Benoit Tauzin

List of Publications by Year
in descending order

31 papers	1,190 citations	430874 18 h-index	434195 31 g-index
40 all docs	40 docs citations	40 times ranked	1040 citing authors

#	Article	IF	Citations
1	Constraints on the shallow elastic and anelastic structure of Mars from InSight seismic data. Nature Geoscience, 2020, 13, 213-220.	12.9	207
2	Seismic evidence for a global low-velocity layer within the Earthâ€™s upper mantle. Nature Geoscience, 2010, 3, 718-721.	12.9	176
3	Thickness and structure of the martian crust from InSight seismic data. Science, 2021, 373, 438-443.	12.6	140
4	The mantle transition zone as seen by global <i>Pds</i> phases: No clear evidence for a thin transition zone beneath hotspots. Journal of Geophysical Research, 2008, 113, .	3.3	73
5	Multiple transition zone seismic discontinuities and low velocity layers below western United States. Journal of Geophysical Research: Solid Earth, 2013, 118, 2307-2322.	3.4	60
6	Potential Pitfalls in the Analysis and Structural Interpretation of Seismic Data from the Mars <i>InSight</i> Mission. Bulletin of the Seismological Society of America, 2021, 111, 2982-3002.	2.3	42
7	Crust stratigraphy and heterogeneities of the first kilometers at the dichotomy boundary in western Elysium Planitia and implications for InSight lander. Icarus, 2020, 338, 113511.	2.5	40
8	Seismoacoustic coupling induced by the breakup of the 15 February 2013 Chelyabinsk meteor. Geophysical Research Letters, 2013, 40, 3522-3526.	4.0	36
9	Pervasive upper mantle melting beneath the western US. Earth and Planetary Science Letters, 2017, 463, 25-35.	4.4	35
10	Autocorrelation of the Ground Vibrations Recorded by the SEISâ€InSight Seismometer on Mars. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006498.	3.6	34
11	Improving Constraints on Planetary Interiors With PPs Receiver Functions. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006983.	3.6	34
12	Seismically deduced thermodynamics phase diagrams for the mantle transition zone. Earth and Planetary Science Letters, 2014, 401, 337-346.	4.4	33
13	Pervasive seismic low-velocity zones within stagnant plates in the mantle transition zone: Thermal or compositional origin?. Earth and Planetary Science Letters, 2017, 477, 1-13.	4.4	31
14	Seismic Noise Autocorrelations on Mars. Earth and Space Science, 2021, 8, e2021EA001755.	2.6	31
15	Receiver functions from seismic interferometry: a practical guide. Geophysical Journal International, 2019, 217, 1-24.	2.4	29
16	Multi-mode conversion imaging of the subducted Gorda and Juan de Fuca plates below the North American continent. Earth and Planetary Science Letters, 2016, 440, 135-146.	4.4	28
17	A poorly mixed mantle transition zone and its thermal state inferred from seismic waves. Nature Geoscience, 2021, 14, 949-955.	12.9	25
18	Deep crustal fracture zones control fluid escape and the seismic cycle in the Cascadia subduction zone. Earth and Planetary Science Letters, 2017, 460, 1-11.	4.4	21

#	Article	IF	Citations
19	Cascadia subduction slab heterogeneity revealed by threeâ€dimensional receiver function Kirchhoff migration. Geophysical Research Letters, 2017, 44, 694-701.	4.0	17
20	MSS/1: Singleâ€Station and Singleâ€Event Marsquake Inversion. Earth and Space Science, 2020, 7, e2020EA001118.	2.6	16
21	Joint mineral physics and seismic wave traveltime analysis of upper mantle temperature. Geology, 2009, 37, 363-366.	4.4	14
22	Seismological evidence for thermo-chemical heterogeneity in Earth's continental mantle. Earth and Planetary Science Letters, 2020, 539, 116240.	4.4	13
23	The Mantle Transition Zone in Fennoscandia: Enigmatic High Topography Without Deep Mantle Thermal Anomaly. Geophysical Research Letters, 2019, 46, 3652-3662.	4.0	10
24	Multifrequency Inversion of Ps and Sp Receiver Functions: Methodology and Application to USArray Data. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB020350.	3.4	10
25	Multiple Phase Changes in the Mantle Transition Zone Beneath Northeast Asia: Constraints From Teleseismic Reflected and Converted Body Waves. Journal of Geophysical Research: Solid Earth, 2018, 123, 6636-6657.	3.4	7
26	On The Efficiency of <i>P</i>â€Wave Coda Autocorrelation in Recovering Crustal Structure: Examples From Dense Arrays in the Eastern United States. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB020270.	3.4	7
27	Automatic Identification of Mantle Seismic Phases Using a Convolutional Neural Network. Geophysical Research Letters, 2021, 48, e2020GL091658.	4.0	7
28	Stochastic Inversion of <i>P</i>â€toâ€<i>S</i> Converted Waves for Mantle Composition and Thermal Structure: Methodology and Application. Journal of Geophysical Research: Solid Earth, 2018, 123, 10,706.	3.4	5
29	An inversion approach for analysing the physical properties of a seismic low-velocity layer in the upper mantle. Physics of the Earth and Planetary Interiors, 2020, 304, 106502.	1.9	4
30	Evidence of Volatileâ€Induced Melting in the Northeast Asian Upper Mantle. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022167.	3.4	3
31	Shear wave velocities across the olivine â€“ wadsleyite â€“ ringwoodite transitions and sharpness of the 410 km seismic discontinuity. Earth and Planetary Science Letters, 2022, 593, 117690.	4.4	1