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128
papers

7,575
citations

40
h-index

86
g-index

143
ext. papers

8,807
ext. citations

4.8
avg. IF

6.19
L-index

#	Paper	IF	Citations
128	Occam's inversion: A practical algorithm for generating smooth models from electromagnetic sounding data. <i>Geophysics</i> , 1987 , 52, 289-300	3.1	1737
127	Occam's inversion to generate smooth, two-dimensional models from magnetotelluric data. <i>Geophysics</i> , 1990 , 55, 1613-1624	3.1	967
126	Ten years of marine CSEM for hydrocarbon exploration. <i>Geophysics</i> , 2010 , 75, 75A67-75A81	3.1	313
125	An introduction to marine controlled-source electromagnetic methods for hydrocarbon exploration. <i>Geophysics</i> , 2007 , 72, WA3-WA12	3.1	285
124	Remote sensing of hydrocarbon layers by seabed logging (SBL): Results from a cruise offshore Angola. <i>The Leading Edge</i> , 2002 , 21, 972-982	1	281
123	Melt-rich channel observed at the lithosphere-asthenosphere boundary. <i>Nature</i> , 2013 , 495, 356-9	50.4	175
122	Mapping thin resistors and hydrocarbons with marine EM methods: Insights from 1D modeling. <i>Geophysics</i> , 2006 , 71, G43-G51	3.1	174
121	Controlled-source electromagnetic sounding of the oceanic lithosphere. <i>Nature</i> , 1986 , 320, 52-54	50.4	162
120	The electrical conductivity of an isotropic olivine mantle. <i>Journal of Geophysical Research</i> , 1992 , 97, 3397-3404		150
119	Marine magnetotellurics for petroleum exploration Part I: A sea-floor equipment system. <i>Geophysics</i> , 1998 , 63, 816-825	3.1	145
118	Marine controlled-source electromagnetic sounding: 2. The PEGASUS experiment. <i>Journal of Geophysical Research</i> , 1996 , 101, 5519-5530		128
117	SEO3: A new model of olivine electrical conductivity. <i>Geophysical Journal International</i> , 2006 , 166, 435-437		105
116	Electrical image of passive mantle upwelling beneath the northern East Pacific Rise. <i>Nature</i> , 2013 , 495, 499-502	50.4	101
115	Mapping thin resistors and hydrocarbons with marine EM methods, Part II Modeling and analysis in 3D. <i>Geophysics</i> , 2006 , 71, G321-G332	3.1	96
114	The feasibility of reservoir monitoring using time-lapse marine CSEM. <i>Geophysics</i> , 2009 , 74, F21-F29	3.1	95
113	Magmatic processes at slow spreading ridges: implications of the RAMESSES experiment at 57°45'N on the Mid-Atlantic Ridge. <i>Geophysical Journal International</i> , 1998 , 135, 731-745	2.6	85
112	Electrical conductivity of olivine, a dunite, and the mantle. <i>Journal of Geophysical Research</i> , 1990 , 95, 6967		80

