Alan G Jones

List of Publications by Year
in descending order

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212 papers	11,796 citations	28190 55 h-index	34900 98 g-index
223 all docs	223 docs citations	223 times ranked	4075 citing authors

#	Article	IF	Citations
1	Partially Molten Middle Crust Beneath Southern Tibet: Synthesis of Project INDEPTH Results. Science, 1996, 274, 1684-1688.	6.0	1,063
2	Crustal rheology of the Himalaya and Southern Tibet inferred from magnetotelluric data. Nature, 2005, 438, 78-81.	13.7	422
3	Detection of Widespread Fluids in the Tibetan Crust by Magnetotelluric Studies. Science, 2001, 292, 716-719.	6.0	405
4	The elusive lithosphereâ€“asthenosphere boundary (LAB) beneath cratons. Lithos, 2009, 109, 1-22.	0.6	365
5	Multisite, multifrequency tensor decomposition of magnetotelluric data. Geophysics, 2001, 66, 158-173.	1.4	363
6	The Magnetotelluric Method. , 2012, , .		354
7	Static shift of magnetotelluric data and its removal in a sedimentary basin environment. Geophysics, 1988, 53, 967-978.	1.4	310
8	Partial melt or aqueous fluid in the mid-crust of Southern Tibet? Constraints from INDEPTH magnetotelluric data. Geophysical Journal International, 2003, 153, 289-304.	1.0	222
9	A comparison of techniques for magnetotelluric response function estimation. Journal of Geophysical Research, 1989, 94, 14201-14213.	3.3	201
10	Imaging the continental upper mantle using electromagnetic methods. Lithos, 1999, 48, 57-80.	0.6	193
11	Electrically Conductive Crust in Southern Tibet from INDEPTH Magnetotelluric Surveying. Science, 1996, 274, 1694-1696.	6.0	186
12	Crustal structure and rheology of the Longmenshan and Wenchuan Mw 7.9 earthquake epicentral area from magnetotelluric data. Geology, 2012, 40, 1139-1142.	2.0	170
13	Resistivity cross section through the Juan de Fuca Subduction System and its tectonic implications. Journal of Geophysical Research, 1989, 94, 14127-14144.	3.3	166
14	Conductivity discontinuities in the upper mantle beneath a stable craton. Geophysical Research Letters, 1993, 20, 2941-2944.	1.5	162
15	Crustal and upper mantle structure of northern Tibet imaged with magnetotelluric data. Journal of Geophysical Research, 2004, 109, .	3.3	144
16	MT and reflection: an essential combination. Geophysical Journal International, 1987, 89, 7-18.	1.0	140
17	The problem of current channelling: A critical review. Geophysical Surveys, 1983, 6, 79-122.	0.3	139
18	TOPO-EUROPE: The geoscience of coupled deep Earth-surface processes. Global and Planetary Change, 2007, 58, 1-118.	1.6	137

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19	The electrical structure of the Slave craton. Lithos, 2003, 71, 505-527.	0.6	133
20	Electric lithosphere of the Slave craton. Geology, 2001, 29, 423.	2.0	124
21	3â€Ð multiobservable probabilistic inversion for the compositional and thermal structure of the lithosphere and upper mantle. I: a priori petrological information and geophysical observables. Journal of Geophysical Research: Solid Earth, 2013, 118, 2586-2617.	1.4	121
22	Two-dimensional interpretation of three-dimensional magnetotelluric data: an example of limitations and resolution. Geophysical Journal International, 2002, 150, 127-139.	1.0	118
23	Lithosphere development in the Slave craton: a linked crustal and mantle perspective. Lithos, 2003, 71, 575-589.	0.6	115
24	Precise temperature estimation in the Tibetan crust from seismic detection of the Î±-Î² quartz transition. Geology, 2004, 32, 601.	2.0	109
25	Penetration of crustal melt beyond the Kunlun Fault into northern Tibet. Nature Geoscience, 2012, 5, 330-335.	5.4	94
26	Strike-angle determination from the magnetotelluric impedance tensor in the presence of noise and local distortion: rotate at your peril!. Geophysical Journal International, 1993, 113, 524-534.	1.0	92
27	How the crust meets the mantle: Lithoprobe perspectives on the MohoroviÄ‡ discontinuity and crustâ€“mantle transitionThis article is one of a series of papers published in this Special Issue on the theme Lithoprobe â€” parameters, processes, and the evolution of a continent.. Canadian Journal of Earth Sciences, 2010, 47, 315-351.	0.6	91
28	Velocityâ€“conductivity relationships for mantle mineral assemblages in Archean cratonic lithosphere based on a review of laboratory data and Hashinâ€“Shtrikman extremal bounds. Lithos, 2009, 109, 131-143.	0.6	89
