Hisashi Utada

List of Publications by Citations

114 papers	2,342 citations	26 h-index	42 g-index
128 ext. papers	2,592 ext. citations	3.9 avg, IF	4.77 L-index

#	Paper	IF	Citations
114	A global model of mantle conductivity derived from 5 years of CHAMP, Ørsted, and SAC-C magnetic data. *Geophysical Research Letters*, **2006**, 33, n/a-n/a	4.9	107
113	Asymmetric Electrical Structure in the Mantle Beneath the East Pacific Rise at 17 degrees S. *Science* , **1999**, 286, 752-756	33.3	103
112	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	2.3	92
111	Electrical conductivity imaging of the Philippine Sea upper mantle using seafloor magnetotelluric data. *Physics of the Earth and Planetary Interiors*, **2010**, 183, 44-62	2.3	82
110	A semi-global reference model for electrical conductivity in the mid-mantle beneath the north Pacific region. *Geophysical Research Letters*, **2003**, 30,	4.9	82
109	Long-term observation of in situ seismic velocity and attenuation. *Journal of Geophysical Research*, **2003**, 108,		71
108	Hydrogen diffusivity in wadsleyite and water distribution in the mantle transition zone. *Earth and Planetary Science Letters*, **2006**, 243, 141-148	5.3	63
107	Upper mantle electrical resistivity structure beneath the central Mariana subduction system. *Geochemistry, Geophysics, Geosystems*, **2010**, 11,	3.6	61
106	3-D modelling and analysis ofDst C-responses in the North Pacific Ocean region, revisited. *Geophysical Journal International*, **2005**, 160, 505-526	2.6	58
105	Magma ascent beneath Unzen Volcano, SW Japan, deduced from the electrical resistivity structure. *Journal of Volcanology and Geothermal Research*, **1999**, 89, 35-42	2.8	56
104	Trans-Pacific temperature field in the mantle transition region derived from seismic and electromagnetic tomography. *Earth and Planetary Science Letters*, **2004**, 217, 425-434	5.3	53
103	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	5.3	50
102	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	5.3	48
101	Magnetic and electric field observations during the 2000 activity of Miyake-jima volcano, Central Japan. *Earth and Planetary Science Letters*, **2002**, 203, 769-777	5.3	48
100	Upper mantle conductivity structure of the back-arc region beneath northeastern China. *Geophysical Research Letters*, **2001**, 28, 3773-3776	4.9	46
99	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	5.3	43
98	Seismic and Electrical Signatures of the Lithosphere–Asthenosphere System of the Normal Oceanic Mantle. *Annual Review of Earth and Planetary Sciences*, **2017**, 45, 139-167	15.3	42

