Ronald T Van Balen

List of Publications by Year in Descending Order

92 papers	2,513 citations	30 h-index	47 g-index
93 ext. papers	2,753 ext. citations	3.1 avg, IF	4.83 L-index

#	Paper	IF	Citations
92	Late Weichselian and Holocene climatic and local controls on aeolian deposition inferred from decomposing grain size-shape distributions. *Quaternary Science Reviews*, **2022**, 287, 107554	3.9	
91	Environmental changes in the late Allerød and early Younger Dryas in the Netherlands: a multiproxy high-resolution record from a site with two Pinus sylvestris populations. *Quaternary Science Reviews*, **2021**, 272, 107199	3.9	1
90	Rapid flood intensification and environmental response of the Lower Meuse during the Allerød-Younger Dryas climate transition. *Geomorphology*, **2021**, 372, 107469	4.3	2
89	The Interplay between Tectonic Activity, Climate and Sea-Level Change in the Suriname River Valley, Tropical South America. *Quaternary*, **2021**, 4, 11	2.2	
88	Anthropogenic impacts on Holocene fluvial dynamics in the Chinese Loess Plateau, an evaluation based on landscape evolution modeling. *Geomorphology*, **2021**, 392, 107935	4.3	1
87	Fluvial or aeolian? Unravelling the origin of the silty clayey sediment cover of terraces in the Hanzhong Basin (Qinling Mountains, central China). *Geomorphology*, **2020**, 367, 107294	4.3	4
86	Paleoflooding reconstruction from Holocene levee deposits in the Lower Meuse valley, the Netherlands. *Geomorphology*, **2020**, 352, 107002	4.3	4
85	An improved method for paleoflood reconstruction and flooding phase identification, applied to the Meuse River in the Netherlands. *Global and Planetary Change*, **2019**, 177, 213-224	4.2	12
84	A celebration of the twentieth anniversary of the Fluvial Archives Group (FLAG). *Quaternary Research*, **2019**, 91, 453-456	1.9	1
83	Fluvial terrace formation and its impacts on early human settlement in the Hanzhong basin, Qinling Mountains, central China. *Global and Planetary Change*, **2019**, 178, 1-14	4.2	9
82	Tectonic and climatic controls on Quaternary fluvial processes and river terrace formation in a Mediterranean setting, the Göksu River, southern Turkey. *Quaternary Research*, **2019**, 91, 533-547	1.9	6
81	Coupling of VAMPERS within iLOVECLIM: experiments during the LGM and Last Deglaciation. *Journal of Quaternary Science*, **2019**, 34, 215-227	2.3	2
80	An overview of fault zone permeabilities and groundwater level steps in the Roer Valley Rift System. *Geologie En Mijnbouw/Netherlands Journal of Geosciences*, **2019**, 98,	1.1	3
79	Aeolian dust supply from the Yellow River floodplain to the Pleistocene loess deposits of the Mangshan Plateau, central China: Evidence from zircon U-Pb age spectra. *Quaternary Science Reviews*, **2018**, 182, 131-143	3.9	18
78	On the genetically meaningful decomposition of grain-size distributions: A comparison of different end-member modelling algorithms. *Sedimentary Geology*, **2018**, 375, 49-71	2.8	24
77	Glacial geology of Saalian relief around Midwolda, eastern Groningen, the Netherlands. *Geologie En Mijnbouw/Netherlands Journal of Geosciences*, **2018**, 97, 261-282	1.1	
76	Evolution of the alluvial fans of the Luo River in the Weihe Basin, central China, controlled by faulting and climate change - A reevaluation of the paleogeographical setting of Dali Man site. *Quaternary Science Reviews*, **2017**, 166, 339-351	3.9	11