29	Lithospheric structure, evolution and diamond prospectivity of the Rehoboth Terrane and western Kaapvaal Craton, southern Africa: Constraints from broadband magnetotellurics. Lithos, 2009, 112, 93-105.	0.6	87
30	Atmospheric sources for audio-magnetotelluric (AMT) sounding. Geophysics, 2002, 67, 448-458.	1.4	85
31	Electrical lithosphere beneath the Kaapvaal craton, southern Africa. Journal of Geophysical Research, 2011, 116, .	3.3	85
32	Europe from the bottom up: A statistical examination of the central and northern European lithosphereâ€“asthenosphere boundary from comparing seismological and electromagnetic observations. Lithos, 2010, 120, 14-29.	0.6	84
33	On the electrical crust--mantle structure in Fennoscandia: no Moho, and the asthenosphere revealed?. Geophysical Journal International, 1982, 68, 371-388.	1.0	83
34	Electromagnetic images of modern and ancient subduction zones. Tectonophysics, 1993, 219, 29-45.	0.9	83
35	Magnetotelluric 3-D inversionâ€”a review of two successful workshops on forward and inversion code testing and comparison. Geophysical Journal International, 2013, 193, 1216-1238.	1.0	79
36	3â€Ð multiâ€observable probabilistic inversion for the compositional and thermal structure of the lithosphere and upper mantle. II: General methodology and resolution analysis. Journal of Geophysical Research: Solid Earth, 2013, 118, 1650-1676.	1.4	78

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37	Electromagnetic images of the Trans-Hudson orogen: the North American Central Plains anomaly revealed. Canadian Journal of Earth Sciences, 2005, 42, 457-478.	0.6	76
38	The Longest Conductivity Anomaly in the World Explained: Sulphides in Fold Hinges Causing Very High Electrical Anisotropy. Journal of Geomagnetism and Geoelectricity, 1997, 49, 1619-1629.	0.8	73
39	A quantitative methodology to extract regional magnetotelluric impedances and determine the dimension of the conductivity structure. Geophysical Journal International, 1993, 115, 1095-1118.	1.0	72
40	The electric Moho. Nature, 2001, 409, 331-333.	13.7	72
41	The North American Central Plains conductivity anomaly and its correlation with gravity, magnetic, seismic, and heat flow data in Saskatchewan, Canada. Physics of the Earth and Planetary Interiors, 1990, 60, 169-194.	0.7	71
42	Joint inversion of receiver functions, surface wave dispersion, and magnetotelluric data. Journal of Geophysical Research, 2010, 115, .	3.3	70
43	Magnetotelluric observations across the Juan de Fuca Subduction System in the EMSLAB Project. Journal of Geophysical Research, 1989, 94, 14111-14125.	3.3	68
44	Robust processing of magnetotelluric data in the AMT dead band using the continuous wavelet transform. Geophysics, 2008, 73, F223-F234.	1.4	67
45	3â€D multiobservable probabilistic inversion for the compositional and thermal structure of the lithosphere and upper mantle: III. Thermochemical tomography in the Westernâ€Central U.S.. Journal of Geophysical Research: Solid Earth, 2016, 121, 7337-7370.	1.4	67
46	Electrical conductivity of continental lithospheric mantle from integrated geophysical and petrological modeling: Application to the Kaapvaal Craton and Rehoboth Terrane, southern Africa. Journal of Geophysical Research, 2011, 116, .	3.3	66
47	Threeâ€dimensional electrical structure of the crust and upper mantle in Ordos Block and adjacent area: Evidence of regional lithospheric modification. Geochemistry, Geophysics, Geosystems, 2014, 15, 2414-2425.	1.0	66
48	Magnetotelluric transfer function estimation improvement by a coherenceâ€based rejection technique. , 1984, , .		65
49	Area selection for diamonds using magnetotellurics: Examples from southern Africa. Lithos, 2009, 112, 83-92.	0.6	65
50	Lithospheric structures and Precambrian terrane boundaries in northeastern Botswana revealed through magnetotelluric profiling as part of the Southern African Magnetotelluric Experiment. Journal of Geophysical Research, 2011, 116, .	3.3	64
51	A multi-station magnetotelluric study in southern Scotland -- II. Monte-Carlo inversion of the data and its geophysical and tectonic implications. Geophysical Journal International, 1979, 56, 351-368.	1.0	63
52	Water in cratonic lithosphere: Calibrating laboratoryâ€determined models of electrical conductivity of mantle minerals using geophysical and petrological observations. Geochemistry, Geophysics, Geosystems, 2012, 13, .	1.0	63
