Gail Christeson

List of Publications by Year
in descending order

80 papers	5,122 citations	126907 33 h-index	91884 69 g-index
83 all docs	83 docs citations	83 times ranked	3948 citing authors

#	Article	IF	Citations
1	The Chicxulub Asteroid Impact and Mass Extinction at the Cretaceous-Paleogene Boundary. Science, 2010, 327, 1214-1218.	12.6	1,140
2	Size and morphology of the Chicxulub impact crater. Nature, 1997, 390, 472-476.	27.8	250
3	The formation of peak rings in large impact craters. Science, 2016, 354, 878-882.	12.6	181
4	Importance of pre-impact crustal structure for the asymmetry of the Chicxulub impactÂcrater. Nature Geoscience, 2008, 1, 131-135.	12.9	156
5	Relationship between spreading rate and the seismic structure of mid-ocean ridges. Nature, 1992, 355, 815-817.	27.8	154
6	Subduction initiation and ophiolite crust: new insights from IODP drilling. International Geology Review, 2017, 59, 1439-1450.	2.1	145
7	Synthesis of Oceanic Crustal Structure From Twoâ€Dimensional Seismic Profiles. Reviews of Geophysics, 2019, 57, 504-529.	23.0	138
8	The Yakutat terrane: Dramatic change in crustal thickness across the Transition fault, Alaska. Geology, 2010, 38, 895-898.	4.4	129
9	Rapid recovery of life at ground zero of the end-Cretaceous mass extinction. Nature, 2018, 558, 288-291.	27.8	123
10	Crustal structure of the Yakutat terrane and the evolution of subduction and collision in southern Alaska. Journal of Geophysical Research, 2012, 117, .	3.3	121
11	Seismic constraints on shallow crustal emplacement processes at the fast spreading East Pacific Rise. Journal of Geophysical Research, 1994, 99, 17957-17973.	3.3	118
12	Peak-ring formation in large impact craters: geophysical constraints from Chicxulub. Earth and Planetary Science Letters, 2000, 183, 347-354.	4.4	113
13	Structure of uppermost fast-spread oceanic crust exposed at the Hess Deep Rift: Implications for subaxial processes at the East Pacific Rise. Geochemistry, Geophysics, Geosystems, 2002, 3, n/a-n/a.	2.5	111
14	Structure of young upper crust at the East Pacific Rise near 9Â°30'N. Geophysical Research Letters, 1992, 19, 1045-1048.	4.0	108
15	GEOPHYSICAL CHARACTERIZATION OF THE CHICXULUB IMPACT CRATER. Reviews of Geophysics, 2013, 51, 31-52.	23.0	100
16	The first day of the Cenozoic. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 19342-19351.	7.1	100
17	Dynamic modeling suggests terrace zone asymmetry in the Chicxulub crater is caused by target heterogeneity. Earth and Planetary Science Letters, 2008, 270, 221-230.	4.4	96
18	Deep crustal structure of the Chicxulub impact crater. Journal of Geophysical Research, 2001, 106, 21751-21769.	3.3	83

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19	Inconsistent correlation of seismic layer 2a and lava layer thickness in oceanic crust. Nature, 2007, 445, 418-421.	27.8	78
20	Structure of the Costa Rica convergent margin, offshore Nicoya Peninsula. Journal of Geophysical Research, 1999, 104, 25443-25468.	3.3	77
21	Deep crustal structure of the northeastern Gulf of Mexico: Implications for rift evolution and seafloor spreading. Journal of Geophysical Research: Solid Earth, 2014, 119, 6802-6822.	3.4	72
22	Probing the hydrothermal system of the Chicxulub impact crater. Science Advances, 2020, 6, eaaz3053.	10.3	69
23	Extrusive thickness variability at the East Pacific Rise, 9Â°-10Â°N: Constraints from seismic techniques. Journal of Geophysical Research, 1996, 101, 2859-2873.	3.3	67
24	Deep crustal structure in the eastern Gulf of Mexico. Journal of Geophysical Research: Solid Earth, 2014, 119, 6782-6801.	3.4	66
25	Crustal structure of the Caribbeanâ€“northeastern South America arcâ€continent collision zone. Journal of Geophysical Research, 2008, 113, .	3.3	65
26	Extraordinary rocks from the peak ring of the Chicxulub impact crater: P-wave velocity, density, and porosity measurements from IODP/ICDP Expedition 364. Earth and Planetary Science Letters, 2018, 495, 1-11.	4.4	65
27	Evolution of the Grenada and Tobago basins and implications for arc migration. Marine and Petroleum Geology, 2011, 28, 235-258.	3.3	60
28	Continental rifting and sediment infill in the northwestern Gulf of Mexico. Geology, 2015, 43, 631-634.	4.4	59
29	Backarc basin evolution and cordilleran orogenesis: Insights from new ocean-bottom seismograph refraction profiling in Bransfield Strait, Antarctica. Geology, 2003, 31, 107.	4.4	51
30	Tectonic and climatic influence on the evolution of the Surveyor Fan and Channel system, Gulf of Alaska. , 2011, 7, 830-844.		51
31	Late Cretaceousâ€Miocene diachronous onset of back thrusting along the South Caribbean deformed belt and its importance for understanding processes of arc collision and crustal growth. Tectonics, 2011, 30, .	2.8	46
32	Shear and compressional wave structure of the East Pacific Rise, 9Â°-10Â°N. Journal of Geophysical Research, 1997, 102, 7821-7835.	3.3	44
33	Deep crustal structure of Bransfield Strait: Initiation of a back arc basin by rift reactivation and propagation. Journal of Geophysical Research, 2003, 108, .	3.3	44
34	Seismic images of the Transition fault and the unstable Yakutatâ€“Pacificâ€“North American triple junction. Geology, 2013, 41, 571-574.	4.4	38
35	Structure and origin of the rifted margin of the northern Gulf of Mexico. , 2018, 14, 1804-1817.		37
36	Mantle deformation beneath the Chicxulub impact crater. Earth and Planetary Science Letters, 2009, 284, 249-257.	4.4	35

