

# Sc Constable

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/633631/sc-constable-publications-by-year.pdf>

**Version:** 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Identification of fresh submarine groundwater off the coast of San Diego, USA, using electromagnetic methods. <i>Hydrogeology Journal</i> , <b>2022</b> , 30, 965	3.1	0
127	A case study in controlled source electromagnetism: Near seabed hydrocarbon seep systems of Coal Oil Point, California, USA. <i>Marine and Petroleum Geology</i> , <b>2022</b> , 139, 105636	4.7	0
126	Marine Electromagnetic Imaging and Volumetric Estimation of Freshwater Plumes Offshore Hawai'i. <i>Geophysical Research Letters</i> , <b>2021</b> , 48, e2020GL091249	4.9	4
125	Electrical Properties of Carbon Dioxide Hydrate: Implications for Monitoring CO2 in the Gas Hydrate Stability Zone. <i>Geophysical Research Letters</i> , <b>2021</b> , 48, e2021GL093475	4.9	0
124	A dynamic lithosphere–asthenosphere boundary near the equatorial Mid-Atlantic Ridge. <i>Earth and Planetary Science Letters</i> , <b>2021</b> , 566, 116949	5.3	11
123	Two-dimensional determinant inversion of marine magnetotelluric data and a field example from the Gulf of California, Mexico. <i>Geophysics</i> , <b>2021</b> , 86, E37-E57	3.1	4
122	Inverted long-baseline acoustic navigation of deep-towed CSEM transmitters and receivers. <i>Marine Geophysical Researches</i> , <b>2021</b> , 42, 1	2.3	2
121	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> , <b>2021</b> , 126, e2021JB022202	3.6	4
120	Characterization and Quantification of Gas Hydrates in the California Borderlands. <i>Geophysical Research Letters</i> , <b>2020</b> , 47, no	4.9	10
119	Invariant TE and TM impedances in the marine magnetotelluric method. <i>Geophysical Journal International</i> , <b>2020</b> , 221, 163-177	2.6	2
118	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> , <b>2020</b> , 99, 102501	2	2
117	Perspectives on Marine Electromagnetic Methods. <i>Perspectives of Earth and Space Scientists</i> , <b>2020</b> , 1, e2019CN000123	0.1	0
116	Marine electrical imaging reveals novel freshwater transport mechanism in Hawai'i. <i>Science Advances</i> , <b>2020</b> , 6,	14.3	14
115	Laboratory Electrical Conductivity of Marine Gas Hydrate. <i>Geophysical Research Letters</i> , <b>2020</b> , 47, e2020GL087645	4.9	45
114	The Nature of the Lithosphere-Asthenosphere Boundary. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2020</b> , 125, e2018JB016463	3.6	23
113	A Lithosphere-Asthenosphere Boundary and Partial Melt Estimated Using Marine Magnetotelluric Data at the Central Middle Atlantic Ridge. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2020</b> , 21, e2020GC009177	3.6	12
112	The Effect of Brine on the Electrical Properties of Methane Hydrate. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2019</b> , 124, 10877-10892	3.6	7

