Hisashi Utada

List of Publications by Year
in descending order

125	2,897	172207	223531
papers	citations	29 h-index	46 g-index

128	128	128	1554
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Asymmetric Electrical Structure in the Mantle Beneath the East Pacific Rise at 17Â°S. Science, 1999, 286, 752-756.	6.0	118
2	A global model of mantle conductivity derived from 5 years of CHAMP, Ã˜rsted, and SAC-C magnetic data. Geophysical Research Letters, 2006, 33, n/a-n/a.	1.5	113
3	Water content and geotherm in the upper mantle above the stagnant slab: Interpretation of electrical conductivity and seismic P-wave velocity models. Physics of the Earth and Planetary Interiors, 2006, 155, 1-15.	0.7	97
4	A semiâ€global reference model for electrical conductivity in the midâ€mantle beneath the north Pacific region. Geophysical Research Letters, 2003, 30, .	1.5	95
5	Long-term observation of in situ seismic velocity and attenuation. Journal of Geophysical Research, 2003, 108, .	3.3	93
6	Electrical conductivity imaging of the Philippine Sea upper mantle using seafloor magnetotelluric data. Physics of the Earth and Planetary Interiors, 2010, 183, 44-62.	0.7	93
7	Hydrogen diffusivity in wadsleyite and water distribution in the mantle transition zone. Earth and Planetary Science Letters, 2006, 243, 141-148.	1.8	71
8	Upper mantle electrical resistivity structure beneath the central Mariana subduction system. Geochemistry, Geophysics, Geosystems, 2010, 11, .	1.0	65
9	Magma ascent beneath Unzen Volcano, SW Japan, deduced from the electrical resistivity structure. Journal of Volcanology and Geothermal Research, 1999, 89, 35-42.	0.8	62
10	3-D modelling and analysis ofDst C-responses in the North Pacific Ocean region, revisited. Geophysical Journal International, 2005, 160, 505-526.	1.0	60
11	Geomagnetic field changes in response to the 2011 off the Pacific Coast of Tohoku Earthquake and Tsunami. Earth and Planetary Science Letters, 2011, 311, 11-27.	1.8	60
12	A joint interpretation of electromagnetic and seismic tomography models suggests the mantle transition zone below Europe is dry. Earth and Planetary Science Letters, 2009, 281, 249-257.	1.8	57
13	Magnetic and electric field observations during the 2000 activity of Miyake-jima volcano, Central Japan. Earth and Planetary Science Letters, 2002, 203, 769-777.	1.8	56
14	Trans-Pacific temperature field in the mantle transition region derived from seismic and electromagnetic tomography. Earth and Planetary Science Letters, 2004, 217, 425-434.	1.8	56
15	Seismic and Electrical Signatures of the Lithosphereâ€“Asthenosphere System of the Normal Oceanic Mantle. Annual Review of Earth and Planetary Sciences, 2017, 45, 139-167.	4.6	56
16	Upper mantle conductivity structure of the back-arc region beneath northeastern China. Geophysical Research Letters, 2001, 28, 3773-3776.	1.5	53
17	Resistivity and self-potential changes associated with volcanic activity: The July 8, 2000 Miyake-jima eruption (Japan). Earth and Planetary Science Letters, 2003, 205, 139-154.	1.8	48
18	Network-magnetotelluric method and its first results in central and eastern Hokkaido, NE Japan. Geophysical Journal International, 2001, 146, 1-19.	1.0	47

