Martin J Siegert

List of Publications by Citations

252 papers	10,912 citations	46 h-index	97 g-index
303 ext. papers	12,312 ext. citations	6.3 avg, IF	6.12 L-index

#	Paper	IF	Citations
252	Bedmap2: improved ice bed, surface and thickness datasets for Antarctica. *Cryosphere*, **2013**, 7, 375-393	5.5	1184
251	Late Quaternary ice sheet history of northern Eurasia. *Quaternary Science Reviews*, **2004**, 23, 1229-1271	3.9	1062
250	BedMachine v3: Complete Bed Topography and Ocean Bathymetry Mapping of Greenland From Multibeam Echo Sounding Combined With Mass Conservation. *Geophysical Research Letters*, **2017**, 44, 11051-11061	4.9	343
249	THE LAST GLACIAL MAXIMUM OF SVALBARD AND THE BARENTS SEA AREA: ICE SHEET EXTENT AND CONFIGURATION. *Quaternary Science Reviews*, **1998**, 17, 43-75	3.9	327
248	Rapid discharge connects Antarctic subglacial lakes. *Nature*, **2006**, 440, 1033-6	50.4	315
247	Maximum extent of the Eurasian ice sheets in the Barents and Kara Sea region during the Weichselian. *Boreas*, **1999**, 28, 234-242	2.4	291
246	A large deep freshwater lake beneath the ice of central East Antarctica. *Nature*, **1996**, 381, 684-686	50.4	276
245	A revised inventory of Antarctic subglacial lakes. *Antarctic Science*, **2005**, 17, 453-460	1.7	230
244	Physical, chemical and biological processes in Lake Vostok and other Antarctic subglacial lakes. *Nature*, **2001**, 414, 603-9	50.4	200
243	Contributions from glacially derived sediment to the global iron (oxyhydr)oxide cycle: Implications for iron delivery to the oceans. *Geochimica Et Cosmochimica Acta*, **2006**, 70, 2765-2780	5.5	188
242	The periglacial climate and environment in northern Eurasia during the Last Glaciation. *Quaternary Science Reviews*, **2004**, 23, 1333-1357	3.9	165
241	A fourth inventory of Antarctic subglacial lakes. *Antarctic Science*, **2012**, 24, 659-664	1.7	162
240	A dynamic early East Antarctic Ice Sheet suggested by ice-covered fjord landscapes. *Nature*, **2011**, 474, 72-5	50.4	140
239	A review of postglacial emergence on Svalbard, Franz Josef Land and Novaya Zemlya, northern Eurasia. *Quaternary Science Reviews*, **2004**, 23, 1391-1434	3.9	133
238	Large-scale sedimentation on the glacier-influenced polar North Atlantic Margins: Long-range side-scan sonar evidence. *Geophysical Research Letters*, **1996**, 23, 3535-3538	4.9	130
237	Choosing the future of Antarctica. *Nature*, **2018**, 558, 233-241	50.4	125
236	Modelling the Eurasian Ice Sheet through a full (Weichselian) glacial cycle. *Global and Planetary Change*, **2001**, 31, 367-385	4.2	122

235	Ice-sheet numerical modeling and marine geophysical measurements of glacier-derived sedimentation on the Eurasian Arctic continental margins. *Bulletin of the Geological Society of America*, **1999**, 111, 1080-1097	3.9	120
234	A roadmap for Antarctic and Southern Ocean science for the next two decades and beyond. *Antarctic Science*, **2015**, 27, 3-18	1.7	118
233	Ocean access to a cavity beneath Totten Glacier in East Antarctica. *Nature Geoscience*, **2015**, 8, 294-298	18.3	118
232	Evidence from ice shelves for channelized meltwater flow beneath the Antarctic Ice Sheet. *Nature Geoscience*, **2013**, 6, 945-948	18.3	118
231	The Gamburtsev mountains and the origin and early evolution of the Antarctic Ice Sheet. *Nature*, **2009**, 459, 690-3	50.4	116
230	The subglacial geology of Wilkes Land, East Antarctica. *Geophysical Research Letters*, **2014**, 41, 2390-2400	4.9	102
229	Antarctic subglacial lakes. *Earth-Science Reviews*, **2000**, 50, 29-50	10.2	99
228	Numerical reconstructions of the Eurasian Ice Sheet and climate during the Late Weichselian. *Quaternary Science Reviews*, **2004**, 23, 1273-1283	3.9	95
227	New modeling of the Vostok ice flow line and implication for the glaciological chronology of the Vostok ice core. *Journal of Geophysical Research*, **2004**, 109,		92
