turkish Journal of Earth Sciences</i> , 2019, 28, 719-733.	1.0	2
88	Jordanian migration and mobility in the Middle Bronze Age (ca. 2100-1550 BCE) at Pella. <i>International Journal of Osteoarchaeology</i> , 0, .	1.2	2
89	Letter to the editor: Response to Oxenham and Matsumura. <i>American Journal of Physical Anthropology</i> , 2016, 159, 352-354.	2.1	0
90	JON PAUL DAVIDSON (1959-2016). <i>Mineralogical Magazine</i> , 2018, 82, 241-241.	1.4	0