53	The COPROD2 Dataset: Tectonic Setting, Recorded MT Data, and Comparison of Models.. Journal of Geomagnetism and Geoelectricity, 1993, 45, 933-955.	0.8	60
54	Coincident conductive and reflective middle and lower crust in southern British Columbia. Geophysical Journal International, 1995, 120, 111-131.	1.0	59

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55	Magnetotelluric and teleseismic study across the Snowbird Tectonic Zone, Canadian Shield: A Neoarchean mantle suture?. Geophysical Research Letters, 2002, 29, 10-1-10-4.	1.5	59
56	Compositional multivariate statistical analysis of thermal groundwater provenance: A hydrogeochemical case study from Ireland. Applied Geochemistry, 2016, 75, 171-188.	1.4	59
57	Magnetotelluric observations along the lithoprobe southeastern Canadian Cordilleran Transect. Geophysical Research Letters, 1988, 15, 677-680.	1.5	56
58	Electromagnetic images of a volcanic zone. Physics of the Earth and Planetary Interiors, 1993, 81, 289-314.	0.7	56
59	North American Central Plains conductivity anomaly goes east. Geophysical Research Letters, 1986, 13, 685-688.	1.5	55
60	Decomposition and Modelling of the BC87 Dataset.. Journal of Geomagnetism and Geoelectricity, 1993, 45, 1127-1150.	0.8	55
61	Electrical anisotropy of South African lithosphere compared with seismic anisotropy from shear-wave splitting analyses. Physics of the Earth and Planetary Interiors, 2006, 158, 226-239.	0.7	55
62	Lithospheric geometry of the Wopmay orogen from a Slave craton to Bear Province magnetotelluric transect. Journal of Geophysical Research, 2009, 114, .	3.3	55
63	Joint inversion of teleseismic receiver functions and magnetotelluric data using a genetic algorithm: Are seismic velocities and electrical conductivities compatible?. Geophysical Research Letters, 2007, 34, .	1.5	54
64	Structure of the Central Altyn Tagh Fault revealed by magnetotelluric data: New insights into the structure of the northern margin of the Indiaâ€“Asia collision. Earth and Planetary Science Letters, 2015, 415, 67-79.	1.8	54
65	Electromagnetic interrogation of the anisotropic Earth: Looking into the Earth with polarized spectacles. Physics of the Earth and Planetary Interiors, 2006, 158, 281-291.	0.7	53
66	Lithospheric structure in the Baikalâ€“central Mongolia region from integrated geophysicalâ€petrological inversion of surfaceâ€wave data and topographic elevation. Geochemistry, Geophysics, Geosystems, 2012, 13, .	1.0	53
67	Extensional extrusion: Insights into south-eastward expansion of Tibetan Plateau from magnetotelluric array data. Earth and Planetary Science Letters, 2016, 454, 78-85.	1.8	52
68	Electromagnetic constraints on strike-slip fault geometryâ€”The Fraser River fault system. Geology, 1992, 20, 561.	2.0	51
69	Upper mantle temperature determined from combining mineral composition, electrical conductivity laboratory studies and magnetotelluric field observations: Application to the intermontane belt, Northern Canadian Cordillera. Earth and Planetary Science Letters, 2005, 236, 258-268.	1.8	51
70	Distortion of magnetotelluric data: its identification and removal. , 2012, , 219-302.		51
71	A multi-station magnetotelluric study in southern Scotland - I. Fieldwork, data analysis and results. Geophysical Journal International, 1979, 56, 329-349.	1.0	49
72	Trans-Hudson orogen and Williston basin in Montana and North Dakota: New COCORP deep-profiling results. Geology, 1993, 21, 447.	2.0	49

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73	Lithospheric structure of an Archean craton and adjacent mobile belt revealed from 2â€Ð and 3â€Ð inversion of magnetotelluric data: Example from southern Congo craton in northern Namibia. Journal of Geophysical Research: Solid Earth, 2013, 118, 4378-4397.	1.4	49
74	Geomagnetically induced currents in the Irish power network during geomagnetic storms. Space Weather, 2016, 14, 1136-1154.	1.3	48
75	North American Central Plains conductivity anomaly within the Trans-Hudson orogen in northern Saskatchewan, Canada. Geology, 1993, 21, 1027.	2.0	47
76	Lithospheric anisotropy structure inferred from collocated teleseismic and magnetotelluric observations: Great Slave Lake shear zone, northern Canada. Geophysical Research Letters, 2004, 31, .	1.5	46