226	A subglacial water-flow model for West Antarctica. *Journal of Glaciology*, **2009**, 55, 879-888	3.4	90
225	The dimensions and topographic setting of Antarctic subglacial lakes and implications for large-scale water storage beneath continental ice sheets. *Bulletin of the Geological Society of America*, **1999**, 111, 254-263	3.9	90
224	Steep reverse bed slope at the grounding line of the Weddell Sea sector in West Antarctica. *Nature Geoscience*, **2012**, 5, 393-396	18.3	89
223	Late Weichselian Glaciation of the Russian High Arctic. *Quaternary Research*, **1999**, 52, 273-285	1.9	81
222	Repeated large-scale retreat and advance of Totten Glacier indicated by inland bed erosion. *Nature*, **2016**, 533, 385-9	50.4	81
221	Recent advances in understanding Antarctic subglacial lakes and hydrology. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2016**, 374,	3	73
220	Water exchange between the subglacial Lake Vostok and the overlying ice sheet. *Nature*, **2000**, 403, 643-6	50.4	66
219	The hydrochemistry of Lake Vostok and the potential for life in Antarctic subglacial lakes. *Hydrological Processes*, **2003**, 17, 795-814	3.3	61
218	Spectral roughness of subglacial topography and implications for former ice-sheet dynamics in East Antarctica. *Global and Planetary Change*, **2005**, 45, 249-263	4.2	59

217	Evidence of a hydrological connection between the ice divide and ice sheet margin in the Aurora Subglacial Basin, East Antarctica. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		57
216	Spatial variations in heat at the base of the Antarctic ice sheet from analysis of the thermal regime above subglacial lakes. *Journal of Glaciology*, **1996**, 42, 501-509	3.4	57
215	Inland extent of the Weddell Sea Rift imaged by new aerogeophysical data. *Tectonophysics*, **2013**, 585, 137-160	3.1	55
214	Paleofluvial mega-canyon beneath the central Greenland ice sheet. *Science*, **2013**, 341, 997-9	33.3	55
213	High sensitivity of subglacial hydrological pathways in Antarctica to small ice-sheet changes. *Geophysical Research Letters*, **2008**, 35,	4.9	55
212	The Antarctic Peninsula Under a 1.5°C Global Warming Scenario. *Frontiers in Environmental Science*, **2019**, 7,	4.8	53
211	Clean access, measurement, and sampling of Ellsworth Subglacial Lake: A method for exploring deep Antarctic subglacial lake environments. *Reviews of Geophysics*, **2012**, 50,	23.1	53
210	Terrigenous fluxes at the Celtic margin during the last glacial cycle. *Marine Geology*, **2002**, 188, 79-108	3.3	53
209	Quantifying subglacial bed roughness in Antarctica: implications for ice-sheet dynamics and history. *Quaternary Science Reviews*, **2009**, 28, 223-236	3.9	52
208	Greenland subglacial lakes detected by radar. *Geophysical Research Letters*, **2013**, 40, 6154-6159	4.9	49
207	The physiography of modern Antarctic subglacial lakes. *Global and Planetary Change*, **2003**, 35, 221-236	4.2	47
206	Penetration of Antarctic subglacial lakes by VHF electromagnetic pulses: Information on the depth and electrical conductivity of basal water bodies. *Journal of Geophysical Research*, **1999**, 104, 29311-29320		46
205	An assessment of deep hot-water drilling as a means to undertake direct measurement and sampling of Antarctic subglacial lakes: experience and lessons learned from the Lake Ellsworth field season 2012/13. *Annals of Glaciology*, **2014**, 55, 59-73	2.5	45
204	LAKES BENEATH THE ICE SHEET: The Occurrence, Analysis, and Future Exploration of Lake Vostok and Other Antarctic Subglacial Lakes. *Annual Review of Earth and Planetary Sciences*, **2005**, 33, 215-245	15.3	45
203	East Antarctic ice stream tributary underlain by major sedimentary basin. *Geology*, **2006**, 34, 33	5	45
202	Subglacial Lake Ellsworth: A candidate for in situ exploration in West Antarctica. *Geophysical Research Letters*, **2004**, 31,	4.9	45
201	Subglacial water at the heads of Antarctic ice-stream tributaries. *Journal of Glaciology*, **2000**, 46, 702-703	3.4	45
