Susan Beck

List of Publications by Year
in descending order

47 papers	2,556 citations	236925 25 h-index	233421 45 g-index
52 all docs	52 docs citations	52 times ranked	1990 citing authors

#	Article	IF	Citations
1	Slab Induced Mantle Upwelling Beneath the Anatolian Plateau. Geophysical Research Letters, 2022, 49, .	4.0	1
2	Triggered crustal earthquake swarm across subduction segment boundary after the 2016 Pedernales, Ecuador megathrust earthquake. Earth and Planetary Science Letters, 2021, 553, 116620.	4.4	16
3	Variable seismic anisotropy across the Peruvian flat-slab subduction zone with implications for upper plate deformation. Journal of South American Earth Sciences, 2021, 106, 103053.	1.4	3
4	3D Local Earthquake Tomography of the Ecuadorian Margin in the Source Area of the 2016 Mw 7.8 Pedernales Earthquake. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB020701.	3.4	6
5	Lithospheric Architecture of the Paranapanema Block and Adjacent Nuclei Using Multipleâ€Frequency <i>P</i>â€Wave Seismic Tomography. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB021183.	3.4	12
6	Repeating Earthquakes at the Edge of the Afterslip of the 2016 Ecuadorian M_W7.8 Pedernales Earthquake. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB021746.	3.4	8
7	Crustal thickness and magma storage beneath the Ecuadorian arc. Journal of South American Earth Sciences, 2021, 110, 103331.	1.4	14
8	Lithospheric structure of the Pampean flat slab region from double-difference tomography. Journal of South American Earth Sciences, 2020, 97, 102417.	1.4	15
9	Upper-plate structure in Ecuador coincident with the subduction of the Carnegie Ridge and the southern extent of large mega-thrust earthquakes. Geophysical Journal International, 2020, 220, 1965-1977.	2.4	15
10	Detailed Structure of the Subducted Nazca Slab into the Lower Mantle Derived From Continentâ€Scale Teleseismic <i>P</i> Wave Tomography. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB017884.	3.4	31
11	Subduction dynamics and structural controls on shear wave splitting along the South American convergent margin. Journal of South American Earth Sciences, 2020, 104, 102824.	1.4	5
12	Mantle dynamics of the Andean Subduction Zone from continent-scale teleseismic <i>S</i>-wave tomography. Geophysical Journal International, 2020, 224, 1553-1571.	2.4	10
13	The Deformational Journey of the Nazca Slab From Seismic Anisotropy. Geophysical Research Letters, 2020, 47, e2020GL087398.	4.0	4
14	Structure of the Ecuadorian forearc from the joint inversion of receiver functions and ambient noise surface waves. Geophysical Journal International, 2020, 222, 1671-1685.	2.4	8
15	Structural Control on Megathrust Rupture and Slip Behavior: Insights From the 2016 Mw 7.8 Pedernales Ecuador Earthquake. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB018001.	3.4	14
16	1D-velocity structure and seismotectonics of the Ecuadorian margin inferred from the 2016 Mw7.8 Pedernales aftershock sequence. Tectonophysics, 2019, 767, 228165.	2.2	9
17	Receiver function analysis reveals layered anisotropy in the crust and upper mantle beneath southern Peru and northern Bolivia. Tectonophysics, 2019, 753, 93-110.	2.2	12
18	The 2016 MwÂ7.8 Pedernales, Ecuador, Earthquake: Rapid Response Deployment. Seismological Research Letters, 2019, 90, 1346-1354.	1.9	17