111	Marine controlled-source electromagnetic of the Scarborough gas field [Part 3: Multicomponent 2D magnetotelluric/controlled-source electromagnetic inversions. <i>Geophysics</i> , <b>2019</b> , 84, B387-B401	3.1	5
110	A newly distinguished marine magnetotelluric coast effect sensitive to the lithosphere–sthenosphere boundary. <i>Geophysical Journal International</i> , <b>2019</b> , 218, 978-987	2.6	6
109	Boat-towed radio-magnetotelluric and controlled source audio-magnetotelluric study to resolve fracture zones at BP Hard Rock Laboratory site, Sweden. <i>Geophysical Journal International</i> , <b>2019</b> , 218, 1008-1031	2.6	7
108	Marine controlled-source electromagnetics with geothermal purposes; central Gulf of California, Mexico. <i>Journal of Volcanology and Geothermal Research</i> , <b>2019</b> , 384, 206-220	2.8	1
107	Crustal Cracks and Frozen Flow in Oceanic Lithosphere Inferred From Electrical Anisotropy. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2019</b> , 20, 5979-5999	3.6	10
106	Measuring marine self-potential using an autonomous underwater vehicle. <i>Geophysical Journal International</i> , <b>2018</b> , 215, 49-60	2.6	24
105	Recording active-seismic ground rotations using induction-coil magnetometers. <i>Geophysics</i> , <b>2018</b> , 83, P19-P42	3.1	3
104	Marine self-potential and controlled-source EM measurements using an autonomous underwater vehicle <b>2018</b> ,		1
103	AUV-CSEM: An Improvement in the Efficiency of Multi-Sensor Mapping of Seafloor Massive Sulfide (SMS) Deposits with an AUV <b>2018</b> ,		1
102	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> , <b>2018</b> , 123, 11016-11030	3.6	14
101	Permafrost Extent on the Alaskan Beaufort Shelf From Surface-Towed Controlled-Source Electromagnetic Surveys. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2018</b> , 123, 7253-7265	3.6	6
100	Surface towed electromagnetic system for mapping of subsea Arctic permafrost. <i>Earth and Planetary Science Letters</i> , <b>2017</b> , 460, 97-104	5.3	19
99	Mapping the resistivity structure of Walker Ridge 313 in the Gulf of Mexico using the marine CSEM method. <i>Marine and Petroleum Geology</i> , <b>2017</b> , 88, 1013-1031	4.7	8
98	Vulcan: A deep-towed CSEM receiver. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2016</b> , 17, 1042-1064	3.6	39
97	Test results and applications of an AUV-borne controlled source electromagnetic (CSEM) system <b>2016</b> ,		1
96	Geomagnetic Induction Studies <b>2015</b> , 219-254		4
95	The advantages of logarithmically scaled data for electromagnetic inversion. <i>Geophysical Journal International</i> , <b>2015</b> , 201, 1765-1780	2.6	28
94	Electrical properties of methane hydrate + sediment mixtures. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2015</b> , 120, 4773-4783	3.6	18

93	Acquiring rotation data on the ocean bottom without rotation sensors <b>2015</b> ,		3
92	Water-rich bending faults at the Middle America Trench. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2015</b> , 16, 2582-2597	3.6	58
91	And the geophysicist replied: Which model do you want? <i>Geophysics</i> , <b>2015</b> , 80, E197-E212	3.1	27
90	Marine CSEM of the Scarborough gas field, Part 2: 2D inversion. <i>Geophysics</i> , <b>2015</b> , 80, E187-E196	3.1	15
89	Bayesian inversion of marine CSEM data from the Scarborough gas field using a transdimensional 2-D parametrization. <i>Geophysical Journal International</i> , <b>2014</b> , 199, 1847-1860	2.6	37
88	2D inversion of marine EM data - Validity and variation <b>2014</b> ,		1
87	Navigating marine electromagnetic transmitters using dipole field geometry. <i>Geophysical Prospecting</i> , <b>2014</b> , 62, 573-596	1.9	10
86	Review paper: Instrumentation for marine magnetotelluric and controlled source electromagnetic sounding. <i>Geophysical Prospecting</i> , <b>2013</b> , 61, 505-532	1.9	75
85	Magnetotelluric evidence for layered mafic intrusions beneath the Vøring and Exmouth rifted margins. <i>Physics of the Earth and Planetary Interiors</i> , <b>2013</b> , 220, 1-10	2.3	19
84	Melt-rich channel observed at the lithosphere-asthenosphere boundary. <i>Nature</i> , <b>2013</b> , 495, 356-9	50.4	175
83	Electrical image of passive mantle upwelling beneath the northern East Pacific Rise. <i>Nature</i> , <b>2013</b> , 495, 499-502	50.4	101
82	Marine CSEM of the Scarborough gas field, Part 1: Experimental design and data uncertainty. <i>Geophysics</i> , <b>2012</b> , 77, E281-E299	3.1	60
81	Electromagnetic detection of plate hydration due to bending faults at the Middle America Trench. <i>Earth and Planetary Science Letters</i> , <b>2012</b> , 351-352, 45-53	5.3	42
80	Invited Organization: Marine Electromagnetic Methods for Gas Hydrate Characterization <b>2012</b> ,		1
79	CSEM uncertainties and inversion <b>2012</b> ,		2
78	Mapping shallow geological structure with towed marine CSEM receivers <b>2012</b> ,		5
77	Electrical properties of polycrystalline methane hydrate. <i>Geophysical Research Letters</i> , <b>2011</b> , 38,	4.9	27
76	Coast effect distortion of marine magnetotelluric data: Insights from a pilot study offshore northeastern Japan. <i>Physics of the Earth and Planetary Interiors</i> , <b>2011</b> , 184, 194-207	2.3	37