200	West Antarctic balance calculations: Impact of flux-routing algorithm, smoothing algorithm and topography. *Computers and Geosciences*, **2006**, 32, 1780-1795	4.5	44

199	Modelling iceberg trajectories, sedimentation rates and meltwater input to the ocean from the Eurasian Ice Sheet at the Last Glacial Maximum. *Palaeogeography, Palaeoclimatology, Palaeoecology* , **2006**, 236, 135-150	2.9	43
198	Numerical reconstructions of LGM climate across the Eurasian Arctic. *Quaternary Science Reviews*, **2001**, 20, 1595-1605	3.9	43
197	An analysis of the ice-sheet surface and subsurface topography above the Vostok Station subglacial lake, central East Antarctica. *Journal of Geophysical Research*, **1998**, 103, 10195-10207		43
196	Dynamic distributed drainage implied by the flow evolution of the 1996–1998 Adventure Trench subglacial lake discharge. *Earth and Planetary Science Letters*, **2009**, 283, 24-37	5.3	42
195	On the origin, nature and uses of Antarctic ice-sheet radio-echo layering. *Progress in Physical Geography*, **1999**, 23, 159-179	3.5	42
194	Ice flow direction change in interior West Antarctica. *Science*, **2004**, 305, 1948-51	33.3	41
193	Spectral roughness of glaciated bedrock geomorphic surfaces: Implications for glacier sliding. *Journal of Geophysical Research*, **2000**, 105, 21295-21303		40
192	Deep radiostratigraphy of the East Antarctic plateau: connecting the Dome C and Vostok ice core sites. *Journal of Glaciology*, **2016**, 62, 323-334	3.4	40
191	Late Holocene ice-flow reconfiguration in the Weddell Sea sector of West Antarctica. *Quaternary Science Reviews*, **2013**, 78, 98-107	3.9	39
190	Radio-Echo Sounding Over Polar Ice Masses. *Journal of Environmental and Engineering Geophysics*, **2007**, 12, 47-62	1	39
189	Macro-scale bed roughness of the siple coast ice streams in West Antarctica. *Earth Surface Processes and Landforms*, **2004**, 29, 1591-1596	3.7	39
188	Organized flow from the South Pole to the Filchner-Ronne ice shelf: An assessment of balance velocities in interior East Antarctica using radio echo sounding data. *Journal of Geophysical Research* , **2007**, 112,		38
187	Self-affine subglacial roughness: consequences for radar scattering and basal water discrimination in northern Greenland. *Cryosphere*, **2017**, 11, 1247-1264	5.5	37
186	Modeling the refreezing of meltwater as superimposed ice on a high Arctic glacier: A comparison of approaches. *Journal of Geophysical Research*, **2007**, 112,		37
185	Glacial–interglacial variations in central East Antarctic ice accumulation rates. *Quaternary Science Reviews*, **2003**, 22, 741-750	3.9	37
184	Topographic controls on post-Oligocene changes in ice-sheet dynamics, Prydz Bay region, East Antarctica. *Geology*, **2004**, 32, 197	5	36
183	A chronology for the Dome C deep ice-core site through radio-echo layer Correlation with the Vostok Ice Core, Antarctica. *Geophysical Research Letters*, **1998**, 25, 1019-1022	4.9	36
182	Sustained Antarctic Research: A 21st Century Imperative. *One Earth*, **2019**, 1, 95-113	8.1	35

181	Location for direct access to subglacial Lake Ellsworth: An assessment of geophysical data and modeling. *Geophysical Research Letters*, **2010**, 37, n/a-n/a	4.9	35
180	Boundary conditions of an active West Antarctic subglacial lake: implications for storage of water beneath the ice sheet. *Cryosphere*, **2014**, 8, 15-24	5.5	34
179	Regional-scale bed roughness beneath ice masses: measurement and analysis. *Computers and Geosciences*, **2004**, 30, 899-908	4.5	34
178	Anomalously high geothermal flux near the South Pole. *Scientific Reports*, **2018**, 8, 16785	4.9	34
177	Delivering 21st century Antarctic and Southern Ocean science. *Antarctic Science*, **2016**, 28, 407-423	1.7	33
176	The Ellsworth Subglacial Highlands: Inception and retreat of the West Antarctic Ice Sheet. *Bulletin of the Geological Society of America*, **2014**, 126, 3-15	3.9	33
