Marc-Andre Gutscher

List of Publications by Year
in descending order

86	6,251	53794 45	66911 78
papers	citations	h-index	g-index

87	87	87	4719
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Assessing the rate of crustal extension by 2D sequential restoration analysis: A case study from the active portion of the Malta Escarpment. Basin Research, 2022, 34, 321-341.	2.7	6
2	Response: Commentary: Deformation Pattern of the Northern Sector of the Malta Escarpment (Offshore SE Sicily, Italy): Fault Dimension, Slip Prediction, and Seismotectonic Implications. Frontiers in Earth Science, 2022, 10, .	1.8	0
3	Deformation Pattern of the Northern Sector of the Malta Escarpment (Offshore SE Sicily, Italy): Fault Dimension, Slip Prediction, and Seismotectonic Implications. Frontiers in Earth Science, 2021, 8, .	1.8	15
4	Geometry of the Deep Calabrian Subduction (Central Mediterranean Sea) From Wideâ€Angle Seismic Data and 3â€D Gravity Modeling. Geochemistry, Geophysics, Geosystems, 2020, 21, .	2.5	5
5	A single-stage megaflood at the termination of the Messinian salinity crisis: Geophysical and modelling evidence from the eastern Mediterranean Basin. Marine Geology, 2020, 430, 106337.	2.1	11
6	Reply to Comment by A. Argnani on â€œGeometry of the Deep Calabrian Subduction From Wideâ€Angle Seismic Data and 3â€D Gravity Modelingâ€• Geochemistry, Geophysics, Geosystems, 2020, 21, e2020GC009223.	2.5	4
7	The Alpine Orogeny in the West and Southwest Iberia Margins. Regional Geology Reviews, 2019, , 487-505.	1.2	13
8	Marine Transform Faults and Fracture Zones: A Joint Perspective Integrating Seismicity, Fluid Flow and Life. Frontiers in Earth Science, 2019, 7, .	1.8	46
9	Ionian Abyssal Plain: a window into the Tethys oceanic lithosphere. Solid Earth, 2019, 10, 447-462.	2.8	19
10	Geomorphic evolution of the Malta Escarpment and implications for the Messinian evaporative drawdown in the eastern Mediterranean Sea. Geomorphology, 2019, 327, 264-283.	2.6	24
11	Strike-Slip Faulting in the Calabrian Accretionary Wedge: Using Analog Modeling to Test the Kinematic Boundary Conditions of Geodynamic Models. , 2019, , 321-337.		6
12	Fiber optic monitoring of active faults at the seafloor: I the FOCUS project. Photoniques, 2019, , 32-37.	0.1	5
13	Crustal Structure of the Ionian Basin and Eastern Sicily Margin: Results From a Wideâ€Angle Seismic Survey. Journal of Geophysical Research: Solid Earth, 2018, 123, 2090-2114.	3.4	41
14	Evidence of the Zanclean megaflood in the eastern Mediterranean Basin. Scientific Reports, 2018, 8, 1078.	3.3	49
15	Scraped by flat-slab subduction. Nature Geoscience, 2018, 11, 890-891.	12.9	20
16	Origin and chronology of the Augias deposit in the Ionian Sea (Central Mediterranean Sea), based on new regional sedimentological data. Marine Geology, 2017, 384, 199-213.	2.1	18
17	Active tectonics of the Calabrian subduction revealed by new multi-beam bathymetric data and high-resolution seismic profiles in the Ionian Sea (Central Mediterranean). Earth and Planetary Science Letters, 2017, 461, 61-72.	4.4	73
18	Opening of the central Atlantic Ocean: Implications for geometric rifting and asymmetric initial seafloor spreading after continental breakup. Tectonics, 2017, 36, 1129-1150.	2.8	48