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19	A regularized three-dimensional magnetotelluric inversion with a minimum gradient support constraint. Geophysical Journal International, 2012, 189, 296-316.	1.0	41
20	Volcanomagnetic effect observed during the 1986 eruption of Izu-Oshima Volcano.. Journal of Geomagnetism and Geoelectricity, 1990, 42, 291-317.	0.8	40
21	Three-dimensional imaging of electrical conductivity in the mantle transition zone beneath the North Pacific Ocean by a semi-global induction study. Physics of the Earth and Planetary Interiors, 2010, 183, 252-269.	0.7	38
22	On galvanic distortion of regional 3-D MT impedances On galvanic distortion of regional three-dimensional magnetotelluric impedances. Geophysical Journal International, 2000, 140, 385-398.	1.0	37
23	Coseismic piezoelectric effects due to a dislocation. Physics of the Earth and Planetary Interiors, 2000, 121, 273-288.	0.7	36
24	Submarine cable OBS using a retired submarine telecommunication cable: GeO-TOC program. Physics of the Earth and Planetary Interiors, 1998, 108, 113-127.	0.7	34
25	Revised 1-D mantle electrical conductivity structure beneath the north Pacific. Geophysical Journal International, 2010, 180, 1030-1048.	1.0	32
26	3-D modelling the electric field due to ocean tidal flow and comparison with observations. Geophysical Research Letters, 2006, 33, .	1.5	31
27	Is the electrical conductivity of the northwestern Pacific upper mantle normal?. Geochemistry, Geophysics, Geosystems, 2013, 14, 4969-4979.	1.0	31
28	On the Berdichevsky average. Physics of the Earth and Planetary Interiors, 2016, 253, 1-4.	0.7	31
29	Preliminary report on a magnetotelluric array study in the Northwest Pacific.. Journal of Geomagnetism and Geoelectricity, 1983, 35, 575-587.	0.8	30
30	Two-dimensional modelling of resistivity structure beneath the Tohoku district, northern Honshu of Japan, by a finite element method.. Journal of Geomagnetism and Geoelectricity, 1986, 38, 45-79.	0.8	29
31	Electrical conductivity anomalies beneath the Western Sea of Kyushu, Japan. Geophysical Research Letters, 1997, 24, 1551-1554.	1.5	29
32	Ocean Bottom Array Probes Stagnant Slab Beneath the Philippine Sea. Eos, 2009, 90, 70-71.	0.1	29
33	In Situ Characterization of the Lithosphereâ€Asthenosphere System beneath NW Pacific Ocean Via Broadband Dispersion Survey With Two OBS Arrays. Geochemistry, Geophysics, Geosystems, 2018, 19, 3529-3539.	1.0	29
34	1-D electrical conductivity structure beneath the Philippine Sea: Results from an ocean bottom magnetotelluric survey. Physics of the Earth and Planetary Interiors, 2007, 162, 2-12.	0.7	28
35	Changes in the geomagnetic total intensity observed before the eruption of Oshima Volcano in 1986.. Journal of Geomagnetism and Geoelectricity, 1990, 42, 277-290.	0.8	27
36	Resistivity structure of Unzen Volcano derived from time domain electromagnetic (TDEM) survey. Journal of Volcanology and Geothermal Research, 2008, 175, 231-240.	0.8	27

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37	Water Content in the Mantle Transition Zone Beneath the North Pacific Derived from the Electrical Conductivity Anomaly. Geophysical Monograph Series, 2013, , 171-179.	0.1	26
38	Changes in the electrical resistivity of the central cone, Miharayama, of Oshima Volcano observed by a direct current method.. Journal of Geomagnetism and Geoelectricity, 1990, 42, 151-168.	0.8	24
39	A study of annual variations in the geomagnetic total intensity with special attention to detecting volcanomagnetic signals. Earth, Planets and Space, 2000, 52, 91-103.	0.9	24
40	Comment on â€œPreseismic ionospheric electron enhancements revisitedâ€•by K. Heki and Y. Enomoto. Journal of Geophysical Research: Space Physics, 2014, 119, 6011-6015.	0.8	24
41	Determination of intrinsic attenuation in the oceanic lithosphere-asthenosphere system. Science, 2017, 358, 1593-1596.	6.0	24
42	Regularized magnetotelluric inversion based on a minimum support gradient stabilizing functional. Earth, Planets and Space, 2017, 69, .	0.9	24
43	GeO-TOC Project-Reuse of Submarine Cables for Seismic and Geoelectrical Measurements.. Journal of Physics of the Earth, 1995, 43, 619-628.	1.4	23
44	An observational constraint on the strength of the toroidal magnetic field at the CMB by time variation of submarine cable voltages. Geophysical Research Letters, 1998, 25, 4023-4026.	1.5	23
45	Electrical conductivity of old oceanic mantle in the northwestern Pacific I: 1-D profiles suggesting differences in thermal structure not predictable from a plate cooling model. Earth, Planets and Space, 2017, 69, .	0.9	23
46	Resistivity image of the Philippine Sea Plate around the 1944 Tonankai earthquake zone deduced by Marine and Land MT surveys. Earth, Planets and Space, 2005, 57, 209-213.	0.9	22
47	Practical incorporation of local and regional topography in three-dimensional inversion of deep ocean magnetotelluric data. Geophysical Journal International, 2013, 194, 348-361.	1.0	22
48	Possible effects of lateral heterogeneity in the Dâ€³ layer on electromagnetic variations of core origin. Physics of the Earth and Planetary Interiors, 2002, 129, 99-116.	0.7	21
49	Sq effect on the electromagnetic response functions in the period range between 104 and 105 s. Geophysical Journal International, 2011, 186, 193-206.	1.0	21
50	Marine magnetotellurics imaged no distinct plume beneath the Tristan da Cunha hotspot in the southern Atlantic Ocean. Tectonophysics, 2017, 716, 52-63.	0.9	21
51	Geomagnetic variations observed after the 1986 eruption of Izu-Oshima Volcano.. Journal of Geomagnetism and Geoelectricity, 1990, 42, 319-335.	0.8	21
52	Ocean Hemisphere Geomagnetic Network: its instrumental design and perspective for long-term geomagnetic observations in the Pacific. Earth, Planets and Space, 1999, 51, 917-932.	0.9	20
53	Electromagnetic signals related to incidence of a teleseismic body wave into a subsurface piezoelectric body. Earth, Planets and Space, 2000, 52, 253-260.	0.9	20
54	Estimating the electrical conductivity of the melt phase of a partially molten asthenosphere from seafloor magnetotelluric sounding data. Physics of the Earth and Planetary Interiors, 2014, 227, 41-47.	0.7	20