175	Determining basal ice-sheet conditions in the Dome C region of East Antarctica using satellite radar altimetry and airborne radio-echo sounding. *Journal of Glaciology*, **1998**, 44, 1-8	3.4	32
174	Refined broad-scale sub-glacial morphology of Aurora Subglacial Basin, East Antarctica derived by an ice-dynamics-based interpolation scheme. *Cryosphere*, **2011**, 5, 551-560	5.5	31
173	An International Plan for Antarctic Subglacial Lake Exploration. *Polar Geography*, **2003**, 27, 69-83	2.2	31
172	Numerical Modeling of the Late Weichselian Svalbard-Barents Sea Ice Sheet. *Quaternary Research*, **1995**, 43, 1-13	1.9	31
171	Bedmap2: improved ice bed, surface and thickness datasets for Antarctica		31
170	Basal roughness of the Institute and M□ller Ice Streams, West Antarctica: Process determination and landscape interpretation. *Geomorphology*, **2014**, 214, 139-147	4.3	30
169	Characterization of subglacial landscapes by a two-parameter roughness index. *Journal of Glaciology*, **2010**, 56, 831-836	3.4	30
168	Past rates of accumulation in central West Antarctica. *Geophysical Research Letters*, **2004**, 31, n/a-n/a	4.9	30
167	The identification and physiographical setting of Antarctic subglacial lakes: An update based on recent discoveries. *Geophysical Monograph Series*, **2011**, 9-26	1.1	30
166	Is there 1.5-million-year-old ice near Dome´C, Antarctica?. *Cryosphere*, **2017**, 11, 2427-2437	5.5	29
165	Sensitivity of the Weddell Sea sector ice streams to sub-shelf melting and surface accumulation. *Cryosphere*, **2014**, 8, 2119-2134	5.5	29
164	Time-dependence of the spatial pattern of accumulation rate in East Antarctica deduced from isochronic radar layers using a 3-D numerical ice flow model. *Journal of Geophysical Research*, **2011**, 116,		29

163	Reconstructing glacier-based climates of LGM Europe and Russia – Part 2: A dataset of LGM precipitation/temperature relations derived from degree-day modelling of palaeo glaciers. *Climate of the Past*, **2008**, 4, 249-263	3.9	29
162	Evidence for a large surface ablation zone in central East Antarctica during the last Ice Age. *Quaternary Research*, **2003**, 59, 114-121	1.9	29
161	Ice-flow structure and ice dynamic changes in the Weddell Sea sector of West Antarctica from radar-imaged internal layering. *Journal of Geophysical Research F: Earth Surface*, **2015**, 120, 655-670	3.8	28
160	Holocene stability of the Amundsen-Weddell ice divide, West Antarctica. *Geology*, **2011**, 39, 935-938	5	28
159	Spatial stability of Ice Stream D and its tributaries, West Antarctica, revealed by radio-echo sounding and interferometry. *Annals of Glaciology*, **2003**, 37, 377-382	2.5	28
158	Airborne radar evidence for tributary flow switching in Institute Ice Stream, West Antarctica: Implications for ice sheet configuration and dynamics. *Journal of Geophysical Research F: Earth Surface*, **2015**, 120, 1611-1625	3.8	27
157	Ice-sheet radar layering and the development of preferred crystal orientation fabrics between Lake Vostok and Ridge B, central East Antarctica. *Earth and Planetary Science Letters*, **2000**, 179, 227-235	5.3	27
156	Recent advances in understanding Antarctic climate evolution. *Antarctic Science*, **2008**, 20, 313-325	1.7	26
155	Salinity impact on water flow and lake ice in Lake Vostok, Antarctica. *Geophysical Research Letters*, **2003**, 30,	4.9	26
154	The Eurasian Arctic During the Last Ice Age. *American Scientist*, **2002**, 90, 32	2.7	26
153	Subglacial controls on the flow of Institute Ice Stream, West Antarctica. *Annals of Glaciology*, **2016**, 57, 19-24	2.5	26
152	A constraint upon the basal water distribution and thermal state of the Greenland Ice Sheet from radar bed echoes. *Cryosphere*, **2018**, 12, 2831-2854	5.5	26
151	Spatio-temporal variability of processes across Antarctic ice-bed-ocean interfaces. *Nature Communications*, **2018**, 9, 2289	17.4	25
