Nicolas Flament

List of Publications by Year
in descending order

58 papers	2,703 citations	186209 28 h-index	182361 51 g-index
69 all docs	69 docs citations	69 times ranked	2459 citing authors

#	Article	IF	Citations
1	Assembly of the basal mantle structure beneath Africa. Nature, 2022, 603, 846-851.	13.7	19
2	Long-term Phanerozoic sea level change from solid Earth processes. Earth and Planetary Science Letters, 2022, 584, 117451.	1.8	21
3	Northwest Pacific-Izanagi plate tectonics since Cretaceous times from western Pacific mantle structure. Earth and Planetary Science Letters, 2022, 583, 117445.	1.8	30
4	Mapping global kimberlite potential from reconstructions of mantle flow over the past billion years. PLoS ONE, 2022, 17, e0268066.	1.1	3
5	A tectonic-rules-based mantle reference frame since 1 billion years ago â€" implications for supercontinent cycles and plateâ€"mantle system evolution. Solid Earth, 2022, 13, 1127-1159.	1.2	16
6	Reconstructing seafloor age distributions in lost ocean basins. Geoscience Frontiers, 2021, 12, 769-780.	4.3	23
7	The influence of mantle flow on intracontinental basins: Three examples from Australia. Basin Research, 2021, 33, 1429-1453.	1.3	5
8	Coupled Evolution of Plate Tectonics and Basal Mantle Structure. Geochemistry, Geophysics, Geosystems, 2021, 22, .	1.0	10
9	Spatio-temporal evolution and dynamic origin of Jurassic-Cretaceous magmatism in the South China Block. Earth-Science Reviews, 2021, 217, 103605.	4.0	24
10	Modelling the role of dynamic topography and eustasy in the evolution of the Great Artesian Basin. Basin Research, 2021, 33, 3378-3405.	1.3	4
11	The evolution of basal mantle structure in response to supercontinent aggregation and dispersal. Scientific Reports, 2021, 11, 22967.	1.6	7
12	Plate tectonics and mantle controls on plume dynamics. Earth and Planetary Science Letters, 2020, 547, 116439.	1.8	27
13	Quantitative stratigraphic analysis in a source-to-sink numerical framework. Geoscientific Model Development, 2019, 12, 2571-2585.	1.3	13
14	The deep roots of Earthâ€™s surface. Nature Geoscience, 2019, 12, 787-788.	5.4	3
15	Constraining Absolute Plate Motions Since the Triassic. Journal of Geophysical Research: Solid Earth, 2019, 124, 7231-7258.	1.4	43
16	The interplay of dynamic topography and eustasy on continental flooding in the late Paleozoic. Tectonophysics, 2019, 761, 108-121.	0.9	22
17	Drainage and Sedimentary Responses to Dynamic Topography. Geophysical Research Letters, 2019, 46, 14385-14394.	1.5	11
18	Global kinematics of tectonic plates and subduction zones since the late Paleozoic Era. Geoscience Frontiers, 2019, 10, 989-1013.	4.3	126

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19	Present-day dynamic topography and lower-mantle structure from palaeogeographically constrained mantle flow models. Geophysical Journal International, 2019, 216, 2158-2182.	1.0	31
20	Palaeolatitudinal distribution of lithologic indicators of climate in a palaeogeographic framework. Geological Magazine, 2019, 156, 331-354.	0.9	33
21	Global tectonic reconstructions with continuously deforming and evolving rigid plates. Computers and Geosciences, 2018, 116, 32-41.	2.0	48
22	The Dynamic Topography of Eastern China Since the Latest Jurassic Period. Tectonics, 2018, 37, 1274-1291.	1.3	35
23	Dynamic topography of passive continental margins and their hinterlands since the Cretaceous. Gondwana Research, 2018, 53, 225-251.	3.0	55
24	Tectonics and geodynamics of the eastern Tethys and northern Gondwana since the Jurassic. ASEG Extended Abstracts, 2018, 2018, 1-6.	0.1	1
25	On the Scales of Dynamic Topography in Wholeâ€Mantle Convection Models. Geochemistry, Geophysics, Geosystems, 2018, 19, 3140-3163.	1.0	20
26	Geodynamic reconstruction of an accreted Cretaceous back-arc basin in the Northern Andes. Journal of Geodynamics, 2018, 121, 115-132.	0.7	21
27	Modelling Rifting Sequence Stratigraphy Coupled with Surface Process and Thermo-Mechanical Modelling. ASEG Extended Abstracts, 2018, 2018, 1-1.	0.1	0
28	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
29	Origin and evolution of the deep thermochemical structure beneath Eurasia. Nature Communications, 2017, 8, 14164.	5.8	55
30	Dynamic topography and eustasy controlled the paleogeographic evolution of northern Africa since the midâ€Cretaceous. Tectonics, 2017, 36, 929-944.	1.3	28
31	Correspondence: Reply to â€˜Numerical modelling of the PERM anomaly and the Emeishan large igneous provinceâ€™. Nature Communications, 2017, 8, 822.	5.8	6
32	The role of deep Earth dynamics in driving the flooding and emergence of New Guinea since the Jurassic. Earth and Planetary Science Letters, 2017, 479, 273-283.	1.8	5
33	Improving global paleogeography since the late Paleozoic using paleobiology. Biogeosciences, 2017, 14, 5425-5439.	1.3	111
34	The deep Earth origin of the Iceland plume and its effects on regional surface uplift and subsidence. Solid Earth, 2017, 8, 235-254.	1.2	17
35	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
36	Alignment between seafloor spreading directions and absolute plate motions through time. Geophysical Research Letters, 2016, 43, 1472-1480.	1.5	12

