Ritske Huismans

List of Publications by Year in Descending Order

62 papers	2,709 citations	28 h-index	51 g-index
77 ext. papers	3,152 ext. citations	6.2 avg, IF	5.51 L-index

#	Paper	IF	Citations
62	Mantle exhumation at magma-poor rifted margins controlled by frictional shear zones.. *Nature Communications*, **2022**, 13, 1634	17.4	1
61	Widespread glacial erosion on the Scandinavian passive margin: REPLY. *Geology*, **2022**, 50, e547-e547	5	
60	Melt volume at Atlantic volcanic rifted margins controlled by depth-dependent extension and mantle temperature. *Nature Communications*, **2021**, 12, 3894	17.4	3
59	The Role of Subduction Interface and Upper Plate Strength on Back-Arc Extension: Application to Mediterranean Back-Arc Basins. *Tectonics*, **2021**, 40, e2021TC006795	4.3	2
58	Growth of Collisional Orogens From Small and Cold to Large and Hot: Inferences From Geodynamic Models. *Journal of Geophysical Research: Solid Earth*, **2021**, 126, e2020JB021168	3.6	7
57	Morphotectonic Evolution of Passive Margins Undergoing Active Surface Processes: Large-Scale Experiments Using Numerical Models. *Geochemistry, Geophysics, Geosystems*, **2020**, 21, e2019GC008884	3.6	7
56	Rotation, narrowing, and preferential reactivation of brittle structures during oblique rifting. *Earth and Planetary Science Letters*, **2020**, 531, 115952	5.3	22
55	Crustal domains in the Western Barents Sea. *Geophysical Journal International*, **2020**, 221, 2155-2169	2.6	2
54	Mountain Building or Backarc Extension in Ocean-Continent Subduction Systems: A Function of Backarc Lithospheric Strength and Absolute Plate Velocities. *Journal of Geophysical Research: Solid Earth*, **2019**, 124, 7461-7482	3.6	8
53	Reply to: Discussion of Eocene to mid-Pliocene landscape evolution in Scandinavia inferred from offshore sediment volumes and pre-glacial topography using inverse modeling (Pedersen et al. 2018, Geomorphology, 303: 467–485). *Geomorphology*, **2019**, 328, 225-230	4.3	0
52	Evolving paleotopography and lithospheric flexure of the Pyrenean Orogen from 3D flexural modeling and basin analysis. *Earth and Planetary Science Letters*, **2019**, 515, 26-37	5.3	18
51	Control of increased sedimentation on orogenic fold-and-thrust belt structure – insights into the evolution of the Western Alps. *Solid Earth*, **2019**, 10, 391-404	3.3	11
50	Water Migration in the Subduction Mantle Wedge: A Two-Phase Flow Approach. *Journal of Geophysical Research: Solid Earth*, **2019**, 124, 9208-9225	3.6	10
49	Salt décollement and rift inheritance controls on crustal deformation in orogens. *Terra Nova*, **2019**, 31, 562-568	3	9
48	Long-Term Coupling and Feedback Between Tectonics and Surface Processes During Non-Volcanic Rifted Margin Formation. *Journal of Geophysical Research: Solid Earth*, **2019**, 124, 12323-12347	3.6	15
47	Drainage integration and sediment dispersal in active continental rifts: A numerical modelling study of the central Italian Apennines. *Basin Research*, **2018**, 30, 965-989	3.2	21
46	Insights Into the Crustal-Scale Dynamics of a Doubly Vergent Orogen From a Quantitative Analysis of Its Forelands: A Case Study of the Eastern Pyrenees. *Tectonics*, **2018**, 37, 450-476	4.3	51

45	The Wilson Cycle and Effects of Tectonic Structural Inheritance on Rifted Passive Margin Formation. *Tectonics*, **2018**, 37, 3085-3101	4.3	16
44	Eocene to mid-Pliocene landscape evolution in Scandinavia inferred from offshore sediment volumes and pre-glacial topography using inverse modelling. *Geomorphology*, **2018**, 303, 467-485	4.3	7
43	Crustal structure and evolution of the Arctic Caledonides: Results from controlled-source seismology. *Tectonophysics*, **2017**, 718, 9-24	3.1	10
42	Orogen-scale uplift in the central Italian Apennines drives episodic behaviour of earthquake faults. *Scientific Reports*, **2017**, 7, 44858	4.9	63
41	Isostatic and dynamic support of high topography on a North Atlantic passive margin. *Earth and Planetary Science Letters*, **2016**, 446, 1-9	5.3	19
40	Alpine exhumation of the central Cantabrian Mountains, Northwest Spain. *Tectonics*, **2016**, 35, 339-356	4.3	29
39	First-order control of syntectonic sedimentation on crustal-scale structure of mountain belts. *Journal of Geophysical Research: Solid Earth*, **2015**, 120, 5362-5377	3.6	20
38	Evaluating balanced section restoration with thermochronology data: A case study from the Central Pyrenees. *Tectonics*, **2014**, 33, 617-634	4.3	11
37	Effects of lithosphere buckling on subsidence and hydrocarbon maturation: A case-study from the ultra-deep East Barents Sea basin. *Earth and Planetary Science Letters*, **2014**, 407, 123-133	5.3	11
36	Extensional inheritance and surface processes as controlling factors of mountain belt structure. *Journal of Geophysical Research: Solid Earth*, **2014**, 119, 9042-9061	3.6	48
35	Three-dimensional numerical simulations of crustal systems undergoing orogeny and subjected to surface processes. *Geochemistry, Geophysics, Geosystems*, **2014**, 15, 4936-4957	3.6	21
34	Rifted continental margins: The case for depth-dependent extension. *Earth and Planetary Science Letters*, **2014**, 407, 148-162	5.3	99
33	Lateral variation in structural style of mountain building: controls of rheological and rift inheritance. *Terra Nova*, **2014**, 26, 201-207	3	38
32	Controls of initial topography on temporal and spatial patterns of glacial erosion. *Geomorphology*, **2014**, 223, 96-116	4.3	27
31	Rifting assisted by shear heating and formation of the Lomonosov Ridge. *Earth and Planetary Science Letters*, **2013**, 373, 31-40	5.3	15
30	Syntectonic sedimentation effects on the growth of fold-and-thrust belts. *Geology*, **2013**, 41, 83-86	5	69
29	Control of lithosphere rheology on subduction polarity at initiation: Insights from 3D analogue modelling. *Earth and Planetary Science Letters*, **2013**, 361, 219-228	5.3	4
28	3D numerical modelling of graben interaction and linkage: a case study of the Canyonlands grabens, Utah. *Basin Research*, **2013**, 25, 436-449	3.2	10

