R Dietmar MÃ¼ller

List of Publications by Year
in descending order

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276	25,372	8732	75	7718	150
papers	citations		h-index		g-index

323	323	323	12133
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Age, spreading rates, and spreading asymmetry of the world's ocean crust. Geochemistry, Geophysics, Geosystems, 2008, 9, .	1.0	1,539
2	Global continental and ocean basin reconstructions since 200Ma. Earth-Science Reviews, 2012, 113, 212-270.	4.0	1,459
3	New global marine gravity model from CryoSat-2 and Jason-1 reveals buried tectonic structure. Science, 2014, 346, 65-67.	6.0	1,074
4	Digital isochrons of the world's ocean floor. Journal of Geophysical Research, 1997, 102, 3211-3214.	3.3	744
5	Ocean Basin Evolution and Global-Scale Plate Reorganization Events Since Pangea Breakup. Annual Review of Earth and Planetary Sciences, 2016, 44, 107-138.	4.6	724
6	Long-Term Sea-Level Fluctuations Driven by Ocean Basin Dynamics. Science, 2008, 319, 1357-1362.	6.0	610
7	Global plate boundary evolution and kinematics since the late Paleozoic. Global and Planetary Change, 2016, 146, 226-250.	1.6	553
8	Global plate motion frames: Toward a unified model. Reviews of Geophysics, 2008, 46, .	9.0	531
9	Revised plate motions relative to the hotspots from combined Atlantic and Indian Ocean hotspot tracks. Geology, 1993, 21, 275.	2.0	529
10	A full-plate global reconstruction of the Neoproterozoic. Gondwana Research, 2017, 50, 84-134.	3.0	474
11	EMAG2: A 2â€“arc min resolution Earth Magnetic Anomaly Grid compiled from satellite, airborne, and marine magnetic measurements. Geochemistry, Geophysics, Geosystems, 2009, 10, .	1.0	452
12	The tectonic evolution of the South Atlantic from Late Jurassic to present. Tectonophysics, 1991, 191, 27-53.	0.9	432
13	GPlates: Building a Virtual Earth Through Deep Time. Geochemistry, Geophysics, Geosystems, 2018, 19, 2243-2261.	1.0	392
14	Catastrophic initiation of subduction following forced convergence across fracture zones. Earth and Planetary Science Letters, 2003, 212, 15-30.	1.8	381
15	Iceland hotspot track. Geology, 1994, 22, 311-314.	2.0	334
16	A Global Plate Model Including Lithospheric Deformation Along Major Rifts and Orogens Since the Triassic. Tectonics, 2019, 38, 1884-1907.	1.3	316
17	Controls on back-arc basin formation. Geochemistry, Geophysics, Geosystems, 2006, 7, n/a-n/a.	1.0	301
18	The role of oceanic plateau subduction in the Laramide orogeny. Nature Geoscience, 2010, 3, 353-357.	5.4	290

