## Adam Schultz

## List of Publications by Year in descending order

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50 papers

3,319 citations

26 h-index 214527 47 g-index

52 all docs 52 docs citations

52 times ranked 2702 citing authors

#	Article	IF	CITATIONS
1	Mid-Ocean Ridge Hydrothermal Fluxes and the Chemical Composition of the Ocean. Annual Review of Earth and Planetary Sciences, 1996, 24, 191-224.	4.6	887
2	Global electromagnetic induction constraints on transition-zone water content variations. Nature, 2009, 460, 1003-1006.	13.7	219
3	Deep electrical resistivity structure of the northwestern U.S. derived from 3-D inversion of USArray magnetotelluric data. Earth and Planetary Science Letters, 2014, 402, 290-304.	1.8	208
4	Northeastern Pacific mantle conductivity profile from long-period magnetotelluric sounding using Hawaii-to-California submarine cable data. Journal of Geophysical Research, 1995, 100, 17837-17854.	3.3	172
5	Conductivity discontinuities in the upper mantle beneath a stable craton. Geophysical Research Letters, 1993, 20, 2941-2944.	1.5	162
6	On the partitioning of heat flux between diffuse and point source seafloor venting. Journal of Geophysical Research, 1992, 97, 12299-12314.	3 <b>.</b> 3	158
7	Geomagnetically induced currents: Science, engineering, and applications readiness. Space Weather, 2017, 15, 828-856.	1.3	149
8	A thermodynamic explanation for black smoker temperatures. Nature, 2000, 403, 880-883.	13.7	118
9	On the electrical conductivity of the mid-mantle-I. Calculation of equivalent scalar magnetotelluric response functions. Geophysical Journal International, 1987, 88, 733-761.	1.0	97
10	Non-linear conjugate gradient inversion for global EM induction: resolution studies. Geophysical Journal International, 2008, 173, 365-381.	1.0	84
11	Crustal inheritance and a top-down control on arc magmatism at Mount St Helens. Nature Geoscience, 2018, 11, 865-870.	5.4	78
12	Geomagnetic induction in a heterogenous sphere: Azimuthally symmetric test computations and the response of an undulating 660-km discontinuity. Journal of Geophysical Research, 1996, 101, 2765-2783.	3.3	73
13	Controls on the physics and chemistry of seafloor hydrothermal circulation. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 1997, 355, 387-425.	1.6	71
14	The 3D electromagnetic response of the Earth to ring current and auroral oval excitation. Geophysical Journal International, 2002, 151, 689-709.	1.0	60
15	Temporal variations in diffuse hydrothermal flow at TAG. Geophysical Research Letters, 1996, 23, 3471-3474.	1.5	55
16	Physical balances in subseafloor hydrothermal convection cells. Journal of Geophysical Research, 2004, 109, .	3.3	52
17	Geoelectromagnetic induction in a heterogeneous sphere:a new three-dimensional forward solver using a conservative staggered-grid finite difference method. Geophysical Journal International, 2000, 140, 636-650.	1.0	49
18	Variations in the electrical conductivity of the upper mantle beneath North America and the Pacific Ocean. Journal of Geophysical Research, 2000, 105, 8229-8242.	3.3	46

