Nicky White

List of Publications by Citations

117 papers	4,309 citations	40 h-index	60 g-index
122 ext. papers	4,833 ext. citations	5.9 avg, IF	5.66 L-index

#	Paper	IF	Citations
117	Measuring the pulse of a plume with the sedimentary record. *Nature*, **1997**, 387, 888-891	50.4	247
116	Formation of the "steer's head" geometry of sedimentary basins by differential stretching of the crust and mantle. *Geology*, **1988**, 16, 250	5	184
115	Estimating uplift rate histories from river profiles using African examples. *Journal of Geophysical Research*, **2010**, 115,		149
114	Sedimentary basin inversion caused by igneous underplating: Northwest European continental shelf. *Geology*, **1994**, 22, 147	5	133
113	Neogene overflow of Northern Component Water at the Greenland-Scotland Ridge. *Geochemistry, Geophysics, Geosystems*, **2006**, 7, n/a-n/a	3.6	119
112	Uplift histories from river profiles. *Geophysical Research Letters*, **2009**, 36,	4.9	110
111	Solid sediment load history of the Zambezi Delta. *Earth and Planetary Science Letters*, **2005**, 238, 49-63	5.3	103
110	Transient convective uplift of an ancient buried landscape. *Nature Geoscience*, **2011**, 4, 562-565	18.3	97
109	Extension and subsidence of the Pearl River Mouth Basin, northern South China Sea. *Basin Research* , **1989**, 2, 205-222	3.2	88
108	V-shaped ridges around Iceland: Implications for spatial and temporal patterns of mantle convection. *Geochemistry, Geophysics, Geosystems*, **2002**, 3, 1-23	3.6	83
107	Cenozoic evolution of the eastern Black Sea: A test of depth-dependent stretching models. *Earth and Planetary Science Letters*, **2008**, 265, 360-378	5.3	77
106	The African landscape through space and time. *Tectonics*, **2014**, 33, 898-935	4.3	76
105	Spatial and temporal evolution of injected CO2 at the Sleipner Field, North Sea. *Journal of Geophysical Research*, **2012**, 117,		76
104	Generating melt during lithospheric extension: Pure shear vs. simple shear. *Geology*, **1990**, 18, 327	5	75
103	40Ar/39Ar dating of the Rajahmundry Traps, Eastern India and their relationship to the Deccan Traps. *Earth and Planetary Science Letters*, **2003**, 208, 85-99	5.3	65
102	A continuous 55-million-year record of transient mantle plume activity beneath Iceland. *Nature Geoscience*, **2014**, 7, 914-919	18.3	64
101	Spatial and temporal patterns of Australian dynamic topography from River Profile Modeling. *Journal of Geophysical Research: Solid Earth*, **2014**, 119, 1384-1424	3.6	63