77	Observations of the electrical asthenosphere beneath Scandinavia. Tectonophysics, 1982, 90, 37-55.	0.9	44
78	Lithospheric structure of the Yukon, northern Canadian Cordillera, obtained from magnetotelluric data. Journal of Geophysical Research, 2004, 109, .	3.3	43
79	Parkinson's pointers' potential perfidy!. Geophysical Journal International, 1986, 87, 1215-1224.	1.0	42
80	The electrical resistivity structure of Archean to Tertiary lithosphere along 3200 km of SNORCLE profiles, northwestern Canada. Canadian Journal of Earth Sciences, 2005, 42, 1257-1275.	0.6	42
81	Crustal structure of the Indiaâ€“Asia collision zone, southern Tibet, from INDEPTH MT investigations. Physics of the Earth and Planetary Interiors, 2005, 150, 227-237.	0.7	41
82	Structure of the crust in the vicinity of the Banggong-Nujiang suture in central Tibet from INDEPTH magnetotelluric data. Journal of Geophysical Research, 2005, 110, .	3.3	41
83	Imaging Precambrian lithospheric structure in Zambia using electromagnetic methods. Gondwana Research, 2018, 54, 38-49.	3.0	41
84	Waves of the future: Superior inferences from collocated seismic and electromagnetic experiments. Tectonophysics, 1998, 286, 273-298.	0.9	40
85	Integrated geophysical-petrological modeling of lithosphere-asthenosphere boundary in central Tibet using electromagnetic and seismic data. Geochemistry, Geophysics, Geosystems, 2014, 15, 3965-3988.	1.0	40
86	Constraints on the evolution of crustal flow beneath <scp>N</scp>orthern <scp>T</scp>ibet. Geochemistry, Geophysics, Geosystems, 2015, 16, 4237-4260.	1.0	40
87	Electromagnetic images of regional structure in the southern Canadian Cordillera. Geophysical Research Letters, 1992, 19, 2373-2376.	1.5	39
88	Tectonic model of the Limpopo belt: Constraints from magnetotelluric data. Precambrian Research, 2013, 226, 143-156.	1.2	39
89	A simple method for deriving the uniform field MT responses in auroral zones. Earth, Planets and Space, 2002, 54, 443-450.	0.9	38
90	Geophysical transect across a Paleoproterozoic continentÂ–continent collision zone: The Trans-Hudson Orogen. Canadian Journal of Earth Sciences, 2005, 42, 385-402.	0.6	38

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91	Joint inversion of long-period magnetotelluric data and surface-wave dispersion curves for anisotropic structure: Application to data from Central Germany. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	38
92	Electric and Magnetic Field Galvanic Distortion Decomposition of BC87 Data.. Journal of Geomagnetism and Geoelectricity, 1997, 49, 767-789.	0.8	37
93	Imaging and observing the electrical Moho. Tectonophysics, 2013, 609, 423-436.	0.9	37
94	The inability of magnetotelluric off-diagonal impedance tensor elements to sense oblique conductors in three-dimensional inversion. Geophysical Journal International, 2014, 196, 1351-1364.	1.0	37
95	Tectonic evolution of the Superior Boundary Zone from coincident seismic reflection and magnetotelluric profiles. Tectonics, 1999, 18, 430-451.	1.3	35
96	Magnetotelluric response and geoelectric structure of the Great Slave Lake shear zone. Earth and Planetary Science Letters, 2002, 196, 35-50.	1.8	35
97	Conductivity structure and rheological property of lithosphere in Southern Tibet inferred from super-broadband magnetotelluric sounding. Science China Earth Sciences, 2010, 53, 189-202.	2.3	35
98	Distortion decomposition of the magnetotelluric impedance tensors from a one-dimensional anisotropic Earth. Geophysical Journal International, 2012, 189, 268-284.	1.0	35
99	Okak Bay AMT dataâ€set case study: Lessons in dimensionality and scale. Geophysics, 2003, 68, 70-91.	1.4	34
100	Improving Bahr's invariant parameters using the WAL approach. Geophysical Journal International, 2005, 163, 38-41.	1.0	34
101	The electrical structure of the lithosphere and asthenosphere beneath the Fennoscandian shield.. Journal of Geomagnetism and Geoelectricity, 1983, 35, 811-827.	0.8	34
102	Crustal and lithospheric scale structures of the Precambrian Superiorâ€“Grenville margin. Tectonophysics, 2014, 614, 146-169.	0.9	33
103	Area selection for diamond exploration using deep-probing electromagnetic surveying. Lithos, 2004, 77, 765-782.	0.6	32
