

# Josep Gallart

## List of Publications by Year in descending order

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117  
papers

6,044  
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50276

46  
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79698

73  
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121  
all docs

121  
docs citations

121  
times ranked

3661  
citing authors

#	ARTICLE	IF	CITATIONS
1	The ECORS Pyrenean deep seismic profile reflection data and the overall structure of an orogenic belt. <i>Tectonics</i> , 1989, 8, 23-39.	2.8	359
2	The ECORS deep reflection seismic survey across the Pyrenees. <i>Nature</i> , 1988, 331, 508-511.	27.8	211
3	Using instantaneous phase coherence for signal extraction from ambient noise data at a local to a global scale. <i>Geophysical Journal International</i> , 2011, 184, 494-506.	2.4	194
4	Evidence for slab rollback in westernmost Mediterranean from improved upper mantle imaging. <i>Earth and Planetary Science Letters</i> , 2013, 368, 51-60.	4.4	163
5	Roots of Etna volcano in faults of great earthquakes. <i>Earth and Planetary Science Letters</i> , 1997, 148, 171-191.	4.4	157
6	Seismic anisotropy as an indicator of mantle flow beneath the Himalayas and Tibet. <i>Nature</i> , 1995, 375, 571-574.	27.8	153
7	TOPO-EUROPE: The geoscience of coupled deep Earth-surface processes. <i>Global and Planetary Change</i> , 2007, 58, 1-118.	3.5	137
8	Seismic image of the Cantabrian Mountains in the western extension of the Pyrenees from integrated ESCIN reflection and refraction data. <i>Tectonophysics</i> , 1996, 264, 1-19.	2.2	124
9	Lateral variation of the crust in the Iberian peninsula: New evidence from the Betic Cordillera. <i>Tectonophysics</i> , 1993, 221, 53-66.	2.2	122
10	Crustal structure of the Ionian margin of Sicily: Etna volcano in the frame of regional evolution. <i>Tectonophysics</i> , 2000, 329, 121-139.	2.2	104
11	The inverse S-transform in filters with time-frequency localization. <i>IEEE Transactions on Signal Processing</i> , 2005, 53, 4417-4422.	5.3	102
12	Implications of the seismic structure for the orogenic evolution of the Pyrenean Range. <i>Earth and Planetary Science Letters</i> , 1982, 57, 88-100.	4.4	99
13	Crustal structure beneath the Iberian Peninsula and surrounding waters: A new compilation of deep seismic sounding results. <i>Physics of the Earth and Planetary Interiors</i> , 2009, 173, 181-190.	1.9	99
14	Frequency-dependent phase coherence for noise suppression in seismic array data. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	98
15	Seismic evidence of Alpine crustal thickening and wedging from the western Pyrenees to the Cantabrian Mountains (north Iberia). <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	96
16	Initiation of an active margin at the North Iberian continent-ocean transition. <i>Tectonics</i> , 2002, 21, 15-1-15-14.	2.8	91
17	Three-dimensional gravity and magnetic modeling of crustal indentation and wedging in the western Pyrenees-Cantabrian Mountains. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	91
18	A deep seismic sounding investigation of lithospheric heterogeneity and anisotropy beneath the Iberian Peninsula. <i>Tectonophysics</i> , 1993, 221, 35-51.	2.2	90