75	Geochemical characterization of the middle and late Pleistocene alluvial fan-dominated infill of the northern part of the Weihe Basin, Central China. *Palaeogeography, Palaeoclimatology, Palaeoecology*, **2017**, 482, 57-69	2.9	5
74	Gravel size matters: Early Middle Palaeolithic artefacts made from local Rhine and Meuse deposits in the central Netherlands. *Geologie En Mijnbouw/Netherlands Journal of Geosciences*, **2017**, 96, 261-271	1.1	1
73	Climate and base-level controlled fluvial system change and incision during the last glacial–interglacial transition, Roer river, the Netherlands – western Germany. *Geologie En Mijnbouw/Netherlands Journal of Geosciences*, **2017**, 96, 71-92	1.1	11
72	Climatic and tectonic controls on the fluvial morphology of the Northeastern Tibetan Plateau (China). *Journal of Chinese Geography*, **2017**, 27, 1325-1340	3.7	14
71	Two decades of numerical modelling to understand long term fluvial archives: Advances and future perspectives. *Quaternary Science Reviews*, **2017**, 166, 177-187	3.9	15
70	Numerical modelling of Quaternary terrace staircase formation in the Ebro foreland basin, southern Pyrenees, NE Iberia. *Basin Research*, **2016**, 28, 124-146	3.2	24
69	Facies analysis of the Middle and Late Quaternary sediment infill of the northern Weihe Basin, Central China. *Journal of Quaternary Science*, **2016**, 31, 152-165	2.3	11
68	Marine and anthropogenic controls on the estuary of the Suriname River over the past 50 years. *Geologie En Mijnbouw/Netherlands Journal of Geosciences*, **2016**, 95, 419-428	1.1	1
67	LGM Permafrost Thickness and Extent in the Northern Hemisphere derived from the Earth System Model iLOVECLIM. *Permafrost and Periglacial Processes*, **2016**, 27, 31-42	4.2	15
66	Landscape potential for the adoption of crop cultivation: Role of local soil properties and groundwater table rise during 6000–5400 BP in Flevoland (central Netherlands). *Quaternary International*, **2015**, 367, 77-95	2	4
65	Climate-dependent fluvial architecture and processes on a suborbital timescale in areas of rapid tectonic uplift: An example from the NE Tibetan Plateau. *Global and Planetary Change*, **2015**, 133, 318-329	4.2	35
64	Active faulting and folding along the Jumilla Fault Zone, northeastern Betics, Spain. *Geomorphology* , **2015**, 237, 88-97	4.3	1
63	Geomorphology of active faulting and seismic hazard assessment: New tools and future challenges. *Geomorphology*, **2015**, 237, 1-13	4.3	24
62	Advancement toward coupling of the VAMPER permafrost model within the Earth system model <I>i</I>LOVECLIM (version 1.0): description and validation. *Geoscientific Model Development*, **2015**, 8, 1445-1460	6.3	5
61	Linking morphology across the glaciofluvial interface: A 10Be supported chronology of glacier advances and terrace formation in the Garonne River, northern Pyrenees, France. *Geomorphology*, **2014**, 207, 71-95	4.3	30
60	Modelling the impact of regional uplift and local tectonics on fluvial terrace preservation. *Geomorphology*, **2014**, 210, 119-135	4.3	31
59	Storms in a lagoon: Flooding history during the last 1200 years derived from geological and historical archives of Schokland (Noordoostpolder, the Netherlands). *Geologie En Mijnbouw/Netherlands Journal of Geosciences*, **2014**, 93, 175-196	1.1	13
58	Differential tectonic movements in the confluence area of the Huang Shui and Huang He rivers (Yellow River), NE Tibetan Plateau, as inferred from fluvial terrace positions. *Boreas*, **2014**, 43, 469-484	2.4	18

57	Weichselian and Holocene climate history reflected in temperatures in the upper crust of the Netherlands. *Geologie En Mijnbouw/Netherlands Journal of Geosciences*, **2014**, 93, 107-117	1.1	5
56	Re-interpreting the biochronology of the La Celia and Los Gargantones mammal sites (Late Miocene, Murcia, Spain). *Geobios*, **2014**, 47, 155-164	1.5	3
55	Reconstructing the interacting effects of base level, climate, and tectonic uplift in the lower Mi River terrace record: A gradient modelling evaluation. *Geomorphology*, **2013**, 186, 96-118	4.3	40
54	New Estimates of Permafrost Evolution during the Last 21 k Years in Eurasia using Numerical Modelling. *Permafrost and Periglacial Processes*, **2013**, 24, 286-303	4.2	17
53	Late Quaternary paleoclimatic and geomorphological evolution at the interface between the Menyuan basin and the Qilian Mountains, northeastern Tibetan Plateau. *Quaternary Research*, **2013**, 80, 534-544	1.9	27
52	Terrace staircase development in the Southern Pyrenees Foreland: Inferences from 10Be terrace exposure ages at the Segre River. *Global and Planetary Change*, **2013**, 101, 97-112	4.2	34
51	External controls on Quaternary fluvial incision and terrace formation at the Segre River, Southern Pyrenees. *Tectonophysics*, **2013**, 602, 316-331	3.1	29
50	Fluvial terraces of the northwest Iberian lower Mi River. *Journal of Maps*, **2013**, 9, 513-522	2.2	16
49	Late Miocene uplift of the NE Tibetan Plateau inferred from basin filling, planation and fluvial terraces in the Huang Shui catchment. *Global and Planetary Change*, **2012**, 88-89, 10-19	4.2	28
48	Thermal state of the Roer Valley Graben, part of the European Cenozoic Rift System. *Basin Research* , **2011**, 23, 65-82	3.2	17
47	Comment on Causes, consequences and chronology of large-magnitude palaeoflows in Middle and Late Pleistocene river systems of northwest Europe by Westaway and Bridgland (2010). *Earth Surface Processes and Landforms*, **2011**, 36, 1836-1840	3.7	4
46	Human presence in the central Netherlands during early MIS 6 (~170-190 Ka): evidence from early Middle Palaeolithic artefacts in ice-pushed Rhine-Meuse sediments. *Geologie En Mijnbouw/Netherlands Journal of Geosciences*, **2010**, 89, 77-83	1.1	6
45	Modeling the response of the Rhine Meuse fluvial system to Late Pleistocene climate change. *Geomorphology*, **2010**, 114, 440-452	4.3	49
44	The impact of land use and climate change on late Holocene and future suspended sediment yield of the Meuse catchment. *Geomorphology*, **2009**, 103, 389-400	4.3	105
43	Response of the Rhine Meuse fluvial system to Saalian ice-sheet dynamics. *Boreas*, **2008**, 37, 377-398	2.4	105
42	Human and climate impact on catchment development during the Holocene Geul River, the Netherlands. *Geomorphology*, **2008**, 98, 316-339	4.3	74
41	Strong increases in flood frequency and discharge of the River Meuse over the late Holocene: impacts of long-term anthropogenic land use change and climate variability. *Hydrology and Earth System Sciences*, **2008**, 12, 159-175	5.5	73
40	Late Pleistocene evolution of the Rhine-Meuse system in the southern North Sea basin: imprints of climate change, sea-level oscillation and glacio-isostacy. *Quaternary Science Reviews*, **2007**, 26, 3216-3248	3.9	192