75	Large-scale 3D inversion of marine magnetotelluric data: Case study from the Gemini prospect, Gulf of Mexico. <i>Geophysics</i> , <b>2011</b> , 76, F77-F87	3.1	27
74	Broad-band waveforms and robust processing for marine CSEM surveys. <i>Geophysical Journal International</i> , <b>2011</b> , 184, 689-698	2.6	76
73	The 2-D magnetotelluric inverse problem solved with optimization. <i>Geophysical Journal International</i> , <b>2011</b> , 184, 639-650	2.6	3
72	A marine electromagnetic survey to detect gas hydrate at Hydrate Ridge, Oregon. <i>Geophysical Journal International</i> , <b>2011</b> , 187, 45-62	2.6	55
71	4. Electrical and Electromagnetic Methods <b>2010</b> , 53-87		
70	Ten years of marine CSEM for hydrocarbon exploration. <i>Geophysics</i> , <b>2010</b> , 75, 75A67-75A81	3.1	313
69	The practical application of 2D inversion to marine controlled-source electromagnetic data. <i>Geophysics</i> , <b>2010</b> , 75, F199-F211	3.1	30
68	Marine CSEM of the Scarborough Gas Field <b>2010</b> ,		1
67	A marine EM survey of the Scarborough gas field, Northwest Shelf of Australia. <i>First Break</i> , <b>2010</b> , 28,	0.5	11
66	Mapping shallow geology and gas hydrate with marine CSEM surveys. <i>First Break</i> , <b>2010</b> , 28,	0.5	23
65	Mapping offshore sedimentary structure using electromagnetic methods and terrain effects in marine magnetotelluric data. <i>Geophysical Journal International</i> , <b>2009</b> , 176, 431-442	2.6	48
64	The feasibility of reservoir monitoring using time-lapse marine CSEM. <i>Geophysics</i> , <b>2009</b> , 74, F21-F29	3.1	95
63	Rigorous 3D inversion of marine magnetotelluric data in the area with complex bathymetry <b>2009</b> ,		7
62	Geomagnetism <b>2007</b> , 237-276		4
61	An introduction to marine controlled-source electromagnetic methods for hydrocarbon exploration. <i>Geophysics</i> , <b>2007</b> , 72, WA3-WA12	3.1	285
60	Geomagnetism <b>2007</b> , 237-276		9
59	2D marine controlled-source electromagnetic modeling: Part 2 The effect of bathymetry. <i>Geophysics</i> , <b>2007</b> , 72, WA63-WA71	3.1	36
58	Making sound inferences from geomagnetic sounding. <i>Physics of the Earth and Planetary Interiors</i> , <b>2007</b> , 160, 51-59	2.3	12