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19	Polarized Earth's ambient microseismic noise. <i>Geochemistry, Geophysics, Geosystems</i> , 2011, 12, n/a-n/a.	2.5	88
20	Mount Etna dense array local earthquake tomography and implications for volcanic plumbing. <i>Journal of Geophysical Research</i> , 2000, 105, 21633-21646.	3.3	87
21	Crustal Root Beneath the Urals: Wide-Angle Seismic Evidence. <i>Science</i> , 1996, 274, 222-224.	12.6	85
22	High-resolution imaging of the Pyrenees and Massif Central from the data of the PYROPE and IBERARRAY portable array deployments. <i>Journal of Geophysical Research: Solid Earth</i> , 2014, 119, 6399-6420.	3.4	83
23	Perturbation to the lithosphere along the hotspot track of La Réunion from an offshore-onshore seismic transect. <i>Journal of Geophysical Research</i> , 1999, 104, 2895-2908.	3.3	80
24	Spatial distribution of hotspot material added to the lithosphere under La Réunion, from wide-angle seismic data. <i>Journal of Geophysical Research</i> , 1999, 104, 2875-2893.	3.3	80
25	Ambient noise surface wave tomography of the Iberian Peninsula: Implications for shallow seismic structure. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	80
26	Coda-Q Distribution In the Iberian Peninsula. <i>Geophysical Journal International</i> , 1990, 100, 285-301.	2.4	76
27	Main results of the ECORS Pyrenees profile. <i>Tectonophysics</i> , 1990, 173, 411-423.	2.2	76
28	Mantle dynamics beneath the Gibraltar Arc (western Mediterranean) from shear-wave splitting measurements on a dense seismic array. <i>Geophysical Research Letters</i> , 2010, 37, .	4.0	75
29	The S-Transform and Its Inverses: Side Effects of Discretizing and Filtering. <i>IEEE Transactions on Signal Processing</i> , 2007, 55, 4928-4937.	5.3	74
30	The deep seismic reflection MARCONI-3 profile: Role of extensional Mesozoic structure during the Pyrenean contractional deformation at the eastern part of the Bay of Biscay. <i>Marine and Petroleum Geology</i> , 2008, 25, 714-730.	3.3	74
31	A crustal transect through the northern and northeastern part of the volcanic edifice of Gran Canaria, Canary Islands. <i>Journal of Geodynamics</i> , 1999, 28, 3-26.	1.6	71
32	Moho topography beneath the Iberian-Western Mediterranean region mapped from controlled-source and natural seismicity surveys. <i>Tectonophysics</i> , 2016, 692, 74-85.	2.2	71
33	Crustal transition between continental and oceanic domains along the North Iberian Margin from wide angle seismic and gravity data. <i>Geophysical Research Letters</i> , 1998, 25, 4249-4252.	4.0	67
34	Subduction-driven recycling of continental margin lithosphere. <i>Nature</i> , 2014, 515, 253-256.	27.8	66
35	Seismic structure of the northern continental margin of Spain from ESCIN deep seismic profiles. <i>Tectonophysics</i> , 1996, 264, 153-174.	2.2	65
36	Seismic signature of Variscan and Alpine tectonics in NW Iberia: Crustal structure of the Cantabrian Mountains and Duero basin. <i>Journal of Geophysical Research</i> , 2000, 105, 3001-3018.	3.3	61

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37	Explosion seismic sounding of throws and dips in the continental Moho. <i>Geophysical Research Letters</i> , 1980, 7, 263-266.	4.0	60
38	Modes of raising northeastern Tibet probed by explosion seismology. <i>Earth and Planetary Science Letters</i> , 2002, 203, 35-43.	4.4	59
39	Crustal structure beneath Spain from deep seismic sounding experiments. <i>Physics of the Earth and Planetary Interiors</i> , 1983, 31, 277-280.	1.9	57
40	Lithospheric structure of Iberia and Morocco using finite-frequency Rayleigh wave tomography from earthquakes and seismic ambient noise. <i>Geochemistry, Geophysics, Geosystems</i> , 2017, 18, 1824-1840.	2.5	57
41	Seismic wide-angle constraints on the crust of the southern Urals. <i>Journal of Geophysical Research</i> , 2000, 105, 13755-13777.	3.3	56
42	The use of instantaneous polarization attributes for seismic signal detection and image enhancement. <i>Geophysical Journal International</i> , 2003, 155, 653-668.	2.4	56
43	Uppermost mantle seismic velocity and anisotropy in the Euro-Mediterranean region from Pn and Sn tomography. <i>Geophysical Journal International</i> , 2013, 192, 310-325.	2.4	55
44	Deep crustal configuration of the Valencia trough and its Iberian and Balearic borders from extensive refraction and wide-angle reflection seismic profiling. <i>Tectonophysics</i> , 1992, 203, 37-55.	2.2	54
45	Vertical movements and material transport during hotspot activity: Seismic reflection profiling offshore La Réunion. <i>Journal of Geophysical Research</i> , 1999, 104, 2855-2874.	3.3	53
46	Lithospheric anisotropy beneath the Pyrenees from shear wave splitting. <i>Journal of Geophysical Research</i> , 1998, 103, 30039-30053.	3.3	52
47	Morphosedimentary features and recent depositional architectural model of the Cantabrian continental margin. <i>Marine Geology</i> , 2008, 247, 61-83.	2.1	50
48	Subduction and volcanism in the Iberia-North Africa collision zone from tomographic images of the upper mantle. <i>Tectonophysics</i> , 2015, 663, 238-249.	2.2	50
49	Estudio Sísmico de la Corteza Ibérica Norte 3.3: A seismic image of the Variscan crust in the hinterland of the NW Iberian Massif. <i>Tectonics</i> , 1998, 17, 171-186.	2.8	47
50	Multiple-frequency tomography of the upper mantle beneath the African/Iberian collision zone. <i>Geophysical Journal International</i> , 2014, 198, 1458-1473.	2.4	47
51	Cenozoic deformational structures on the Galicia Bank Region (NW Iberian continental margin). <i>Marine Geology</i> , 2008, 249, 128-149.	2.1	46
52	Degree of Polarization Filter for Frequency-Dependent Signal Enhancement Through Noise Suppression. <i>Bulletin of the Seismological Society of America</i> , 2004, 94, 1016-1035.	2.3	44
53	A wide angle seismic reconnaissance survey of the crust and upper mantle in the Celtiberian Chain of eastern Spain. <i>Earth and Planetary Science Letters</i> , 1985, 75, 393-402.	4.4	42
54	Crustal thickness and velocity structure across the Moroccan Atlas from long offset wide-angle reflection seismic data: The SIMA experiment. <i>Geochemistry, Geophysics, Geosystems</i> , 2014, 15, 1698-1717.	2.5	42