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19	Recent uplift of the Atlantic Atlas (offshore West Morocco): Tectonic arch and submarine terraces. Tectonophysics, 2017, 706-707, 46-58.	2.2	14
20	Tectonic expression of an active slab tear from highâ€resolution seismic and bathymetric data offshore Sicily (Ionian Sea). Tectonics, 2016, 35, 39-54.	2.8	82
21	Thermal modeling of the SW Ryukyu forearc (Taiwan): Implications for the seismogenic zone and the age of the subducting Philippine Sea Plate (Huatung Basin). Tectonophysics, 2016, 692, 131-142.	2.2	10
22	Crustal structure variations along the NW-African continental margin: A comparison of new and existing models from wide-angle and reflection seismic data. Tectonophysics, 2016, 674, 227-252.	2.2	30
23	3D architecture of Quaternary sediment along the NW Atlantic Moroccan Rharb continental shelf: A stratal pattern under the dual control of tectonics and climatic variations. Marine and Petroleum Geology, 2014, 49, 129-142.	3.3	13
24	High-resolution imagery of active faulting offshore Al Hoceima, Northern Morocco. Tectonophysics, 2014, 632, 160-166.	2.2	46
25	Reply to comment on the article â€œPropagation of a lithospheric tear fault (STEP) through the western boundary of the Calabrian accretionary wedge offshore eastern Sicily (Southern Italy)â€•by Gallais et al., 2013 Tectonophysics. Tectonophysics, 2014, 610, 200-203.	2.2	3
26	Are subduction zones invading the Atlantic? Evidence from the southwest Iberia margin: REPLY. Geology, 2014, 42, e329-e329.	4.4	2
27	Seismic reflection imaging of shallow oceanographic structures. Journal of Geophysical Research: Oceans, 2013, 118, 2329-2344.	2.6	19
28	Propagation of a lithospheric tear fault (STEP) through the western boundary of the Calabrian accretionary wedge offshore eastern Sicily (Southern Italy). Tectonophysics, 2013, 602, 141-152.	2.2	74
29	Seismic evidence of exhumed mantle rock basement at the Gorringe Bank and the adjacent Horseshoe and Tagus abyssal plains (SW Iberia). Earth and Planetary Science Letters, 2013, 365, 120-131.	4.4	71
30	Are subduction zones invading the Atlantic? Evidence from the southwest Iberia margin. Geology, 2013, 41, 839-842.	4.4	128
31	How wide is the seismogenic zone of the Lesser Antilles forearc?. Bulletin - Societie Geologique De France, 2013, 184, 47-59.	2.2	8
32	Subduction beneath Gibraltar? Recent studies provide answers. Eos, 2012, 93, 133-134.	0.1	11
33	The size of plume heterogeneities constrained by Marquesas isotopic stripes. Geochemistry, Geophysics, Geosystems, 2012, 13, .	2.5	50
34	The Gibraltar subduction: A decade of new geophysical data. Tectonophysics, 2012, 574-575, 72-91.	2.2	109
35	Two-stage growth of the Calabrian accretionary wedge in the Ionian Sea (Central Mediterranean): Constraints from depthâ€migrated multichannel seismic data. Marine Geology, 2012, 326-328, 28-45.	2.1	32
36	The Cenozoic tectonostratigraphic evolution of the Barracuda Ridge and Tiburon Rise, at the western end of the North Americaâ€“South America plate boundary zone. Marine Geology, 2012, 303-306, 154-171.	2.1	24