97	Network-magnetotelluric method and its first results in central and eastern Hokkaido, NE Japan. *Geophysical Journal International*, **2001**, 146, 1-19	2.6	41
96	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	2.3	34
95	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	2.6	34
94	Coseismic piezoelectric effects due to a dislocation: 1. An analytic far and early-time field solution in a homogeneous whole space. *Physics of the Earth and Planetary Interiors*, **2000**, 121, 273-288	2.3	34
93	Electrical conductivity anomalies beneath the Western Sea of Kyushu, Japan. *Geophysical Research Letters*, **1997**, 24, 1551-1554	4.9	29
92	3-D modelling the electric field due to ocean tidal flow and comparison with observations. *Geophysical Research Letters*, **2006**, 33,	4.9	29
91	A regularized three-dimensional magnetotelluric inversion with a minimum gradient support constraint. *Geophysical Journal International*, **2012**, 189, 296-316	2.6	28
90	Revised 1-D mantle electrical conductivity structure beneath the north Pacific. *Geophysical Journal International*, **2010**, 180, 1030-1048	2.6	27
89	Volcanomagnetic effect observed during the 1986 eruption of Izu-Oshima Volcano.. *Journal of Geomagnetism and Geoelectricity*, **1990**, 42, 291-317		27
88	Is the electrical conductivity of the northwestern Pacific upper mantle normal?. *Geochemistry, Geophysics, Geosystems*, **2013**, 14, 4969-4979	3.6	26
87	Ocean Bottom Array Probes Stagnant Slab Beneath the Philippine Sea. *Eos*, **2009**, 90, 70	1.5	24
86	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	2.3	24
85	Water Content in the Mantle Transition Zone Beneath the North Pacific Derived from the Electrical Conductivity Anomaly. *Geophysical Monograph Series*, **2013**, 171-179	1.1	23
84	Comment on Preseismic ionospheric electron enhancements revisited by K. Heki and Y. Enomoto. *Journal of Geophysical Research: Space Physics*, **2014**, 119, 6011-6015	2.6	21
83	Resistivity structure of Unzen Volcano derived from time domain electromagnetic (TDEM) survey. *Journal of Volcanology and Geothermal Research*, **2008**, 175, 231-240	2.8	21
82	Submarine cable OBS using a retired submarine telecommunication cable: GeO-TOC program. *Physics of the Earth and Planetary Interiors*, **1998**, 108, 113-127	2.3	20
81	Preliminary report on a magnetotelluric array study in the Northwest Pacific.. *Journal of Geomagnetism and Geoelectricity*, **1983**, 35, 575-587		20
80	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	2.3	19

79	Possible effects of lateral heterogeneity in the D? layer on electromagnetic variations of core origin. *Physics of the Earth and Planetary Interiors*, **2002**, 129, 99-116	2.3	19
78	Low electrical resistivity along an active fault, the Yamasaki fault.. *Journal of Geomagnetism and Geoelectricity*, **1982**, 34, 103-127		19
77	Determination of intrinsic attenuation in the oceanic lithosphere-asthenosphere system. *Science*, **2017**, 358, 1593-1596	33.3	18
76	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		18
75	Changes in the geomagnetic total intensity observed before the eruption of Oshima Volcano in 1986.. *Journal of Geomagnetism and Geoelectricity*, **1990**, 42, 277-290		18
74	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		18
73	Regularized magnetotelluric inversion based on a minimum support gradient stabilizing functional. *Earth, Planets and Space*, **2017**, 69,	2.9	17
72	On the Berdichevsky average. *Physics of the Earth and Planetary Interiors*, **2016**, 253, 1-4	2.3	17
71	Sq effect on the electromagnetic response functions in the period range between 104 and 105 s. *Geophysical Journal International*, **2011**, 186, 193-206	2.6	17
70	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	2.9	17
69	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	4.9	17
68	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	2.9	17
67	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,	2.9	16
66	Practical incorporation of local and regional topography in three-dimensional inversion of deep ocean magnetotelluric data. *Geophysical Journal International*, **2013**, 194, 348-361	2.6	16
65	Electromagnetic signals related to incidence of a teleseismic body wave into a subsurface piezoelectric body. *Earth, Planets and Space*, **2000**, 52, 253-260	2.9	16
64	Three-dimensional simulation of the electromagnetic fields induced by the 2011 Tohoku tsunami. *Journal of Geophysical Research: Solid Earth*, **2014**, 119, 150-168	3.6	15
63	Marine magnetotellurics imaged no distinct plume beneath the Tristan da Cunha hotspot in the southern Atlantic Ocean. *Tectonophysics*, **2017**, 716, 52-63	3.1	15
62	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	2.9	15