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55	Explosion seismic P and S velocity and attenuation constraints on the lower crust of the Northâ€“Central Tibetan Plateau, and comparison with the Tethyan Himalayas: Implications on composition, mineralogy, temperature, and tectonic evolution. <i>Tectonophysics</i> , 2006, 412, 141-157.	2.2	41
56	A deep seismic crustal transect from the NE Iberian Peninsula to the western Mediterranean. <i>Journal of Geophysical Research</i> , 1998, 103, 12381-12396.	3.3	38
57	Seismic structure and activity of the north-central Lesser Antilles subduction zone from an integrated approach: Similarities with the Tohoku forearc. <i>Tectonophysics</i> , 2013, 603, 1-20.	2.2	37
58	Seismic monitoring of an Alpine mountain river. <i>Journal of Geophysical Research: Solid Earth</i> , 2014, 119, 3276-3289.	3.4	37
59	Lateral variations in the deep crustal structure at the Iberian margin of the Valencia trough imaged from seismic reflection methods. <i>Tectonophysics</i> , 1994, 232, 59-75.	2.2	36
60	Seismic activity at the western Pyrenean edge. <i>Tectonophysics</i> , 2006, 412, 217-235.	2.2	36
61	Geophysical constraints on the deep structure along the Eors Pyrenees Line. <i>Tectonics</i> , 1989, 8, 1051-1058.	2.8	35
62	Tracking fin whale calls offshore the Galicia Margin, North East Atlantic Ocean. <i>Journal of the Acoustical Society of America</i> , 2006, 120, 2077-2085.	1.1	35
63	Background Noise Characteristics at the IberArray Broadband Seismic Network. <i>Bulletin of the Seismological Society of America</i> , 2010, 100, 618-628.	2.3	34
64	A traverse of the ionian islands front with coincident normal incidence and wide-angle seismics. <i>Tectonophysics</i> , 1996, 264, 35-49.	2.2	33
65	Complex images of Moho and variation of Vp/Vs across the Himalaya and South Tibet, from a joint receiver-function and wide-angle-reflection approach. <i>Geophysical Research Letters</i> , 2002, 29, 35-1-35-4.	4.0	31
66	From the Bay of Biscay to the High Atlas: Completing the anisotropic characterization of the upper mantle beneath the westernmost Mediterranean region. <i>Tectonophysics</i> , 2015, 663, 192-202.	2.2	31
67	Mapping the Moho beneath the Southern Urals with wide-angle reflections. <i>Geophysical Research Letters</i> , 1998, 25, 4229-4232.	4.0	30
68	Atypical seismic signals at the Galicia Margin, North Atlantic Ocean, related to the resonance of subsurface fluid-filled cracks. <i>Tectonophysics</i> , 2007, 433, 1-13.	2.2	30
69	Structure of the Lesser Antilles subduction forearc and backstop from 3D seismic refraction tomography. <i>Tectonophysics</i> , 2013, 603, 55-67.	2.2	27
70	Features of deep crustal structure and the onshore-offshore transition at the Iberian flank of the Valencia Trough (Western Mediterranean). <i>Journal of Geodynamics</i> , 1990, 12, 233-252.	1.6	26
71	Crustal structure beneath the <sc>R</sc> if <sc>C</sc> ordillera, <sc>N</sc> orth <sc>M</sc> orocco, from the <sc>RIFSIS</sc> wideâ€“angle reflection seismic experiment. <i>Geochemistry, Geophysics, Geosystems</i> , 2014, 15, 4712-4733.	2.5	26
72	Crustal structure of the North Iberian continental margin from seismic refraction/wide-angle reflection profiles. <i>Tectonophysics</i> , 2017, 717, 65-82.	2.2	26

