Manel Fernandez

List of Publications by Year
in descending order

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106 papers	6,384 citations	66343 42 h-index	71685 76 g-index
110 all docs	110 docs citations	110 times ranked	4705 citing authors

#	Article	IF	Citations
1	Numerical modelling of opposing subduction in the Western Mediterranean. Tectonophysics, 2022, 830, 229309.	2.2	3
2	Opposite Symmetry in the Lithospheric Structure of the Alboran and Algerian Basins and Their Margins (Western Mediterranean): Geodynamic Implications. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB021388.	3.4	12
3	Four decades of geophysical research on Iberia and adjacent margins. Earth-Science Reviews, 2021, 222, 103841.	9.1	8
4	Regional crustal and lithospheric thickness model for Alaska, the Chukchi shelf, and the inner and outer bering shelves. Geophysical Journal International, 2020, 220, 522-540.	2.4	6
5	Analog and Numerical Experiments of Double Subduction Systems With Opposite Polarity in Adjacent Segments. Geochemistry, Geophysics, Geosystems, 2020, 21, e2020GC009035.	2.5	7
6	LitMod2D_2.0: An Improved Integrated Geophysicalâ€Petrological Modeling Tool for the Physical Interpretation of Upper Mantle Anomalies. Geochemistry, Geophysics, Geosystems, 2020, 21, e2019GC008777.	2.5	14
7	Evidence of Segmentation in the Iberiaâ€“Africa Plate Boundary: A Jurassic Heritage?. Geosciences (Switzerland), 2019, 9, 343.	2.2	14
8	Deep Seated Density Anomalies Across the Iberiaâ€Africa Plate Boundary and Its Topographic Response. Journal of Geophysical Research: Solid Earth, 2019, 124, 13310-13332.	3.4	17
9	Lithospheric mantle buoyancy: the role of tectonic convergence and mantle composition. Scientific Reports, 2019, 9, 17953.	3.3	16
10	Opposite Subduction Polarity in Adjacent Plate Segments. Tectonics, 2018, 37, 3285-3302.	2.8	12
11	Lithospheric structure in Central Eurasia derived from elevation, geoid anomaly and thermal analysis. Geological Society Special Publication, 2017, 427, 271-293.	1.3	24
12	Impact of the lithosphere on dynamic topography: Insights from analogue modeling. Geophysical Research Letters, 2017, 44, 2693-2702.	4.0	8
13	The nature of crustal reflectivity at the southwest Iberian margin. Tectonophysics, 2017, 721, 239-253.	2.2	2
14	Neotectonic Deformation in Central Eurasia: A Geodynamic Model Approach. Journal of Geophysical Research: Solid Earth, 2017, 122, 9461-9484.	3.4	8
15	Evidence for mantle heterogeneities in the westernmost Mediterranean from a statistical approach to volcanic petrology. Lithos, 2017, 276, 62-74.	1.4	12
16	A New Southern North Atlantic Isochron Map: Insights Into the Drift of the Iberian Plate Since the Late Cretaceous. Journal of Geophysical Research: Solid Earth, 2017, 122, 9603-9626.	3.4	79
17	Geophysicalâ€petrological model of the crust and upper mantle in the Indiaâ€Eurasia collision zone. Tectonics, 2016, 35, 1642-1669.	2.8	45
18	New insights into the crust and lithospheric mantle structure of Africa from elevation, geoid, and thermal analysis. Journal of Geophysical Research: Solid Earth, 2016, 121, 5389-5424.	3.4	57

