

Wouter P Schellart

List of Publications by Year in descending order

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51
papers

3,039
citations

218677

26
h-index

161849

54
g-index

69
all docs

69
docs citations

69
times ranked

2201
citing authors

#	ARTICLE	IF	CITATIONS
1	Polarity-reversal subduction zone initiation triggered by buoyant plateau obstruction. <i>Earth and Planetary Science Letters</i> , 2022, 577, 117195.	4.4	22
2	Overriding Plate Deformation and Topography During Slab Rollback and Slab Rollover: Insights From Subduction Experiments. <i>Tectonics</i> , 2022, 41, .	2.8	14
3	Geodynamic models of short-lived, long-lived and periodic flat slab subduction. <i>Geophysical Journal International</i> , 2021, 226, 1517-1541.	2.4	18
4	Thermo-mechanical Numerical Modeling of the South American Subduction Zone: A Multi-Parametric Investigation. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2020JB021527.	3.4	15
5	Effects of multi-seamount subduction on accretionary wedge deformation: Insights from analogue modelling. <i>Journal of Geodynamics</i> , 2021, 145, 101842.	1.6	4
6	A geological map of the Scotia Sea area constrained by bathymetry, geological data, geophysical data and seismic tomography models from the deep mantle. <i>Earth-Science Reviews</i> , 2020, 210, 103391.	9.1	14
7	Effect of Plate Length on Subduction Kinematics and Slab Geometry: Insights From Buoyancy-Driven Analog Subduction Models. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2020JB020514.	3.4	9
8	Pacific subduction control on Asian continental deformation including Tibetan extension and eastward extrusion tectonics. <i>Nature Communications</i> , 2019, 10, 4480.	12.8	65
9	Impact of Aseismic Ridges on Subduction Systems: Insights From Analog Modeling. <i>Journal of Geophysical Research: Solid Earth</i> , 2019, 124, 5951-5969.	3.4	18
10	The future of Earth's oceans: consequences of subduction initiation in the Atlantic and implications for supercontinent formation. <i>Geological Magazine</i> , 2018, 155, 45-58.	1.5	27
11	A subduction and mantle plume origin for Samoan volcanism. <i>Scientific Reports</i> , 2018, 8, 10424.	3.3	20
12	Topography of the Overriding Plate During Progressive Subduction: A Dynamic Model to Explain Forearc Subsidence. <i>Geophysical Research Letters</i> , 2017, 44, 9632-9643.	4.0	13
13	Andean mountain building and magmatic arc migration driven by subduction-induced whole mantle flow. <i>Nature Communications</i> , 2017, 8, 2010.	12.8	71
14	Benchmarking analogue models of brittle thrust wedges. <i>Journal of Structural Geology</i> , 2016, 92, 116-139.	2.3	58
15	The variation of crustal stretching and different modes of rifting along the Australian southern continental margin. <i>Australian Journal of Earth Sciences</i> , 2016, 63, 159-174.	1.0	7
16	A review of analogue modelling of geodynamic processes: Approaches, scaling, materials and quantification, with an application to subduction experiments. <i>Journal of Geodynamics</i> , 2016, 100, 7-32.	1.6	107
17	Control of slab width on subduction-induced upper mantle flow and associated upwellings: Insights from analog models. <i>Journal of Geophysical Research: Solid Earth</i> , 2016, 121, 4641-4654.	3.4	26
18	Does subduction-induced mantle flow drive backarc extension?. <i>Earth and Planetary Science Letters</i> , 2016, 441, 200-210.	4.4	67