111	Broad-band waveforms and robust processing for marine CSEM surveys. <i>Geophysical Journal International</i> , 2011 , 184, 689-698	2.6	76
110	Review paper: Instrumentation for marine magnetotelluric and controlled source electromagnetic sounding. <i>Geophysical Prospecting</i> , 2013 , 61, 505-532	1.9	75
109	Effects of near-surface conductance on global satellite induction responses. <i>Geophysical Journal International</i> , 2003 , 153, 277-286	2.6	73
108	Marine magnetotellurics for petroleum exploration, Part II: Numerical analysis of subsalt resolution. <i>Geophysics</i> , 1998 , 63, 826-840	3.1	73
107	Global triangulation of intense lightning discharges. <i>Geophysical Research Letters</i> , 2000 , 27, 333-336	4.9	72
106	Electrical resistivity structure of the Valu Fa Ridge, Lau Basin, from marine controlled-source electromagnetic sounding. <i>Geophysical Journal International</i> , 2001 , 146, 217-236	2.6	71
105	Evidence for accumulated melt beneath the slow-spreading Mid-Atlantic Ridge. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 1997 , 355, 233-253	3	69
104	The electrical conductivity of the oceanic upper mantle. <i>Geophysical Journal International</i> , 1992 , 110, 159-179	2.6	66
103	Observing geomagnetic induction in magnetic satellite measurements and associated implications for mantle conductivity. <i>Geochemistry, Geophysics, Geosystems</i> , 2004 , 5, n/a-n/a	3.6	63
102	The RAMESSES experiment-III. Controlled-source electromagnetic sounding of the Reykjanes Ridge at 57°45'N. <i>Geophysical Journal International</i> , 1998 , 135, 773-789	2.6	62
101	A seafloor electric field instrument.. <i>Journal of Geomagnetism and Geoelectricity</i> , 1985 , 37, 1115-1129		62
100	Marine CSEM of the Scarborough gas field, Part 1: Experimental design and data uncertainty. <i>Geophysics</i> , 2012 , 77, E281-E299	3.1	60
99	Marine magnetotellurics for base-of-salt mapping: Gulf of Mexico field test at the Gemini structure. <i>Geophysics</i> , 2000 , 65, 1476-1488	3.1	60
98	Water-rich bending faults at the Middle America Trench. <i>Geochemistry, Geophysics, Geosystems</i> , 2015 , 16, 2582-2597	3.6	58
97	Marine electromagnetic methods: A new tool for offshore exploration. <i>The Leading Edge</i> , 2006 , 25, 438-444		58
96	Inversion of magnetotelluric data for 2D structure with sharp resistivity contrasts. <i>Geophysics</i> , 2004 , 69, 78-86	3.1	58
95	A marine electromagnetic survey to detect gas hydrate at Hydrate Ridge, Oregon. <i>Geophysical Journal International</i> , 2011 , 187, 45-62	2.6	55
94	Mapping 3D salt using the 2D marine magnetotelluric method: Case study from Gemini Prospect, Gulf of Mexico. <i>Geophysics</i> , 2006 , 71, B17-B27	3.1	53

93	The electrical conductivity of lherzolite. <i>Journal of Geophysical Research</i> , 1993 , 98, 11885-11899		52
92	Mapping offshore sedimentary structure using electromagnetic methods and terrain effects in marine magnetotelluric data. <i>Geophysical Journal International</i> , 2009 , 176, 431-442	2.6	48
91	Electromagnetic detection of plate hydration due to bending faults at the Middle America Trench. <i>Earth and Planetary Science Letters</i> , 2012 , 351-352, 45-53	5.3	42
90	Electric dipole fields over an anisotropic seafloor: theory and application to the structure of 40Ma Pacific Ocean lithosphere. <i>Geophysical Journal International</i> , 1999 , 136, 41-56	2.6	42
89	Marine controlled-source electromagnetic sounding: 1. Modeling and experimental design. <i>Journal of Geophysical Research</i> , 1996 , 101, 5507-5517		41
88	Constraints on Mantle Electrical Conductivity from Field and Laboratory Measurements.. <i>Journal of Geomagnetism and Geoelectricity</i> , 1993 , 45, 707-728		40
87	Vulcan: A deep-towed CSEM receiver. <i>Geochemistry, Geophysics, Geosystems</i> , 2016 , 17, 1042-1064	3.6	39
86	Bayesian inversion of marine CSEM data from the Scarborough gas field using a transdimensional 2-D parametrization. <i>Geophysical Journal International</i> , 2014 , 199, 1847-1860	2.6	37
85	Coast effect distortion of marine magnetotelluric data: Insights from a pilot study offshore northeastern Japan. <i>Physics of the Earth and Planetary Interiors</i> , 2011 , 184, 194-207	2.3	37
84	2D marine controlled-source electromagnetic modeling: Part 2 □The effect of bathymetry. <i>Geophysics</i> , 2007 , 72, WA63-WA71	3.1	36
83	Upper crustal resistivity structure of the East Pacific Rise near 13°N. <i>Geophysical Research Letters</i> , 1991 , 18, 1917-1920	4.9	36
82	Hawaiian hot-spot swell structure from seafloor MT sounding. <i>Tectonophysics</i> , 2004 , 389, 111-124	3.1	35
81	Simultaneous modeling of thermopower and electrical conduction in olivine. <i>Physics and Chemistry of Minerals</i> , 1997 , 24, 319-325	1.6	33
80	Broadband marine MT exploration of the East Pacific Rise at 9°50'N. <i>Geophysical Research Letters</i> , 2002 , 29, 11-1-11-4	4.9	33
79	Marine electromagnetic induction studies. <i>Surveys in Geophysics</i> , 1990 , 11, 303-327	7.6	32
78	Episodic melt transport at mid-ocean ridges inferred from magnetotelluric sounding. <i>Geophysical Research Letters</i> , 2000 , 27, 2317-2320	4.9	31
77	The practical application of 2D inversion to marine controlled-source electromagnetic data. <i>Geophysics</i> , 2010 , 75, F199-F211	3.1	30
76	Global mapping of the electrically conductive lower mantle. <i>Geophysical Research Letters</i> , 1996 , 23, 1461-1464	1.4	30