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73	The MARCONI reflection seismic data: A view into the eastern part of the Bay of Biscay. <i>Tectonophysics</i> , 2011, 508, 34-41.	2.2	25
74	Seismic images and evolution of the Iberian crust in the Pyrenees. <i>Tectonophysics</i> , 1993, 221, 67-80.	2.2	24
75	Geological characterization of the Prestige sinking area. <i>Marine Pollution Bulletin</i> , 2006, 53, 208-219.	5.0	24
76	Crustal structure of the Betic-Rif system, western Mediterranean, from local earthquake tomography. <i>Tectonophysics</i> , 2015, 643, 94-105.	2.2	24
77	Mapping the crustal structure beneath the eastern Pyrenees. <i>Tectonophysics</i> , 2018, 744, 296-309.	2.2	24
78	Aftershocks series monitoring of the September 18, 2004 M=4.6 earthquake at the western Pyrenees: A case of reservoir-triggered seismicity?. <i>Tectonophysics</i> , 2006, 424, 223-243.	2.2	23
79	TOPO-EUROPE: From Iberia to the Carpathians and analogues. <i>Tectonophysics</i> , 2011, 502, 1-27.	2.2	23
80	The eastern end of the Pyrenees: Seismic features at the transition to the NW Mediterranean. <i>Geophysical Research Letters</i> , 2001, 28, 2277-2280.	4.0	21
81	Modelling and imaging the Moho transition: the case of the southern Urals. <i>Geophysical Journal International</i> , 2002, 149, 134-148.	2.4	21
82	Upper-mantle anisotropy in SW Iberia from long-range seismic profiles and teleseismic shear-wave data. <i>Physics of the Earth and Planetary Interiors</i> , 1996, 95, 153-166.	1.9	20
83	Mapping the indentation between the Iberian and Eurasian plates beneath the Western Pyrenees/Eastern Cantabrian Mountains from receiver function analysis. <i>Tectonophysics</i> , 2012, 570-571, 114-122.	2.2	20
84	Seismic activity offshore Martinique and Dominica islands (Central Lesser Antilles subduction zone) from temporary onshore and offshore seismic networks. <i>Tectonophysics</i> , 2013, 603, 68-78.	2.2	20
85	Evidence for azimuthal anisotropy in southwest Iberia from deep seismic sounding data. <i>Physics of the Earth and Planetary Interiors</i> , 1993, 78, 193-206.	1.9	19
86	Seismic anisotropy from the Variscan core of Iberia to the Western African Craton: New constrains on upper mantle flow at regional scales. <i>Earth and Planetary Science Letters</i> , 2014, 394, 48-57.	4.4	19
87	Teleseismic prospecting of lithospheric contrasts beneath the Pyrenees and Alps. <i>Nature</i> , 1984, 308, 531-533.	27.8	18
88	Recent activity and seismotectonics of the Eastern Pyrenees. <i>Tectonophysics</i> , 1986, 129, 367-380.	2.2	18
89	Multichannel seismic image of the crustal thinning at the NE Iberian Margin combining normal and wide angle reflection data. <i>Geophysical Research Letters</i> , 1995, 22, 489-492.	4.0	18
90	Anisotropy beneath the Iberian Peninsula: The Contribution of the ILIHA-NARS Broad-band Experiment. <i>Pure and Applied Geophysics</i> , 1998, 151, 395.	1.9	18