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19	Kinematics of the South Atlantic rift. Solid Earth, 2013, 4, 215-253.	1.2	286
20	A review of observations and models of dynamic topography. Lithosphere, 2013, 5, 189-210.	0.6	277
21	Cenozoic motion between East and West Antarctica. Nature, 2000, 404, 145-150.	13.7	270
22	Major Australian-Antarctic Plate Reorganization at Hawaiian-Emperor Bend Time. Science, 2007, 318, 83-86.	6.0	264
23	Origin of anomalous subsidence along the Northern South China Sea margin and its relationship to dynamic topography. Marine and Petroleum Geology, 2006, 23, 745-765.	1.5	242
24	On the uncertainties in hot spot reconstructions and the significance of moving hot spot reference frames. Geochemistry, Geophysics, Geosystems, 2005, 6, n/a-n/a.	1.0	237
25	The Cretaceous and Cenozoic tectonic evolution of Southeast Asia. Solid Earth, 2014, 5, 227-273.	1.2	234
26	Breakup and early seafloor spreading between India and Antarctica. Geophysical Journal International, 2007, 170, 151-169.	1.0	223
27	Cretaceous Vertical Motion of Australia and the AustralianAntarctic Discordance. Science, 1998, 279, 1499-1504.	6.0	218
28	Plate tectonic reconstructions with continuously closing plates. Computers and Geosciences, 2012, 38, 35-42.	2.0	214
29	The breakup of East Gondwana: Assimilating constraints from Cretaceous ocean basins around India into a bestâ€fit tectonic model. Journal of Geophysical Research: Solid Earth, 2013, 118, 808-822.	1.4	207
30	Origin and evolution of a submarine large igneous province: the Kerguelen Plateau and Broken Ridge, southern Indian Ocean. Earth and Planetary Science Letters, 2000, 176, 73-89.	1.8	199
31	Next-generation plate-tectonic reconstructions using GPlates. , 2011, , 95-114.		188
32	Extending full-plate tectonic models into deep time: Linking the Neoproterozoic and the Phanerozoic. Earth-Science Reviews, 2021, 214, 103477.	4.0	183
33	Ridge subduction sparked reorganization of the Pacific plateâ€mantle system 60â€“50 million years ago. Geophysical Research Letters, 2015, 42, 1732-1740.	1.5	170
34	Global sediment thickness data set updated for the Australianâ€Antarctic Southern Ocean. Geochemistry, Geophysics, Geosystems, 2013, 14, 3297-3305.	1.0	166
35	A global-scale plate reorganization event at 105â^'100Ma. Earth and Planetary Science Letters, 2012, 355-356, 283-298.	1.8	165
36	A tectonic model reconciling evidence for the collisions between India, Eurasia and intra-oceanic arcs of the central-eastern Tethys. Gondwana Research, 2015, 28, 451-492.	3.0	165

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37	Simulation of the Middle Miocene Climate Optimum. Geophysical Research Letters, 2009, 36, .	1.5	161
38	Resolution of direction of oceanic magnetic lineations by the sixthâ€generation lithospheric magnetic field model from CHAMP satellite magnetic measurements. Geochemistry, Geophysics, Geosystems, 2008, 9, .	1.0	160
39	Miocene drainage reversal of the Amazon River driven by plateâ€“mantle interaction. Nature Geoscience, 2010, 3, 870-875.	5.4	160
40	The tectonic evolution of the Arctic since Pangea breakup: Integrating constraints from surface geology and geophysics with mantle structure. Earth-Science Reviews, 2013, 124, 148-183.	4.0	153
41	A recipe for microcontinent formation. Geology, 2001, 29, 203.	2.0	151
42	Tectonic evolution and deep mantle structure of the eastern Tethys since the latest Jurassic. Earth-Science Reviews, 2016, 162, 293-337.	4.0	151
43	An expression of Philippine Sea plate rotation: the Parece Vela and Shikoku Basins. Tectonophysics, 2004, 394, 69-86.	0.9	150
44	Abrupt plate accelerations shape rifted continental margins. Nature, 2016, 536, 201-204.	13.7	147
45	A Cenozoic diffuse alkaline magmatic province (DAMP) in the southwest Pacific without rift or plume origin. Geochemistry, Geophysics, Geosystems, 2005, 6, .	1.0	146
46	Late Cretaceousâ€“Cenozoic deformation of northeast Asia. Earth and Planetary Science Letters, 2002, 197, 273-286.	1.8	138
47	Late Jurassic rifting along the Australian North West Shelf: margin geometry and spreading ridge configuration. Australian Journal of Earth Sciences, 2005, 52, 27-39.	0.4	138
48	Potential links between continental rifting, CO2 degassing and climate change through time. Nature Geoscience, 2017, 10, 941-946.	5.4	136
49	A Global Data Set of Presentâ€Day Oceanic Crustal Age and Seafloor Spreading Parameters. Geochemistry, Geophysics, Geosystems, 2020, 21, e2020GC009214.	1.0	133
50	Global kinematics of tectonic plates and subduction zones since the late Paleozoic Era. Geoscience Frontiers, 2019, 10, 989-1013.	4.3	126
51	Stratigraphic architecture and evolution of the continental slope system in offshore Hainan, northern South China Sea. Marine Geology, 2008, 247, 129-144.	0.9	123
52	The tectonic fabric of the ocean basins. Journal of Geophysical Research, 2011, 116, .	3.3	123
53	Cenozoic tectonic and depth/age evolution of the Indonesian gateway and associated back-arc basins. Earth-Science Reviews, 2007, 83, 177-203.	4.0	118
54	Subduction controls the distribution and fragmentation of Earthâ€™s tectonic plates. Nature, 2016, 535, 140-143.	13.7	112