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19	Updated Bouguer anomalies of the Iberian Peninsula: a new perspective to interpret the regional geology. Journal of Maps, 2016, 12, 1089-1092.	2.0	39
20	The Alboran domain in the western Mediterranean evolution: the birth of a concept. Bulletin - Societie Geologique De France, 2015, 186, 371-384.	2.2	31
21	Crust and mantle lithospheric structure of the Iberian Peninsula deduced from potential field modeling and thermal analysis. Tectonophysics, 2015, 663, 419-433.	2.2	51
22	Geophysical-petrological modeling of the lithosphere beneath the Cantabrian Mountains and the North-Iberian margin: geodynamic implications. Lithos, 2015, 230, 46-68.	1.4	52
23	From the North-Iberian Margin to the Alboran Basin: A lithosphere geo-transect across the Iberian Plate. Tectonophysics, 2015, 663, 399-418.	2.2	34
24	Iberia geodynamics: An integrative approach from the Topo-Iberia framework. Tectonophysics, 2015, 663, 1-4.	2.2	8
25	Thermal and petrophysical characterization of the lithospheric mantle along the northeastern Iberia geo-transect. Gondwana Research, 2015, 27, 1430-1445.	6.0	26
26	Lithospheric mantle heterogeneities beneath the Zagros Mountains and the Iranian Plateau: a petrological-geophysical study. Geophysical Journal International, 2014, 200, 596-614.	2.4	43
27	Crustal thickness and velocity structure across the Moroccan Atlas from long offset wideâ€angle reflection seismic data: The SIMA experiment. Geochemistry, Geophysics, Geosystems, 2014, 15, 1698-1717.	2.5	42
28	Coupled mantle dripping and lateral dragging controlling the lithosphere structure of the NW-Moroccan margin and the Atlas Mountains: A numerical experiment. Lithos, 2014, 189, 16-27.	1.4	5
29	3-D lithospheric structure and regional/residual Bouguer anomalies in the Arabia-Eurasia collision (Iran). Geophysical Journal International, 2012, 190, 1311-1324.	2.4	78
30	Tethysâ€“Atlantic interaction along the Iberiaâ€“Africa plate boundary: The Beticâ€“Rif orogenic system. Tectonophysics, 2012, 579, 144-172.	2.2	214
31	Decoupled crust-mantle accommodation of Africa-Eurasia convergence in the NW Moroccan margin. Journal of Geophysical Research, 2011, 116, .	3.3	30
32	Crustal-scale cross-sections across the NW Zagros belt: implications for the Arabian margin reconstruction. Geological Magazine, 2011, 148, 739-761.	1.5	169
33	Geophysical model of the lithosphere across the Variscan Belt of SW-Iberia: Multidisciplinary assessment. Tectonophysics, 2011, 508, 42-51.	2.2	34
34	The structure and evolution of the lithosphereâ€“asthenosphere boundary beneath the Atlanticâ€“Mediterranean Transition Region. Lithos, 2010, 120, 74-95.	1.4	126
35	Insights in the exhumation history of the NW Zagros from bedrock and detrital apatite fissionâ€track analysis: evidence for a longâ€lived orogeny. Basin Research, 2010, 22, 659-680.	2.7	84
36	Radiogenic heat production variability of some common lithological groups and its significance to lithospheric thermal modeling. Tectonophysics, 2010, 490, 152-164.	2.2	168

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37	Lithospheric structure of the Gorringe Bank: Insights into its origin and tectonic evolution. Tectonics, 2010, 29, n/a-n/a.	2.8	53
38	On the Vp/Vsâ€“Mg# correlation in mantle peridotites: Implications for the identification of thermal and compositional anomalies in the upper mantle. Earth and Planetary Science Letters, 2010, 289, 606-618.	4.4	68
39	The deep lithospheric structure of the Namibian volcanic margin. Tectonophysics, 2010, 481, 68-81.	2.2	47
40	Catastrophic flood of the Mediterranean after the Messinian salinity crisis. Nature, 2009, 462, 778-781.	27.8	380
41	Effective elastic thickness of Africa and its relationship to other proxies for lithospheric structure and surface tectonics. Earth and Planetary Science Letters, 2009, 287, 152-167.	4.4	142
42	Sediment supply from the Beticâ€“Rif orogen to basins through Neogene. Tectonophysics, 2009, 475, 68-84.	2.2	64
43	LitMod3D: An interactive 3â€Ð software to model the thermal, compositional, density, seismological, and rheological structure of the lithosphere and sublithospheric upper mantle. Geochemistry, Geophysics, Geosystems, 2009, 10, .	2.5	107
44	Modelling Gravitational Instabilities: Slab Breakâ€“off and Rayleighâ€“Taylor Diapirism. Pure and Applied Geophysics, 2008, 165, 1491-1510.	1.9	52
45	FA2BOUGâ€”A FORTRAN 90 code to compute Bouguer gravity anomalies from gridded free-air anomalies: Application to the Atlantic-Mediterranean transition zone. Computers and Geosciences, 2008, 34, 1665-1681.	4.2	116
46	Integrated geophysicalâ€petrological modeling of the lithosphere and sublithospheric upper mantle: Methodology and applications. Geochemistry, Geophysics, Geosystems, 2008, 9, .	2.5	200
47	Thermal structure of the crust in the Gibraltar Arc: Influence on active tectonics in the western Mediterranean. Geochemistry, Geophysics, Geosystems, 2008, 9, .	2.5	33
48	On the interpretation of gravity tide residuals in the Iberian Peninsula. Journal of Geodynamics, 2008, 45, 18-31.	1.6	3
49	Lithosphere structure underneath the Tibetan Plateau inferred from elevation, gravity and geoid anomalies. Earth and Planetary Science Letters, 2008, 267, 276-289.	4.4	167
50	Effects of compositional and rheological stratifications on smallâ€scale convection under the oceans: Implications for the thickness of oceanic lithosphere and seafloor flattening. Geophysical Research Letters, 2008, 35, .	4.0	45
51	Small-scale gravitational instabilities under the oceans: Implications for the evolution of oceanic lithosphere and its expression in geophysical observables. Philosophical Magazine, 2008, 88, 3197-3217.	1.6	30
52	Modelling Gravitational Instabilities: Slab Break-off and Rayleigh-Taylor Diapirism. , 2008, , 1491-1510.		0
53	A rapid method to map the crustal and lithospheric thickness using elevation, geoid anomaly and thermal analysis. Application to the Gibraltar Arc System, Atlas Mountains and adjacent zones. Tectonophysics, 2007, 430, 97-117.	2.2	106
54	Density structure and buoyancy of the oceanic lithosphere revisited. Geophysical Research Letters, 2007, 34, .	4.0	77

