Philippe Charvis

List of Publications by Year in Descending Order

85 papers	3,455 citations	37 h-index	57 g-index
95 ext. papers	3,763 ext. citations	3.5 avg, IF	4.14 L-index

#	Paper	IF	Citations
85	Formation, segmentation and deep crustal structure variations along the Algerian margin from the SPIRAL seismic experiment. *Journal of African Earth Sciences*, **2022**, 186, 104433	2.2	1
84	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	3.6	2
83	Repeating Earthquakes at the Edge of the Afterslip of the 2016 Ecuadorian MW 7.8 Pedernales Earthquake. *Journal of Geophysical Research: Solid Earth*, **2021**, 126, e2021JB021746	3.6	2
82	Triggered crustal earthquake swarm across subduction segment boundary after the 2016 Pedernales, Ecuador megathrust earthquake. *Earth and Planetary Science Letters*, **2021**, 553, 116620	5.3	8
81	Structure of the Ecuadorian forearc from the joint inversion of receiver functions and ambient noise surface waves. *Geophysical Journal International*, **2020**, 222, 1671-1685	2.6	7
80	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	3.6	8
79	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	2.6	11
78	Ridge subduction and afterslip control aftershock distribution of the 2016 Mw 7.8 Ecuador earthquake. *Earth and Planetary Science Letters*, **2019**, 520, 63-76	5.3	15
77	The 2016 Mw 7.8 Pedernales, Ecuador, Earthquake: Rapid Response Deployment. *Seismological Research Letters*, **2019**, 90, 1346-1354	3	11
76	Deep structure of the continental margin and basin off Greater Kabylia, Algeria New insights from wide-angle seismic data modeling and multichannel seismic interpretation. *Tectonophysics*, **2018**, 728-729, 1-22	3.1	25
75	Analysis of Tsunami Tide Gauge Records Following the 2016 Ecuadorian Earthquake and Tsunami. *Journal of Waterway, Port, Coastal and Ocean Engineering*, **2018**, 144, 05017004	1.7	3
74	Seismicity Distribution Near a Subducting Seamount in the Central Ecuadorian Subduction Zone, Space-Time Relation to a Slow-Slip Event. *Tectonics*, **2018**, 37, 2106-2123	4.3	12
73	Subducted oceanic relief locks the shallow megathrust in central Ecuador. *Journal of Geophysical Research: Solid Earth*, **2017**, 122, 3286-3305	3.6	48
72	Supercycle at the Ecuadorian subduction zone revealed after the 2016 Pedernales earthquake. *Nature Geoscience*, **2017**, 10, 145-149	18.3	83
71	Dehydration of subducting slow-spread oceanic lithosphere in the Lesser Antilles. *Nature Communications*, **2017**, 8, 15980	17.4	32
70	Geophysical evidence for a transform margin offshore Western Algeria: a witness of a subduction-transform edge propagator?. *Geophysical Journal International*, **2015**, 200, 1029-1045	2.6	26
69	A search for neutrino emission from the Fermi bubbles with the ANTARES telescope. *European Physical Journal C*, **2014**, 74, 1	4.2	23

68	Distribution of discrete seismic asperities and aseismic slip along the Ecuadorian megathrust. *Earth and Planetary Science Letters*, **2014**, 400, 292-301	5.3	68
67	A search for time dependent neutrino emission from microquasars with the ANTARES telescope. *Journal of High Energy Astrophysics*, **2014**, 3-4, 9-17	2.5	8
66	Three-dimensional velocity structure of the outer fore arc of the Colombia-Ecuador subduction zone and implications for the 1958 megathrust earthquake rupture zone. *Journal of Geophysical Research: Solid Earth*, **2014**, 119, 1041-1060	3.6	7
65	Measurement of the atmospheric □energy spectrum from 100 GeV to 200 TeV with the ANTARES telescope. *European Physical Journal C*, **2013**, 73, 1	4.2	48
64	Seismic activity offshore Martinique and Dominica islands (Central Lesser Antilles subduction zone) from temporary onshore and offshore seismic networks. *Tectonophysics*, **2013**, 603, 68-78	3.1	16
63	Seismic structure and activity of the north-central Lesser Antilles subduction zone from an integrated approach: Similarities with the Tohoku forearc. *Tectonophysics*, **2013**, 603, 1-20	3.1	31
62	Structure of the Lesser Antilles subduction forearc and backstop from 3D seismic refraction tomography. *Tectonophysics*, **2013**, 603, 55-67	3.1	23
61	A first search for coincident gravitational waves and high energy neutrinos using LIGO, Virgo and ANTARES data from 2007. *Journal of Cosmology and Astroparticle Physics*, **2013**, 2013, 008-008	6.4	29
60	SEARCH FOR A CORRELATION BETWEEN ANTARES NEUTRINOS AND PIERRE AUGER OBSERVATORY UHECRs ARRIVAL DIRECTIONS. *Astrophysical Journal*, **2013**, 774, 19	4.7	9
59	Search for muon neutrinos from gamma-ray bursts with the ANTARES neutrino telescope using 2008 to 2011 data. *Astronomy and Astrophysics*, **2013**, 559, A9	5.1	50
58	Deep-sea bioluminescence blooms after dense water formation at the ocean surface. *PLoS ONE*, **2013**, 8, e67523	3.7	46
57	A method for detection of muon induced electromagnetic showers with the ANTARES detector. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2012**, 675, 56-62	1.2	1
56	SEARCH FOR COSMIC NEUTRINO POINT SOURCES WITH FOUR YEARS OF DATA FROM THE ANTARES TELESCOPE. *Astrophysical Journal*, **2012**, 760, 53	4.7	90
55	Measurement of atmospheric neutrino oscillations with the ANTARES neutrino telescope. *Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics*, **2012**, 714, 224-230	4.2	58
54	Search for neutrino emission from gamma-ray flaring blazars with the ANTARES telescope. *Astroparticle Physics*, **2012**, 36, 204-210	2.4	16
53	The ANTARES telescope neutrino alert system. *Astroparticle Physics*, **2012**, 35, 530-536	2.4	35
52	Measurement of the group velocity of light in sea water at the ANTARES site. *Astroparticle Physics*, **2012**, 35, 552-557	2.4	2
51	Search for relativistic magnetic monopoles with the ANTARES neutrino telescope. *Astroparticle Physics*, **2012**, 35, 634-640	2.4	38

