Jeroen van Hunen

List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/3856385/jeroen-van-hunen-publications-by-year.pdf
Version: 2024-04-10

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

96 papers	4,540 citations	39 h-index	66 g-index
116 ext. papers	5,261 ext. citations	5.7 avg, IF	5.91 L-index

#	Paper	IF	Citations
96	Episodic back-arc spreading centre jumps controlled by transform fault to overriding plate strength ratio.. *Nature Communications*, **2022**, 13, 582	17.4	1
95	On the origin of the Canary Islands: Insights from mantle convection modelling. *Earth and Planetary Science Letters*, **2022**, 584, 117506	5.3	3
94	Thermal state and evolving geodynamic regimes of the Meso- to Neoarchean North China Craton. *Nature Communications*, **2021**, 12, 3888	17.4	7
93	Subduction history of the Caribbean from upper-mantle seismic imaging and plate reconstruction. *Nature Communications*, **2021**, 12, 4211	17.4	7
92	The structural evolution of pull-apart basins in response to changes in plate motion. *Basin Research*, **2021**, 33, 1603-1625	3.2	3
91	Detecting and quantifying palaeoseasonality in stalagmites using geochemical and modelling approaches. *Quaternary Science Reviews*, **2021**, 254, 106784	3.9	6
90	Deep continental roots and cratons. *Nature*, **2021**, 596, 199-210	50.4	17
89	The impact of oblique inheritance and changes in relative plate motion on the development of rift-transform systems. *Earth and Planetary Science Letters*, **2020**, 541, 116277	5.3	4
88	Variable water input controls evolution of the Lesser Antilles volcanic arc. *Nature*, **2020**, 582, 525-529	50.4	31
87	Influence of the Thickness of the Overriding Plate on Convergence Zone Dynamics. *Geochemistry, Geophysics, Geosystems*, **2020**, 21, e2019GC008678	3.6	5
86	Wide-Angle Seismic Imaging of Two Modes of Crustal Accretion in Mature Atlantic Ocean Crust. *Journal of Geophysical Research: Solid Earth*, **2020**, 125, e2019JB019100	3.6	12
85	Topographic Fingerprint of Deep Mantle Subduction. *Journal of Geophysical Research: Solid Earth*, **2020**, 125, e2019JB017962	3.6	4
84	Along-Arc Heterogeneity in Local Seismicity across the Lesser Antilles Subduction Zone from a Dense Ocean-Bottom Seismometer Network. *Seismological Research Letters*, **2020**, 91, 237-247	3	15
83	Modelling fluid flow in complex natural fault zones: Implications for natural and human-induced earthquake nucleation. *Earth and Planetary Science Letters*, **2020**, 530, 115869	5.3	3
82	Mapping geologic features onto subducted slabs. *Geophysical Journal International*, **2019**, 219, 725-733	2.6	8
81	Analogue Modeling of Plate Rotation Effects in Transform Margins and Rift-Transform Intersections. *Tectonics*, **2019**, 38, 823-841	4.3	10
80	Deformation driven by deep and distant structures: Influence of a mantle lithosphere suture in the Ouachita orogeny, southeastern United States. *Geology*, **2019**, 47, 147-150	5	6