150	Radar-derived bed roughness characterization of Institute and Möller ice streams, West Antarctica, and comparison with Siple Coast ice streams. *Geophysical Research Letters*, **2007**, 34,	4.9	24
149	Antarctic subglacial topography and ice-sheet evolution. *Earth Surface Processes and Landforms*, **2008**, 33, 646-660	3.7	24
148	Basal topography and ice flow in the Bailey/Slessor region of East Antarctica. *Journal of Geophysical Research*, **2003**, 108, n/a-n/a		24
147	Five decades of radioglaciology. *Annals of Glaciology*, **2020**, 61, 1-13	2.5	24
146	The tectonic development and erosion of the Knox Subglacial Sedimentary Basin, East Antarctica. *Geophysical Research Letters*, **2016**, 43, 10,728	4.9	23

145	Numerical modelling of ice-sheet dynamics across the Vostok subglacial lake, central East Antarctica. *Journal of Glaciology*, **2000**, 46, 197-205	3.4	23
144	Antarctic subglacial groundwater: a concept paper on its measurement and potential influence on ice flow. *Geological Society Special Publication*, **2018**, 461, 197-213	1.7	23
143	An extensive subglacial lake and canyon system in Princess Elizabeth Land, East Antarctica. *Geology*, **2016**, 44, 87-90	5	21
142	A temperate former West Antarctic ice sheet suggested by an extensive zone of subglacial meltwater channels. *Geology*, **2014**, 42, 971-974	5	21
141	Internal ice-sheet radar layer profiles and their relation to reflection mechanisms between Dome C and the Transantarctic Mountains. *Journal of Glaciology*, **2001**, 47, 205-212	3.4	21
140	Switch-off of a major enhanced ice flow unit in East Antarctica. *Geophysical Research Letters*, **2006**, 33,	4.9	20
139	Modelling the impact of superimposed ice on the mass balance of an Arctic glacier under scenarios of future climate change. *Annals of Glaciology*, **2005**, 42, 277-283	2.5	20
138	Ocean forced variability of Totten Glacier mass loss. *Geological Society Special Publication*, **2018**, 461, 175-186	1.7	20
137	Distribution of subglacial sediments across the Wilkes Subglacial Basin, East Antarctica. *Journal of Geophysical Research F: Earth Surface*, **2016**, 121, 790-813	3.8	19
136	Technologies for retrieving sediment cores in Antarctic subglacial settings. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2016**, 374,	3	19
135	The englacial stratigraphy of Wilkes Land, East Antarctica, as revealed by internal radio-echo sounding layering, and its relationship with balance velocities. *Annals of Glaciology*, **2003**, 36, 189-196	2.5	19
134	Vostok subglacial lake: A review of geophysical data regarding its discovery and topographic setting. *Geophysical Monograph Series*, **2011**, 45-60	1.1	19
133	Antarctic subglacial lake exploration: first results and future plans. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2016**, 374,	3	18
132	Subglacial hydrological connectivity within the Byrd Glacier catchment, East Antarctica. *Journal of Glaciology*, **2014**, 60, 345-352	3.4	18
131	Quantifying the Mass Balance of Ice Caps on Severnaya Zemlya, Russian High Arctic. I: Climate and Mass Balance of the Vavilov Ice Cap. *Arctic, Antarctic, and Alpine Research*, **2006**, 38, 1-12	1.8	18
130	The role of ice thickness and bed properties on the dynamics of the enhanced-flow tributaries of Bailey Ice Stream and Slessor Glacier, East Antarctica. *Annals of Glaciology*, **2004**, 39, 366-372	2.5	18
129	Internal radio-echo layering at Vostok station, Antarctica, as an independent stratigraphie control on the ice-core record. *Annals of Glaciology*, **1998**, 27, 360-364	2.5	18
128	An ice-sheet-wide framework for englacial attenuation from ice-penetrating radar data. *Cryosphere*, **2016**, 10, 1547-1570	5.5	18

127	Twenty-first century sea-level rise could exceed IPCC projections for strong-warming futures. *One Earth*, **2020**, 3, 691-703	8.1	17