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37	A Miocene tectonic inversion in the Ionian Sea (central Mediterranean): Evidence from multichannel seismic data. Journal of Geophysical Research, 2011, 116, .	3.3	48
38	Seismic evidence for the presence of Jurassic oceanic crust in the central Gulf of Cadiz (SW Iberian) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	4.4	106
39	Thrustâ€“wrench interference tectonics in the Gulf of Cadiz (Africaâ€“Iberia plate boundary in the) Tj ETQq1 1 0.784314 rgBT /Overlock	2.1	56
40	Limits of the seismogenic zone in the epicentral region of the 26 December 2004 great Sumatraâ€Andaman earthquake: Results from seismic refraction and wideâ€angle reflection surveys and thermal modeling. Journal of Geophysical Research, 2010, 115, .	3.3	57
41	Detecting and characterizing mesoscale and submesoscale structures of Mediterranean water from joint seismic and hydrographic measurements in the Gulf of Cadiz. Geophysical Research Letters, 2010, 37, .	4.0	15
42	Focal mechanisms for subâ€crustal earthquakes in the Gulf of Cadiz from a dense OBS deployment. Geophysical Research Letters, 2010, 37, .	4.0	75
43	Seismic stratigraphy of the NW Moroccan Atlantic continental shelf and Quaternary deformation at the offshore termination of the southern Rif front. Comptes Rendus - Geoscience, 2010, 342, 731-740.	1.2	14
44	Reply to Comment by Fernando Marques (on Tectonophysics article â€œDeep structure, recent) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 4 485, 330-331.	2.2	0
45	Deep structure, recent deformation and analog modeling of the Gulf of Cadiz accretionary wedge: Implications for the 1755 Lisbon earthquake. Tectonophysics, 2009, 475, 85-97.	2.2	53
46	Tectonic shortening and gravitational spreading in the Gulf of Cadiz accretionary wedge: Observations from multi-beam bathymetry and seismic profiling. Marine and Petroleum Geology, 2009, 26, 647-659.	3.3	47
47	Megathrust earthquakes can nucleate in the forearc mantle: Evidence from the 2004 Sumatra event. Geology, 2009, 37, 659-662.	4.4	45
48	Great Earthquakes in Slow-Subduction, Low-Taper Margins. Frontiers in Earth Sciences, 2009, , 119-133.	0.1	24
49	Impact of lower plate structure on upper plate deformation at the NW Sumatran convergent margin from seafloor morphology. Earth and Planetary Science Letters, 2008, 275, 201-210.	4.4	67
50	Late Quaternary co-seismic sedimentation in the Sea of Marmara's deep basins. Sedimentary Geology, 2007, 199, 65-89.	2.1	92
51	Source of the 1693 Catania earthquake and tsunami (southern Italy): New evidence from tsunami modeling of a locked subduction fault plane. Geophysical Research Letters, 2006, 33, .	4.0	70
52	The Gibraltar Arc seismogenic zone (part 1): Constraints on a shallow east dipping fault plane source for the 1755 Lisbon earthquake provided by seismic data, gravity and thermal modeling. Tectonophysics, 2006, 426, 135-152.	2.2	73
53	The Gibraltar Arc seismogenic zone (part 2): Constraints on a shallow east dipping fault plane source for the 1755 Lisbon earthquake provided by tsunami modeling and seismic intensity. Tectonophysics, 2006, 426, 153-166.	2.2	95
54	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.	2.1	32