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55	Improving global paleogeography since the late Paleozoic using paleobiology. Biogeosciences, 2017, 14, 5425-5439.	1.3	111
56	Census of seafloor sediments in the worldâ€™s ocean. Geology, 2015, 43, 795-798.	2.0	110
57	Mid-Cretaceous seafloor spreading pulse: Fact or fiction?. Geology, 2009, 37, 687-690.	2.0	105
58	Tectonic speed limits from plate kinematic reconstructions. Earth and Planetary Science Letters, 2015, 418, 40-52.	1.8	102
59	A review of machine learning in processing remote sensing data for mineral exploration. Remote Sensing of Environment, 2022, 268, 112750.	4.6	101
60	Origin of Indian Ocean Seamount Province by shallow recycling of continental lithosphere. Nature Geoscience, 2011, 4, 883-887.	5.4	99
61	Asymmetric sea-floor spreading caused by ridgeâ€“plume interactions. Nature, 1998, 396, 455-459.	13.7	98
62	Community infrastructure and repository for marine magnetic identifications. Geochemistry, Geophysics, Geosystems, 2014, 15, 1629-1641.	1.0	97
63	Fullâ€fit, palinspastic reconstruction of the conjugate Australianâ€Antarctic margins. Tectonics, 2011, 30, .	1.3	96
64	Revised tectonic evolution of the Eastern Indian Ocean. Geochemistry, Geophysics, Geosystems, 2013, 14, 1891-1909.	1.0	96
65	Geological, tomographic, kinematic and geodynamic constraints on the dynamics of sinking slabs. Journal of Geodynamics, 2014, 73, 1-13.	0.7	93
66	Topographic asymmetry of the South Atlantic from global models of mantle flow and lithospheric stretching. Earth and Planetary Science Letters, 2014, 387, 107-119.	1.8	92
67	Long-term interaction between mid-ocean ridges and mantle plumes. Nature Geoscience, 2015, 8, 479-483.	5.4	92
68	Fracture zones in the North Atlantic from combined Geosat and Seasat data. Journal of Geophysical Research, 1992, 97, 3337-3350.	3.3	91
69	Modeling the Miocene climatic optimum: Ocean circulation. Paleoceanography, 2012, 27, n/a-n/a.	3.0	88
70	Chapter 2 New constraints on the late cretaceous/tertiary plate tectonic evolution of the caribbean. Sedimentary Basins of the World, 1999, 4, 33-59.	0.2	86
71	Oblique rifting: the rule, not the exception. Solid Earth, 2018, 9, 1187-1206.	1.2	85
72	Geodynamic implications of moving Indian Ocean hotspots. Earth and Planetary Science Letters, 2003, 215, 151-168.	1.8	84