75	The advantages of logarithmically scaled data for electromagnetic inversion. <i>Geophysical Journal International</i> , 2015 , 201, 1765-1780	2.6	28
74	And the geophysicist replied: Which model do you want? <i>Geophysics</i> , 2015 , 80, E197-E212	3.1	27
73	Electrical properties of polycrystalline methane hydrate. <i>Geophysical Research Letters</i> , 2011 , 38,	4.9	27
72	Large-scale 3D inversion of marine magnetotelluric data: Case study from the Gemini prospect, Gulf of Mexico. <i>Geophysics</i> , 2011 , 76, F77-F87	3.1	27
71	Marine EM techniques for gas-hydrate detection and hazard mitigation. <i>The Leading Edge</i> , 2006 , 25, 629-632		26
70	Measuring marine self-potential using an autonomous underwater vehicle. <i>Geophysical Journal International</i> , 2018 , 215, 49-60	2.6	24
69	Mapping shallow geology and gas hydrate with marine CSEM surveys. <i>First Break</i> , 2010 , 28,	0.5	23
68	The Nature of the Lithosphere-Asthenosphere Boundary. <i>Journal of Geophysical Research: Solid Earth</i> , 2020 , 125, e2018JB016463	3.6	23
67	Short and long baseline tiltmeter measurements on axial seamount, Juan de Fuca Ridge. <i>Physics of the Earth and Planetary Interiors</i> , 1998 , 108, 129-141	2.3	20
66	Surface towed electromagnetic system for mapping of subsea Arctic permafrost. <i>Earth and Planetary Science Letters</i> , 2017 , 460, 97-104	5.3	19
65	Magnetotelluric evidence for layered mafic intrusions beneath the Vøring and Exmouth rifted margins. <i>Physics of the Earth and Planetary Interiors</i> , 2013 , 220, 1-10	2.3	19
64	Electrical properties of methane hydrate + sediment mixtures. <i>Journal of Geophysical Research: Solid Earth</i> , 2015 , 120, 4773-4783	3.6	18
63	Marine self potential exploration*. <i>Exploration Geophysics</i> , 1999 , 30, 1-4	1	17
62	A seafloor long-baseline tiltmeter. <i>Journal of Geophysical Research</i> , 1997 , 102, 20269-20285		16
61	Marine CSEM of the Scarborough gas field, Part 2: 2D inversion. <i>Geophysics</i> , 2015 , 80, E187-E196	3.1	15
60	Deep Schlumberger sounding and the crustal resistivity structure of central Australia. <i>Geophysical Journal International</i> , 1984 , 79, 893-910	2.6	14
59	Marine electrical imaging reveals novel freshwater transport mechanism in Hawai'i. <i>Science Advances</i> , 2020 , 6,	14.3	14
58	Marine Geophysical Investigation of the Chain Fracture Zone in the Equatorial Atlantic From the PI-LAB Experiment. <i>Journal of Geophysical Research: Solid Earth</i> , 2018 , 123, 11016-11030	3.6	14