61	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	2.9	15
60	In Situ Characterization of the Lithosphere-Asthenosphere System beneath NW Pacific Ocean Via Broadband Dispersion Survey With Two OBS Arrays. *Geochemistry, Geophysics, Geosystems*, **2018**, 19, 3529-3539	3.6	15
59	Geomagnetic variations observed after the 1986 eruption of Izu-Oshima Volcano.. *Journal of Geomagnetism and Geoelectricity*, **1990**, 42, 319-335		14
58	Three-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	3.6	13
57	GeO-TOC Project-Reuse of Submarine Cables for Seismic and Geoelectrical Measurements.. *Journal of Physics of the Earth*, **1995**, 43, 619-628		13
56	Geomagnetic observatory operates at the seafloor in the northwest Pacific Ocean. *Eos*, **2004**, 85, 467-473	1.5	12
55	EMRIDGE: The electromagnetic investigation of the Juan de Fuca Ridge. *Marine Geophysical Researches*, **1993**, 15, 77-100	2.3	12
54	A Two-Dimensional Conductivity Model across Central Japan. *Journal of Geomagnetism and Geoelectricity*, **1986**, 38, 447-473		12
53	3-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	3.6	11
52	The 2011 Tohoku Tsunami observed by an array of ocean bottom electromagnetometers. *Geophysical Research Letters*, **2014**, 41, 4937-4944	4.9	11
51	Interpretation of time changes in the apparent resistivity observed prior to the 1986 eruption of Izu□shima volcano, Japan. *Journal of Volcanology and Geothermal Research*, **2003**, 126, 97-107	2.8	11
50	Geoelectric power spectra over oceanic distances. *Geophysical Research Letters*, **1995**, 22, 421-424	4.9	11
49	On the physical background of the van earthquake prediction method. *Tectonophysics*, **1993**, 224, 153-160	3.1	11
48	Resistivity structure of Izu-Oshima volcano revealed by the ELF-VLF magnetotelluric method.. *Journal of Geomagnetism and Geoelectricity*, **1990**, 42, 169-194		11
47	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	2.6	10
46	Anomalous occurrence features of the preliminary impulse of geomagnetic sudden commencement in the South Atlantic Anomaly region. *Journal of Geophysical Research*, **2010**, 115, n/a-n/a		10
45	Approximate treatment of seafloor topographic effects in three-dimensional marine magnetotelluric inversion. *Earth, Planets and Space*, **2012**, 64, 1005-1021	2.9	10
44	Seismic resistivity changes observed at Aburatsubo, central Japan, revisited. *Tectonophysics*, **1998**, 299, 317-331	3.1	10

43	Magnetotelluric investigations for the seismically active area in Northern Miyagi Prefecture, northeastern Japan. *Earth, Planets and Space*, **1999**, 51, 351-361	2.9	10
42	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,	2.9	10
41	Electromagnetic evidence for volatile-rich upwelling beneath the society hotspot, French Polynesia. *Geophysical Research Letters*, **2016**, 43, 12021-12026	4.9	9
40	Characteristics of counter-Sq SFE (SFE*) at the dip equator CPMN stations. *Journal of Geophysical Research*, **2009**, 114, n/a-n/a		9
39	Seasonal thermal signatures of heat transfer by water exchange in an underground vault. *Geophysical Journal International*, **2004**, 158, 372-384	2.6	9
38	The feasibility of using decadal changes in the geoelectric field to probe Earth□ core. *Physics of the Earth and Planetary Interiors*, **2004**, 142, 297-319	2.3	9
37	The 2000 Activity of Miyake-jima Volcano as Inferred from Electric and Magnetic Field Observations. *Journal of Geography (Chigaku Zasshi)*, **2001**, 110, 226-244	0.5	9
36	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	2.9	9
35	Preliminary report on a study of resistivity structure beneath the Northern Honsyu of Japan.. *Journal of Geomagnetism and Geoelectricity*, **1983**, 35, 589-608		9
34	Study on New Low Cost Ocean Bottom Cabled Seismometers **2006**,		8
33	A New Low Cost Ocean Bottom Cabled Seismometers **2007**,		8
32	Evolution of the current system during solar wind pressure pulses based on aurora and magnetometer observations. *Earth, Planets and Space*, **2016**, 68,	2.9	8
31	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	5.3	7
30	Electromagnetic exploration of the oceanic mantle. *Proceedings of the Japan Academy Series B: Physical and Biological Sciences*, **2015**, 91, 203-22	4	7
29	Three-dimensional geomagnetic response functions for global and semi-global scale induction problems. *Geophysical Journal International*, **2009**, 178, 123-144	2.6	7
28	Robust and less robust features in the tangential geostrophy core flows. *Geophysical Journal International*, **2009**, 178, 678-692	2.6	7
27	A New OBCS: Ocean Bottom Cabled Seismometer - IP Goes to the Oceans **2008**,		7
26	Variability of the topographic core-mantle torque calculated from core surface flow models. *Physics of the Earth and Planetary Interiors*, **2006**, 154, 85-111	2.3	7