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55	Threeâ€dimensional inversion of seafloor magnetotelluric data collected in the Philippine Sea and the western margin of the northwest Pacific Ocean. Geochemistry, Geophysics, Geosystems, 2014, 15, 2895-2917.	1.0	19
56	Low electrical resistivity along an active fault, the Yamasaki fault.. Journal of Geomagnetism and Geoelectricity, 1982, 34, 103-127.	0.8	19
57	A Two-Dimensional Conductivity Model across Central Japan. Journal of Geomagnetism and Geoelectricity, 1986, 38, 447-473.	0.8	18
58	Preliminary report on regional resistivity variation inferred from the Network MT investigation in the Shikoku district, southwestern Japan. Earth, Planets and Space, 1999, 51, 193-203.	0.9	18
59	Geoelectric power spectra over oceanic distances. Geophysical Research Letters, 1995, 22, 421-424.	1.5	17
60	Threeâ€dimensional simulation of the electromagnetic fields induced by the 2011 Tohoku tsunami. Journal of Geophysical Research: Solid Earth, 2014, 119, 150-168.	1.4	17
61	Resistivity structure of Izu-Oshima volcano revealed by the ELF-VLF magnetotelluric method.. Journal of Geomagnetism and Geoelectricity, 1990, 42, 169-194.	0.8	17
62	Sea floor measurement of geomagnetic field using newly developed ocean bottom magnetometers.. Journal of Geomagnetism and Geoelectricity, 1982, 34, 571-585.	0.8	16
63	The 2011 Tohoku Tsunami observed by an array of ocean bottom electromagnetometers. Geophysical Research Letters, 2014, 41, 4937-4944.	1.5	16
64	On the physical background of the van earthquake prediction method. Tectonophysics, 1993, 224, 153-160.	0.9	15
65	Approximate treatment of seafloor topographic effects in three-dimensional marine magnetotelluric inversion. Earth, Planets and Space, 2012, 64, 1005-1021.	0.9	15
66	3â€D electrical resistivity structure based on geomagnetic transfer functions exploring the features of arc magmatism beneath Kyushu, Southwest Japan Arc. Journal of Geophysical Research: Solid Earth, 2017, 122, 172-190.	1.4	15
67	Temporal variation in the resistivity structure of the first Nakadake crater, Aso volcano, Japan, during the magmatic eruptions from November 2014 to May 2015, as inferred by the ACTIVE electromagnetic monitoring system. Earth, Planets and Space, 2018, 70, .	0.9	15
68	EMRIDGE: The electromagnetic investigation of the Juan de Fuca Ridge. Marine Geophysical Researches, 1993, 15, 77-100.	0.5	14
69	Electromagnetic evidence for volatileâ€rich upwelling beneath the society hotspot, French Polynesia. Geophysical Research Letters, 2016, 43, 12021-12026.	1.5	14
70	The 2000 Activity of Miyake-jima Volcano as Inferred from Electric and Magnetic Field Observations. Journal of Geography (Chigaku Zasshi), 2001, 110, 226-244.	0.1	13
71	Interpretation of time changes in the apparent resistivity observed prior to the 1986 eruption of Izuâ€“Oshima volcano, Japan. Journal of Volcanology and Geothermal Research, 2003, 126, 97-107.	0.8	13
72	Seasonal thermal signatures of heat transfer by water exchange in an underground vault. Geophysical Journal International, 2004, 158, 372-384.	1.0	13