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19	Foreland uplift during flat subduction: Insights from the Peruvian Andes and Fitzcarrald Arch. Tectonophysics, 2018, 731-732, 73-84.	2.2	20
20	Midcrustal Deformation in the Central Andes Constrained by Radial Anisotropy. Journal of Geophysical Research: Solid Earth, 2018, 123, 4798-4813.	3.4	33
21	The nature of subslab slow velocity anomalies beneath South America. Geophysical Research Letters, 2017, 44, 4747-4755.	4.0	44
22	Mantle flow through a tear in the Nazca slab inferred from shear wave splitting. Geophysical Research Letters, 2017, 44, 6735-6742.	4.0	23
23	Tectonic Evolution of the Central Andean Plateau and Implications for the Growth of Plateaus. Annual Review of Earth and Planetary Sciences, 2017, 45, 529-559.	11.0	127
24	Causes and consequences of flat-slab subduction in southern Peru. , 2017, 13, 1392-1407.		67
25	Central Andean crustal structure from receiver function analysis. Tectonophysics, 2016, 682, 120-133.	2.2	47
26	Lithospheric structure beneath the northern Central Andean Plateau from the joint inversion of ambient noise and earthquakeâ€generated surface waves. Journal of Geophysical Research: Solid Earth, 2016, 121, 8217-8238.	3.4	26
27	Imaging the transition from flat to normal subduction: variations in the structure of the Nazca slab and upper mantle under southern Peru and northwestern Bolivia. Geophysical Journal International, 2016, 204, 457-479.	2.4	51
28	Seismicity and state of stress in the central and southern Peruvian flat slab. Earth and Planetary Science Letters, 2016, 441, 71-80.	4.4	33
29	Internal deformation of the subducted Nazca slab inferred from seismic anisotropy. Nature Geoscience, 2016, 9, 56-59.	12.9	34
30	Evolution of crustal thickening in the central Andes, Bolivia. Earth and Planetary Science Letters, 2015, 426, 191-203.	4.4	32
31	Shear wave velocity structure of the Anatolian Plate: anomalously slow crust in southwestern Turkey. Geophysical Journal International, 2015, 202, 261-276.	2.4	61
32	The role of ridges in the formation and longevity of flat slabs. Nature, 2015, 524, 212-215.	27.8	87
33	Multiple styles and scales of lithospheric foundering beneath the Puna Plateau, central Andes. , 2015, , .		23
34	Imaging the Nazca slab and surrounding mantle to 700 km depth beneath the central Andes (18Â°S to) Tj ETQq0 0 0 rgBT /Overlock 10		10
35	Seismic imaging of the magmatic underpinnings beneath the Altiplano-Puna volcanic complex from the joint inversion of surface wave dispersion and receiver functions. Earth and Planetary Science Letters, 2014, 404, 43-53.	4.4	181
36	Response of the mantle to flat slab evolution: Insights from local <i>S</i> splitting beneath Peru. Geophysical Research Letters, 2014, 41, 3438-3446.	4.0	30

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37	Ambient noise tomography across the Central Andes. Geophysical Journal International, 2013, 194, 1559-1573.	2.4	87
38	Shear wave velocities in the Pampean flatâ€slab region from Rayleigh wave tomography: Implications for slab and upper mantle hydration. Journal of Geophysical Research, 2012, 117, .	3.3	48
39	Continental and oceanic crustal structure of the Pampean flat slab region, western Argentina, using receiver function analysis: new high-resolution results. Geophysical Journal International, 2011, 186, 45-58.	2.4	117
40	Lithospheric evolution of the Andean foldâ€“thrust belt, Bolivia, and the origin of the central Andean plateau. Tectonophysics, 2005, 399, 15-37.	2.2	203
41	Anisotropy and mantle flow in the Chile-Argentina subduction zone from shear wave splitting analysis. Geophysical Research Letters, 2004, 31, .	4.0	88
42	The nature of orogenic crust in the central Andes. Journal of Geophysical Research, 2002, 107, ESE 7-1-ESE 7-16.	3.3	260
43	Strong crustal heterogeneity in the Bolivian Altiplano as suggested by attenuation ofLgwaves. Journal of Geophysical Research, 1999, 104, 20287-20305.	3.3	48
44	Lithospheric-scale structure across the Bolivian Andes from tomographic images of velocity and attenuation forPandSwaves. Journal of Geophysical Research, 1998, 103, 21233-21252.	3.3	111
45	Crustal-thickness variations in the central Andes. Geology, 1996, 24, 407.	4.4	239
46	Historical 1942 Ecuador and 1942 Peru subduction earthquakes and earthquake cycles along Colombia-Ecuador and Peru subduction segments. Pure and Applied Geophysics, 1996, 146, 67-101.	1.9	97
47	The rupture process of the Great 1979 Colombia Earthquake: Evidence for the asperity model. Journal of Geophysical Research, 1984, 89, 9281-9291.	3.3	122