126	Land-ice elevation changes from photon-counting swath altimetry: first applications over the Antarctic ice sheet. *Journal of Glaciology*, **2015**, 61, 17-28	3.4	17
125	Accidents and opportunities: a history of the radio echo-sounding of Antarctica, 1958–79. *British Journal for the History of Science*, **2008**, 41, 417-444	0.2	17
124	Exploring subglacial Antarctic lake environments. *Eos*, **2005**, 86, 193	1.5	17
123	Science, geopolitics and the governance of Antarctica. *Nature Geoscience*, **2008**, 1, 143-145	18.3	16
122	On thick ice: scientific internationalism and Antarctic affairs, 1957–1980. *History and Technology*, **2008**, 24, 351-376	0.4	16
121	Reconstructing ice-sheet accumulation rates at ridge B, East Antarctica. *Annals of Glaciology*, **2004**, 39, 326-330	2.5	16
120	Incorporation of particulates into accreted ice above subglacial Vostok lake, Antarctica. *Annals of Glaciology*, **2005**, 40, 145-150	2.5	16
119	A new bed elevation model for the Weddell Sea sector of the West Antarctic Ice Sheet. *Earth System Science Data*, **2018**, 10, 711-725	10.5	16
118	Bed topography of Princess Elizabeth Land in East Antarctica. *Earth System Science Data*, **2020**, 12, 2765-2774	10.5	16
117	Ancient pre-glacial erosion surfaces preserved beneath the West Antarctic Ice Sheet. *Earth Surface Dynamics*, **2015**, 3, 139-152	3.8	15
116	Radar-Detected Englacial Debris in the West Antarctic Ice Sheet. *Geophysical Research Letters*, **2019**, 46, 10454-10462	4.9	14
115	Forests and Decarbonization – Roles of Natural and Planted Forests. *Frontiers in Forests and Global Change*, **2020**, 3,	3.7	14
114	The IGY and the ice sheet: surveying Antarctica. *Journal of Historical Geography*, **2008**, 34, 574-595	0.7	14
113	Modelling ice-sheet sensitivity to late weichselian environments in the svalbard-barents sea region. *Journal of Quaternary Science*, **1995**, 10, 33-43	2.3	14
112	Paleofluvial landscape inheritance for Jakobshavn Isbræ Catchment, Greenland. *Geophysical Research Letters*, **2016**, 43, 6350-6357	4.9	14
111	Multidecadal observations of the Antarctic ice sheet from restored analog radar records. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 18867-18873	11.5	14
110	Generating synthetic fjord bathymetry for coastal Greenland. *Cryosphere*, **2017**, 11, 363-380	5.5	13

109	Optimal site selection for a high-resolution ice core record in East Antarctica. *Climate of the Past*, **2016**, 12, 595-610	3.9	13
108	Clean subglacial access: prospects for future deep hot-water drilling. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2016**, 374,	3	13
107	Subglacial roughness of the Greenland Ice Sheet: relationship with contemporary ice velocity and geology. *Cryosphere*, **2019**, 13, 3093-3115	5.5	13
106	Hard rock landforms generate 130 km ice shelf channels through water focusing in basal corrugations. *Nature Communications*, **2018**, 9, 4576	17.4	13
105	Evidence for the long-term sedimentary environment in an Antarctic subglacial lake. *Earth and Planetary Science Letters*, **2018**, 504, 139-151	5.3	13
104	Data in Antarctic Science and Politics. *Social Studies of Science*, **2008**, 38, 571-604	2.4	12
103	Geophysical investigations of ice-sheet internal layering and deformation in the Dome C region of central East Antarctica. *Journal of Glaciology*, **2000**, 46, 161-166	3.4	12
102	A high-resolution synthetic bed elevation grid of the Antarctic continent. *Earth System Science Data* , **2017**, 9, 267-279	10.5	12
101	Major Ice Sheet Change in the Weddell Sea Sector of West Antarctica Over the Last 5,000 Years. *Reviews of Geophysics*, **2019**, 57, 1197-1223	23.1	11
100	Quantifying the Mass Balance of Ice Caps on Severnaya Zemlya, Russian High Arctic. III: Sensitivity of Ice Caps in Severnaya Zemlya to Future Climate Change. *Arctic, Antarctic, and Alpine Research*, **2006**, 38, 21-33	1.8	11
99	Calculating basal temperatures in ice sheets: an Excel spreadsheet method. *Earth Surface Processes and Landforms*, **2002**, 27, 673-680	3.7	11
