Masayuki Obayashi

List of Publications by Year
in descending order

53	3,900	218677	175258
papers	citations	26 h-index	52 g-index

54	54	54	2215
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Subducting slabs stagnant in the mantle transition zone. Journal of Geophysical Research, 1992, 97, 4809-4822.	3.3	596
2	Stagnant slabs in the upper and lower mantle transition region. Reviews of Geophysics, 2001, 39, 291-323.	23.0	573
3	Subducted slabs stagnant above, penetrating through, and trapped below the 660 km discontinuity. Journal of Geophysical Research: Solid Earth, 2013, 118, 5920-5938.	3.4	411
4	Stagnant Slab: A Review. Annual Review of Earth and Planetary Sciences, 2009, 37, 19-46.	11.0	314
5	Changbaishan volcanism in northeast China linked to subduction-induced mantle upwelling. Nature Geoscience, 2014, 7, 470-475.	12.9	230
6	Finite frequency whole mantle P wave tomography: Improvement of subducted slab images. Geophysical Research Letters, 2013, 40, 5652-5657.	4.0	167
7	Melting of dehydrated oceanic crust from the stagnant slab and of the hydrated mantle transition zone: Constraints from Cenozoic alkaline basalts in eastern China. Chemical Geology, 2013, 359, 32-48.	3.3	117
8	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.	1.9	97
9	Crustal structure beneath NE China imaged by NECESSArray receiver function data. Earth and Planetary Science Letters, 2014, 398, 48-57.	4.4	92
10	High temperature anomalies oceanward of subducting slabs at the 410-km discontinuity. Earth and Planetary Science Letters, 2006, 243, 149-158.	4.4	91
11	Geologic implication of the whole mantle P-wave tomography.. Journal of the Geological Society of Japan, 1994, 100, 4-23.	0.6	89
12	Tearing of Stagnant Slab. Science, 2009, 324, 1173-1175.	12.6	83
13	PandPcPtravel time tomography for the core-mantle boundary. Journal of Geophysical Research, 1997, 102, 17825-17841.	3.3	79
14	Mapping the subducting Pacific slab beneath southwest Japan with Hi-net receiver functions. Earth and Planetary Science Letters, 2005, 239, 9-17.	4.4	76
15	High resolution 3-D crustal structure beneath NE China from joint inversion of ambient noise and receiver functions using NECESSArray data. Earth and Planetary Science Letters, 2015, 416, 1-11.	4.4	70
16	South Pacific mantle plumes imaged by seismic observation on islands and seafloor. Geochemistry, Geophysics, Geosystems, 2009, 10, .	2.5	68
17	Receiver function images of the mantle transition zone beneath NE China: New constraints on intraplate volcanism, deep subduction and their potential link. Earth and Planetary Science Letters, 2015, 412, 101-111.	4.4	60
18	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.	4.4	57