50	The positioning system of the ANTARES Neutrino Telescope. *Journal of Instrumentation*, **2012**, 7, T08002-T08002	1	36
49	The 2010 Haiti earthquake: A complex fault pattern constrained by seismologic and tectonic observations. *Geophysical Research Letters*, **2011**, 38, n/a-n/a	4.9	33
48	Deep structure of the central Lesser Antilles Island Arc: Relevance for the formation of continental crust. *Earth and Planetary Science Letters*, **2011**, 304, 121-134	5.3	68
47	Acoustic and optical variations during rapid downward motion episodes in the deep north-western Mediterranean Sea. *Deep-Sea Research Part I: Oceanographic Research Papers*, **2011**, 58, 875-884	2.5	12
46	Seismological study of the central Ecuadorian margin: Evidence of upper plate deformation. *Journal of South American Earth Sciences*, **2011**, 31, 139-152	2	13
45	FIRST SEARCH FOR POINT SOURCES OF HIGH-ENERGY COSMIC NEUTRINOS WITH THE ANTARES NEUTRINO TELESCOPE. *Astrophysical Journal Letters*, **2011**, 743, L14	7.9	35
44	ANTARES: The first undersea neutrino telescope. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2011**, 656, 11-38	1.2	363
43	A fast algorithm for muon track reconstruction and its application to the ANTARES neutrino telescope. *Astroparticle Physics*, **2011**, 34, 652-662	2.4	63
42	AMADEUS—The acoustic neutrino detection test system of the ANTARES deep-sea neutrino telescope. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2011**, 626-627, 128-143	1.2	50
41	Time calibration of the ANTARES neutrino telescope. *Astroparticle Physics*, **2011**, 34, 539-549	2.4	67
40	Search for a diffuse flux of high-energy . *Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics*, **2011**, 696, 16-22	4.2	56
39	Measurement of the atmospheric muon flux with a 4GeV threshold in the ANTARES neutrino telescope. *Astroparticle Physics*, **2010**, 33, 86-90	2.4	31
38	Zenith distribution and flux of atmospheric muons measured with the 5-line ANTARES detector. *Astroparticle Physics*, **2010**, 34, 179-184	2.4	45
37	Performance of the first ANTARES detector line. *Astroparticle Physics*, **2009**, 31, 277-283	2.4	37
36	A real time seismological station at 2500 m depth in front Toulon **2008**,		1
35	The ANTARES optical beacon system. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2007**, 578, 498-509	1.2	49
34	Studies of a full-scale mechanical prototype line for the ANTARES neutrino telescope and tests of a prototype instrument for deep-sea acoustic measurements. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2007**, 581, 695-708	1.2	11
33	The data acquisition system for the ANTARES neutrino telescope. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2007**, 570, 107-116	1.2	113