57	Conduction by mantle hydrogen. <i>Nature</i> , 1993 , 362, 704-704	50.4	13
56	In defence of a resistive oceanic upper mantle: reply to a Comment by Tarits, Chave and Schultz. <i>Geophysical Journal International</i> , 1993 , 114, 717-723	2.6	13
55	Making sound inferences from geomagnetic sounding. <i>Physics of the Earth and Planetary Interiors</i> , 2007 , 160, 51-59	2.3	12
54	A Lithosphere-Asthenosphere Boundary and Partial Melt Estimated Using Marine Magnetotelluric Data at the Central Middle Atlantic Ridge. <i>Geochemistry, Geophysics, Geosystems</i> , 2020 , 21, e2020GC009177	3.6	12
53	Diffusion and mobility of electrically conducting defects in olivine. <i>Physics and Chemistry of Minerals</i> , 2002 , 29, 446-454	1.6	11
52	A marine EM survey of the Scarborough gas field, Northwest Shelf of Australia. <i>First Break</i> , 2010 , 28,	0.5	11
51	A dynamic lithosphere–asthenosphere boundary near the equatorial Mid-Atlantic Ridge. <i>Earth and Planetary Science Letters</i> , 2021 , 566, 116949	5.3	11
50	Characterization and Quantification of Gas Hydrates in the California Borderlands. <i>Geophysical Research Letters</i> , 2020 , 47, no	4.9	10
49	Navigating marine electromagnetic transmitters using dipole field geometry. <i>Geophysical Prospecting</i> , 2014 , 62, 573-596	1.9	10
48	Seafloor magnetotelluric sounding above axial seamount. <i>Geophysical Research Letters</i> , 1996 , 23, 2275-2278	2.7	10
47	Occam's Inversion and the North American Central Plains Electrical Anomaly.. <i>Journal of Geomagnetism and Geoelectricity</i> , 1993 , 45, 985-999		10
46	Crustal Cracks and Frozen Flow in Oceanic Lithosphere Inferred From Electrical Anisotropy. <i>Geochemistry, Geophysics, Geosystems</i> , 2019 , 20, 5979-5999	3.6	10
45	Seafloor Electromagnetic Measurements above Axial Seamount, Juan de Fuca Ridge. <i>Journal of Geomagnetism and Geoelectricity</i> , 1997 , 49, 1327-1342		9
44	Geomagnetism 2007 , 237-276		9
43	Mapping the resistivity structure of Walker Ridge 313 in the Gulf of Mexico using the marine CSEM method. <i>Marine and Petroleum Geology</i> , 2017 , 88, 1013-1031	4.7	8
42	Comment on Magnetic appraisal using simulated annealing by S. E. Dosso and D. W. Oldenburg. <i>Geophysical Journal International</i> , 1991 , 106, 387-388	2.6	8
41	The Effect of Brine on the Electrical Properties of Methane Hydrate. <i>Journal of Geophysical Research: Solid Earth</i> , 2019 , 124, 10877-10892	3.6	7
40	Boat-towed radio-magnetotelluric and controlled source audio-magnetotelluric study to resolve fracture zones at the Hard Rock Laboratory site, Sweden. <i>Geophysical Journal International</i> , 2019 , 218, 1008-1031	2.6	7

