Suzanne M Carbotte

List of Publications by Year
in descending order

58 papers	2,782 citations	147801 31 h-index	175258 52 g-index
59 all docs	59 docs citations	59 times ranked	1560 citing authors

#	Article	IF	Citations
1	Hydrothermal vent distribution along the East Pacific Rise crest (9Â°09â€²â€“54â€²N) and its relationship to magmatic and tectonic processes on fast-spreading mid-ocean ridges. Earth and Planetary Science Letters, 1991, 104, 513-534.	4.4	374
2	The East Pacific Rise and its flanks 8?18ï¿½ N: History of segmentation, propagation and spreading direction based on SeaMARC II and Sea Beam studies. Marine Geophysical Researches, 1992, 14, 299-344.	1.2	146
3	Comparison of seafloor tectonic fabric at intermediate, fast, and super fast spreading ridges: Influence of spreading rate, plate motions, and ridge segmentation on fault patterns. Journal of Geophysical Research, 1994, 99, 13609-13631.	3.3	146
4	Rift topography linked to magmatism at the intermediate spreading Juan de Fuca Ridge. Geology, 2006, 34, 209.	4.4	108
5	Fine-scale segmentation of the crustal magma reservoir beneath the East Pacific Rise. Nature Geoscience, 2013, 6, 866-870.	12.9	99
6	Frozen magma lenses below the oceanic crust. Nature, 2005, 436, 1149-1152.	27.8	92
7	Seismic reflection images of a near-axis melt sill within the lower crust at the Juan de Fuca ridge. Nature, 2009, 460, 89-93.	27.8	82
8	Contribution of volcanism and tectonism to axial and flank morphology of the southern East Pacific Rise, 17Â°10â€²-17Â°40â€²S, from a study of layer 2A geometry. Journal of Geophysical Research, 1997, 102, 10165-10184.	3.3	81
9	A multi-sill magma plumbing system beneath the axis of the East Pacific Rise. Nature Geoscience, 2014, 7, 825-829.	12.9	76
10	Seismic reflection imaging of the Juan de Fuca plate from ridge to trench: New constraints on the distribution of faulting and evolution of the crust prior to subduction. Journal of Geophysical Research: Solid Earth, 2016, 121, 1849-1872.	3.4	72
11	Upper crustal structure and axial topography at intermediate spreading ridges: Seismic constraints from the southern Juan de Fuca Ridge. Journal of Geophysical Research, 2005, 110, .	3.3	70
12	Influence of magma supply and spreading rate on crustal magma bodies and emplacement of the extrusive layer: Insights from the East Pacific Rise at lat 16Â°N. Geology, 1998, 26, 455.	4.4	66
13	Endeavour Segment of the Juan de Fuca Ridge: One of the Most Remarkable Places on Earth. Oceanography, 2012, 25, 44-61.	1.0	65
14	Seismic evidence for variations in axial magma chamber properties along the southern Juan de Fuca Ridge. Earth and Planetary Science Letters, 2006, 246, 353-366.	4.4	63
15	Causes of variation in fault-facing direction on the ocean floor. Geology, 1990, 18, 749.	4.4	62
16	Links between sediment consolidation and Cascadia megathrust slip behaviour. Nature Geoscience, 2017, 10, 954-959.	12.9	60
17	Variable crustal structure along the Juan de Fuca Ridge: Influence of onâ€axis hot spots and absolute plate motions. Geochemistry, Geophysics, Geosystems, 2008, 9, .	2.5	59
18	Faulting and hydration of the Juan de Fuca plate system. Earth and Planetary Science Letters, 2009, 284, 94-102.	4.4	59

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19	Faulting patterns near 19Â°30â€²Son the East Pacific Rise: Fault formation and growth at a superfast spreading center. Geochemistry, Geophysics, Geosystems, 2001, 2, n/a-n/a.	2.5	55
20	Evaluation of morphological indicators of magma supply and segmentation from a seismic reflection study of the East Pacific Rise 15Â°30â€²-17Â°N. Journal of Geophysical Research, 2000, 105, 2737-2759.	3.3	53
21	Upper crustal evolution across the Juan de Fuca ridge flanks. Geochemistry, Geophysics, Geosystems, 2008, 9, .	2.5	53
22	Variable morphologic expression of volcanic, tectonic, and hydrothermal processes at six hydrothermal vent fields in the Lau backâ€arc basin. Geochemistry, Geophysics, Geosystems, 2008, 9, .	2.5	52
23	Controls on extrusion at mid-ocean ridges. Geology, 1997, 25, 935.	4.4	51
24	Tectonic and magmatic segmentation of the Global Ocean Ridge System: a synthesis of observations. Geological Society Special Publication, 2016, 420, 249-295.	1.3	51
25	The influence of ridge migration on the magmatic segmentation of mid-ocean ridges. Nature, 2004, 429, 743-746.	27.8	47
26	Process-related classification of acoustic data from the Hudson River Estuary. Marine Geology, 2004, 209, 131-145.	2.1	47
27	The axial topographic high at intermediate and fast spreading ridges. Earth and Planetary Science Letters, 1994, 128, 85-97.	4.4	46
28	Crustal thickness and Moho character of the fastâ€spreading East Pacific Rise from 9Â°42â€²N to 9Â°57â€²N from poststackâ€migrated 3âĐ MCS data. Geochemistry, Geophysics, Geosystems, 2014, 15, 634-657.	2.5	46
29	Architecture of on- and off-axis magma bodies at EPR 9Â°37â€“40â€²N and implications for oceanic crustal accretion. Earth and Planetary Science Letters, 2014, 390, 31-44.	4.4	44
30	Variations in upper crustal structure due to variable mantle temperature along the Southeast Indian Ridge. Geochemistry, Geophysics, Geosystems, 2005, 6, n/a-n/a.	2.5	36
31	Evolution of seismic layer 2B across the Juan de Fuca Ridge from hydrophone streamer 2âĐ traveltime tomography. Geochemistry, Geophysics, Geosystems, 2011, 12, .	2.5	32
32	Variations in axial magma lens properties along the East Pacific Rise (9Â°30â€²Nâ€“10Â°00â€²N) from swath 3âĐ seismic imaging and 1âĐ waveform inversion. Journal of Geophysical Research: Solid Earth, 2014, 119, 2721-2744.	3.4	31
33	Stacked sills forming a deep melt-mush feeder conduit beneath Axial Seamount. Geology, 2020, 48, 693-697.	4.4	31
34	Magmatic subsidence of the East Pacific Rise (EPR) at 18Â°14â€²S revealed through fault restoration of ridge crest bathymetry. Geochemistry, Geophysics, Geosystems, 2003, 4, .	2.5	29
35	Recent Seismic Studies at the East Pacific Rise 8Â°20'â€“10Â°10'N and Endeavour Segment: Insights into Mid-Ocean Ridge Hydrothermal and Magmatic Processes. Oceanography, 2012, 25, 100-112.	1.0	28
36	Centered and staggered Fourier derivatives and Hilbert transforms. Geophysics, 2002, 67, 1558-1563.	2.6	25