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55	Numerical modelling of tectonic plates subduction using X-FEM. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 4283-4293.	6.6	20
56	The structure of the Atlanticâ€“Mediterranean transition zone from the Alboran Sea to the Horseshoe Abyssal Plain (Iberiaâ€“Africa plate boundary). Marine Geology, 2007, 243, 97-119.	2.1	82
57	Lithospheric structure in the Atlanticâ€“Mediterranean transition zone (southern Spain, northern) Tj ETQq1 1 0.784314 rgBT /Overlock 2006, 338, 140-151.	1.2	38
58	Ranges and basins in the Iberian Peninsula: their contribution to the present topography. Geological Society Memoir, 2006, 32, 223-234.	1.7	30
59	Effects of mantle upwelling in a compressional setting: the Atlas Mountains of Morocco. Terra Nova, 2005, 17, 456-461.	2.1	162
60	Lithospheric structure under the western African-European plate boundary: A transect across the Atlas Mountains and the Gulf of Cadiz. Tectonics, 2005, 24, n/a-n/a.	2.8	141
61	Thermal expansivity and elastic properties of the lithospheric mantle: results from mineral physics of composites. Physics of the Earth and Planetary Interiors, 2005, 149, 279-306.	1.9	71
62	Thin-sheet modelling of lithospheric deformation and surface mass transport. Tectonophysics, 2005, 407, 239-255.	2.2	15
63	Lithospheric structure of the Mid-Norwegian Margin: comparison between the MÃ¸re and VÃ¸ring margins. Journal of the Geological Society, 2005, 162, 1005-1012.	2.1	24
64	Lithospheric transition from the Variscan Iberian Massif to the Jurassic oceanic crust of the Central Atlantic. Tectonophysics, 2004, 386, 97-115.	2.2	51
65	Extensional geometry of the Mid Norwegian Margin before Early Tertiary continental breakup. Marine and Petroleum Geology, 2004, 21, 177-194.	3.3	21
66	Deep structure of the VÃ¸ring Margin: the transition from a continental shield to a young oceanic lithosphere. Earth and Planetary Science Letters, 2004, 221, 131-144.	4.4	26
67	Three-dimensional crustal structure of the VÃ¸ring Margin (NE Atlantic): A combined seismic and gravity image. Journal of Geophysical Research, 2003, 108, .	3.3	16
68	Modeling the evolution of the Guadalquivir foreland basin (southern Spain). Tectonics, 2002, 21, 9-1-9-17.	2.8	102
69	Thin-shell modeling of neotectonics in the Azores-Gibraltar Region. Geophysical Research Letters, 2001, 28, 1083-1086.	4.0	31
70	The transition from linear to diffuse plate boundary in the Azoresâ€“Gibraltar region: results from a thin-sheet model. Earth and Planetary Science Letters, 2001, 192, 175-189.	4.4	91
71	Slab pull effects from a flexural analysis of the Tonga and Kermadec trenches (Pacific Plate). Geophysical Journal International, 2000, 141, 479-484.	2.4	23
72	Laboratory measurements of seismic P-wave velocities on rocks from the Betic chain (southern Iberian) Tj ETQq0 0 0 rgBT /Overlock 10 T	2.2	40