104	Three-dimensional galvanic distortion of three-dimensional regional conductivity structures: Comment on â€œThree-dimensional joint inversion for magnetotelluric resistivity and static shift distributions in complex mediaâ€•by Yutaka Sasaki and Max A. Meju. Journal of Geophysical Research, 2011, 116, .	3.3	32
105	Velocityâ€conductivity relations for cratonic lithosphere and their application: Example of Southern Africa. Geochemistry, Geophysics, Geosystems, 2013, 14, 806-827.	1.0	31
106	The lithosphereâ€“asthenosphere system beneath Ireland from integrated geophysicalâ€“petrological modeling II: 3D thermal and compositional structure. Lithos, 2014, 189, 49-64.	0.6	31
107	Robust Processing of Magnetotelluric Data from the Auroral Zone. Journal of Geomagnetism and Geoelectricity, 1997, 49, 1451-1468.	0.8	30
108	A new methodology for the acquisition and processing of audio-magnetotelluric (AMT) data in the AMT dead band. Geophysics, 2005, 70, G119-G126.	1.4	30

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109	Calculations of voltages for magnetotelluric modelling of a region with near-surface inhomogeneities. Physics of the Earth and Planetary Interiors, 1989, 53, 287-297.	0.7	29
110	Electromagnetic images of crustal structures in southern and central Canadian Cordillera. Canadian Journal of Earth Sciences, 1995, 32, 1541-1563.	0.6	29
111	Electromagnetic images of a strike-slip fault: The Tintina fault-Northern Canadian. Geophysical Research Letters, 2002, 29, 66-1-66-4.	1.5	28
112	Implications for the lithospheric geometry of the Iapetus suture beneath Ireland based on electrical resistivity models from deep-probing magnetotellurics. Geophysical Journal International, 2014, 198, 737-759.	1.0	28
113	Magnetotelluric investigations of the lithosphere beneath the central Rae craton, mainland Nunavut, Canada. Journal of Geophysical Research: Solid Earth, 2014, 119, 2415-2439.	1.4	28
114	Joint inversions of three types of electromagnetic data explicitly constrained by seismic observations: results from the central Okavango Delta, Botswana. Geophysical Journal International, 2015, 202, 1429-1452.	1.0	28
115	The BC87 Dataset: Tectonic Setting, Previous EM Results, and Recorded MT Data.. Journal of Geomagnetism and Geoelectricity, 1993, 45, 1089-1105.	0.8	27
116	Shaping the Surface Deformation of Central and South Tibetan Plateau: Insights From Magnetotelluric Array Data. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB019206.	1.4	27
117	The magnetotelluric response function. , 2012, , 122-164.		26
118	Magnetotelluric array data analysis from north-west Fennoscandia. Tectonophysics, 2015, 653, 1-19.	0.9	26
119	Geophysical evidence for crustal and mantle weak zones controlling intra-plate seismicity â€“ the 2017 Botswana earthquake sequence. Earth and Planetary Science Letters, 2019, 506, 175-183.	1.8	26
120	Deep electrical conductivity structures of the Appalachian Orogen in the southeastern U.S.. Geophysical Research Letters, 1996, 23, 1597-1600.	1.5	25
121	Regional electrical resistivity structure of the southern Canadian Cordillera and its physical interpretation. Journal of Geophysical Research, 2001, 106, 30755-30769.	3.3	25
122	Central Baffin electromagnetic experiment (CBEX): Mapping the North American Central Plains (NACP) conductivity anomaly in the Canadian arctic. Physics of the Earth and Planetary Interiors, 2005, 150, 107-122.	0.7	23
123	The geometry of the Iapetus Suture Zone in central Ireland deduced from a magnetotelluric study. Physics of the Earth and Planetary Interiors, 2007, 161, 134-141.	0.7	23
124	The electrical resistivity of Canadaâ€™s lithosphere and correlation with other parameters: contributions from Lithoprobe and other programmes. Canadian Journal of Earth Sciences, 2014, 51, 573-617.	0.6	23
125	Logarithmic Fourier transformation. Geophysical Journal International, 1988, 92, 171-178.	1.0	22
126	Spectral analyses of the KTB sonic and density logs using robust nonparametric methods. Journal of Geophysical Research, 1997, 102, 18391-18403.	3.3	22

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127	Northward channel flow in northern Tibet revealed from 3D magnetotelluric modelling. Physics of the Earth and Planetary Interiors, 2014, 235, 13-24.	0.7	22
128	Geoelectrical baseline model of the subsurface of the HontomÃn site (Spain) for CO2 geological storage in a deep saline aquifer: A 3D magnetotelluric characterisation. International Journal of Greenhouse Gas Control, 2014, 27, 120-138.	2.3	22
