

# Roger L Gibson

## List of Publications by Year in descending order

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53  
papers

1,314  
citations

361413

20  
h-index

377865

34  
g-index

55  
all docs

55  
docs citations

55  
times ranked

995  
citing authors

#	ARTICLE	IF	CITATIONS
1	Precise Uâ€“Pb titanite age constraints on the emplacement of the Bushveld Complex, South Africa. <i>Journal of the Geological Society</i> , 2001, 158, 3-6.	2.1	161
2	A SHRIMP Uâ€“Pb and LA-ICP-MS trace element study of the petrogenesis of garnetâ€“cordieriteâ€“orthoamphibole gneisses from the Central Zone of the Limpopo Belt, South Africa. <i>Lithos</i> , 2006, 88, 150-172.	1.4	136
3	Thermal-metamorphic signature of an impact event in the Vredefort dome, South Africa. <i>Geology</i> , 1998, 26, 787.	4.4	84
4	Archean crustal structure of the Kaapvaal craton, South Africa â€“ evidence from the Vredefort dome. <i>Earth and Planetary Science Letters</i> , 2003, 206, 133-144.	4.4	61
5	The melt rocks of the Vredefort impact structure â€“ Vredefort Granophyre and pseudotachylitic breccias: Implications for impact cratering and the evolution of the Witwatersrand Basin. <i>Chemie Der Erde</i> , 2006, 66, 1-35.	2.0	61
6	Mid-crustal granulite facies metamorphism in the Central Kaapvaal craton: the Bushveld Complex connection. <i>Precambrian Research</i> , 1997, 82, 113-132.	2.7	48
7	Origin of large-volume pseudotachylite in terrestrial impact structures. <i>Geology</i> , 2010, 38, 619-622.	4.4	48
8	Hercynian low-pressure-high-temperature regional metamorphism and subhorizontal foliation development in the Canigou massif, Pyrenees, Franceâ€”Evidence for crustal extension. <i>Geology</i> , 1991, 19, 380.	4.4	46
9	Shocked and thermally metamorphosed zircon from the Vredefort impact structure, South Africa: a transmission electron microscopic study. <i>European Journal of Mineralogy</i> , 2002, 14, 859-868.	1.3	43
10	Economic Mineral Deposits in Impact Structures: A Review. , 2005, , 479-552.		42
11	Generation of fragment-rich pseudotachylite bodies during central uplift formation in the Vredefort impact structure, South Africa. <i>Earth and Planetary Science Letters</i> , 2009, 279, 53-64.	4.4	37
12	The role of strain localization in the segregation and ascent of anatectic melts, Namaqualand, South Africa. <i>Journal of Structural Geology</i> , 1998, 20, 229-242.	2.3	36
13	The timing of sub-solidus hydrothermal alteration in the Central Zone, Limpopo Belt (South Africa): Constraints from titanite Uâ€“Pb geochronology and REE partitioning. <i>Lithos</i> , 2007, 98, 97-117.	1.4	36
14	Metamorphism on the Moon: A terrestrial analogue in the Vredefort dome, South Africa?. <i>Geology</i> , 2002, 30, 475.	4.4	34
15	Shock pressure distribution in the Vredefort impact structure, South Africa. , 2005, , .		33
16	First petrographic results on impactites from the Yaxcopoilâ€“1 borehole, Chicxulub structure, Mexico. <i>Meteoritics and Planetary Science</i> , 2004, 39, 899-930.	1.6	32
17	Steep structure formation in the Okiep Copper District, South Africa: bulk inhomogeneous shortening of a high-grade metamorphic granite-gneiss sequence. <i>Journal of Structural Geology</i> , 1996, 18, 735-751.	2.3	29
18	Structural analysis of the collar of the Vredefort Dome, South Africaâ€”Significance for impactâ€“related deformation and central uplift formation. <i>Meteoritics and Planetary Science</i> , 2005, 40, 1537-1554.	1.6	24