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91	Local earthquakes seismic tomography in the Betic Cordillera (southern Spain). <i>Earth and Planetary Science Letters</i> , 1998, 160, 225-239.	4.4	18
92	Alpine tectonic wedging and crustal delamination in the Cantabrian Mountains (NW Spain). <i>Solid Earth</i> , 2016, 7, 1043-1057.	2.8	18
93	Probing seismic anisotropy in North Iberia from shear wave splitting. <i>Physics of the Earth and Planetary Interiors</i> , 2006, 158, 210-225.	1.9	17
94	Geophysical constraints on the crustal structure of the Olot Volcanic Area, northeastern Iberian Peninsula. <i>Journal of Volcanology and Geothermal Research</i> , 1991, 47, 33-44.	2.1	16
95	The upper-mantle transition zone beneath the Ibero-Maghrebian region as seen by teleseismic Pds phases. <i>Tectonophysics</i> , 2015, 663, 212-224.	2.2	16
96	Crustal structure of an intraplate thrust belt: The Iberian Chain revealed by wide-angle seismic, magnetotelluric soundings and gravity data. <i>Tectonophysics</i> , 2015, 663, 339-353.	2.2	16
97	The Lithospheric Structure of the Gibraltar Arc System From Wide-Angle Seismic Data. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2020JB019854.	3.4	16
98	Teleseismic imaging of alpine crustal underthrusting beneath Niberia. <i>Geophysical Research Letters</i> , 2003, 30, .	4.0	15
99	Seismicity analysis at the Prestige oil-tanker wreck area (Galicia Margin, NW of Iberia). <i>Marine Geology</i> , 2008, 249, 150-165.	2.1	15
100	Quelques donnees recentes sur la relation entre fractures crustales et seismes dans les Pyrenees orientales. <i>Bulletin - Societe Geologique De France</i> , 1982, S7-XXIV, 293-298.	2.2	13
101	Deep reflection seismic images of the crustal thinning in the eastern Pyrenees and western Gulf of Lion. <i>Journal of Geodynamics</i> , 2001, 31, 211-225.	1.6	13
102	Seismotectonic constraints at the western edge of the Pyrenees: aftershock series monitoring of the 2002 February 21, 4.1 Lg earthquake. <i>Geophysical Journal International</i> , 2006, 166, 238-252.	2.4	11
103	Authors' Reply to Comments on "The Inverse S-Transform in Filters With Time-Frequency Localization". <i>IEEE Transactions on Signal Processing</i> , 2007, 55, 5120-5121.	5.3	11
104	Crustal structure beneath North-West Iberia imaged using receiver functions. <i>Tectonophysics</i> , 2009, 478, 175-183.	2.2	11
105	Constraining the crustal root geometry beneath Northern Morocco. <i>Tectonophysics</i> , 2016, 689, 14-24.	2.2	11
106	Mapping of volcanic apron and the upper crust between Gran Canaria and Tenerife (Canary Islands) with seismic reflection profiling. <i>Geo-Marine Letters</i> , 1996, 16, 57-64.	1.1	10
107	Studying the 410-km and 660-km discontinuities beneath Spain and Morocco through detection of P-to-s conversions. <i>Geophysical Journal International</i> , 2013, 194, 920-935.	2.4	10
108	Iberia geodynamics: An integrative approach from the Topo-Iberia framework. <i>Tectonophysics</i> , 2015, 663, 1-4.	2.2	8

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109	Four decades of geophysical research on Iberia and adjacent margins. Earth-Science Reviews, 2021, 222, 103841.	9.1	8
110	Anisotropic features of the Alpine lithosphere in Northern Spain. Geophysical Research Letters, 2002, 29, 78-1-78-4.	4.0	7
111	On the Ability of the Benford's Law to Detect Earthquakes and Discriminate Seismic Signals. Seismological Research Letters, 2015, 86, 192-201.	1.9	7
112	Estimation of Coda Wave Attenuation in Northern Morocco. Pure and Applied Geophysics, 2018, 175, 883-897.	1.9	7
113	Mapping the Moho in the Iberian Mediterranean Margin by Multicoverage Processing and Merging of Wide-Angle and Near-Vertical Reflection Data. , 1995, , 291-308.		7
114	Seismostructural studies in the Pyrenees: Evolution and recent results. Pure and Applied Geophysics, 1984, 122, 713-724.	1.9	5
115	An alternative inverse S-transform for filters with time-frequency localization. Proc Int Symp Image Signal Process Anal, 2005, , .	0.0	5
116	Structure of Atlantic Oceanic Crust Around Chron M16 from Deep Seismic Reflection Profiles. , 1995, , 183-196.		0
117	Anisotropy beneath the Iberian Peninsula: The Contribution of the ILIHA-NARS Broad-band Experiment. , 1998, , 395-405.		0