79	Segmentation of Rifts Through Structural Inheritance: Creation of the Davis Strait. *Tectonics*, **2019**, 38, 2411-2430	4.3	28
78	The Role of Crustal Buoyancy in the Generation and Emplacement of Magmatism During Continental Collision. *Geochemistry, Geophysics, Geosystems*, **2019**, 20, 4693-4709	3.6	2
77	Project VoiLA: Volatile Recycling in the Lesser Antilles. *Eos*, **2019**, 100,	1.5	7
76	Onset and Evolution of Plate Tectonics: Geodynamical Constraints **2019**,		
75	Modeling Slab Temperature: A Reevaluation of the Thermal Parameter. *Geochemistry, Geophysics, Geosystems*, **2019**, 20, 673-687	3.6	12
74	Interaction between mantle-derived magma and lower arc crust: quantitative reactive melt flow modelling using STyx. *Geological Society Special Publication*, **2019**, 478, 65-87	1.7	4
73	Making Archean cratonic roots by lateral compression: A two-stage thickening and stabilization model. *Tectonophysics*, **2018**, 746, 562-571	3.1	26
72	The role of pre-existing structures during rifting, continental breakup and transform system development, offshore West Greenland. *Basin Research*, **2018**, 30, 373-394	3.2	46
71	Strong plates enhance mantle mixing in early Earth. *Nature Communications*, **2018**, 9, 2708	17.4	16
70	Lithosphere Destabilization by Melt Weakening and Crust-Mantle Interactions: Implications for Generation of Granite-Migmatite Belts. *Tectonics*, **2018**, 37, 3102-3116	4.3	3
69	Quantifying the influence of sill intrusion on the thermal evolution of organic-rich sedimentary rocks in nonvolcanic passive margins: an example from ODP 210-1276, offshore Newfoundland, Canada. *Basin Research*, **2017**, 29, 249-265	3.2	25
68	Subducting-slab transition-zone interaction: Stagnation, penetration and mode switches. *Earth and Planetary Science Letters*, **2017**, 464, 10-23	5.3	63
67	Subduction-transition zone interaction: A review **2017**, 13, 644-664		111
66	Numerical models of the magmatic processes induced by slab breakoff. *Earth and Planetary Science Letters*, **2017**, 478, 203-213	5.3	37
65	Application of material balance methods to CO2 storage capacity estimation within selected depleted gas reservoirs. *Petroleum Geoscience*, **2017**, 23, 339-352	1.9	2
64	Continental underplating after slab break-off. *Earth and Planetary Science Letters*, **2017**, 474, 59-67	5.3	38
63	Relamination of mafic subducting crust throughout Earth's history. *Earth and Planetary Science Letters*, **2016**, 449, 206-216	5.3	23
62	A great thermal divergence in the mantle beginning 2.5 Ga: Geochemical constraints from greenstone basalts and komatiites. *Geoscience Frontiers*, **2016**, 7, 543-553	6	99

61	Madagascar's escape from Africa: A high-resolution plate reconstruction for the Western Somali Basin and implications for supercontinent dispersal. *Geochemistry, Geophysics, Geosystems*, **2016**, 17, 5036-5055	3.6	40
60	Collisional Processes and Links to Episodic Changes in Subduction Zones. *Elements*, **2015**, 11, 119-124	3.8	22
59	The thinning of subcontinental lithosphere: The roles of plume impact and metasomatic weakening. *Geochemistry, Geophysics, Geosystems*, **2015**, 16, 1156-1171	3.6	50
58	A numerical approach to melting in warm subduction zones. *Earth and Planetary Science Letters*, **2015**, 411, 37-44	5.3	43
57	Basin formation by thermal subsidence of accretionary orogens. *Tectonophysics*, **2015**, 639, 132-143	3.1	13
56	Advantages of a conservative velocity interpolation (CVI) scheme for particle-in-cell methods with application in geodynamic modeling. *Geochemistry, Geophysics, Geosystems*, **2015**, 16, 2015-2023	3.6	45
55	Seasonality of westerly moisture transport in the East Asian summer monsoon and its implications for interpreting precipitation δ18O. *Journal of Geophysical Research D: Atmospheres*, **2015**, 120, 5850-5862	4.4	62
54	Craton stability and longevity: The roles of composition-dependent rheology and buoyancy. *Earth and Planetary Science Letters*, **2014**, 391, 224-233	5.3	54
53	Plate rotation during continental collision and its relationship with the exhumation of UHP metamorphic terranes: Application to the Norwegian Caledonides. *Geochemistry, Geophysics, Geosystems*, **2014**, 15, 1766-1782	3.6	19
52	How collision triggers backarc extension: Insight into Mediterranean style of extension from 3-D numerical models. *Geology*, **2014**, 42, 511-514	5	55
51	Deep water recycling through time. *Geochemistry, Geophysics, Geosystems*, **2014**, 15, 4203-4216	3.6	45
50	Dynamics of lithospheric thinning and mantle melting by edge-driven convection: Application to Moroccan Atlas mountains. *Geochemistry, Geophysics, Geosystems*, **2014**, 15, 3175-3189	3.6	62
49	Dynamic modelling of a UK North Sea saline formation for CO2 sequestration. *Petroleum Geoscience*, **2014**, 20, 169-185	1.9	5
48	The effect of metastable pyroxene on the slab dynamics. *Geophysical Research Letters*, **2014**, 41, 8800-8808	4.9	36
47	Sublithospheric small-scale convection—A mechanism for collision zone magmatism. *Geology*, **2014**, 42, 291-294	5	54
46	The end of continental growth by TTG magmatism. *Terra Nova*, **2013**, 25, 130-136	3	14
45	Geochemical variations at ridge-centered hotspots caused by variable melting of a veined mantle plume. *Earth and Planetary Science Letters*, **2013**, 371-372, 191-202	5.3	4
44	Delamination vs. break-off: the fate of continental collision. *Geophysical Research Letters*, **2013**, 40, 285-289	4.9	46