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73	The Late Cretaceous to recent tectonic history of the Pacific Ocean basin. Earth-Science Reviews, 2016, 154, 138-173.	4.0	83
74	Subsidence in intracontinental basins due to dynamic topography. Physics of the Earth and Planetary Interiors, 2008, 171, 252-264.	0.7	82
75	The case for dynamic subsidence of the U.S. east coast since the Eocene. Geophysical Research Letters, 2008, 35, .	1.5	81
76	Episodicity in back-arc tectonic regimes. Physics of the Earth and Planetary Interiors, 2008, 171, 265-279.	0.7	79
77	Constraining the Jurassic extent of Greater India: Tectonic evolution of the West Australian margin. Geochemistry, Geophysics, Geosystems, 2012, 13, .	1.0	78
78	Mantle plumes and their role in Earth processes. Nature Reviews Earth & Environment, 2021, 2, 382-401.	12.2	78
79	Cause and evolution of intraplate orogeny in Australia. Geology, 2008, 36, 495.	2.0	75
80	Geologic and kinematic constraints on Late Cretaceous to mid Eocene plate boundaries in the southwest Pacific. Earth-Science Reviews, 2015, 140, 72-107.	4.0	75
81	Insights on the kinematics of the Indiaâ€Eurasia collision from global geodynamic models. Geochemistry, Geophysics, Geosystems, 2012, 13, .	1.0	74
82	Evolution of the Louisiade triple junction. Journal of Geophysical Research, 1999, 104, 12927-12939.	3.3	73
83	A rapid burst in hotspot motion through the interaction of tectonics and deep mantle flow. Nature, 2016, 533, 239-242.	13.7	73
84	Sunda-Java trench kinematics, slab window formation and overriding plate deformation since the Cretaceous. Earth and Planetary Science Letters, 2007, 255, 445-457.	1.8	71
85	Middle Miocene tectonic boundary conditions for use in climate models. Geochemistry, Geophysics, Geosystems, 2008, 9, .	1.0	71
86	A suite of early Eocene (~ 55 Ma) climate model boundary conditions. Geoscientific Model Development, 2014, 7, 2077-2090.	1.3	71
87	Rift and plate boundary evolution across two supercontinent cycles. Global and Planetary Change, 2019, 173, 1-14.	1.6	70
88	The Interplay Between the Eruption and Weathering of Large Igneous Provinces and the Deepâ€Time Carbon Cycle. Geophysical Research Letters, 2018, 45, 5380-5389.	1.5	69
89	An open-source software environment for visualizing and refining plate tectonic reconstructions using high-resolution geological and geophysical data sets. GSA Today, 2012, , 4-9.	1.1	68
90	Influence of subduction history on South American topography. Earth and Planetary Science Letters, 2015, 430, 9-18.	1.8	67

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91	Australian paleo-stress fields and tectonic reactivation over the past 100 Ma. Australian Journal of Earth Sciences, 2012, 59, 13-28.	0.4	66
92	Volcanic margin formation and Mesozoic rift propagators in the Cuvier Abyssal Plain off Western Australia. Journal of Geophysical Research, 1998, 103, 27135-27149.	3.3	65
93	Integrating deep Earth dynamics in paleogeographic reconstructions of Australia. Tectonophysics, 2010, 483, 135-150.	0.9	64
94	Full-fit reconstruction of the Labrador Sea and Baffin Bay. Solid Earth, 2013, 4, 461-479.	1.2	62
95	Semiautomatic fracture zone tracking. Geochemistry, Geophysics, Geosystems, 2015, 16, 2462-2472.	1.0	60
96	Kinematic constraints on the Rodinia to Gondwana transition. Precambrian Research, 2017, 299, 132-150.	1.2	59
97	Long-wavelength tilting of the Australian continent since the Late Cretaceous. Earth and Planetary Science Letters, 2009, 278, 175-185.	1.8	58
98	Provenance of plumes in global convection models. Geochemistry, Geophysics, Geosystems, 2015, 16, 1465-1489.	1.0	58
99	The Opening of the Arctic Ocean. , 1990, , 29-62.		58
100	Tectonic fabric map of the ocean basins from satellite altimetry data. Tectonophysics, 1988, 155, 1-26.	0.9	57
101	Circum-Antarctic palaeobathymetry: Illustrated examples from Cenozoic to recent times. Palaeogeography, Palaeoclimatology, Palaeoecology, 2006, 231, 158-168.	1.0	57
102	A reconstruction of the North Atlantic since the earliest Jurassic. Basin Research, 2018, 30, 160-185.	1.3	57
103	Early to Middle Miocene monsoon climate in Australia. Geology, 2011, 39, 3-6.	2.0	56
104	Modeling the Miocene Climatic Optimum. Part I: Land and Atmosphere*. Journal of Climate, 2011, 24, 6353-6372.	1.2	56
105	Fragmentation of active continental plate margins owing to the buoyancy of the mantle wedge. Nature Geoscience, 2010, 3, 257-261.	5.4	55
106	Origin and evolution of the deep thermochemical structure beneath Eurasia. Nature Communications, 2017, 8, 14164.	5.8	55
107	Dynamic topography of passive continental margins and their hinterlands since the Cretaceous. Gondwana Research, 2018, 53, 225-251.	3.0	55
108	Kinematics and extent of the Piemontâ€“Liguria Basin â€“ implications for subduction processes in the Alps. Solid Earth, 2021, 12, 885-913.	1.2	55