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19	Geodynamic models of continental subduction and obduction of overriding plate forearc oceanic lithosphere on top of continental crust. <i>Tectonics</i> , 2015, 34, 1494-1515.	2.8	24
20	Overriding plate deformation and variability of forearc deformation during subduction: Insight from geodynamic models and application to the Calabria subduction zone. <i>Geochemistry, Geophysics, Geosystems</i> , 2015, 16, 3697-3715.	2.5	26
21	A two-way interaction between the Hainan plume and the Manila subduction zone. <i>Geophysical Research Letters</i> , 2015, 42, 5796-5802.	4.0	17
22	Quantifying the energy dissipation of overriding plate deformation in three-dimensional subduction models. <i>Journal of Geophysical Research: Solid Earth</i> , 2015, 120, 519-536.	3.4	13
23	How weak is the subduction zone interface?. <i>Geophysical Research Letters</i> , 2015, 42, 2664-2673.	4.0	52
24	Evolution of 3-D subduction-induced mantle flow around lateral slab edges in analogue models of free subduction analysed by stereoscopic particle image velocimetry technique. <i>Earth and Planetary Science Letters</i> , 2014, 403, 368-379.	4.4	63
25	Rheology of petroleum-paraffin oil mixtures: Applications to analogue modelling of geological processes. <i>Journal of Structural Geology</i> , 2014, 63, 1-11.	2.3	31
26	Are subduction zones invading the Atlantic? Evidence from the southwest Iberia margin: REPLY. <i>Geology</i> , 2014, 42, e329-e329.	4.4	2
27	The development of sheath folds in viscously stratified materials in simple shear conditions: An analogue approach. <i>Journal of Structural Geology</i> , 2013, 56, 129-141.	2.3	28
28	A new driving mechanism for backarc extension and backarc shortening through slab sinking induced toroidal and poloidal mantle flow: Results from dynamic subduction models with an overriding plate. <i>Journal of Geophysical Research: Solid Earth</i> , 2013, 118, 3221-3248.	3.4	138
29	Are subduction zones invading the Atlantic? Evidence from the southwest Iberia margin. <i>Geology</i> , 2013, 41, 839-842.	4.4	128
30	Three-dimensional dynamic laboratory models of subduction with an overriding plate and variable interplate rheology. <i>Geophysical Journal International</i> , 2013, 195, 47-66.	2.4	71
31	Three-dimensional dynamic models of subducting plate-overriding plate-upper mantle interaction. <i>Journal of Geophysical Research: Solid Earth</i> , 2013, 118, 775-790.	3.4	50
32	Tracking the Australian plate motion through the Cenozoic: Constraints from ⁴⁰ Ar/ ³⁹ Ar geochronology. <i>Tectonics</i> , 2013, 32, 1371-1383.	2.8	37
33	Mantle constraints on the plate tectonic evolution of the Tonga-Kermadec-Hikurangi subduction zone and the South Fiji Basin region. <i>Australian Journal of Earth Sciences</i> , 2012, 59, 933-952.	1.0	49
34	Effect of plate thickness on bending radius and energy dissipation at the subduction zone hinge. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	20
35	Introduction to the thematic issue on the evolution and dynamics of the Indo-Australian plate. <i>Australian Journal of Earth Sciences</i> , 2012, 59, 807-808.	1.0	4
36	A subduction zone reference frame based on slab geometry and subduction partitioning of plate motion and trench migration. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	4.0	28

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37	Influence of lateral slab edge distance on plate velocity, trench velocity, and subduction partitioning. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	55
38	Cenozoic Tectonics of Western North America Controlled by Evolving Width of Farallon Slab. <i>Science</i> , 2010, 329, 316-319.	12.6	81
39	The Black Sea back-arc basin: insights to its origin from geodynamic models of modern analogues. <i>Geological Society Special Publication</i> , 2010, 340, 11-21.	1.3	44
40	Evolution of Subduction Zone Curvature and its Dependence on the Trench Velocity and the Slab to Upper Mantle Viscosity Ratio. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	46
41	Kinematics and flow patterns in deep mantle and upper mantle subduction models: Influence of the mantle depth and slab to mantle viscosity ratio. <i>Geochemistry, Geophysics, Geosystems</i> , 2008, 9, .	2.5	127
42	Comment on "The thermal structure of subduction zone back arcs" by Claire A. Currie and Roy D. Hyndman. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	8
43	Evolution and diversity of subduction zones controlled by slab width. <i>Nature</i> , 2007, 446, 308-311.	27.8	494
44	Influence of trench width on subduction hinge retreat rates in 3-D models of slab rollback. <i>Geochemistry, Geophysics, Geosystems</i> , 2006, 7, n/a-n/a.	2.5	276
45	Fitting Northland, New Caledonia and dEntrecasteaux geology into the Late Cretaceous-Cenozoic Southwest Pacific tectonic framework. <i>ASEG Extended Abstracts</i> , 2006, 2006, 1-4.	0.1	7
46	Quantifying the net slab pull force as a driving mechanism for plate tectonics. <i>Geophysical Research Letters</i> , 2004, 31, n/a-n/a.	4.0	147
47	Kinematics of subduction and subduction-induced flow in the upper mantle. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	225
48	Asymmetric deformation in the backarc region of the Kuril arc, northwest Pacific: New insights from analogue modeling. <i>Tectonics</i> , 2003, 22, n/a-n/a.	2.8	77
49	3D evolution of a pop-up structure above a double basement strike-slip fault: some insights from analogue modelling. <i>Geological Society Special Publication</i> , 2003, 212, 169-179.	1.3	13
50	Analogue modelling of large-scale tectonic processes: an introduction. <i>Journal of the Virtual Explorer</i> , 0, 07, .	0.0	13
51	Analogue modelling of asymmetrical back-arc extension. <i>Journal of the Virtual Explorer</i> , 0, 07, .	0.0	27