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55	Seismic structure of the Carnegie ridge and the nature of the GalÃ¡pagos hotspot. Geophysical Journal International, 2005, 161, 763-788.	2.4	82
56	Submarine fault scarps in the Sea of Marmara pull-apart (North Anatolian Fault): Implications for seismic hazard in Istanbul. Geochemistry, Geophysics, Geosystems, 2005, 6, .	2.5	226
57	Destruction of Atlantis by a great earthquake and tsunami? A geological analysis of the Spartel Bank hypothesis. Geology, 2005, 33, 685.	4.4	13
58	GEOSCIENCE: What Caused the Great Lisbon Earthquake?. Science, 2004, 305, 1247-1248.	12.6	99
59	The crustal structure of the NW Moroccan continental margin from wide-angle and reflection seismic data. Geophysical Journal International, 2004, 159, 117-128.	2.4	91
60	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, .	3.3	114
61	Thermal models of flat subduction and the rupture zone of great subduction earthquakes. Journal of Geophysical Research, 2003, 108, ESE 2-1-ESE 2-16.	3.3	69
62	Magmatic response to early aseismic ridge subduction: the Ecuadorian margin case (South America). Earth and Planetary Science Letters, 2003, 205, 123-138.	4.4	144
63	Slab melting and slab melt metasomatism in the Northern Andean Volcanic Zone : adakites and high-Mg andesites from Pichincha volcano (Ecuador). Bulletin - Societie Geologique De France, 2002, 173, 195-206.	2.2	33
64	Evidence for active subduction beneath Gibraltar. Geology, 2002, 30, 1071.	4.4	423
65	Deep crustal structure of the Tuamotu plateau and Tahiti (French Polynesia) based on seismic refraction data. Geophysical Research Letters, 2002, 29, 1-1-1-4.	4.0	25
66	Andean subduction styles and their effect on thermal structure and interplate coupling. Journal of South American Earth Sciences, 2002, 15, 3-10.	1.4	148
67	Mechanical decoupling and basal duplex formation observed in sandbox experiments with application to the Western Mediterranean Ridge accretionary complex. Marine Geology, 2002, 186, 29-42.	2.1	75
68	An Andean model of interplate coupling and strain partitioning applied to the flat subduction zone of SW Japan (Nankai Trough). Tectonophysics, 2001, 333, 95-109.	2.2	17
69	Non-Coulomb wedges, wrong-way thrusting, and natural hazards in Cascadia. Geology, 2001, 29, 379.	4.4	63
70	Can slab melting be caused by flat subduction?. Geology, 2000, 28, 535.	4.4	482
71	Geodynamics of flat subduction: Seismicity and tomographic constraints from the Andean margin. Tectonics, 2000, 19, 814-833.	2.8	573
72	Transtensional basins in the Western Sunda Strait. Geophysical Research Letters, 2000, 27, 3545-3548.	4.0	29

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73	Can slab melting be caused by flat subduction?. Geology, 2000, 28, 535-538.	4.4	44
74	Tectonic segmentation of the North Andean margin: impact of the Carnegie Ridge collision. Earth and Planetary Science Letters, 1999, 168, 255-270.	4.4	325
75	The â€œlost inca plateauâ€• cause of flat subduction beneath peru?. Earth and Planetary Science Letters, 1999, 171, 335-341.	4.4	175
76	Material transfer in accretionary wedges from analysis of a systematic series of analog experiments. Journal of Structural Geology, 1998, 20, 407-416.	2.3	123
77	Episodic imbricate thrusting and underthrusting: Analog experiments and mechanical analysis applied to the Alaskan Accretionary Wedge. Journal of Geophysical Research, 1998, 103, 10161-10176.	3.3	129
78	Mass and fluid flux during accretion at the Alaskan margin. Bulletin of the Geological Society of America, 1998, 110, 468-482.	3.3	51
79	Development of the accretionary prism along Peru and material flux after subduction of Nazca Ridge. Tectonics, 1996, 15, 19-33.	2.8	64
80	Cyclical behavior of thrust wedges: Insights from high basal friction sandbox experiments. Geology, 1996, 24, 135.	4.4	161
81	Crustal structure and dynamics in the Rhine Graben and the Alpine foreland. Geophysical Journal International, 1995, 122, 617-636.	2.4	26
82	Lithospheric cross sections of the European Cenozoic rift system. Tectonophysics, 1992, 208, 113-138.	2.2	54
83	Deep crustal structure of the Rhine Graben from dekorp-ecors seismic reflection data: A summary. Tectonophysics, 1992, 208, 139-147.	2.2	128
84	A deep reflection seismic line across the Northern Rhine Graben. Earth and Planetary Science Letters, 1991, 104, 140-150.	4.4	71
85	Crustal-scale structure of the southern Rhinegraben from ECORS-DEKORP seismic reflection data. Geology, 1991, 19, 758.	4.4	87
86	Gravity interpretation along seismic reflection profile DEKORP 9-N (northern Rhine Graben). Terra Nova, 1991, 3, 166-174.	2.1	9