25	OFFSHORE EMSLAB: objectives, experimental phase and early results. *Physics of the Earth and Planetary Interiors*, **1989**, 53, 422-431	2.3	7
24	Use of ssq rotational invariant of magnetotelluric impedances for estimating informative properties for galvanic distortion. *Earth, Planets and Space*, **2017**, 69,	2.9	6
23	Seafloor electromagnetic induction studies in the Bay of Bengal. *Marine Geophysical Researches*, **2000**, 21, 1-21	2.3	6
22	Application of sompi spectral analysis to the estimation of the geomagnetic transfer function.. *Journal of Geomagnetism and Geoelectricity*, **1988**, 40, 447-463		6
21	A new model of ocean bottom magnetometer.. *Journal of Geomagnetism and Geoelectricity*, **1983**, 35, 407-421		6
20	Sea floor measurement of geomagnetic field using newly developed ocean bottom magnetometers.. *Journal of Geomagnetism and Geoelectricity*, **1982**, 34, 571-585		6
19	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	6
18	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	2.8	5
17	A Deep Transient EM Experiment in the Northern Part of Miyagi Prefecture, Northeastern Japan.. *Journal of Geomagnetism and Geoelectricity*, **1996**, 48, 1265-1280		5
16	Motional magnetotellurics by long oceanic waves. *Geophysical Journal International*, **2015**, 201, 390-405	2.6	4
15	Inversion of Longer-Period OBS Waveforms for P Structures in the Oceanic Lithosphere and Asthenosphere. *Journal of Geophysical Research: Solid Earth*, **2020**, 125, e2019JB018810	3.6	4
14	The response of the dayside equatorial electrojet to step-like changes of IMF BZ. *Journal of Geophysical Research: Space Physics*, **2013**, 118, 3637-3646	2.6	3
13	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	2.9	3
12	Audio-Frequency Magnetotelluric Imaging of an Active Strike-Slip Fault.. *Journal of Geomagnetism and Geoelectricity*, **1994**, 46, 403-408		3
11	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		3
10	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	4	3
9	Probing 1-D electrical anisotropy in the oceanic upper mantle from seafloor magnetotelluric array data. *Geophysical Journal International*, **2020**, 222, 1502-1525	2.6	2
8	Ocean bottom measurements of the Earth's electric field using long cable installed by ROV **2013**,		2

7	New innovative ocean bottom cabled seismometer system and observation in the Sea of Japan **2011**,		2
6	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		2
5	Ocean bottom geophysical array studies may reveal the cause of seafloor flattening. *Earth and Planetary Science Letters*, **2019**, 518, 100-107	5.3	1
4	Three-Dimensional Electrical Resistivity Structure Beneath a Volcanically and Seismically Active Island, Kyushu, Southwest Japan Arc. *Journal of Geophysical Research: Solid Earth*, **2020**, 125, e2019JB017485	3.6	1
3	A new compact Ocean Bottom Cabled Seismometers system for spatially dense observation on sea floor **2008**,		1
2	Impedance Tensor of Network-MT and the Influencing Factors. *Chinese Journal of Geophysics*, **2008**, 51, 183-190		1
1	Difficulty of statistical evaluation of an earthquake prediction method. *Geophysical Research Letters* , **1996**, 23, 1391-1394	4.9	1