100	An uplift history of the Colorado Plateau and its surroundings from inverse modeling of longitudinal river profiles. *Tectonics*, **2012**, 31, n/a-n/a	4.3	63
99	Abrupt transition from magma-starved to magma-rich rifting in the eastern Black Sea. *Geology*, **2009**, 37, 7-10	5	60
98	A plume model of transient diachronous uplift at the Earth's surface. *Earth and Planetary Science Letters*, **2008**, 267, 146-160	5.3	58
97	Crustal trace of a hot convective sheet. *Geology*, **2003**, 31, 207	5	57
96	Present and past influence of the Iceland Plume on sedimentation. *Geological Society Special Publication*, **2002**, 196, 13-25	1.7	55
95	Seismic imaging of a hot upwelling beneath the British Isles. *Geology*, **2005**, 33, 345	5	54
94	Temporal and spatial evolution of dynamic support from river profiles: A framework for Madagascar. *Geochemistry, Geophysics, Geosystems*, **2012**, 13, n/a-n/a	3.6	53
93	Spatial and temporal patterns of Cenozoic dynamic topography around Australia. *Geochemistry, Geophysics, Geosystems*, **2013**, 14, 634-658	3.6	53
92	Inverse modelling of extension and denudation in the East Irish Sea and surrounding areas. *Earth and Planetary Science Letters*, **1998**, 161, 57-71	5.3	53
91	An inverse method for determining lithospheric strain rate variation on geological timescales. *Earth and Planetary Science Letters*, **1994**, 122, 351-371	5.3	53
90	Scales of transient convective support beneath Africa. *Geology*, **2009**, 37, 883-886	5	52
89	Understanding the thermal evolution of deep-water continental margins. *Nature*, **2003**, 426, 334-43	50.4	49
88	Origin of anomalous Tertiary subsidence adjacent to North Atlantic continental margins. *Marine and Petroleum Geology*, **1994**, 11, 702-714	4.7	49
87	Lithospheric extension and magmatism in the Porcupine Basin west of Ireland. *Journal of Geophysical Research*, **1993**, 98, 13905-13923		47
86	Oceanic residual depth measurements, the plate cooling model, and global dynamic topography. *Journal of Geophysical Research: Solid Earth*, **2017**, 122, 2328	3.6	46
85	Depth, age and dynamic topography of oceanic lithosphere beneath heavily sedimented Atlantic margins. *Earth and Planetary Science Letters*, **2009**, 287, 137-151	5.3	46
84	Quest for dynamic topography: Observations from Southeast Asia. *Geology*, **2000**, 28, 963	5	45
83	Neogene Uplift and Magmatism of Anatolia: Insights From Drainage Analysis and Basaltic Geochemistry. *Geochemistry, Geophysics, Geosystems*, **2018**, 19, 175-213	3.6	45

82	Accurate measurements of residual topography from the oceanic realm. *Tectonics*, **2014**, 33, 982-1015	4.3	44
81	Recovery of strain rate variation from inversion of subsidence data. *Nature*, **1993**, 366, 449-452	50.4	43
80	Estimating mixing rates from seismic images of oceanic structure. *Geophysical Research Letters*, **2009**, 36,	4.9	42
79	Reappraising elastic thickness variation at oceanic trenches. *Journal of Geophysical Research*, **2007**, 112,		42
78	Ocean circulation and mantle melting controlled by radial flow of hot pulses in the Iceland plume. *Nature Geoscience*, **2011**, 4, 558-561	18.3	40
77	Evolution of the Timan-Pechora and South Barents Sea basins. *Geological Magazine*, **2004**, 141, 141-160	2	39
76	Cenozoic and Cretaceous transient uplift in the Porcupine Basin and its relationship to a mantle plume. *Geological Society Special Publication*, **2001**, 188, 345-360	1.7	38
75	Seismic imaging of forearc backthrusts at northern Sumatra subduction zone. *Geophysical Journal International*, **2009**, 179, 1772-1780	2.6	36
74	Anatomy and formation of oblique continental collision: South Falkland basin. *Tectonics*, **2004**, 23, n/a-n/a	4.3	35
73	Evolution of deep-water rifted margins: Testing depth-dependent extensional models. *Tectonics*, **2011**, 30,	4.3	34
72	A Neogene chronology of Iceland plume activity from V-shaped ridges. *Earth and Planetary Science Letters*, **2009**, 283, 1-13	5.3	34
71	Quantifying transient mantle convective uplift: An example from the Faroe-Shetland basin. *Tectonics*, **2008**, 27, n/a-n/a	4.3	34
70	Nature of lithospheric extension in the North Sea. *Geology*, **1989**, 17, 111	5	34
69	Crustal structure of the British Isles and its epeirogenic consequences. *Geophysical Journal International*, **2012**, 190, 705-725	2.6	33
68	Rheology of the continental lithosphere inferred from sedimentary basins. *Nature*, **1997**, 385, 621-624	50.4	33
67	Shape and size of the starting Iceland plume swell. *Earth and Planetary Science Letters*, **2003**, 216, 271-282	4.3	32
66	Internal structure of a contourite drift generated by the Antarctic Circumpolar Current. *Geochemistry, Geophysics, Geosystems*, **2008**, 9, n/a-n/a	3.6	31
65	Measuring dynamic topography: An analysis of Southeast Asia. *Tectonics*, **2002**, 21, 4-1-4-26	4.3	31