39	Electromagnetic investigation of the Eyre Peninsula conductivity anomaly. <i>Exploration Geophysics</i> , 2000 , 31, 187-191	1	7
38	Resistivity studies over the Flinders conductivity anomaly, South Australia. <i>Geophysical Journal International</i> , 1985 , 83, 775-786	2.6	7
37	Rigorous 3D inversion of marine magnetotelluric data in the area with complex bathymetry 2009 ,		7
36	A newly distinguished marine magnetotelluric coast effect sensitive to the lithosphere-asthenosphere boundary. <i>Geophysical Journal International</i> , 2019 , 218, 978-987	2.6	6
35	Permafrost Extent on the Alaskan Beaufort Shelf From Surface-Towed Controlled-Source Electromagnetic Surveys. <i>Journal of Geophysical Research: Solid Earth</i> , 2018 , 123, 7253-7265	3.6	6
34	Marine controlled-source electromagnetic of the Scarborough gas field [Part 3: Multicomponent 2D magnetotelluric/controlled-source electromagnetic inversions. <i>Geophysics</i> , 2019 , 84, B387-B401	3.1	5
33	Mapping shallow geological structure with towed marine CSEM receivers 2012 ,		5
32	Geomagnetic Induction Studies 2015 , 219-254		4
31	Geomagnetism 2007 , 237-276		4
30	Laboratory Electrical Conductivity of Marine Gas Hydrate. <i>Geophysical Research Letters</i> , 2020 , 47, e2020GL087645	4.9	4
29	Marine Electromagnetic Imaging and Volumetric Estimation of Freshwater Plumes Offshore Hawai'i. <i>Geophysical Research Letters</i> , 2021 , 48, e2020GL091249	4.9	4
28	Two-dimensional determinant inversion of marine magnetotelluric data and a field example from the Gulf of California, Mexico. <i>Geophysics</i> , 2021 , 86, E37-E57	3.1	4
27	Shear Velocity Inversion Guided by Resistivity Structure From the PI-LAB Experiment for Integrated Estimates of Partial Melt in the Mantle. <i>Journal of Geophysical Research: Solid Earth</i> , 2021 , 126, e2021JB022202	3.6	4
26	Recording active-seismic ground rotations using induction-coil magnetometers. <i>Geophysics</i> , 2018 , 83, P19-P42	3.1	3
25	Acquiring rotation data on the ocean bottom without rotation sensors 2015 ,		3
24	The 2-D magnetotelluric inverse problem solved with optimization. <i>Geophysical Journal International</i> , 2011 , 184, 639-650	2.6	3
23	Practical Magnetotellurics. <i>Eos</i> , 2006 , 87, 44	1.5	3
22	Hydrocarbon Exploration Using Marine EM Techniques 2005 ,		3

21	Invariant TE and TM impedances in the marine magnetotelluric method. <i>Geophysical Journal International</i> , 2020 , 221, 163-177	2.6	2
20	Magnetotelluric exploration of the Wagner Basin, Gulf of California, Mexico: Evidence for an axial magma chamber and hydrothermal circulation. <i>Journal of South American Earth Sciences</i> , 2020 , 99, 10250 ¹		2
19	CSEM uncertainties and inversion 2012 ,		2
18	The Electrical Conductivity of the Lithosphere and Asthenosphere beneath the Coastline of Southern California. <i>Exploration Geophysics</i> , 1993 , 24, 195-200	1	2
17	Mapping 3D salt using 2D marine MT: Case study from Gemini Prospect, Gulf of Mexico 2004 ,		2
16	Inverted long-baseline acoustic navigation of deep-towed CSEM transmitters and receivers. <i>Marine Geophysical Researches</i> , 2021 , 42, 1	2.3	2
15	Marine controlled-source electromagnetics with geothermal purposes; central Gulf of California, Mexico. <i>Journal of Volcanology and Geothermal Research</i> , 2019 , 384, 206-220	2.8	1
14	2D inversion of marine EM data - Validity and variation 2014 ,		1
13	Invited Organization: Marine Electromagnetic Methods for Gas Hydrate Characterization 2012 ,		1
12	Marine CSEM of the Scarborough Gas Field 2010 ,		1
11	Evidence for accumulated melt beneath the slow-spreading Mid-Atlantic Ridge 1999 , 17-38		1
10	The feasibility of reservoir monitoring using marine 4D CSEM 2007 ,		1
9	Marine self-potential and controlled-source EM measurements using an autonomous underwater vehicle 2018 ,		1
8	Occam's inversion in two dimensions 1990 ,		1
7	Test results and applications of an AUV-borne controlled source electromagnetic (CSEM) system 2016 ,		1
6	AUV-CSEM: An Improvement in the Efficiency of Multi-Sensor Mapping of Seafloor Massive Sulfide (SMS) Deposits with an AUV 2018 ,		1
5	Electrical Properties of Carbon Dioxide Hydrate: Implications for Monitoring CO ₂ in the Gas Hydrate Stability Zone. <i>Geophysical Research Letters</i> , 2021 , 48, e2021GL093475	4.9	0
4	A case study in controlled source electromagnetism: Near seabed hydrocarbon seep systems of Coal Oil Point, California, USA. <i>Marine and Petroleum Geology</i> , 2022 , 139, 105636	4.7	0

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2 Perspectives on Marine Electromagnetic Methods. *Perspectives of Earth and Space Scientists*, **2020**,
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1 Identification of fresh submarine groundwater off the coast of San Diego, USA, using
electromagnetic methods. *Hydrogeology Journal*, **2022**, 30, 965 3.1