57	The feasibility of reservoir monitoring using marine 4D CSEM <b>2007</b> ,		1
56	Mapping 3D salt using the 2D marine magnetotelluric method: Case study from Gemini Prospect, Gulf of Mexico. <i>Geophysics</i> , <b>2006</b> , 71, B17-B27	3.1	53
55	Mapping thin resistors and hydrocarbons with marine EM methods: Insights from 1D modeling. <i>Geophysics</i> , <b>2006</b> , 71, G43-G51	3.1	174
54	Mapping thin resistors and hydrocarbons with marine EM methods, Part II [Modeling and analysis in 3D. <i>Geophysics</i> , <b>2006</b> , 71, G321-G332	3.1	96
53	Practical Magnetotellurics. <i>Eos</i> , <b>2006</b> , 87, 44	1.5	3
52	Marine electromagnetic methods: A new tool for offshore exploration. <i>The Leading Edge</i> , <b>2006</b> , 25, 438-444		58
51	Marine EM techniques for gas-hydrate detection and hazard mitigation. <i>The Leading Edge</i> , <b>2006</b> , 25, 629-632		26
50	SEO3: A new model of olivine electrical conductivity. <i>Geophysical Journal International</i> , <b>2006</b> , 166, 435-437		105
49	Hydrocarbon Exploration Using Marine EM Techniques <b>2005</b> ,		3
48	Inversion of magnetotelluric data for 2D structure with sharp resistivity contrasts. <i>Geophysics</i> , <b>2004</b> , 69, 78-86	3.1	58
47	Observing geomagnetic induction in magnetic satellite measurements and associated implications for mantle conductivity. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2004</b> , 5, n/a-n/a	3.6	63
46	Hawaiian hot-spot swell structure from seafloor MT sounding. <i>Tectonophysics</i> , <b>2004</b> , 389, 111-124	3.1	35
45	Mapping 3D salt using 2D marine MT: Case study from Gemini Prospect, Gulf of Mexico <b>2004</b> ,		2
44	Effects of near-surface conductance on global satellite induction responses. <i>Geophysical Journal International</i> , <b>2003</b> , 153, 277-286	2.6	73
43	Diffusion and mobility of electrically conducting defects in olivine. <i>Physics and Chemistry of Minerals</i> , <b>2002</b> , 29, 446-454	1.6	11
42	Remote sensing of hydrocarbon layers by seabed logging (SBL): Results from a cruise offshore Angola. <i>The Leading Edge</i> , <b>2002</b> , 21, 972-982	1	281
41	Broadband marine MT exploration of the East Pacific Rise at 9°50'N. <i>Geophysical Research Letters</i> , <b>2002</b> , 29, 11-1-11-4	4.9	33
40	Electrical resistivity structure of the Valu Fa Ridge, Lau Basin, from marine controlled-source electromagnetic sounding. <i>Geophysical Journal International</i> , <b>2001</b> , 146, 217-236	2.6	71

39	Electromagnetic investigation of the Eyre Peninsula conductivity anomaly. <i>Exploration Geophysics</i> , <b>2000</b> , 31, 187-191	1	7
38	Marine magnetotellurics for base-of-salt mapping: Gulf of Mexico field test at the Gemini structure. <i>Geophysics</i> , <b>2000</b> , 65, 1476-1488	3.1	60
37	Global triangulation of intense lightning discharges. <i>Geophysical Research Letters</i> , <b>2000</b> , 27, 333-336	4.9	72
36	Episodic melt transport at mid-ocean ridges inferred from magnetotelluric sounding. <i>Geophysical Research Letters</i> , <b>2000</b> , 27, 2317-2320	4.9	31
35	Marine self potential exploration*. <i>Exploration Geophysics</i> , <b>1999</b> , 30, 1-4	1	17
34	Evidence for accumulated melt beneath the slow-spreading Mid-Atlantic Ridge <b>1999</b> , 17-38		1
33	Electric dipole fields over an anisotropic seafloor: theory and application to the structure of 40Ma Pacific Ocean lithosphere. <i>Geophysical Journal International</i> , <b>1999</b> , 136, 41-56	2.6	42
32	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> , <b>1998</b> , 135, 731-745	2.6	85
31	The RAMESSES experiment-III. Controlled-source electromagnetic sounding of the Reykjanes Ridge at 57°45'N. <i>Geophysical Journal International</i> , <b>1998</b> , 135, 773-789	2.6	62
30	Short and long baseline tiltmeter measurements on axial seamount, Juan de Fuca Ridge. <i>Physics of the Earth and Planetary Interiors</i> , <b>1998</b> , 108, 129-141	2.3	20
29	Marine magnetotellurics for petroleum exploration, Part II: Numerical analysis of subsalt resolution. <i>Geophysics</i> , <b>1998</b> , 63, 826-840	3.1	73
28	Marine magnetotellurics for petroleum exploration Part I: A sea-floor equipment system. <i>Geophysics</i> , <b>1998</b> , 63, 816-825	3.1	145
27	Evidence for accumulated melt beneath the slow-spreading Mid-Atlantic Ridge. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>1997</b> , 355, 233-253	3	69
26	A seafloor long-baseline tiltmeter. <i>Journal of Geophysical Research</i> , <b>1997</b> , 102, 20269-20285		16
25	Seafloor Electromagnetic Measurements above Axial Seamount, Juan de Fuca Ridge. <i>Journal of Geomagnetism and Geoelectricity</i> , <b>1997</b> , 49, 1327-1342		9
24	Simultaneous modeling of thermopower and electrical conduction in olivine. <i>Physics and Chemistry of Minerals</i> , <b>1997</b> , 24, 319-325	1.6	33
23	Marine controlled-source electromagnetic sounding: 2. The PEGASUS experiment. <i>Journal of Geophysical Research</i> , <b>1996</b> , 101, 5519-5530		128
22	Marine controlled-source electromagnetic sounding: 1. Modeling and experimental design. <i>Journal of Geophysical Research</i> , <b>1996</b> , 101, 5507-5517		41