64	Exhumation of the North Atlantic margin: introduction and background. *Geological Society Special Publication*, **2002**, 196, 1-12	1.7	31
63	The link between sedimentary basin inversion and igneous underplating. *Geological Society Special Publication*, **1995**, 88, 21-38	1.7	31
62	Reassessing the Thermal Structure of Oceanic Lithosphere With Revised Global Inventories of Basement Depths and Heat Flow Measurements. *Journal of Geophysical Research: Solid Earth*, **2018**, 123, 9136-9161	3.6	31
61	Cenozoic epeirogeny of the Indian peninsula. *Geochemistry, Geophysics, Geosystems*, **2016**, 17, 4920-4954	3.6	30
60	Cenozoic epeirogeny of the Arabian Peninsula from drainage modeling. *Geochemistry, Geophysics, Geosystems*, **2014**, 15, 3723-3761	3.6	30
59	Evolution of the Newfoundland–Iberia conjugate rifted margins. *Earth and Planetary Science Letters*, **2008**, 273, 214-226	5.3	29
58	Constraining uplift and denudation of west African continental margin by inversion of stacking velocity data. *Journal of Geophysical Research*, **2005**, 110,		28
57	The dynamics of extensional sedimentary basins: constraints from subsidence inversion. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **1999**, 357, 805-834	3	28
56	Subsidence analyses from the Betic Cordillera, southeast Spain. *Basin Research*, **2003**, 15, 1-21	3.2	26
55	A joint geochemical–geophysical record of time-dependent mantle convection south of Iceland. *Earth and Planetary Science Letters*, **2014**, 386, 86-97	5.3	25
54	Wide-angle seismic data reveal extensive overpressures in the Eastern Black Sea Basin. *Geophysical Journal International*, **2009**, 178, 1145-1163	2.6	24
53	Spatial and temporal uplift history of South America from calibrated drainage analysis. *Geochemistry, Geophysics, Geosystems*, **2017**, 18, 2321-2353	3.6	24
52	Quantitative Relationships Between Basalt Geochemistry, Shear Wave Velocity, and Asthenospheric Temperature Beneath Western North America. *Geochemistry, Geophysics, Geosystems*, **2018**, 19, 3376-3404	3.6	23
51	Cenozoic vertical motions in the Moray Firth Basin associated with initiation of the Iceland Plume. *Tectonics*, **2005**, 24, n/a-n/a	4.3	22
50	The elastic thickness of the British Isles. *Journal of the Geological Society*, **2003**, 160, 499-502	2.7	22
49	Seismic imaging of a large horizontal vortex at abyssal depths beneath the Sub-Antarctic Front. *Nature Geoscience*, **2012**, 5, 542-546	18.3	21
48	Crustal velocity structure of the British Isles; a comparison of receiver functions and wide-angle seismic data. *Geophysical Journal International*, **2006**, 166, 795-813	2.6	21
47	An automatic method for determining three-dimensional normal fault geometries. *Journal of Geophysical Research*, **1993**, 98, 17837-17857		21