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37	A rapid burst in hotspot motion through the interaction of tectonics and deep mantle flow. Nature, 2016, 533, 239-242.	13.7	73
38	Large fluctuations of shallow seas in low-lying Southeast Asia driven by mantle flow. Geochemistry, Geophysics, Geosystems, 2016, 17, 3589-3607.	1.0	28
39	Tectonic evolution and deep mantle structure of the eastern Tethys since the latest Jurassic. Earth-Science Reviews, 2016, 162, 293-337.	4.0	151
40	Formation of Australian continental margin highlands driven by plateâ€"mantle interaction. Earth and Planetary Science Letters, 2016, 441, 60-70.	1.8	54
41	Cenozoic surface uplift from south Western Australian rivers. ASEG Extended Abstracts, 2015, 2015, 1-4.	0.1	0
42	Absolute plate motions since 130 Ma constrained by subduction zone kinematics. Earth and Planetary Science Letters, 2015, 418, 66-77.	1.8	53
43	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
44	Tectonic speed limits from plate kinematic reconstructions. Earth and Planetary Science Letters, 2015, 418, 40-52.	1.8	102
45	Provenance of plumes in global convection models. Geochemistry, Geophysics, Geosystems, 2015, 16, 1465-1489.	1.0	58
46	Influence of subduction history on South American topography. Earth and Planetary Science Letters, 2015, 430, 9-18.	1.8	67
47	Assimilating lithosphere and slab history in 4-D Earth models. Physics of the Earth and Planetary Interiors, 2015, 238, 8-22.	0.7	83
48	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
49	Cenozoic uplift of south Western Australia as constrained by river profiles. Tectonophysics, 2014, 622, 186-197.	0.9	20
50	Linking plate tectonics and mantle flow to Earthâ€™s topography. Geology, 2014, 42, 927-928.	2.0	8
51	Circumâ€Arctic mantle structure and longâ€wavelength topography since the Jurassic. Journal of Geophysical Research: Solid Earth, 2014, 119, 7889-7908.	1.4	31
52	Spreading continents kick-started plate tectonics. Nature, 2014, 513, 405-408.	13.7	116
53	The evolution of the 87Sr/86Sr of marine carbonates does not constrain continental growth. Precambrian Research, 2013, 229, 177-188.	1.2	63
54	A review of observations and models of dynamic topography. Lithosphere, 2013, 5, 189-210.	0.6	277

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55	A deep subaqueous fan depositional model for the Palaeoarchaean (3.46 Ga) Marble Bar Cherts, Warrawoona Group, Western Australia. Geological Magazine, 2012, 149, 743-749.	0.9	6
56	Insights on the kinematics of the Indiaâ€Eurasia collision from global geodynamic models. Geochemistry, Geophysics, Geosystems, 2012, 13, .	1.0	74
57	Lower crustal flow kept Archean continental flood basalts at sea level. Geology, 2011, 39, 1159-1162.	2.0	30
58	A case for late-Archaean continental emergence from thermal evolution models and hypsometry. Earth and Planetary Science Letters, 2008, 275, 326-336.	1.8	179