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109	Towards community-driven paleogeographic reconstructions: integrating open-access paleogeographic and paleobiology data with plate tectonics. Biogeosciences, 2013, 10, 1529-1541.	1.3	54
110	Formation of Australian continental margin highlands driven by plateâ€“mantle interaction. Earth and Planetary Science Letters, 2016, 441, 60-70.	1.8	54
111	Testing absolute plate reference frames and the implications for the generation of geodynamic mantle heterogeneity structure. Earth and Planetary Science Letters, 2012, 317-318, 204-217.	1.8	53
112	Absolute plate motions since 130 Ma constrained by subduction zone kinematics. Earth and Planetary Science Letters, 2015, 418, 66-77.	1.8	53
113	Mapping crustal thickness using marine gravity data: Methods and uncertainties. Geophysics, 2014, 79, G27-G36.	1.4	52
114	Oceanic crustal carbon cycle drives 26-million-year atmospheric carbon dioxide periodicities. Science Advances, 2018, 4, eaaq0500.	4.7	52
115	Mesozoic/Cenozoic tectonic events around Australia. Geophysical Monograph Series, 2000, , 161-188.	0.1	51
116	Early Indiaâ€Australia spreading history revealed by newly detected Mesozoic magnetic anomalies in the Perth Abyssal Plain. Journal of Geophysical Research: Solid Earth, 2013, 118, 3275-3284.	1.4	51
117	Past and present seafloor age distributions and the temporal evolution of plate tectonic heat transport. Earth and Planetary Science Letters, 2009, 278, 233-242.	1.8	50
118	Seawater chemistry driven by supercontinent assembly, breakup, and dispersal. Geology, 2013, 41, 907-910.	2.0	50
119	Controls on the global distribution of contourite drifts: Insights from an eddy-resolving ocean model. Earth and Planetary Science Letters, 2018, 489, 228-240.	1.8	50
120	Australian-Antarctic breakup and seafloor spreading: Balancing geological and geophysical constraints. Earth-Science Reviews, 2019, 188, 41-58.	4.0	49
121	Deformation of the oceanic crust between the North American and South American Plates. Journal of Geophysical Research, 1993, 98, 8275-8291.	3.3	48
122	Convergence of tectonic reconstructions and mantle convection models for significant fluctuations in seafloor spreading. Earth and Planetary Science Letters, 2013, 383, 92-100.	1.8	48
123	Global tectonic reconstructions with continuously deforming and evolving rigid plates. Computers and Geosciences, 2018, 116, 32-41.	2.0	48
124	Reconstructing the lost eastern Tethys Ocean Basin: Convergence history of the SE Asian margin and marine gateways. Geophysical Monograph Series, 2004, , 37-54.	0.1	46
125	The Moho: Boundary above upper mantle peridotites or lower crustal eclogites? A global review and new interpretations for passive margins. Tectonophysics, 2013, 609, 636-650.	0.9	46
126	Dynamic subsidence of Eastern Australia during the Cretaceous. Gondwana Research, 2011, 19, 372-383.	3.0	45