98	A stratigraphic link across 1100 km of the Antarctic Ice sheet between the Vostok ice-core site and Titan Dome (near South Pole). *Geophysical Research Letters*, **2000**, 27, 2133-2136	4.9	11
97	Exploration of subsurface Antarctica: uncovering past changes and modern processes. *Geological Society Special Publication*, **2018**, 461, 1-6	1.7	11
96	Ice-flow reorganization within the East Antarctic Ice Sheet deep interior. *Geological Society Special Publication*, **2018**, 461, 35-47	1.7	11
95	Summit of the East Antarctic Ice Sheet underlain by thick ice-crystal fabric layers linked to glacial–interglacial environmental change. *Geological Society Special Publication*, **2018**, 461, 131-143	1.7	11
94	Reflections on the anomalous ANITA events: the Antarctic subsurface as a possible explanation. *Annals of Glaciology*, **2020**, 61, 92-98	2.5	10
93	Insights into geological evolution of Princess Elizabeth Land, East Antarctica-clues for continental suturing and breakup since Rodinian time. *Gondwana Research*, **2020**, 84, 260-283	5.1	10
92	Antarctic Earth Sciences: Preface. *Earth and Environmental Science Transactions of the Royal Society of Edinburgh*, **2013**, 104, 1-1	0.9	10

91	Reviewing the origin of subglacial Lake Vostok and its sensitivity to ice sheet changes. *Progress in Physical Geography*, **2005**, 29, 156-170	3.5	10
90	Modelling the influence of glacial isostasy on Late Weichselian ice-sheet growth in the Barents Sea. *Journal of Quaternary Science*, **2000**, 15, 475-486	2.3	10
89	Spatial variations in heat at the base of the Antarctic ice sheet from analysis of the thermal regime above subglacial lakes. *Journal of Glaciology*, **1996**, 42, 501-509	3.4	10
88	Ellsworth Subglacial Lake, West Antarctica: A review of its history and recent field campaigns. *Geophysical Monograph Series*, **2011**, 221-233	1.1	10
87	Microbiology: lessons from a first attempt at Lake Ellsworth. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2016**, 374,	3	10
86	Englacial Architecture and Age-Depth Constraints Across the West Antarctic Ice Sheet. *Geophysical Research Letters*, **2020**, 47, e2019GL086663	4.9	9
85	Position and variability of complex structures in the central East Antarctic Ice Sheet. *Geological Society Special Publication*, **2018**, 461, 113-129	1.7	9
84	Hydrological Connections between Antarctic Subglacial Lakes, the Flow of Water beneath the East Antarctic Ice Sheet and Implications for Sedimentary Processes **2009**, 3-10		9
83	Reconstructing glacier-based climates of LGM Europe and Russia Part 1: Numerical modelling and validation methods. *Climate of the Past*, **2008**, 4, 235-248	3.9	9
82	. *Geophysical Monograph Series*, **2011**,	1.1	9
81	RESEARCH FOCUS: A wide variety of unique environments beneath the Antarctic ice sheet. *Geology*, **2016**, 44, 399-400	5	9
80	Spatial Variability of Antarctic Surface Snow Bacterial Communities. *Frontiers in Microbiology*, **2019**, 10, 461	5.7	8
79	A 60-year international history of Antarctic subglacial lake exploration. *Geological Society Special Publication*, **2018**, 461, 7-21	1.7	8
78	Reconstructing glacier-based climates of LGM Europe and Russia Part 3: Comparison with previous climate reconstructions. *Climate of the Past*, **2008**, 4, 265-280	3.9	8
77	The role of lateral and vertical shear in tributary flow toward a West Antarctic ice stream. *Annals of Glaciology*, **2003**, 36, 244-250	2.5	8
76	Comment on A numerical model for an alternative origin of Lake Vostok and its exobiological implications for Mars by N. S. Duxbury, I. A. Zotikov, K. H. Nealson, V. E. Romanovsky, and F. D. Carsey. *Journal of Geophysical Research*, **2004**, 109, n/a-n/a		8
75	Which Are the Most Suitable Antarctic Subglacial Lakes for Exploration?. *Polar Geography*, **2002**, 26, 134-146	1.1	8
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