21	Global mapping of the electrically conductive lower mantle. <i>Geophysical Research Letters</i> , <b>1996</b> , 23, 1461-1464	19.64	30
20	Seafloor magnetotelluric sounding above axial seamount. <i>Geophysical Research Letters</i> , <b>1996</b> , 23, 2275-2278	7.9	10
19	The electrical conductivity of lherzolite. <i>Journal of Geophysical Research</i> , <b>1993</b> , 98, 11885-11899		52
18	The Electrical Conductivity of the Lithosphere and Asthenosphere beneath the Coastline of Southern California. <i>Exploration Geophysics</i> , <b>1993</b> , 24, 195-200	1	2
17	Constraints on Mantle Electrical Conductivity from Field and Laboratory Measurements.. <i>Journal of Geomagnetism and Geoelectricity</i> , <b>1993</b> , 45, 707-728		40
16	Occam's Inversion and the North American Central Plains Electrical Anomaly.. <i>Journal of Geomagnetism and Geoelectricity</i> , <b>1993</b> , 45, 985-999		10
15	Conduction by mantle hydrogen. <i>Nature</i> , <b>1993</b> , 362, 704-704	50.4	13
14	In defence of a resistive oceanic upper mantle: reply to a Comment by Tarits, Chave and Schultz. <i>Geophysical Journal International</i> , <b>1993</b> , 114, 717-723	2.6	13
13	The electrical conductivity of an isotropic olivine mantle. <i>Journal of Geophysical Research</i> , <b>1992</b> , 97, 3397-3404		150
12	The electrical conductivity of the oceanic upper mantle. <i>Geophysical Journal International</i> , <b>1992</b> , 110, 159-179	2.6	66
11	Comment on Magnetic appraisal using simulated annealing by S. E. Dosso and D. W. Oldenburg. <i>Geophysical Journal International</i> , <b>1991</b> , 106, 387-388	2.6	8
10	Upper crustal resistivity structure of the East Pacific Rise near 13°N. <i>Geophysical Research Letters</i> , <b>1991</b> , 18, 1917-1920	4.9	36
9	Marine electromagnetic induction studies. <i>Surveys in Geophysics</i> , <b>1990</b> , 11, 303-327	7.6	32
8	Occam's inversion to generate smooth, two-dimensional models from magnetotelluric data. <i>Geophysics</i> , <b>1990</b> , 55, 1613-1624	3.1	967
7	Electrical conductivity of olivine, a dunite, and the mantle. <i>Journal of Geophysical Research</i> , <b>1990</b> , 95, 6967		80
6	Occam's inversion in two dimensions <b>1990</b> ,		1
5	Occam's inversion: A practical algorithm for generating smooth models from electromagnetic sounding data. <i>Geophysics</i> , <b>1987</b> , 52, 289-300	3.1	1737
4	Controlled-source electromagnetic sounding of the oceanic lithosphere. <i>Nature</i> , <b>1986</b> , 320, 52-54	50.4	162

3	Resistivity studies over the Flinders conductivity anomaly, South Australia. <i>Geophysical Journal International</i> , <b>1985</b> , 83, 775-786	2.6	7
2	A seafloor electric field instrument.. <i>Journal of Geomagnetism and Geoelectricity</i> , <b>1985</b> , 37, 1115-1129		62
1	Deep Schlumberger sounding and the crustal resistivity structure of central Australia. <i>Geophysical Journal International</i> , <b>1984</b> , 79, 893-910	2.6	14