39	Pleistocene tectonics inferred from fluvial terraces of the northern Upper Rhine Graben, Germany. *Tectonophysics*, **2007**, 430, 41-65	3.1	50
38	Tectonic geomorphology of the northern Upper Rhine Graben, Germany. *Global and Planetary Change*, **2007**, 58, 310-334	4.2	51
37	TOPO-EUROPE: The geoscience of coupled deep Earth-surface processes. *Global and Planetary Change*, **2007**, 58, 1-118	4.2	102
36	Interplay between tectonic, fluvial and erosional processes along the Western Border Fault of the northern Upper Rhine Graben, Germany. *Tectonophysics*, **2005**, 406, 39-66	3.1	24
35	Characterization and quantification of active faulting in the Roer valley rift system based on high precision digital elevation models. *Quaternary Science Reviews*, **2005**, 24, 455-472	3.9	22
34	Neotectonics of The Netherlands: a review. *Quaternary Science Reviews*, **2005**, 24, 439-454	3.9	45
33	Late Quaternary evolution of the Feldbiss Fault (Roer Valley Rift System, the Netherlands) based on trenching, and its potential relation to glacial unloading. *Quaternary Science Reviews*, **2005**, 24, 489-508	3.9	27
32	Pre-Neogene controls on present-day fault activity in the West Netherlands Basin and Roer Valley Rift System (southern Netherlands): role of variations in fault orientation in a uniform low-stress regime. *Quaternary Science Reviews*, **2005**, 24, 473-488	3.9	16
31	The effect of fault relay and clay smearing on groundwater flow patterns in the Lower Rhine Embayment. *Basin Research*, **2004**, 16, 397-411	3.2	48
30	Slip tendency analysis as a tool to constrain fault reactivation: A numerical approach applied to three-dimensional fault models in the Roer Valley rift system (southeast Netherlands). *Journal of Geophysical Research*, **2004**, 109,		26
29	The impact of faults on the hydrogeological conditions in the Roer Valley Rift System: an overview. *Geologie En Mijnbouw/Netherlands Journal of Geosciences*, **2003**, 82, 41-54	1.1	42
28	History of petroleum systems in the southern part of the Broad Fourteens Basin. *Geologie En Mijnbouw/Netherlands Journal of Geosciences*, **2003**, 82, 71-90	1.1	6
27	The Cenozoic evolution of the Roer Valley Rift System integrated at a European scale. *Tectonophysics*, **2003**, 367, 101-126	3.1	97
26	Process-based modelling of fluvial system response to rapid climate change I. model formulation and generic applications. *Quaternary Science Reviews*, **2003**, 22, 2077-2095	3.9	51
25	Process-based modelling of fluvial system response to rapid climate change II. Application to the River Maas (The Netherlands) during the Last Glacial–Interglacial Transition. *Quaternary Science Reviews*, **2003**, 22, 2097-2110	3.9	47
24	Hydrogeological aspects of fault zones on various scales in theRoer Valley Rift System. *Journal of Geochemical Exploration*, **2003**, 78-79, 317-320	3.8	13
23	Process-based modelling of the climatic forcing of fluvial sediment flux: some examples and a discussion of optimal model complexity. *Geological Society Special Publication*, **2002**, 191, 187-198	1.7	2
22	Deep subsurface temperatures in the Roer Valley Graben and the Peelblock, the Netherlands - new results. *Geologie En Mijnbouw/Netherlands Journal of Geosciences*, **2002**, 81, 19-26	1.1	11

