

# Matthew J Fouch

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/5204454/matthew-j-fouch-publications-by-citations.pdf>

**Version:** 2024-04-26

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

41  
papers

2,344  
citations

27  
h-index

44  
g-index

44  
ext. papers

2,514  
ext. citations

5.5  
avg, IF

4.93  
L-index

#	Paper	IF	Citations
41	Shear wave splitting, continental keels, and patterns of mantle flow. <i>Journal of Geophysical Research</i> , <b>2000</b> , 105, 6255-6275		198
40	Seismic anisotropy beneath stable continental interiors. <i>Physics of the Earth and Planetary Interiors</i> , <b>2006</b> , 158, 292-320	2.3	189
39	An Overview of the Izu-Bonin-Mariana Subduction Factory. <i>Geophysical Monograph Series</i> , <b>2003</b> , 175-222	1.1	174
38	Mantle anisotropy beneath northwest Pacific subduction zones. <i>Journal of Geophysical Research</i> , <b>1996</b> , 101, 15987-16002		166
37	Complex and variable crustal and uppermost mantle seismic anisotropy in the western United States. <i>Nature Geoscience</i> , <b>2011</b> , 4, 55-61	18.3	132
36	Vertical mantle flow associated with a lithospheric drip beneath the Great Basin. <i>Nature Geoscience</i> , <b>2009</b> , 2, 439-444	18.3	122
35	Mantle seismic structure beneath the Kaapvaal and Zimbabwe Cratons. <i>South African Journal of Geology</i> , <b>2004</b> , 107, 33-44	1.6	119
34	Slab fragmentation, edge flow and the origin of the Yellowstone hotspot track. <i>Earth and Planetary Science Letters</i> , <b>2011</b> , 311, 124-135	5.3	105
33	Subduction factory processes beneath the Guguan cross-chain, Mariana Arc: no role for sediments, are serpentinites important?. <i>Contributions To Mineralogy and Petrology</i> , <b>2006</b> , 151, 202-221	3.5	97
32	Three-dimensional seismic velocity structure of the northwestern United States. <i>Geophysical Research Letters</i> , <b>2008</b> , 35,	4.9	84
31	The lithosphere–asthenosphere boundary and the tectonic and magmatic history of the northwestern United States. <i>Earth and Planetary Science Letters</i> , <b>2014</b> , 402, 69-81	5.3	68
30	Lowermost mantle anisotropy beneath the Pacific: Imaging the source of the Hawaiian plume. <i>Earth and Planetary Science Letters</i> , <b>2001</b> , 190, 167-180	5.3	60
29	Lateral variations in Compressional/Shear velocities at the base of the mantle. <i>Science</i> , <b>1999</b> , 284, 120-5	33.3	59
28	Detailed three-dimensional shear wave velocity structure of the northwestern United States from Rayleigh wave tomography. <i>Earth and Planetary Science Letters</i> , <b>2010</b> , 299, 273-284	5.3	54
27	Shear wave splitting and the pattern of mantle flow beneath eastern Oregon. <i>Earth and Planetary Science Letters</i> , <b>2009</b> , 288, 359-369	5.3	53
26	Seismic characterization of mantle flow in subduction systems: Can we resolve a hydrated mantle wedge?. <i>Earth and Planetary Science Letters</i> , <b>2006</b> , 243, 632-649	5.3	53
25	Shear wave anisotropy in the Mariana Subduction Zone. <i>Geophysical Research Letters</i> , <b>1998</b> , 25, 1221-1224	4.9	52

24	Receiver function imaging of upper mantle complexity beneath the Pacific Northwest, United States. <i>Earth and Planetary Science Letters</i> , <b>2010</b> , 297, 141-153	5.3	49
23	Crustal structure beneath the High Lava Plains of eastern Oregon and surrounding regions from receiver function analysis. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,		48
22	Azimuthal anisotropy in the D? layer beneath the Caribbean. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110,		47
21	Unraveling the geometry of the Farallon plate: Synthesis of three-dimensional imaging results from USArray. <i>Tectonophysics</i> , <b>2012</b> , 532-535, 82-102	3.1	45
20	Small-scale variations in seismic anisotropy near Kimberley, South Africa. <i>Geophysical Journal International</i> , <b>2004</b> , 157, 764-774	2.6	44
19	Mantle dynamics beneath the Pacific Northwest and the generation of voluminous back-arc volcanism. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2012</b> , 13, n/a-n/a	3.6	41
18	Depths and temperatures of . <i>Geochemistry, Geophysics, Geosystems</i> , <b>2013</b> , 14, 864-879	3.6	38
17	Seismic anisotropy in the Izu-Bonin subduction system. <i>Geophysical Research Letters</i> , <b>2005</b> , 32,	4.9	35
16	FuncLab: A MATLAB Interactive Toolbox for Handling Receiver Function Datasets. <i>Seismological Research Letters</i> , <b>2012</b> , 83, 596-603	3	34
15	The Yellowstone Hotspot: Plume or Not?. <i>Geology</i> , <b>2012</b> , 40, 479-480	5	34
14	Isotropy or weak vertical transverse isotropy in D? beneath the Atlantic Ocean. <i>Journal of Geophysical Research</i> , <b>2004</b> , 109,		25
13	Depth constraints on azimuthal anisotropy in the Great Basin from Rayleigh-wave phase velocity maps. <i>Earth and Planetary Science Letters</i> , <b>2010</b> , 289, 467-478	5.3	20
12	The role of hydrous phases in the formation of trench parallel anisotropy: Evidence from Rayleigh waves in Cascadia. <i>Geophysical Research Letters</i> , <b>2013</b> , 40, 2642-2646	4.9	19
11	Crust and upper mantle structure beneath the Pacific Northwest from joint inversions of ambient noise and earthquake data. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2012</b> , 13,	3.6	15
10	Seismicity within Arizona during the Deployment of the EarthScope USArray Transportable Array. <i>Bulletin of the Seismological Society of America</i> , <b>2012</b> , 102, 1850-1863	2.3	11
9	Support of high elevation in the southern Basin and Range based on the composition and architecture of the crust in the Basin and Range and Colorado Plateau. <i>Earth and Planetary Science Letters</i> , <b>2006</b> , 249, 62-73	5.3	11
8	Constraints on the causes of mid-Miocene volcanism in the Pacific Northwest US from ambient noise tomography. <i>Geophysical Research Letters</i> , <b>2012</b> , 39, n/a-n/a	4.9	10
7	Modeling time-dependent and -independent indicators to facilitate identification of breakthrough research papers. <i>Scientometrics</i> , <b>2016</b> , 107, 807-817	3	8

- 6 Dynamic lithosphere within the Great Basin. *Geochemistry, Geophysics, Geosystems*, **2014**, 15, 1128-1146 3.6 7
- 5 Seismic evidence for lithospheric modification beneath the Mojave Neovolcanic Province, Southern California. *Geophysical Research Letters*, **2013**, 40, 5119-5124 4.9 6
- 4 EMERALD: A Web Application for Seismic Event Data Processing. *Seismological Research Letters*, **2012**, 83, 1061-1067 3 5
- 3 Lithospheric structure beneath the High Lava Plains, Oregon, imaged by scattered teleseismic waves. *Geochemistry, Geophysics, Geosystems*, **2013**, 14, 4835-4848 3.6 4
- 2 Analysis of Seismic Activity near Theodore Roosevelt Dam, Arizona, during the Occupation of the EarthScope/USArray Transportable Array. *Seismological Research Letters*, **2012**, 83, 1014-1022 3 2
- 1 Anisotropy and Flow in Pacific Subduction Zone Back-arcs **1998**, 463-475