129	The lithosphereâ€“asthenosphere system beneath Ireland from integrated geophysicalâ€“petrological modeling â€" I: Observations, 1D and 2D hypothesis testing and modeling. Lithos, 2014, 189, 28-48.	0.6	22
130	Compensation of the Meyerâ€Neldel Compensation Law for H diffusion in minerals. Geochemistry, Geophysics, Geosystems, 2014, 15, 2616-2631.	1.0	22
131	Reexamination of magnetotelluric responses and electrical anisotropy of the lithospheric mantle in the Grenville Province, Canada. Journal of Geophysical Research: Solid Earth, 2015, 120, 1890-1908.	1.4	22
132	Seismic reflections and electrical conductivity: A case of Holmes's curious dog?. Geology, 1995, 23, 141.	2.0	21
133	The advantages of complementing MT profiles in 3-D environments with geomagnetic transfer function and interstation horizontal magnetic transfer function data: results from a synthetic case study. Geophysical Journal International, 2016, 207, 1818-1836.	1.0	21
134	Geoelectric structure of the Proterozoic Wopmay Orogen and adjacent terranes, Northwest Territories, Canada. Canadian Journal of Earth Sciences, 2005, 42, 955-981.	0.6	20
135	Conductivity Structure of Crust and Upper Mantle Beneath the Northern Tibetan Plateau: Results of Superâ€Wide Band Magnetotelluric Sounding. Chinese Journal of Geophysics, 2006, 49, 1098-1110.	0.2	20
136	Geochemical and geophysical constrains on the dynamic topography of the <scp>S</scp>outhern <scp>A</scp>frican <scp>P</scp>lateau. Geochemistry, Geophysics, Geosystems, 2017, 18, 3556-3575.	1.0	20
137	Electromagnetic imaging of a complex ore body: 3D forward modeling, sensitivity tests, and down-mine measurements. Geophysics, 2007, 72, F85-F95.	1.4	18
138	Artefacts of isotropic inversion applied to magnetotelluric data from an anisotropic Earth. Geophysical Journal International, 2011, 187, 677-689.	1.0	18
139	Instrumentation and field procedures. , 2012, , 421-479.		18
140	Reconciling different equations for proton conduction using the Meyerâ€Neldel compensation rule. Geochemistry, Geophysics, Geosystems, 2014, 15, 337-349.	1.0	18
141	Proton conduction and hydrogen diffusion in olivine: an attempt to reconcile laboratory and field observations and implications for the role of grain boundary diffusion in enhancing conductivity. Physics and Chemistry of Minerals, 2016, 43, 237-265.	0.3	18
142	Are impact-generated lower-crustal faults observable?. Earth and Planetary Science Letters, 1987, 85, 248-252.	1.8	17
143	Introduction to the magnetotelluric method. , 2012, , 1-18.		17
144	Understanding hydrothermal circulation patterns at a low-enthalpy thermal spring using audio-magnetotelluric data: A case study from Ireland. Journal of Applied Geophysics, 2016, 132, 1-16.	0.9	17

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145	Tectonic fabric of the subcontinental lithosphere: Evidence from seismic, magnetotelluric and mechanical anisotropy. Physics of the Earth and Planetary Interiors, 2006, 158, 85-91.	0.7	16
146	Electrical signature of modern and ancient tectonic processes in the crust of the Atlas mountains of Morocco. Physics of the Earth and Planetary Interiors, 2011, 185, 82-88.	0.7	16
147	The EyjafjallajÃ¶kull volcanic system, Iceland: insights from electromagnetic measurements. Geophysical Journal International, 2014, 199, 1187-1204.	1.0	16
148	A new methodology to estimate magnetotelluric (MT) tensor relationships: Estimation of Local transfer-functIons by Combining Interstation Transfer-functions (ELICIT). Geophysical Journal International, 2014, 198, 484-494.	1.0	16
149	Comment on â€˜Geomagnetic depth sounding by induction arrow representation: A reviewâ€™ by G. P. Gregori and L. J. Lanzerotti. Reviews of Geophysics, 1981, 19, 687-688.	9.0	15
150	Introduction to Special Section: The KTB Deep Drill Hole. Journal of Geophysical Research, 1997, 102, 18175-18177.	3.3	15
151	Geoelectric response and crustal electrical-conductivity structure of the Flin Flon Belt, Trans-Hudson Orogen, Canada. Canadian Journal of Earth Sciences, 1999, 36, 1917-1938.	0.6	15
152	New geoelectrical characterization of a continental collision zone in the Central â€“ E astern Pyrenees: Constraints from 3-D joint inversion of electromagnetic data. Tectonophysics, 2018, 742-743, 168-179.	0.9	15