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19	On the electrical conductivity of the mid-mantle: II. Delineation of heterogeneity by application of extremal inverse solutions. Geophysical Journal International, 1990, 101, 565-580.	1.0	44
20	Rapid prediction of electric fields associated with geomagnetically induced currents in the presence of threeâ€dimensional ground structure: Projection of remote magnetic observatory data through magnetotelluric impedance tensors. Space Weather, 2017, 15, 204-227.	1.3	41
21	Very long period magnetotellurics at Tucson Observatory: Estimation of impedances. Journal of Geophysical Research, 1992, 97, 15113-15128.	3.3	36
22	On the vertical gradient and associated heterogeneity in mantle electrical conductivity. Physics of the Earth and Planetary Interiors, 1990, 64, 68-86.	0.7	35
23	Two-Dimensional Nonlinear Magnetotelluric Inversion Using a Genetic Algorithm Journal of Geomagnetism and Geoelectricity, 1993, 45, 1013-1026.	0.8	32
24	Subannual Temporal Variation in Faunal Distributions at the TAG Hydrothermal Mound (260 N,) Tj ETQq0 0 0 rgB	T /Oyerloo	ck 38 Tf 50 5
25	EMScope: A Continental Scale Magnetotelluric Observatory and Data Discovery Resource. Data Science Journal, 2009, 8, IGY6-IGY20.	0.6	30
26	A poroelastic model for the tidal modulation of seafloor hydrothermal systems. Journal of Geophysical Research, 2004, 109, .	3.3	29
27	Ocean bottom seismometer facilities available. Eos, 1991, 72, 506-506.	0.1	27
28	A dual sensor device to estimate fluid flow velocity at diffuse hydrothermal vents. Deep-Sea Research Part I: Oceanographic Research Papers, 2009, 56, 2065-2074.	0.6	26
29	Using homotopy to invert geophysical data. Geophysics, 2001, 66, 1749-1760.	1.4	25
30	A 3-D perturbation solution for the EM induction problem in a spherical earth-the forward problem. Geophysical Journal International, 1992, 111, 319-334.	1.0	21
31	Comment on †The electrical conductivity of the oceanic upper mantle†by G. Heinson and S. Constable. Geophysical Journal International, 1993, 114, 711-716.	1.0	21
32	Geomagnetic induction in eccentrically nested spheres. Physics of the Earth and Planetary Interiors, 1995, 92, 189-198.	0.7	20
33	Application of 2-D inversion with genetic algorithms to magnetotelluric data from geothermal areas. Earth, Planets and Space, 2002, 54, 607-616.	0.9	20
34	Analysis of zonal field morphology and data quality for a global set of magnetic observatory daily mean values Journal of Geomagnetism and Geoelectricity, 1983, 35, 835-846.	0.8	20
35	Very low frequency ambient noise at the seafloor under the Beaufort Sea icecap. Journal of the Acoustical Society of America, 1992, 91, 1429-1439.	0.5	18
36	Composition of Magma and Characteristics of the Hydrothermal System of Newberry Volcano, Oregon, From Magnetotellurics. Geochemistry, Geophysics, Geosystems, 2020, 21, e2019GC008831.	1.0	14

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37	Regularized spherical harmonic analysis and the 3-D electromagnetic response of the Earth. Geophysical Journal International, 1994, 116, 141-156.	1.0	13
38	Evidence of Bermuda Hot and Wet Upwelling From Novel Threeâ€Dimensional Global Mantle Electrical Conductivity Image. Geochemistry, Geophysics, Geosystems, 2020, 21, e2020GC009016.	1.0	13
39	Lake bottom magnetotellurics. Journal of Geophysical Research, 1987, 92, 10639-10649.	3.3	12
40	Introduction to MT-DIW2 Special Issue Journal of Geomagnetism and Geoelectricity, 1997, 49, 727-737.	0.8	11
41	Down to Earth With an Electric Hazard From Space. Space Weather, 2017, 15, 658-662.	1.3	9
42	29. Three-Dimensional Inversion for Large-Scale Structure in a Spherical Domain. , 1999, , 451-473.		8
43	Exorcise—an algorithm for detection of spurious values and prediction of missing data. Computers and Geosciences, 1990, 16, 1027-1065.	2.0	6
44	Preliminary modelling of hydrothermal circulation within mid-ocean ridge sulphide structures. Geological Society Special Publication, 1995, 87, 145-157.	0.8	6
45	Controls on the physics and chemistry of seafloor hydrothermal circulation. , 1999, , 171-210.		6
46	Quality estimation of magnetotelluric impedance tensors using neural networks. The Leading Edge, 2020, 39, 702-710.	0.4	5
47	Brent Spar or Broken Spur?. Nature, 1995, 376, 208-208.	13.7	1
48	The evolution of a continent: Thirteen years of EarthScope Magnetotelluric Threeâ€Dimensional Imaging of the United States. Acta Geologica Sinica, 2019, 93, 1-1.	0.8	1
49	Leg 203 synthesis: summary of scientific results. , 0, , .		0
50	EM, Lakeâ€Bottom Measurements. , 2007, , 227-228.		0