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73	Geomagnetic observatory operates at the seafloor in the northwest Pacific Ocean. Eos, 2004, 85, 467-473.	0.1	13
74	The feasibility of using decadal changes in the geoelectric field to probe Earthâ€™s core. Physics of the Earth and Planetary Interiors, 2004, 142, 297-319.	0.7	13
75	Changes in the Electrical Resistivity of the Central Cone, Miharayama, of Izu-Oshima Volcano, associated with its Eruption in November, 1986. Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 1987, 63, 55-58.	1.6	12
76	Magnetotelluric investigations for the seismically active area in Northern Miyagi Prefecture, northeastern Japan. Earth, Planets and Space, 1999, 51, 351-361.	0.9	12
77	Characteristics of counterâ€S_q SFE (SFE*) at the dip equator CPMN stations. Journal of Geophysical Research, 2009, 114, .	3.3	12
78	Anomaly of the geomagnetic Sq variation in Japan: effect from 3-D subterranean structure or the ocean effect?. Geophysical Journal International, 2010, 183, 1239-1247.	1.0	12
79	Mantle transition zone beneath a normal seafloor in the northwestern Pacific: Electrical conductivity, seismic thickness, and water content. Earth and Planetary Science Letters, 2017, 462, 189-198.	1.8	12
80	Studies on the lithosphere and the water transport by using the Japan Sea submarine cable (JASC): 1. Theoretical considerations. Earth, Planets and Space, 1998, 50, 35-42.	0.9	11
81	Anomalous occurrence features of the preliminary impulse of geomagnetic sudden commencement in the South Atlantic Anomaly region. Journal of Geophysical Research, 2010, 115, .	3.3	11
82	The OJP array: seismological and electromagnetic observation on seafloor and islands in the Ontong Java Plateau. JAMSTEC Report of Research and Development, 2018, 26, 54-64.	0.2	11
83	Seismic resistivity changes observed at Aburatsubo, central Japan, revisited. Tectonophysics, 1998, 299, 317-331.	0.9	10
84	Study on New Low Cost Ocean Bottom Cabled Seismometers. , 2006, , .		10
85	A New Low Cost Ocean Bottom Cabled Seismometers. , 2007, , .		10
86	Use of ssq rotational invariant of magnetotelluric impedances for estimating informative properties for galvanic distortion. Earth, Planets and Space, 2017, 69, .	0.9	10
87	A new model of ocean bottom magnetometer.. Journal of Geomagnetism and Geoelectricity, 1983, 35, 407-421.	0.8	9
88	ACTIVE system for monitoring volcanic activity: A case study of the Izu-Oshima Volcano, Central Japan. Journal of Volcanology and Geothermal Research, 2007, 164, 217-243.	0.8	9
89	A New OBCS: Ocean Bottom Cabled Seismometer - IP Goes to the Oceans. , 2008, , .		9
90	Three-dimensional geomagnetic response functions for global and semi-global scale induction problems. Geophysical Journal International, 2009, 178, 123-144.	1.0	9