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37	Full waveform tomographic images of the peak ring at the Chicxulub impact crater. Journal of Geophysical Research, 2011, 116, .	3.3	35
38	Testing the resolution of a 3D velocity tomogram across the Chicxulub crater. Tectonophysics, 2002, 355, 215-226.	2.2	34
39	Structure of the Lesser Antilles subduction zone backstop and its role in a large accretionary system. Journal of Geophysical Research, 2003, 108, .	3.3	34
40	The shallow attenuation structure of the fast-spreading East Pacific Rise near 9Â°30â€²N. Geophysical Research Letters, 1994, 21, 321-324.	4.0	33
41	Seismic Layer 2A: Evolution and Thickness From 0â€to 70â€Ma Crust in the Slowâ€Intermediate Spreading South Atlantic. Journal of Geophysical Research: Solid Earth, 2019, 124, 7633-7651.	3.4	32
42	Longâ€Lasting Evolution of Layer 2A in the Western South Atlantic: Evidence for Lowâ€Temperature Hydrothermal Circulation in Old Oceanic Crust. Journal of Geophysical Research: Solid Earth, 2019, 124, 2252-2273.	3.4	30
43	The role of farfield tectonic stress in oceanic intraplate deformation, Gulf of Alaska. Journal of Geophysical Research: Solid Earth, 2013, 118, 1862-1872.	3.4	26
44	Evolution of the Southern Caribbean Plate Boundary. Eos, 2006, 87, 97.	0.1	25
45	Explosive interaction of impact melt and seawater following the Chicxulub impact event. Geology, 2020, 48, 108-112.	4.4	25
46	Characterizing the Galicia Bank-Southern Iberia Abyssal Plain rifted margin segment boundary using multichannel seismic and ocean bottom seismometer data. Journal of Geophysical Research, 2007, 112, .	3.3	24
47	Mapping of seismic layer 2A/2B boundary above the sheeted dike unit at intermediate spreading crust exposed near the Blanco Transform. Geochemistry, Geophysics, Geosystems, 2010, 11, .	2.5	24
48	Moho interface beneath Yakutat terrane, southern Alaska. Journal of Geophysical Research: Solid Earth, 2013, 118, 5084-5097.	3.4	24
49	Deep structure of an island arc backstop, Lesser Antilles subduction zone. Journal of Geophysical Research, 2003, 108, .	3.3	23
50	Impactâ€Induced Porosity and Microfracturing at the Chicxulub Impact Structure. Journal of Geophysical Research E: Planets, 2019, 124, 1960-1978.	3.6	23
51	South Atlantic Transect: Variations in Oceanic Crustal Structure at 31Â°S. Geochemistry, Geophysics, Geosystems, 2020, 21, e2020GC009017.	2.5	21
52	Effect of shot interval on ocean bottom seismograph and hydrophone data. Geophysical Research Letters, 1996, 23, 3783-3786.	4.0	17
53	Threeâ€dimensional joint inversion of traveltime and gravity data across the Chicxulub impact crater. Journal of Geophysical Research, 2009, 114, .	3.3	17
54	Seismic images of Chicxulub impact melt sheet and comparison with the Sudbury structure. , 2010, , .		17