153	An objective realâ€time dataâ€adaptive technique for efficient model resolution improvement in magnetotelluric studies. Geophysics, 1986, 51, 90-97.	1.4	14
154	Electromagnetic sounding and crustal electrical conductivity in the region of the Wopmay Orogen, Northwest Territories, Canada. Canadian Journal of Earth Sciences, 1989, 26, 2385-2395.	0.6	14
155	Estimation of the magnetotelluric response function. , 2012, , 165-218.		14
156	Imaging the mantle lithosphere of the Precambrian Grenville Province: large-scale electrical resistivity structures. Geophysical Journal International, 2015, 201, 1040-1061.	1.0	14
157	Internal structure of the western flank of the Cumbre Vieja volcano, La Palma, Canary Islands, from land magnetotelluric imaging. Journal of Geophysical Research, 2010, 115, .	3.3	13
158	STATISTICAL EVALUATION OF MT AND AMT METHODS APPLIED TO A BASALT-COVERED AREA IN SOUTHEASTERN ANATOLIA, TURKEY*. Geophysical Prospecting, 1984, 32, 706-724.	1.0	12
159	Electrical conductivity structure of the Purcell Anticlinorium in southeast British Columbia and northwest Montana. Canadian Journal of Earth Sciences, 1995, 32, 1564-1583.	0.6	12
160	Geoelectric structure of the northeastern Williston basin and underlying Precambrian lithosphereEarth Science Sector (ESS) Contribution 20080509.. Canadian Journal of Earth Sciences, 2009, 46, 441-464.	0.6	12
161	The inverse problem. , 2012, , 347-420.		12
162	Structure of the Lithosphere Beneath the Barotse Basin, Western Zambia, From Magnetotelluric Data. Tectonics, 2019, 38, 666-686.	1.3	12

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163	Magnetotelluric Experiment probes deep physical state of southeastern United States. Eos, 1996, 77, 329.	0.1	11
164	Magnetotelluric inversion based on mutual information. Geophysical Journal International, 2014, 199, 242-252.	1.0	11
165	Crustal structure of southern Burkina Faso inferred from magnetotelluric, gravity and magnetic data. Precambrian Research, 2017, 300, 261-272.	1.2	11
166	Introduction to MT-DIW2 Special Issue.. Journal of Geomagnetism and Geoelectricity, 1997, 49, 727-737.	0.8	11
167	Orthogonality in CSAMT and MT measurements. Geophysics, 1993, 58, 924-934.	1.4	10
168	A layer stripping approach for monitoring resistivity variations using surface magnetotelluric responses. Journal of Applied Geophysics, 2016, 132, 100-115.	0.9	10
169	Correcting for static shift of magnetotelluric data with airborne electromagnetic measurements: a case study from Rathlin Basin, Northern Ireland. Solid Earth, 2017, 8, 637-660.	1.2	10
170	Electrical resistivity structure of the Flathead Basin in southeastern British Columbia, Canada. Canadian Journal of Earth Sciences, 1990, 27, 1061-1073.	0.6	9
171	Features of faults in the central and northern Tibetan plateau based on results of INDEPTH (III)-MT. Frontiers of Earth Science, 2007, 1, 121-128.	0.5	8
172	Imaging the continental upper mantle using electromagnetic methods. Developments in Geotectonics, 1999, 24, 57-80.	0.3	7
173	Chapter 13 Decomposition of three-dimensional magnetotelluric data. Methods in Geochemistry and Geophysics, 2002, , 235-250.	0.2	7
174	The Slaveâ€“Kaapvaal workshop: a tale of two cratons. Lithos, 2003, 71, ix-xi.	0.6	7
175	Electromagnetic image of the Trans-Hudson orogen Â— THO94 transect. Canadian Journal of Earth Sciences, 2005, 42, 479-493.	0.6	7
176	An audio-magnetotelluric investigation of the Otjiwarongo and Katima Mulilo regions, Namibia. Geophysics, 2014, 79, B151-B171.	1.4	7
177	A passive natural-source twin-purpose borehole technique: Vertical gradient magnetometry (VGM). Journal of Geomagnetism and Geoelectricity, 1983, 35, 473-490.	0.8	7
178	Source field effects in the auroral zone: Evidence from the Slave craton (NW Canada). Physics of the Earth and Planetary Interiors, 2007, 164, 21-35.	0.7	6
179	3B. Description of the magnetospheric/ionospheric sources. , 2012, , 96-121.		6
180	A novel anisotropic inversion approach for magnetotelluric data from subsurfaces with orthogonal geoelectric strike directions. Geophysical Journal International, 2013, 195, 1576-1593.	1.0	6

#	Article	IF	Citations
181	Subsurface Characterization of the Pennsylvanian Clare Basin, Western Ireland, by Means of Joint Interpretation of Electromagnetic Geophysical Data and Wellâ€Log Data. Journal of Geophysical Research: Solid Earth, 2019, 124, 6200-6222.	1.4	6