46	Linking Paleogene denudation and magmatic underplating beneath the British Isles. *Geological Magazine*, **2004**, 141, 345-351	2	18
45	Phanerozoic vertical motions of Hudson Bay. *Canadian Journal of Earth Sciences*, **2004**, 41, 1181-1200	1.5	18
44	Laboratory testing of an automatic method for determining normal fault geometry at depth. *Journal of Structural Geology*, **1992**, 14, 873-885	3	18
43	Quantifying the Relationship Between Short-Wavelength Dynamic Topography and Thermomechanical Structure of the Upper Mantle Using Calibrated Parameterization of Anelasticity. *Journal of Geophysical Research: Solid Earth*, **2020**, 125, e2019JB019062	3.6	18
42	Seismic Imaging of Rapid Onset of Stratified Turbulence in the South Atlantic Ocean. *Journal of Physical Oceanography*, **2016**, 46, 1023-1044	2.4	18
41	Quantifying Asthenospheric and Lithospheric Controls on Mafic Magmatism Across North Africa. *Geochemistry, Geophysics, Geosystems*, **2019**, 20, 3520-3555	3.6	17
40	Layer spreading and dimming within the CO2 plume at the sleipner field in the north sea. *Energy Procedia*, **2011**, 4, 3254-3261	2.3	17
39	Reply to 40Ar/39Ar dating of the Rajahmundry Traps, Eastern India and their relationship to the Deccan Traps: Discussion by A.K. Baksi. *Earth and Planetary Science Letters*, **2005**, 239, 374-382	5.3	17
38	A two-dimensional inverse model for extensional sedimentary basins 1. Theory. *Journal of Geophysical Research*, **2002**, 107, ETG 17-1-ETG 17-20		17
37	Estimating Geostrophic Shear from Seismic Images of Oceanic Structure*. *Journal of Atmospheric and Oceanic Technology*, **2011**, 28, 1149-1154	2	16
36	A method for automatically determining normal fault geometry at depth. *Journal of Geophysical Research*, **1992**, 97, 1715-1733		16
35	Mesozoic magmatic activity in the North Sea Basin: implications for stretching history. *Geological Society Special Publication*, **1990**, 55, 207-227	1.7	16
34	Hotspots and mantle plumes revisited: Towards reconciling the mantle heat transfer discrepancy. *Earth and Planetary Science Letters*, **2020**, 542, 116317	5.3	15
33	The Generation and Scaling of Longitudinal River Profiles. *Journal of Geophysical Research F: Earth Surface*, **2019**, 124, 137-153	3.8	14
32	Spatial Variation of Diapycnal Diffusivity Estimated From Seismic Imaging of Internal Wave Field, Gulf of Mexico. *Journal of Geophysical Research: Oceans*, **2017**, 122, 9827-9854	3.3	14
31	Calculating normal fault geometries at depth: theory and examples. *Geological Society Special Publication*, **1991**, 56, 251-260	1.7	14
30	Continental-Scale Landscape Evolution: A History of North American Topography. *Journal of Geophysical Research F: Earth Surface*, **2019**, 124, 2689-2722	3.8	13
29	Seismic data reveal eastern Black Sea basin structure. *Eos*, **2005**, 86, 413	1.5	13