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55	Responseâ€"Cretaceous Extinctions. Science, 2010, 328, 975-976.	12.6	16
56	Subduction and accretion of sedimentary rocks in the Yakutat collision zone, St. Elias orogen, Gulf of Alaska. Earth and Planetary Science Letters, 2013, 381, 116-126.	4.4	16
57	Structure of the Northern Symmetrical Segment of the Juan de Fuca Ridge. Marine Geophysical Researches, 1993, 15, 219-240.	1.2	15
58	Upper crustal structure of the Chicxulub impact crater from wide-angle ocean bottom seismograph data. , 1999, , .		15
59	Physical properties and seismic structure of <scp>Izu</scp>â€‹<scp>B</scp>oninâ€‹<scp>M</scp>ariana foreâ€arc crust: Results from IODP <scp>E</scp>xpedition 352 and comparison with oceanic crust. Geochemistry, Geophysics, Geosystems, 2016, 17, 4973-4991.	2.5	15
60	U-Pb memory behavior in Chicxulub's peak ring â€" Applying U-Pb depth profiling to shocked zircon. Chemical Geology, 2019, 525, 356-367.	3.3	15
61	The Eastern North American Margin Community Seismic Experiment: An Amphibious Activeâ€•and Passiveâ€Source Dataset. Seismological Research Letters, 2020, 91, 533-540.	1.9	15
62	Geophysical constraints on the shear stress along the Marquesas Fracture Zone. Journal of Geophysical Research, 1992, 97, 4425-4437.	3.3	14
63	Seismic attenuation in the Costa Rica margin wedge: amplitude modeling of ocean bottom hydrophone data. Earth and Planetary Science Letters, 2000, 179, 391-405.	4.4	14
64	Shallow oceanic crust: Full waveform tomographic images of the seismic layer 2A/2B boundary. Journal of Geophysical Research, 2012, 117, .	3.3	13
65	Chicxulub Crater Seismic Survey prepares way for future drilling. Eos, 2005, 86, 325.	0.1	11
66	Intraplate deformation of oceanic crust near the Rio Grande Rise in the South Atlantic. Tectonophysics, 2020, 790, 228543.	2.2	11
67	Hydrothermal Models Constrained by Fineâ€Scale Seismic Velocities Confirm Hydrothermal Cooling of 7â€"63ÂMa South Atlantic Crust. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB021612.	3.4	11
68	Dynamic response to strike-slip tectonic control on the deposition and evolution of the Baranof Fan, Gulf of Alaska. , 2014, 10, 680-691.		10
69	Aleutian basin oceanic crust. Earth and Planetary Science Letters, 2015, 426, 167-175.	4.4	9
70	Comparison of Geologic and Seismic Structure of Uppermost Fast-Spreading Oceanic Crust: Insights From a Crustal Cross-Section at the Hess Deep Rift. , 2003, , 99-129.		9
71	Shaping of the Present-Day Deep Biosphere at Chicxulub by the Impact Catastrophe That Ended the Cretaceous. Frontiers in Microbiology, 2021, 12, 668240.	3.5	8
72	Mapping the Chicxulub Impact Stratigraphy and Peak Ring Using Drilling and Seismic Data. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006938.	3.6	8

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73	Postmagmatic Tectonic Evolution of the Outer Izuâ€Bonin Forearc Revealed by Sediment Basin Structure and Vein Microstructure Analysis: Implications for a 15 Ma Hiatus Between Pacific Plate Subduction Initiation and Forearc Extension. Geochemistry, Geophysics, Geosystems, 2019, 20, 5867-5895.	2.5	6
74	Ocean resurge-induced impact melt dynamics on the peak-ring of the Chicxulub impact structure, Mexico. International Journal of Earth Sciences, 2021, 110, 2619-2636.	1.8	5
75	Ocean Drilling Perspectives on Meteorite Impacts. Oceanography, 2019, 32, 120-134.	1.0	3
76	70 million years of seafloor spreading and magmatism in the South Atlantic. Earth and Planetary Science Letters, 2021, 574, 117173.	4.4	2
77	Future Scientific Drilling of Oceanic Crust. Eos, 2010, 91, 133.	0.1	1
78	Borehole Seismic Observations From the Chicxulub Impact Drilling: Implications for Seismic Reflectivity and Impact Damage. Geochemistry, Geophysics, Geosystems, 2022, 23, .	2.5	1
79	Journal club. Nature, 2009, 459, 755-755.	27.8	0
80	Tectonic Activity Near the Rio Grande Rise Increases Fluid Flux in Old Oceanic Crust. Geophysical Research Letters, 2021, 48, e2021GL094624.	4.0	0