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19	Petrographic and geochemical evidence for an allochthonous, possibly impact melt, origin of pseudotachylite from the Vredefort Dome, South Africa. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 4490-4514.	3.9	24
20	“Pseudotachylites” in Large Impact Structures. , 2005, , 1-53.		23
21	Major and trace element characteristics of impactites from the Yaxcopoil-1 borehole, Chicxulub structure, Mexico. <i>Meteoritics and Planetary Science</i> , 2004, 39, 955-978.	1.6	21
22	The impact and recovery of asteroid 2018 LA. <i>Meteoritics and Planetary Science</i> , 2021, 56, 844-893.	1.6	21
23	Geochemical and petrographic characteristics of impactites and Cretaceous target rocks from the Yaxcopoil-1 borehole, Chicxulub impact structure, Mexico: Implications for target composition. <i>Meteoritics and Planetary Science</i> , 2005, 40, 1513-1536.	1.6	20
24	Experimental investigation of shock metamorphic effects in a metapelitic granulite: The importance of shock impedance contrast between components. <i>Meteoritics and Planetary Science</i> , 2011, 46, 1565-1586.	1.6	20
25	Comment on “Searching for giant, ancient impact structures on Earth: The Mesoarchean Maniitsoq structure, West Greenland” by Garde et al. [ <i>Earth Planet. Sci. Lett.</i> 337-338 (2012) 197-210]. <i>Earth and Planetary Science Letters</i> , 2013, 369-370, 333-335.	4.4	18
26	Geoscience Initiative Develops Sustainable Science in Africa. <i>Eos</i> , 2011, 92, 161-162.	0.1	17
27	Regional metamorphism due to anorogenic intracratonic magmatism. <i>Geological Society Special Publication</i> , 1998, 138, 121-135.	1.3	16
28	Geologic columns for the ICDP-USGS Eyreville B core, Chesapeake Bay impact structure: Impactites and crystalline rocks, 1766 to 1096 m depth. , 2009, , .		16
29	Lithostratigraphic and petrographic analysis of ICDP drill core LB-07A, Bosumtwi impact structure, Ghana. <i>Meteoritics and Planetary Science</i> , 2007, 42, 569-589.	1.6	15
30	SHRIMP zircon age constraints on Mesoarchean crustal development in the Vredefort dome, central Kaapvaal Craton, South Africa. , 2006, , .		14
31	Geochemistry of impactites and basement lithologies from ICDP borehole LB-07A, Bosumtwi impact structure, Ghana. <i>Meteoritics and Planetary Science</i> , 2007, 42, 667-688.	1.6	13
32	Arrested development “a comparative analysis of multilayer corona textures in high-grade metamorphic rocks. <i>Solid Earth</i> , 2017, 8, 93-135.	2.8	12
33	Major and trace element compositions of melt particles and associated phases from the Yaxcopoil-1 drill core, Chicxulub impact structure, Mexico. <i>Meteoritics and Planetary Science</i> , 2006, 41, 1361-1379.	1.6	11
34	Melt particle characteristics of the within- and out-of-crater suevites from the Bosumtwi impact structure, Ghana: Implications for crater formation. , 2010, , .		9
35	The Mesoarchean Basement Complex of the Vredefort Dome “A Mid-Crustal Section Through the Central Kaapvaal Craton Exposed by Impact. <i>Regional Geology Reviews</i> , 2019, , 109-132.	1.2	8
36	Geochemistry of impactites and crystalline basement-derived lithologies from the ICDP-USGS Eyreville A and B drill cores, Chesapeake Bay impact structure, Virginia, USA. , 2009, , .		6

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37	A reappraisal of legacy reflection seismic data from the western margin of the Kaapvaal craton, South Africa, with implications for Mesozoic-Cenozoic regional tectonics. <i>Tectonophysics</i> , 2021, 813, 228934.	2.2	5
38	Timescales of impact melt sheet crystallization and the precise age of the Morokweng impact structure, South Africa. <i>Earth and Planetary Science Letters</i> , 2021, 567, 117013.	4.4	5
39	Meteorite Impact!. , 2010, , .		5
40	Pre-impact tectonothermal evolution of the crystalline basement-derived rocks in the ICDP-USGS Eyreville B core, Chesapeake Bay impact structure. , 2009, , .		4
41	Petrographic and geochemical comparisons between the lower crystalline basement-derived section and the granite megablock and amphibolite megablock of the Eyreville B core, Chesapeake Bay impact structure, USA. , 2009, , .		4
42	The State of Planetary and Space Sciences in Africa. <i>Eos</i> , 2017, , .	0.1	4
43	Magnetic anomaly near the center of the Vredefort structure: Implications for impact-related magnetic signatures: Comment and Reply. <i>Geology</i> , 1995, 23, 1149.	4.4	2
44	Structural controls on melt segregation and migration related to the formation of the diapiric Schwerin Fold in the contact aureole of the Bushveld Complex, South Africa. <i>Earth and Environmental Science Transactions of the Royal Society of Edinburgh</i> , 2009, 100, 61-76.	0.3	2
45	Landscape and Landforms of the Vredefort Dome: Exposing an Old Wound. <i>World Geomorphological Landscapes</i> , 2015, , 31-38.	0.3	2
46	Introduction: Impact cratering and planetary studiesâ€”a fifty-year perspective. , 2010, , .		1
47	Shock-induced kelyphite formation in the core of a complex impact crater. <i>Contributions To Mineralogy and Petrology</i> , 2017, 172, 1.	3.1	1
48	Conference report: Large Meteorite Impacts and Planetary Evolution VI. <i>Meteoritics and Planetary Science</i> , 2020, 55, 245-250.	1.6	1
49	An investigation of the 27 July 2018 bolide and meteorite fall over Benenitra, southwestern Madagascar. <i>South African Journal of Science</i> , 2021, 117, .	0.7	1
50	Dynamics of collapse of an impact central uplift: Evidence from folds and faults in the collar of the Vredefort Dome, South Africa. , 2021, , .		1
51	FIELD FORUM REPORT: Processes on the Early Earth. <i>GSA Today</i> , 2004, 14, 28.	2.0	1
52	Structural controls on melt segregation and migration related to the formation of the diapiric Schwerin Fold in the contact aureole of the Bushveld Complex, South Africa. , 2010, , .		0
53	Granitoid gneisses of the Morokweng impact structure: Implications for Neoproterozoic evolution of the western Kaapvaal craton. <i>Lithos</i> , 2022, 426-427, 106793.	1.4	0