28	Animated models of extensional basins and passive margins. *Geochemistry, Geophysics, Geosystems*, **2004**, 5,	3.6	12
27	An inverse method for estimating thickness and volume with time of a thin CO2-filled layer at the Sleipner Field, North Sea. *Journal of Geophysical Research: Solid Earth*, **2016**, 121, 5068-5085	3.6	11
26	A Neogene history of mantle convective support beneath Borneo. *Earth and Planetary Science Letters*, **2018**, 496, 142-158	5.3	9
25	Accurate estimates of the spatial pattern of denudation by inversion of stacking velocity data: An example from the British Isles. *Geochemistry, Geophysics, Geosystems*, **2006**, 7, n/a-n/a	3.6	9
24	Lithospheric stretching in the Porcupine Basin, west of Ireland. *Geological Society Special Publication*, **1992**, 62, 327-331	1.7	9
23	Structure and dynamics of the oceanic lithosphere-asthenosphere system. *Physics of the Earth and Planetary Interiors*, **2020**, 309, 106559	2.3	9
22	Calibrated Seismic Imaging of Eddy-Dominated Warm-Water Transport Across the Bellingshausen Sea, Southern Ocean. *Journal of Geophysical Research: Oceans*, **2018**, 123, 3072-3099	3.3	9
21	Causes and Consequences of Diachronous V-Shaped Ridges in the North Atlantic Ocean. *Journal of Geophysical Research: Solid Earth*, **2017**, 122, 8675-8708	3.6	8
20	Wide-angle seismic data reveal sedimentary and crustal structure of the Eastern Black Sea. *The Leading Edge*, **2009**, 28, 1056-1065	1	8
19	A two-dimensional inverse model for extensional sedimentary Basins 2. Application. *Journal of Geophysical Research*, **2002**, 107, ETG 18-1-ETG 18-14		8
18	Global influence of mantle temperature and plate thickness on intraplate volcanism. *Nature Communications*, **2021**, 12, 2045	17.4	7
17	Time-Lapse Seismic Imaging of Oceanic Fronts and Transient Lenses Within South Atlantic Ocean. *Journal of Geophysical Research: Oceans*, **2020**, 125, e2020JC016293	3.3	6
16	Role of basaltic magmatism within the Parnaba cratonic basin, NE Brazil. *Geological Society Special Publication*, **2018**, 472, 309-319	1.7	6
15	Coaxial Stretching or Lithospheric Simple Shear in the North Sea? Evidence from Deep Seismic Profiling and Subsidence **1989**,		6
14	Reply to comment by Hillis et´al. (2013). *Geophysical Journal International*, **2013**, 194, 680-682	2.6	5
13	Time-Lapse Acoustic Imaging of Mesoscale and Fine-Scale Variability within the Faroe-Shetland Channel. *Journal of Geophysical Research: Oceans*, **2020**, 125, e2019JC015861	3.3	3
12	Implications of preliminary subsidence analyses for the Parnaba cratonic basin. *Geological Society Special Publication*, **2018**, 472, 147-156	1.7	3
11	Three-dimensional seismic imaging of a dymanic Earth. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **1999**, 357, 3359-3375	3	3

10	Kinematic modelling of normal fault geometries using inverse theory. *Geological Society Special Publication*, **1996**, 99, 179-188	1.7	2
9	Large-Scale Tectonic Forcing of the African Landscape. *Journal of Geophysical Research F: Earth Surface*, **2021**, 126, e2021JF006345	3.8	2
8	Cenozoic Dynamic Topography of Madagascar. *Geochemistry, Geophysics, Geosystems*, **2021**, 22, e2020GC009624	3.6	2
7	Scale-Dependent Contributors to River Profile Geometry. *Journal of Geophysical Research F: Earth Surface*, **2021**, 126, e2020JF005879	3.8	2
6	Self-consistent strain rate and heat flow modelling of lithospheric extension: application to Newfoundland-Iberia conjugate margins. *Petroleum Geoscience*, **2010**, 16, 247-256	1.9	1
5	Estimating denudation from seismic velocities offshore northwest Ireland **2007**,		1
4	Towards an Automated Strategy for Modelling Extensional Basins and Margins in Four Dimensions. *Geological Society Memoir*, **2004**, 29, 321-331	0.4	1
3	Using prior subsidence data to infer basin evolution. *Geological Society Special Publication*, **2004**, 239, 211-224	1.7	1
2	Thermal Structure of Eastern Australia's Upper Mantle and Its Relationship to Cenozoic Volcanic Activity and Dynamic Topography. *Geochemistry, Geophysics, Geosystems*, **2021**, 22, e2021GC009717	3.6	1
1	Reply to "Geochemical Characteristics of Anatolian Basalts: Comment on "Neogene Uplift and Magmatism of Anatolia: Insights from Drainage Analysis and Basaltic Geochemistry" by McNab et al." *Geochemistry, Geophysics, Geosystems*, **2019**, 20, 542-544	3.6	