43	Introduction to the special issue on "Subduction Zones". *Solid Earth*, **2013**, 4, 129-133	3.3	0
42	Dissolution of CO2 From Leaking Fractures in Saline Formations. *Transport in Porous Media*, **2012**, 94, 729-745	3.1	7
41	Archean Subduction: Fact or Fiction?. *Annual Review of Earth and Planetary Sciences*, **2012**, 40, 195-219	15.3	249
40	Short-term episodicity of Archaean plate tectonics. *Geology*, **2012**, 40, 451-454	5	142
39	Subsidence of the West Siberian Basin: Effects of a mantle plume impact. *Geology*, **2012**, 40, 703-706	5	12
38	Numerical models of trench migration in continental collision zones **2012**,		2
37	Insight into collision zone dynamics from topography: numerical modelling results and observations **2012**,		1
36	Insight into collision zone dynamics from topography: numerical modelling results and observations. *Solid Earth*, **2012**, 3, 387-399	3.3	27
35	Numerical models of slab migration in continental collision zones. *Solid Earth*, **2012**, 3, 293-306	3.3	41
34	Repeat ridge jumps associated with plume-ridge interaction, melt transport, and ridge migration. *Journal of Geophysical Research*, **2011**, 116,		42
33	Geochemical variations at intraplate hot spots caused by variable melting of a veined mantle plume. *Geochemistry, Geophysics, Geosystems*, **2011**, 12, n/a-n/a	3.6	18
32	Continental collision and slab break-off: A comparison of 3-D numerical models with observations. *Earth and Planetary Science Letters*, **2011**, 302, 27-37	5.3	334
31	Spatial and temporal variability in Hawaiian hotspot volcanism induced by small-scale convection. *Nature Geoscience*, **2011**, 4, 457-460	18.3	86
30	Small-scale convection at the edge of the Colorado Plateau: Implications for topography, magmatism, and evolution of Proterozoic lithosphere. *Geology*, **2010**, 38, 611-614	5	117
29	Small-scale sublithospheric convection reconciles geochemistry and geochronology of Superplume volcanism in the western and south Pacific. *Earth and Planetary Science Letters*, **2010**, 290, 224-232	5.3	42
28	Lithospheric cooling and thickening as a basin forming mechanism. *Tectonophysics*, **2010**, 495, 184-194	3.1	23
27	On the relation between trench migration, seafloor age, and the strength of the subducting lithosphere. *Lithosphere*, **2009**, 1, 121-128	2.7	26
26	No evidence for thermogenic methane release in coal from the Karoo-Ferrar large igneous province. *Earth and Planetary Science Letters*, **2009**, 277, 204-212	5.3	60