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73	Lithospheric Structure Beneath the Alboran Basin: Results from 3D Gravity Modeling and Tectonic Relevance. Journal of Geophysical Research, 2000, 105, 3209-3228.	3.3	142
74	Three-dimensional modelling of crustal motions caused by subduction and continental convergence in the central Mediterranean. Geophysical Journal International, 1999, 136, 261-274.	2.4	20
75	The onset of extension during lithospheric shortening: a two-dimensional thermomechanical model for lithospheric unrooting. Geophysical Journal International, 1999, 139, 98-114.	2.4	26
76	Numerical modeling of simultaneous extension and compression: The Valencia trough (western) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 6	2.8	21
77	Plio-Quaternary vertical motion of the Northern Apennines: Insights from dynamic modeling. Tectonics, 1999, 18, 703-718.	2.8	40
78	Heat flow, heat production, and lithospheric thermal regime in the Iberian Peninsula. Tectonophysics, 1998, 291, 29-53.	2.2	179
79	Mantle unrooting in collisional settings. Tectonophysics, 1998, 296, 31-46.	2.2	64
80	On the post-25 Ma geodynamic evolution of the western Mediterranean. Tectonophysics, 1998, 298, 259-269.	2.2	515
81	Geophysical and geological constraints on the evolution of the Guadalquivir foreland basin, Spain. Geological Society Special Publication, 1998, 134, 29-48.	1.3	25
82	Lateral diapiric emplacement of Triassic evaporites at the southern margin of the Guadalquivir Basin, Spain. Geological Society Special Publication, 1998, 134, 49-68.	1.3	44
83	The role of rheology in extensional basin formation modelling. Tectonophysics, 1997, 282, 129-145.	2.2	75
84	Structural controls on sedimentary basin evolution: introduction. Tectonophysics, 1997, 282, xi-xviii.	2.2	8
85	Numerical modeling of foreland basin formation: a program relating thrusting, flexure, sediment geometry and lithosphere rheology. Computers and Geosciences, 1997, 23, 993-1003.	4.2	46
86	The Western Mediterranean extensional basins and the Alpine orogen. Terra Nova, 1997, 9, 109-112.	2.1	154
87	Lithospheric boudinage in the Western Mediterranean backâ€arc basin. Terra Nova, 1997, 9, 184-187.	2.1	139
88	Heat flow in the Alboran Sea, western Mediterranean. Tectonophysics, 1996, 263, 191-218.	2.2	76
89	Extension with lateral material accommodation â€" â€˜activeâ€™ vs. â€˜passiveâ€™ rifting. Tectonophysics, 1996, 266, 121-137.	2.2	11
90	Two-dimensional geoid modelling: some remarks on Chapman's algorithm. Geophysical Journal International, 1996, 127, 542-544.	2.4	7

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91	Heat flow and regional uplift at the north-eastern border of the Ebro basin,NE Spain. Geophysical Journal International, 1995, 121, 393-403.	2.4	15
92	Evidence for the multi-stage formation of the south-western Valencia Trough. Marine and Petroleum Geology, 1995, 12, 101-109.	3.3	24
93	Thermo-mechanical constraints on kinematic models of lithospheric extension. Earth and Planetary Science Letters, 1995, 134, 87-98.	4.4	16
94	Lithospheric Transition from Continental to Oceanic in the West Iberia Atlantic Margin. , 1995, , 247-263.		10
95	Integrated lithospheric modeling combining thermal, gravity, and local isostasy analysis: Application to the NE Spanish Geotransect. Journal of Geophysical Research, 1994, 99, 18089-18102.	3.3	135
96	Heat-flow data and shallow thermal regime on Mallorca and Menorca (western Mediterranean). Tectonophysics, 1992, 203, 133-143.	2.2	13
97	Neogene vertical movements and constraints on extension in the Catalan Coastal Ranges, Iberian Peninsula, and the Valencia trough (western Mediterranean). Tectonophysics, 1992, 203, 185-201.	2.2	26
98	Regional Geothermal Gradients and Lithospheric Structure in Spain. Exploration of the Deep Continental Crust, 1991, , 176-186.	0.1	10
99	Modelling of thermal anomalies in the NW border of the Valencia Trough by groundwater convection. Geophysical Research Letters, 1990, 17, 105-108.	4.0	20
100	Lithospheric thermal structure of NE Spain and the North-Balearic basin. Journal of Geodynamics, 1990, 12, 253-267.	1.6	18
101	Geothermal anomalies in the Vallesâ€Penedes Graben Master Fault: Convection through the Horst as a possible mechanism. Journal of Geophysical Research, 1990, 95, 4887-4894.	3.3	17
102	An approach to the thermal field in northeastern Spain. Tectonophysics, 1989, 164, 259-266.	2.2	22
103	Heat pulse lineâ€source method to determine thermal conductivity of consolidated rocks. Review of Scientific Instruments, 1986, 57, 2832-2836.	1.3	7
104	La estructura profunda del Zagros y de la meseta de IrÃ¡n: un modelo geofÃsico y petrolÃ³gico. FÃsica De La Tierra, 1970, 23, 93.	0.1	0
105	Corte litosfÃ©rico al Este de la PenÃnsula IbÃ©rica y sus mÃ¡rgenes. ModelizaciÃ³n de las propiedades fÃsicas del manto superior. FÃsica De La Tierra, 1970, 23, 131.	0.1	1
106	The Pyrenean orogen: pre-, syn-, and post-collisional evolution. Journal of the Virtual Explorer, 0, 08, .	0.0	186