182	Tectonics of the northern Canadian Cordillera imaged using modern magnetotelluric analysis. Tectonophysics, 2019, 765, 102-128.	0.9	6
183	Characterising thermal water circulation in fractured bedrock using a multidisciplinary approach: a case study of St. Gormanâ€™s Well, Ireland. Hydrogeology Journal, 2021, 29, 2595-2611.	0.9	6
184	Electrical-resistivity imaging of the central Trans-Hudson orogen. Canadian Journal of Earth Sciences, 2005, 42, 495-515.	0.6	5
185	Structures and geometries of the Tajo Basin crust, Spain: Results of a magnetotelluric investigation compared to seismic and thermal models. Tectonics, 2014, 33, 1710-1737.	1.3	5
186	Robust magnetotelluric inversion. Geophysical Journal International, 2014, 196, 1365-1374.	1.0	5
187	Quantitative geothermal interpretation of electrical resistivity models of the Rathlin Basin, Northern Ireland. Geothermics, 2019, 77, 175-187.	1.5	5
188	A Reduced Order Approach for Probabilistic Inversions of 3D Magnetotelluric Data II: Joint Inversion of MT and Surfaceâ€Wave Data. Journal of Geophysical Research: Solid Earth, 2021, 126, .	1.4	5
189	Audioâ€magnetotellurics (AMT) for steeplyâ€dipping mineral targets: importance of multiâ€component measurements at each site. , 2002, , .		4
190	Comment on â€œDeep resistivity cross section of the intraplate Atlas Mountains (NW Africa): New evidence of anomalous mantle and related Quaternary volcanismâ€• Tectonics, 2012, 31, .	1.3	4
191	Case histories and geological applications. , 2012, , 480-544.		4
192	Multiâ€site, multiâ€frequency tensor decomposition of magnetotelluric data. , 1996, , .		4
193	Introduction to MT-DIWI Special Section. Journal of Geomagnetism and Geoelectricity, 1993, 45, 931-932.	0.8	4
194	EMAP data processing in the wavenumber domain. , 1989, , .		3
195	A closer look at deep crustal reflections. Eos, 1991, 72, 337-337.	0.1	3
196	High-resolution electromagnetic images of conducting zones in an upthrust crustal block. Geophysical Research Letters, 1994, 21, 1807-1810.	1.5	3
197	POLARIS Update: Fall 2002. Seismological Research Letters, 2003, 74, 41-43.	0.8	3
198	A geothermal aquifer in the dilation zones on the southern margin of the Dublin Basin. Geophysical Journal International, 2020, 220, 1717-1734.	1.0	3

#	Article	IF	Citations
199	The nature of the southern West African craton lithosphere inferred from its electrical resistivity. Precambrian Research, 2021, 358, 106190.	1.2	3
200	Probing the Southern African Lithosphere With Magnetotelluricsâ€"Part I: Model Construction. Journal of Geophysical Research: Solid Earth, 2022, 127, .	1.4	3
201	The collective review papers presented at the 7th IAGA Workshop on Electromagnetic Induction in the Earth and Moon. Surveys in Geophysics, 1986, 8, 235-238.	2.1	1
202	Deep conductivity anomaly of the Darling Fault Zone - implications for fluid transport in the Perth Basin. ASEG Extended Abstracts, 2015, 2015, 1-4.	0.1	1
203	Interpretation of resistivity and magnetic anomalies from the Fox River Sill, Trans Hudson Orogen, Canada. ASEG Extended Abstracts, 2015, 2015, 1-5.	0.1	1
204	Beyond chi-squared: Additional measures of the closeness of a model to data. ASEG Extended Abstracts, 2019, 2019, 1-6.	0.1	1
205	A pioneering geophysicist: Rosemary Hutton. Geological Society Special Publication, 2021, 506, 215-229.	0.8	1
206	Electromagnetic images of colliding continents: A magnetotelluric survey of the Tsangpo Suture and surrounding regions of Tibet. , 1996, , .		1
207	Beyond chi-squared: Additional measures of the closeness of a model to data. , 2018, , .		1
208	Lithospheric magnetotelluric imaging in canada: significance to diamond exploration. ASEG Extended Abstracts, 2004, 2004, 1-4.	0.1	0
209	Multiâ€stage evolution of the Ordos lithosphere from stochastic inversion of elevation, geoid, surface heat flow, Rayleigh wave dispersion data and magnetotelluric data. Acta Geologica Sinica, 2019, 93, 101-101.	0.8	0
210	Using deepâ€probing EM studies as an aid to area selection of diamond provinces. , 2002, , .		0
211	Paleoproterozoic tectonic processes revealed through electromagnetic studies of the North American Central Plains (NACP) conductivity anomaly: From continental to hand sample scale. , 1996, , .		0
212	3D inversion of natural-source electromagnetic data from distributed-acquisition systems. , 2018, , .		0