27	Formation of intracratonic basins by lithospheric shortening and phase changes: a case study from the ultra-deep East Barents Sea basin. *Terra Nova*, **2013**, 25, 459-464	3	17
26	Syntectonic sedimentation controls on the evolution of the southern Pyrenean fold-and-thrust belt: Inferences from coupled tectonic-surface processes models. *Journal of Geophysical Research: Solid Earth*, **2013**, 118, 5665-5680	3.6	24
25	Low seismic velocities below mid-ocean ridges: Attenuation versus melt retention. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		45
24	Structural styles of mountain building: Controls of lithospheric rheologic stratification and extensional inheritance. *Journal of Geophysical Research*, **2012**, 117,		64
23	On the origin of the ultradeep East Barents Sea basin. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		18
22	Factors controlling the mode of rift interaction in brittle-ductile coupled systems: A 3D numerical study. *Geochemistry, Geophysics, Geosystems*, **2012**, 13,	3.6	52
21	Bimodal Plio□Quaternary glacial erosion of fjords and low-relief surfaces in Scandinavia. *Nature Geoscience*, **2012**, 5, 635-639	18.3	63
20	Three-dimensional numerical modeling of upper crustal extensional systems. *Journal of Geophysical Research*, **2011**, 116,		42
19	Depth-dependent extension, two-stage breakup and cratonic underplating at rifted margins. *Nature*, **2011**, 473, 74-8	50.4	399
18	Dynamical modelling of lithospheric extension and small-scale convection: implications for magmatism during the formation of volcanic rifted margins. *Geophysical Journal International*, **2009** , 176, 327-350	2.6	37
17	Dissipation analysis as a guide to mode selection during crustal extension and implications for the styles of sedimentary basins. *Journal of Geophysical Research*, **2008**, 113,		39
16	DOUAR: A new three-dimensional creeping flow numerical model for the solution of geological problems. *Physics of the Earth and Planetary Interiors*, **2008**, 171, 76-91	2.3	74
15	Thinning of continental backarc lithosphere by flow-induced gravitational instability. *Earth and Planetary Science Letters*, **2008**, 269, 436-447	5.3	56
14	Complex rifted continental margins explained by dynamical models of depth-dependent lithospheric extension. *Geology*, **2008**, 36, 163	5	117
13	The fate of subducted sediments: A case for backarc intrusion and underplating. *Geology*, **2007**, 35, 1111	5	91
12	A numerical model for coupled fluid flow and matrix deformation with applications to disequilibrium compaction and delta stability. *Journal of Geophysical Research*, **2007**, 112,		63
11	Roles of lithospheric strain softening and heterogeneity in determining the geometry of rifts and continental margins. *Geological Society Special Publication*, **2007**, 282, 111-138	1.7	64
10	Effect of plastic-viscous layering and strain softening on mode selection during lithospheric extension. *Journal of Geophysical Research*, **2005**, 110,		88

9	Symmetric and asymmetric lithospheric extension: Relative effects of frictional-plastic and viscous strain softening. *Journal of Geophysical Research*, **2003**, 108,		189
8	Asymmetric lithospheric extension: The role of frictional plastic strain softening inferred from numerical experiments. *Geology*, **2002**, 30, 211	5	109
7	The Transylvanian basin, transfer zone between coeval extending and contracting regions: Inferences on the relative importance of slab pull and rift push in arc Back arc systems. *Tectonics*, **2002**, 21, 2-1-2-18	4.3	9
6	Dynamic modeling of the transition from passive to active rifting, application to the Pannonian Basin. *Tectonics*, **2001**, 20, 1021-1039	4.3	83
5	Melt generation at volcanic continental margins: No need for a mantle plume?. *Geophysical Research Letters*, **2001**, 28, 3995-3998	4.9	80
4	Transition from passive to active rifting: Relative importance of asthenospheric doming and passive extension of the lithosphere. *Journal of Geophysical Research*, **2001**, 106, 11271-11291		131
3	Structural evolution of the Transylvanian Basin (Romania): a sedimentary basin in the bend zone of the Carpathians. *Tectonophysics*, **1997**, 272, 249-268	3.1	39
2	Northeast Atlantic breakup volcanism and consequences for Paleogene climate change MagellanPlus Workshop report. *Scientific Drilling*,26, 69-85		3
1	Widespread glacial erosion on the Scandinavian passive margin. *Geology*,	5	3