#	Article	IF	Citations
19	Trans-Pacific temperature field in the mantle transition region derived from seismic and electromagnetic tomography. Earth and Planetary Science Letters, 2004, 217, 425-434.	4.4	56
20	Whole mantlePwave tomography usingPand PP-P data. Journal of Geophysical Research, 2003, 108, ESE 8-1-ESE 8-14.	3.3	48
21	Depths of the 410-km and 660-km discontinuities in and around the stagnant slab beneath the Philippine Sea: Is water stored in the stagnant slab?. Physics of the Earth and Planetary Interiors, 2010, 183, 270-279.	1.9	41
22	Visualization of geoscience data on Google Earth: Development of a data converter system for seismic tomographic models. Computers and Geosciences, 2010, 36, 373-382.	4.2	40
23	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.	1.9	38
24	Upper mantle tomography in the northwestern Pacific region using triplicated P waves. Journal of Geophysical Research: Solid Earth, 2014, 119, 7667-7685.	3.4	33
25	Seismic discontinuities in the mantle transition zone and at the top of the lower mantle beneath eastern China and Korea: Influence of the stagnant Pacific slab. Physics of the Earth and Planetary Interiors, 2010, 183, 288-295.	1.9	30
26	Mantle seismic anisotropy beneath NE China and implications for the lithospheric delamination hypothesis beneath the southern Great Xing'an range. Earth and Planetary Science Letters, 2017, 471, 32-41.	4.4	27
27	PP-Pdifferential traveltime measurement with crustal correction. Geophysical Journal International, 2004, 157, 1152-1162.	2.4	25
28	Towards Mapping the Three-Dimensional Distribution of Water in the Transition Zone from P-Velocity Tomography and 660-Km Discontinuity Depths. Geophysical Monograph Series, 2013, , 237-249.	0.1	23
29	P-wave tomography of the mantle beneath the South Pacific Superswell revealed by joint ocean floor and islands broadband seismic experiments. Physics of the Earth and Planetary Interiors, 2009, 172, 268-277.	1.9	21
30	Deep Earth Structure - Subduction Zone Structure in the Mantle Transition Zone. , 2015, , 641-654.		21
31	Very broadband analysis of a swarm of very low frequency earthquakes and tremors beneath Kii Peninsula, SW Japan. Geophysical Research Letters, 2010, 37, .	4.0	20
32	Seismic evidence for a thermochemical mantle plume underplating the lithosphere of the Ontong Java Plateau. Communications Earth & Environment, 2021, 2, .	6.8	19
33	Characterization of Crustal and Uppermostâ€Mantle Seismic Discontinuities in the Ontong Java Plateau. Journal of Geophysical Research: Solid Earth, 2019, 124, 7155-7170.	3.4	17
34	Mantle plumes beneath the South Pacific superswell revealed by finite frequency P tomography using regional seafloor and island data. Geophysical Research Letters, 2016, 43, 11,628.	4.0	16
35	Unusually deep Bonin earthquake of 30 May 2015: A precursory signal to slab penetration?. Earth and Planetary Science Letters, 2017, 459, 221-226.	4.4	15
36	Evaluation of slab images in the northwestern Pacific. Earth, Planets and Space, 1998, 50, 953-964.	2.5	14

#	Article	IF	Citations
37	Seismological evidence for compositional variations at the base of the mantle transition zone under Japan Islands. Gondwana Research, 2009, 16, 482-490.	6.0	13
38	Lg attenuation in northeast China using NECESSArray data. Geophysical Journal International, 2015, 200, 67-76.	2.4	13
39	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.	4.4	12
40	Reference frequency of teleseismic body waves. Journal of Geophysical Research, 2004, 109, .	3.3	11
41	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
42	Multiscale waveform tomography with twoâ€step model parameterization. Journal of Geophysical Research, 2009, 114, .	3.3	9
43	Interrelation of the stagnant slab, Ontong Java Plateau, and intraplate volcanism as inferred from seismic tomography. Scientific Reports, 2021, 11, 20966.	3.3	9
44	Adjoint tomography of the crust and upper mantle structure beneath the Kanto region using broadband seismograms. Progress in Earth and Planetary Science, 2017, 4, .	3.0	8
45	Rapid lateral variation of P-wave velocity at the base of the mantle near the edge of the Large-Low Shear Velocity Province beneath the western Pacific. Geophysical Journal International, 2015, 200, 1052-1065.	2.4	7
46	Persistent Longâ€Period Signals Recorded by an OBS Array in the Westernâ€Central Pacific: Activity of Ambrym Volcano in Vanuatu. Geophysical Research Letters, 2020, 47, e2020GL089108.	4.0	7
47	Fast P- and S-wave velocities associated with the â€œcoldâ€•stagnant slab beneath the northern Philippine Sea. Physics of the Earth and Planetary Interiors, 2010, 179, 1-6.	1.9	6
48	High QScS beneath the Ontong Java Plateau. Earth, Planets and Space, 2019, 71, .	2.5	6
49	Effects of shallow-layer reverberation on measurement of teleseismic P-wave travel times for ocean bottom seismograph data. Earth, Planets and Space, 2017, 69, .	2.5	5
50	A database of global seismic travel times. JAMSTEC Report of Research and Development, 2017, 24, 23-29.	0.2	3
51	The 3D Structure of the Mantle from Travel Time Inversion.. Journal of Geography (Chigaku Zasshi), 1995, 104, 934-940.	0.3	2
52	CSMAP: Cross Section Selector and Tomogram Generator. JAMSTEC Report of Research and Development, 2016, 22, 31-38.	0.2	1
53	Development of the global seismic travel time database at JAMSTEC/IFREE. JAMSTEC Report of Research and Development, 2009, 2009, 163-172.	0.2	0