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127	Integration of Selective Dimensionality Reduction Techniques for Mineral Exploration Using ASTER Satellite Data. Remote Sensing, 2020, 12, 1261.	1.8	45
128	3-D finite-element modelling of deformation and stress associated with faulting: effect of inhomogeneous crustal structures. Geophysical Journal International, 2004, 157, 629-644.	1.0	44
129	Eocene to Miocene geometry of the West Antarctic Rift System. Australian Journal of Earth Sciences, 2007, 54, 1033-1045.	0.4	44
130	Evolution of the Central Tertiary Basin of Spitsbergen: towards a synthesis of sediment and plate tectonic history. Palaeogeography, Palaeoclimatology, Palaeoecology, 1990, 80, 153-172.	1.0	43
131	Enigmatic formation of the Norfolk Basin, SW Pacific: A plume influence on back-arc extension. Geochemistry, Geophysics, Geosystems, 2004, 5, .	1.0	43
132	Geophysical evaluation of the enigmatic Bedout basement high, offshore northwestern Australia. Earth and Planetary Science Letters, 2005, 237, 264-284.	1.8	43
133	Constraining Absolute Plate Motions Since the Triassic. Journal of Geophysical Research: Solid Earth, 2019, 124, 7231-7258.	1.4	43
134	Evolution of Earthâ€™s tectonic carbon conveyor belt. Nature, 2022, 605, 629-639.	13.7	43
135	The GPlates Portal: Cloud-Based Interactive 3D Visualization of Global Geophysical and Geological Data in a Web Browser. PLoS ONE, 2016, 11, e0150883.	1.1	41
136	A Quantitative Tomotectonic Plate Reconstruction of Western North America and the Eastern Pacific Basin. Geochemistry, Geophysics, Geosystems, 2020, 21, e2020GC009117.	1.0	41
137	Finite-element modelling of contemporary and palaeo-intraplate stress using ABAQUSâ„¢. Computers and Geosciences, 2005, 31, 297-307.	2.0	40
138	Global chemical weathering dominated by continental arcs since the mid-Palaeozoic. Nature Geoscience, 2021, 14, 690-696.	5.4	40
139	Ellipsis 3D: A particle-in-cell finite-element hybrid code for modelling mantle convection and lithospheric deformation. Computers and Geosciences, 2006, 32, 1769-1779.	2.0	39
140	Full-fit reconstruction of the South China Sea conjugate margins. Tectonophysics, 2015, 661, 121-135.	0.9	39
141	Deformation-related volcanism in the Pacific Ocean linked to the Hawaiianâ€“Emperor bend. Nature Geoscience, 2015, 8, 393-397.	5.4	38
142	Tectonic evolution of Western Tethys from Jurassic to present day: coupling geological and geophysical data with seismic tomography models. International Geology Review, 2016, 58, 1616-1645.	1.1	38
143	A dynamic process for drowning carbonate reefs on the northeastern Australian margin. Geology, 2010, 38, 11-14.	2.0	37
144	Influence of mantle flow on the drainage of eastern <scp>A</scp>ustralia since the <scp>J</scp>urassic <scp>P</scp>eriod. Geochemistry, Geophysics, Geosystems, 2017, 18, 280-305.	1.0	37

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145	Organization of the tectonic plates in the last 200 Myr. Earth and Planetary Science Letters, 2013, 373, 93-101.	1.8	36
146	Sea-level fluctuations driven by changes in global ocean basin volume following supercontinent break-up. Earth-Science Reviews, 2020, 208, 103293.	4.0	36
147	Paleostress field evolution of the Australian continent since the Eocene. Journal of Geophysical Research, 2005, 110, .	3.3	35
148	Climate model sensitivity to atmospheric CO2 concentrations for the middle Miocene. Global and Planetary Change, 2009, 67, 129-140.	1.6	35
149	Global pulsations of intraplate magmatism through the Cenozoic. Lithosphere, 2010, 2, 361-376.	0.6	35
150	A reconstruction of the Eurekan Orogeny incorporating deformation constraints. Tectonics, 2017, 36, 304-320.	1.3	35
151	The Dynamic Topography of Eastern China Since the Latest Jurassic Period. Tectonics, 2018, 37, 1274-1291.	1.3	35
152	Palaeolatitudinal distribution of lithologic indicators of climate in a palaeogeographic framework. Geological Magazine, 2019, 156, 331-354.	0.9	33
153	Sequestration and subduction of deep-sea carbonate in the global ocean since the Early Cretaceous. Geology, 2019, 47, 91-94.	2.0	32
154	Computer vision-based framework for extracting tectonic lineaments from optical remote sensing data. International Journal of Remote Sensing, 2020, 41, 1760-1787.	1.3	32
155	Intraplate volcanism triggered by bursts in slab flux. Science Advances, 2020, 6, .	4.7	32
156	Circumâ€Arctic mantle structure and longâ€wavelength topography since the Jurassic. Journal of Geophysical Research: Solid Earth, 2014, 119, 7889-7908.	1.4	31
157	Revision of Paleogene plate motions in the Pacific and implications for the Hawaiian-Emperor bend. Geology, 2015, 43, 455-458.	2.0	31
158	The tectonic stress field evolution of India since the Oligocene. Gondwana Research, 2015, 28, 612-624.	3.0	30
159	Global patterns in Earth's dynamic topography since the Jurassic: the role of subducted slabs. Solid Earth, 2017, 8, 899-919.	1.2	30
160	Environmental predictors of deep-sea polymetallic nodule occurrence in the global ocean. Geology, 2020, 48, 293-297.	2.0	30
161	A deforming plate tectonic model of the South China Block since the Jurassic. Gondwana Research, 2022, 102, 3-16.	3.0	30
162	How supercontinents and superoceans affect seafloor roughness. Nature, 2008, 456, 938-941.	13.7	28