32	Segmentation of the Nazca and South American plates along the Ecuador subduction zone from wide angle seismic profiles. *Earth and Planetary Science Letters*, **2007**, 260, 444-464	5.3	41
31	Deep Sea Net: an affordable, and expandable solution for deep sea sensor networks **2007**,		3
30	First results of the Instrumentation Line for the deep-sea ANTARES neutrino telescope. *Astroparticle Physics*, **2006**, 26, 314-324	2.4	76
29	Structure of the Malpelo Ridge (Colombia) from seismic and gravity modelling. *Marine Geophysical Researches*, **2006**, 27, 289-300	2.3	11
28	Fields of multi-kilometer scale sub-circular depressions in the Carnegie Ridge sedimentary blanket: Effect of underwater carbonate dissolution?. *Marine Geology*, **2005**, 216, 205-219	3.3	27
27	Study of large hemispherical photomultiplier tubes for the ANTARES neutrino telescope. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2005**, 555, 132-141	1.2	61
26	Seismic structure of the Carnegie ridge and the nature of the Galapagos hotspot. *Geophysical Journal International*, **2005**, 161, 763-788	2.6	70
25	Transmission of light in deep sea water at the site of the Antares neutrino telescope. *Astroparticle Physics*, **2005**, 23, 131-155	2.4	79
24	Deep structures of the Ecuador convergent margin and the Carnegie Ridge, possible consequence on great earthquakes recurrence interval. *Geophysical Research Letters*, **2004**, 31,	4.9	55
23	Are rupture zone limits of great subduction earthquakes controlled by upper plate structures? Evidence from multichannel seismic reflection data acquired across the northern Ecuador–southwest Colombia margin. *Journal of Geophysical Research*, **2004**, 109,		98
22	Reflection–refraction seismics in the Gulf of Corinth: hints at deep structure and control of the deep marine basin. *Tectonophysics*, **2004**, 391, 97-108	3.1	32
21	Crustal structure beneath the Strait of Juan de Fuca and southern Vancouver Island from seismic and gravity analyses. *Journal of Geophysical Research*, **2003**, 108,		10
20	Structure and development of a microcontinent: Elan Bank in the southern Indian Ocean. *Geochemistry, Geophysics, Geosystems*, **2003**, 4, n/a-n/a	3.6	48
19	Seismic structure of Cocos and Malpelo Volcanic Ridges and implications for hot spot-ridge interaction. *Journal of Geophysical Research*, **2003**, 108,		83
18	Crustal thickness constraints on the geodynamic evolution of the Galapagos Volcanic Province. *Earth and Planetary Science Letters*, **2003**, 214, 545-559	5.3	63
17	Exploring the Ecuador-Colombia Active Margin and Interplate Seismogenic Zone. *Eos*, **2002**, 83, 185	1.5	47
16	Ocean island densities and models of lithospheric flexure. *Geophysical Journal International*, **2001**, 145, 731-739	2.6	16
15	Seismic structure and the active Hellenic subduction in the Ionian islands. *Tectonophysics*, **2000**, 329, 141-156	3.1	43

14	Western Hellenic subduction and Cephalonia Transform: local earthquakes and plate transport and strain. *Tectonophysics*, **2000**, 319, 301-319	3.1	120
13	Structure of the Cretaceous Kerguelen Volcanic Province (southern Indian Ocean) from wide-angle seismic data.. *Journal of Geodynamics*, **1999**, 28, 51-71	2.2	35
12	Perturbation to the lithosphere along the hotspot track of La Rùnion from an offshore-onshore seismic transect. *Journal of Geophysical Research*, **1999**, 104, 2895-2908		72
11	Spatial distribution of hotspot material added to the lithosphere under La Rùnion, from wide-angle seismic data. *Journal of Geophysical Research*, **1999**, 104, 2875-2893		69
10	Vertical movements and material transport during hotspot activity: Seismic reflection profiling offshore La Rùnion. *Journal of Geophysical Research*, **1999**, 104, 2855-2874		48
9	Small-scale crustal variability within an intraplate structure: the Crozet Bank (southern Indian Ocean). *Geophysical Journal International*, **1998**, 134, 145-156	2.6	25
8	Early development of the southern Kerguelen Plateau (Indian Ocean) from shallow wide-angle ocean bottom seismometer and multichannel seismic reflection data. *Journal of Geophysical Research*, **1998**, 103, 24085-24108		8
7	Deep structure of the southern Kerguelen Plateau (southern Indian Ocean) from ocean bottom seismometer wide-angle seismic data. *Journal of Geophysical Research*, **1996**, 101, 25077-25103		61
6	Deep structure of the northern Kerguelen Plateau and hotspot-related activity. *Geophysical Journal International*, **1995**, 122, 899-924	2.6	72
5	Kerguelen Plateau: A volcanic passive margin fragment?. *Geology*, **1995**, 23, 137	5	42
4	Structure profonde du mont Ross d'après la réfraction sismique (îles Kerguelen, océan Indien austral). *Canadian Journal of Earth Sciences*, **1994**, 31, 1806-1821	1.5	9
3	The northern New Hebrides back-arc troughs: history and relation with the North Fiji basin. *Tectonophysics*, **1989**, 170, 259-277	3.1	24
2	La ride asismique de Kerguelen-Heard : Anomalie du geoide et compensation isostatique. *Marine Geology*, **1987**, 76, 301-311	3.3	4
1	A seismic refraction survey in the Kerguelen Isles, southern Indian Ocean. *Geophysical Journal International*, **1986**, 84, 529-559	2.6	25