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91	Preliminary report on a study of resistivity structure beneath the Northern Honsyu of Japan.. Journal of Geomagnetism and Geoelectricity, 1983, 35, 589-608.	0.8	9
92	Application of sompi spectral analysis to the estimation of the geomagnetic transfer function.. Journal of Geomagnetism and Geoelectricity, 1988, 40, 447-463.	0.8	8
93	Electromagnetic exploration of the oceanic mantle. Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 2015, 91, 203-222.	1.6	8
94	Evolution of the current system during solar wind pressure pulses based on aurora and magnetometer observations. Earth, Planets and Space, 2016, 68, .	0.9	8
95	OFFSHORE EMSLAB: objectives, experimental phase and early results. Physics of the Earth and Planetary Interiors, 1989, 53, 422-431.	0.7	7
96	Variability of the topographic core-mantle torque calculated from core surface flow models. Physics of the Earth and Planetary Interiors, 2006, 154, 85-111.	0.7	7
97	Robust and less robust features in the tangential geostrophy core flows. Geophysical Journal International, 2009, 178, 678-692.	1.0	7
98	Motional magnetotellurics by long oceanic waves. Geophysical Journal International, 2015, 201, 390-405.	1.0	7
99	A Deep Transient EM Experiment in the Northern Part of Miyagi Prefecture, Northeastern Japan.. Journal of Geomagnetism and Geoelectricity, 1996, 48, 1265-1280.	0.8	6
100	Seafloor electromagnetic induction studies in the Bay of Bengal. Marine Geophysical Researches, 2000, 21, 1-21.	0.5	6
101	Inversion of Longerâ€Period OBS Waveforms for P Structures in the Oceanic Lithosphere and Asthenosphere. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB018810.	1.4	6
102	Regional secular change in the geomagnetic field in the Oshima Island area during a tectonically active period.. Journal of Geomagnetism and Geoelectricity, 1990, 42, 257-275.	0.8	6
103	The effect of initial and prior models on phase tensor inversion of distorted magnetotelluric data. Earth, Planets and Space, 2022, 74, .	0.9	6
104	Audio-Frequency Magnetotelluric Imaging of an Active Strike-Slip Fault.. Journal of Geomagnetism and Geoelectricity, 1994, 46, 403-408.	0.8	5
105	A geomagnetic total intensity anomaly originated from lightning-induced isothermal remanent magnetization: case of the Yatsugatake Magnetic Observatory, central Japan. Earth, Planets and Space, 2007, 59, 141-149.	0.9	5
106	The response of the dayside equatorial electrojet to stepâ€like changes of IMF B_Z. Journal of Geophysical Research: Space Physics, 2013, 118, 3637-3646.	0.8	5
107	Probing 1-D electrical anisotropy in the oceanic upper mantle from seafloor magnetotelluric array data. Geophysical Journal International, 2020, 222, 1502-1525.	1.0	5
108	Magnetometer Array Observation in the North-Eastern Izu Region after the Teisi Knoll Seafloor Eruption in 1989.. Journal of Physics of the Earth, 1991, 39, 321-328.	1.4	4

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109	Difficulty of statistical evaluation of an earthquake prediction method. Geophysical Research Letters, 1996, 23, 1391-1394.	1.5	4
110	New innovative ocean bottom cabled seismometer system and observation in the Sea of Japan. , 2011, , .		4
111	Threeâ€Dimensional Electrical Resistivity Structure Beneath a Volcanically and Seismically Active Island, Kyushu, Southwest Japan Arc. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB017485.	1.4	3
112	Recent developments of ocean bottom seismic and electromagnetic instruments operated by ROV. , 2011, , .		2
113	Ocean bottom measurements of the Earth's electric field using long cable installed by ROV. , 2013, , .		2
114	Ocean bottom geophysical array studies may reveal the cause of seafloor flattening. Earth and Planetary Science Letters, 2019, 518, 100-107.	1.8	2
115	A new approach to real time measurements at Izu-Bonin trench using TPC-1, demission telecommunication cable. , 0, , .		1
116	A new compact Ocean Bottom Cabled Seismometers system for spatially dense observation on sea floor. , 2008, , .		1
117	Impedance Tensor of Networkâ€MT and the Influencing Factors. Chinese Journal of Geophysics, 2008, 51, 183-190.	0.2	1
118	New compact ocean bottom cabled system for seismic observation in the Japan Sea. , 2010, , .		1
119	Reuse of submarine cable for seismic and geoelectrical measurements. , 0, , .		0
120	Changes in the Geomagnetic Total Intensity and Self Potential Anomaly Associated with the 2000 Activity of Miyake-jima Volcano. Journal of Geography (Chigaku Zasshi), 2001, 110, Plate7-Plate8.	0.1	0
121	Detectability of decadal variations of the surface electric potential generated by zonal oscillating flows in Earth's core. , 2003, , .		0
122	Three-dimensional electrical conductivity structure beneath North Pacific by using a submarine cable network. , 2003, , .		0
123	Re-evaluation of Linear Trend of Submarine Cable Voltages for the Study of the Toroidal Field Variation at the CMB. , 2007, , .		0
124	Development of compact ocean bottom cabled seismometers system for spatially dense observation on sea floor and first installation plan. , 2009, , .		0
125	Submarine cable electrical voltages to probe the Earth's deep interior. , 2011, , .		0