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37	Crustal Magmatic System Beneath the East Pacific Rise (8Â°20â€² to 10Â°10â€²N): Implications for Tectonomagmatic Segmentation and Crustal Melt Transport at Fastâ€Spreading Ridges. Geochemistry, Geophysics, Geosystems, 2018, 19, 4584-4611.	2.5	25
38	Using geophysical information to define benthic habitats in a large river. Freshwater Biology, 2006, 51, 25-38.	2.4	24
39	Environmental change and oyster colonization within the Hudson River estuary linked to Holocene climate. Geo-Marine Letters, 2004, 24, 212-224.	1.1	23
40	Do sea level variations influence mid-ocean ridge magma supply? A test using crustal thickness and bathymetry data from the East Pacific Rise. Earth and Planetary Science Letters, 2020, 535, 116121.	4.4	21
41	Gravity and seismic study of crustal structure along the Juan de Fuca Ridge axis and across pseudofaults on the ridge flanks. Geochemistry, Geophysics, Geosystems, 2011, 12, .	2.5	20
42	Alongâ€Trench Structural Variations of the Subducting Juan de Fuca Plate From Multichannel Seismic Reflection Imaging. Journal of Geophysical Research: Solid Earth, 2018, 123, 3122-3146.	3.4	19
43	Stacked Magma Lenses Beneath Midâ€Ocean Ridges: Insights From New Seismic Observations and Synthesis With Prior Geophysical and Geologic Findings. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB021434.	3.4	19
44	Distribution of melt along the East Pacific Rise from 9Â°30â€² to 10Â°N from an amplitude variation with angle of incidence (AVA) technique. Geophysical Journal International, 2015, 203, 1-21.	2.4	15
45	Spatial variations in a condensed interval between estuarine and open-marine settings: Holocene Hudson River estuary and adjacent continental shelf. Geology, 2004, 32, 169.	4.4	14
46	Estuarine processes and their stratigraphic record: paleosalinity and sedimentation changes in the Hudson Estuary (North America). Marine Geology, 2004, 209, 113-129.	2.1	13
47	Constraints on melt content of offâ€axis magma lenses at the East Pacific Rise from analysis of 3â€D seismic amplitude variation with angle of incidence. Journal of Geophysical Research: Solid Earth, 2017, 122, 4123-4142.	3.4	9
48	A 65 k.y. time series from sediment-hosted glasses reveals rapid transitions in ocean ridge magmas. Geology, 2017, 45, 491-494.	4.4	9
49	Vp/Vs Ratio of Incoming Sediments Off Cascadia Subduction Zone From Analysis of Controlledâ€Source Multicomponent OBS Records. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB019239.	3.4	9
50	Rescue of long-tail data from the ocean bottom to the Moon: IEDA Data Rescue Mini-Awards. GeoResJ, 2015, 6, 108-114.	1.4	6
51	Upper crustal seismic structure along the Southeast Indian Ridge: Evolution from 0 to 550 ka and variation with axial morphology. Geochemistry, Geophysics, Geosystems, 2010, 11, .	2.5	5
52	Constraints on the mantle temperature gradient along the Southeast Indian Ridge from crustal structure and isostasy: implications for the transition from an axial high to an axial valley. Geophysical Journal International, 2009, 179, 144-153.	2.4	4
53	Recent Advances in Multichannel Seismic Imaging for Academic Research in Deep Oceanic Environments. Oceanography, 2012, 25, 113-115.	1.0	3
54	WORKSHOP REPORT | Building a Global Data Network for Studies of Earth Processes at the World's Plate Boundaries. Oceanography, 2007, 20, 124-125.	1.0	3

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55	Fresnel zone: A pitfall in seismic imaging of mid-ocean ridge magma lenses. Geophysical Research Letters, 1999, 26, 3021-3024.	4.0	2
56	Sound source localization technique using a seismic streamer and its extension for whale localization during seismic surveys. Journal of the Acoustical Society of America, 2015, 138, 3951-3963.	1.1	2
57	Tectonics: Seismic Structure at Mid-Ocean Ridges. , 2019, , 455-471.		0
58	Detection of magma beneath the northern and southern rift zones of Axial Seamount at the Juan de Fuca Ridge. Geochemistry, Geophysics, Geosystems, 0, , .	2.5	0