25	Reduced oceanic seismic anisotropy by small-scale convection. *Earth and Planetary Science Letters*, **2009**, 284, 622-629	5.3	11
24	Control of seafloor aging on the migration of the Izu-Bonin-Mariana trench. *Earth and Planetary Science Letters*, **2009**, 288, 386-398	5.3	40
23	Geochemical and numerical constraints on Neoarchean plate tectonics. *Precambrian Research*, **2009**, 174, 155-162	3.9	154
22	Intraplate volcanism with complex age-distance patterns: A case for small-scale sublithospheric convection. *Geochemistry, Geophysics, Geosystems*, **2009**, 10, n/a-n/a	3.6	54
21	Plate tectonics on the early Earth: Limitations imposed by strength and buoyancy of subducted lithosphere. *Lithos*, **2008**, 103, 217-235	2.9	197
20	Slab stiffness control of trench motion: Insights from numerical models. *Geochemistry, Geophysics, Geosystems*, **2008**, 9, n/a-n/a	3.6	99
19	Geochemical variation at the Hawaiian hot spot caused by upper mantle dynamics and melting of a heterogeneous plume. *Geochemistry, Geophysics, Geosystems*, **2008**, 9, n/a-n/a	3.6	29
18	A benchmark comparison of spontaneous subduction models-Towards a free surface. *Physics of the Earth and Planetary Interiors*, **2008**, 171, 198-223	2.3	294
17	Tectonics of early Earth: Some geodynamic considerations **2008**, 157-171		12
16	Why does plate tectonics occur only on Earth?. *Physics Education*, **2008**, 43, 144-150	0.8	6
15	Small-scale convection during continental rifting: Evidence from the Rio Grande rift. *Geology*, **2008**, 36, 575	5	57
14	Non-hotspot volcano chains originating from small-scale sublithospheric convection. *Geophysical Research Letters*, **2007**, 34, n/a-n/a	4.9	78
13	Stress distribution within subducting slabs and their deformation in the transition zone. *Physics of the Earth and Planetary Interiors*, **2007**, 161, 202-214	2.3	54
12	Influence of rheology on realignment of mantle convective structure with plate motion after a plate reorganization. *Geochemistry, Geophysics, Geosystems*, **2006**, 7, n/a-n/a	3.6	11
11	New evidence for dislocation creep from 3-D geodynamic modeling of the Pacific upper mantle structure. *Earth and Planetary Science Letters*, **2005**, 238, 146-155	5.3	84
10	Various mechanisms to induce present-day shallow flat subduction and implications for the younger Earth: a numerical parameter study. *Physics of the Earth and Planetary Interiors*, **2004**, 146, 179-194	2.3	147
9	Interaction between small-scale mantle diapirs and a continental root. *Geochemistry, Geophysics, Geosystems*, **2003**, 4,	3.6	10
8	New insight in the Hawaiian plume swell dynamics from scaling laws. *Geophysical Research Letters*, **2003**, 30,	4.9	12

7	The effect of shearing on the onset and vigor of small-scale convection in a Newtonian rheology. *Geophysical Research Letters*, **2003**, 30,	4.9	38
6	Controls on sublithospheric small-scale convection. *Journal of Geophysical Research*, **2003**, 108,		93
5	The influence of rheological weakening and yield stress on the interaction of slabs with the 670 km discontinuity. *Earth and Planetary Science Letters*, **2002**, 199, 447-457	5.3	103
4	On the role of subducting oceanic plateaus in the development of shallow flat subduction. *Tectonophysics*, **2002**, 352, 317-333	3.1	206
3	The impact of the South-American plate motion and the Nazca Ridge subduction on the flat subduction below South Peru. *Geophysical Research Letters*, **2002**, 29, 35-1-35-4	4.9	37
2	Latent heat effects of the major mantle phase transitions on low-angle subduction. *Earth and Planetary Science Letters*, **2001**, 190, 125-135	5.3	31
1	A thermo-mechanical model of horizontal subduction below an overriding plate. *Earth and Planetary Science Letters*, **2000**, 182, 157-169	5.3	101