21	Neotectonic evolution and sediment budget of the Meuse catchment in the Ardennes and the Roer Valley Rift System. *Geologie En Mijnbouw/Netherlands Journal of Geosciences*, **2002**, 81, 211-215	1.1	8
20	Late Quaternary activity of the Feldbiss Fault Zone, Roer Valley Rift System, the Netherlands, based on displaced fluvial terrace fragments. *Tectonophysics*, **2002**, 352, 295-315	3.1	36
19	Modelling the hydrocarbon generation and migration in the West Netherlands Basin, the Netherlands. *Geologie En Mijnbouw/Netherlands Journal of Geosciences*, **2000**, 79, 29-44	1.1	30
18	Modelling the Middle Pleistocene uplift in the Ardennes-Rhenish Massif: thermo-mechanical weakening under the Eifel?. *Global and Planetary Change*, **2000**, 27, 39-52	4.2	52
17	Sediment budget and tectonic evolution of the Meuse catchment in the Ardennes and the Roer Valley Rift System. *Global and Planetary Change*, **2000**, 27, 113-129	4.2	95
16	Neotectonics of the Roer Valley Rift System, the Netherlands. *Global and Planetary Change*, **2000**, 27, 131-146	4.2	56
15	Numerical modeling of the response of alluvial rivers to Quaternary climate change. *Global and Planetary Change*, **2000**, 27, 147-163	4.2	50
14	The influence of faults and intraplate stresses on the overpressure evolution of the Halten Terrace, mid-Norwegian margin. *Tectonophysics*, **2000**, 320, 331-345	3.1	11
13	Two-dimensional modelling of stratigraphy and compaction-driven fluid flow in the Pannonian Basin. *Geological Society Special Publication*, **1999**, 156, 391-414	1.7	12
12	Contrasting Neogene denudation histories of different structural regions in the Transantarctic Mountains rift flank constrained by cosmogenic isotope measurements. *Global and Planetary Change*, **1999**, 23, 145-172	4.2	51
11	Origin of overpressures on the Halten Terrace, offshore mid-Norway: the potential role of mechanical compaction, pressure transfer and stress. *Geological Society Special Publication*, **1999**, 158, 137-156	1.7	10
10	The influence of a stratified rheology on the flexural response of the lithosphere to (un)loading by extensional faulting. *Geophysical Journal International*, **1998**, 134, 721-735	2.6	43
9	Middle Proterozoic-Early Palaeozoic evolution of central Baltoscandian intracratonic basins: evidence for asthenospheric diapirs. *Tectonophysics*, **1998**, 300, 131-142	3.1	16
8	The effect of inplane force variations on a faulted elastic thin-plate, Implications for rifted sedimentary basins. *Geophysical Research Letters*, **1998**, 25, 3903-3906	4.9	9
7	A new multilayered model for intraplate stress-induced differential subsidence of faulted lithosphere, applied to rifted basins. *Tectonics*, **1998**, 17, 938-954	4.3	37
6	Neural network analyses of stress-induced overpressures in the Pannonian Basin. *Geophysical Journal International*, **1995**, 121, 532-544	2.6	18
5	The effect of rift shoulder erosion on stratal patterns at passive margins: Implications for sequence stratigraphy. *Earth and Planetary Science Letters*, **1995**, 134, 527-544	5.3	61
4	IMPLICATIONS OF OROGENIC WEDGE GROWTH, INTRAPLATE STRESS VARIATIONS, AND EUSTATIC SEA-LEVEL CHANGE FOR FORELAND BASIN STRATIGRAPHY-INFERENCES FROM NUMERICAL MODELING **1995**, 25-35		5

3	Tectonic control of the sedimentary record and stress-induced fluid flow: constraints from basin modelling. *Geological Society Special Publication*, **1994**, 78, 9-26	1.7	8
2	Numerical analysis of how sedimentation and redistribution of surficial sediments affects salt diapirism. *Tectonophysics*, **1993**, 226, 199-216	3.1	44
1	Temporal and spatial variability of cross-fault groundwater-level differences: the impact of fault-induced permeability reduction, precipitation and evapotranspiration. *Hydrogeology Journal*,1	3.1	