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163	Comparing early to middle Miocene terrestrial climate simulations with geological data. , 2010, 6, 952-961.		28
164	Large fluctuations of shallow seas in low-lying Southeast Asia driven by mantle flow. Geochemistry, Geophysics, Geosystems, 2016, 17, 3589-3607.	1.0	28
165	Dynamic topography and eustasy controlled the paleogeographic evolution of northern Africa since the midâ€Cretaceous. Tectonics, 2017, 36, 929-944.	1.3	28
166	A Comparative Study of Convolutional Neural Networks and Conventional Machine Learning Models for Lithological Mapping Using Remote Sensing Data. Remote Sensing, 2022, 14, 819.	1.8	28
167	The link between great earthquakes and the subduction of oceanic fracture zones. Solid Earth, 2012, 3, 447-465.	1.2	27
168	Oceanic microplate formation records the onset of Indiaâ€“Eurasia collision. Earth and Planetary Science Letters, 2016, 433, 204-214.	1.8	27
169	Bayesian geological and geophysical data fusion for the construction and uncertainty quantification of 3D geological models. Geoscience Frontiers, 2021, 12, 479-493.	4.3	27
170	Climate model sensitivity to changes in Miocene paleotopography. Australian Journal of Earth Sciences, 2009, 56, 1049-1059.	0.4	26
171	Subduction history reveals Cretaceous slab superflux as a possible cause for the mid-Cretaceous plume pulse and superswell events. Gondwana Research, 2020, 79, 125-139.	3.0	26
172	Mantle dynamics of continentwide Cenozoic subsidence and tilting of Australia. Lithosphere, 2011, 3, 311-316.	0.6	25
173	Influence of overriding plate geometry and rheology on subduction. Geochemistry, Geophysics, Geosystems, 2012, 13, .	1.0	24
174	A global review and digital database of large-scale extinct spreading centers. , 2017, 13, 911-949.		24
175	Spatio-temporal evolution and dynamic origin of Jurassic-Cretaceous magmatism in the South China Block. Earth-Science Reviews, 2021, 217, 103605.	4.0	24
176	Predicting Sediment Thickness on Vanished Ocean Crust Since 200 Ma. Geochemistry, Geophysics, Geosystems, 2017, 18, 4586-4603.	1.0	23
177	Reconstructing seafloor age distributions in lost ocean basins. Geoscience Frontiers, 2021, 12, 769-780.	4.3	23
178	Dynamic topography and anomalously negative residual depth of the Argentine Basin. Gondwana Research, 2012, 22, 658-663.	3.0	22
179	Forward modelling of oceanic lithospheric magnetization. Geophysical Journal International, 2013, 192, 951-962.	1.0	22
180	Assessing the role of slab rheology in coupled plate-mantle convection models. Earth and Planetary Science Letters, 2015, 430, 191-201.	1.8	22

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181	The interplay of dynamic topography and eustasy on continental flooding in the late Paleozoic. Tectonophysics, 2019, 761, 108-121.	0.9	22
182	Geodynamic reconstruction of an accreted Cretaceous back-arc basin in the Northern Andes. Journal of Geodynamics, 2018, 121, 115-132.	0.7	21
183	Long-term Phanerozoic sea level change from solid Earth processes. Earth and Planetary Science Letters, 2022, 584, 117451.	1.8	21
184	Cenozoic uplift of south Western Australia as constrained by river profiles. Tectonophysics, 2014, 622, 186-197.	0.9	20
185	Absolute plate motion of Africa around Hawaii-Emperor bend time. Geophysical Journal International, 2015, 201, 1743-1764.	1.0	20
186	On the Scales of Dynamic Topography in Wholeâ€Mantle Convection Models. Geochemistry, Geophysics, Geosystems, 2018, 19, 3140-3163.	1.0	20
187	Crustal structure and rift flank uplift of the Adare Trough, Antarctica. Geochemistry, Geophysics, Geosystems, 2005, 6, n/a-n/a.	1.0	19
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