Daphne van der Wal

List of Publications by Year
in descending order

67 papers	3,154 citations	172457 29 h-index	155660 55 g-index
71 all docs	71 docs citations	71 times ranked	2517 citing authors

#	Article	IF	Citations
1	Vegetation causes channel erosion in a tidal landscape. Geology, 2007, 35, 631.	4.4	325
2	Selfâ€Organization and Vegetation Collapse in Salt Marsh Ecosystems. American Naturalist, 2005, 165, E1-E12.	2.1	242
3	Beachâ€“dune morphological relationships and erosion/accretion: An investigation at five sites in England and Wales using LIDAR data. Geomorphology, 2005, 72, 128-155.	2.6	184
4	Long-term morphological change in the Ribble Estuary, northwest England. Marine Geology, 2002, 189, 249-266.	2.1	160
5	Hydrodynamic forcing on salt-marsh development: Distinguishing the relative importance of waves and tidal flows. Estuarine, Coastal and Shelf Science, 2010, 89, 73-88.	2.1	142
6	Patterns, rates and possible causes of saltmarsh erosion in the Greater Thames area (UK). Geomorphology, 2004, 61, 373-391.	2.6	138
7	Long-term morphological change and its causes in the Mersey Estuary, NW England. Geomorphology, 2006, 81, 185-206.	2.6	131
8	Windows of opportunity for salt marsh vegetation establishment on bare tidal flats: The importance of temporal and spatial variability in hydrodynamic forcing. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 1450-1469.	3.0	112
9	Distinctly variable mudscapes: Distribution gradients of intertidal macrofauna across the Dutch Wadden Sea. Journal of Sea Research, 2013, 82, 103-116.	1.6	106
10	Spatial patterns, rates and mechanisms of saltmarsh cycles (Westerschelde, The Netherlands). Estuarine, Coastal and Shelf Science, 2008, 76, 357-368.	2.1	98
11	Vegetation recovery in tidal marshes reveals critical slowing down under increased inundation. Nature Communications, 2017, 8, 15811.	12.8	86
12	Characterisation of surface roughness and sediment texture of intertidal flats using ERS SAR imagery. Remote Sensing of Environment, 2005, 98, 96-109.	11.0	80
13	Spatial Synchrony in Intertidal Benthic Algal Biomass in Temperate Coastal and Estuarine Ecosystems. Ecosystems, 2010, 13, 338-351.	3.4	75
14	Distribution and dynamics of intertidal macrobenthos predicted from remote sensing: response to microphytobenthos and environment. Marine Ecology - Progress Series, 2008, 367, 57-72.	1.9	73
15	The use of historical bathymetric charts in a GIS to assess morphological change in estuaries. Geographical Journal, 2003, 169, 21-31.	3.1	64
16	Conditional outcome of ecosystem engineering: A case study on tussocks of the salt marsh pioneer Spartina anglica. Geomorphology, 2012, 153-154, 232-238.	2.6	62
17	Regression-based synergy of optical, shortwave infrared and microwave remote sensing for monitoring the grain-size of intertidal sediments. Remote Sensing of Environment, 2007, 111, 89-106.	11.0	55
18	Impacts of salt marsh plants on tidal channel initiation and inheritance. Journal of Geophysical Research F: Earth Surface, 2014, 119, 385-400.	2.8	51

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19	Potential for Sudden Shifts in Transient Systems: Distinguishing Between Local and Landscape-Scale Processes. Ecosystems, 2008, 11, 1133-1141.	3.4	50
20	Zooming in and out: Scale dependence of extrinsic and intrinsic factors affecting salt marsh erosion. Journal of Geophysical Research F: Earth Surface, 2017, 122, 1455-1470.	2.8	50
21	Landscapes of facilitation: how selfâ€organized patchiness of aquatic macrophytes promotes diversity in streams. Ecology, 2018, 99, 832-847.	3.2	50
22	Effects of fetch and surface texture on aeolian sand transport on two nourished beaches. Journal of Arid Environments, 1998, 39, 533-547.	2.4	48
23	Estuarine suspended particulate matter concentrations from sun-synchronous satellite remote sensing: Tidal and meteorological effects and biases. Remote Sensing of Environment, 2014, 143, 204-215.	11.0	44
24	Nature-Based Engineering: A Review on Reducing Coastal Flood Risk With Mangroves. Frontiers in Marine Science, 2021, 8, .	2.5	44
25	A model to assess microphytobenthic primary production in tidal systems using satellite remote sensing. Remote Sensing of Environment, 2018, 211, 129-145.	11.0	37
26	Spatial heterogeneity in estuarine mud dynamics. Ocean Dynamics, 2010, 60, 519-533.	2.2	35
27	Continuous monitoring bed-level dynamics on an intertidal flat: Introducing novel, stand-alone high-resolution SED-sensors. Geomorphology, 2015, 245, 223-230.	2.6	33
28	Quantifying Bed Level Change at the Transition of Tidal Flat and Salt Marsh: Can We Understand the Lateral Location of the Marsh Edge?. Journal of Geophysical Research F: Earth Surface, 2018, 123, 2509-2524.	2.8	32
29	Trends in the Seaward Extent of Saltmarshes across Europe from Long-Term Satellite Data. Remote Sensing, 2019, 11, 1653.	4.0	31
30	Beach-Dune Interactions in Nourishment Areas along the Dutch Coast. Journal of Coastal Research, 2004, 201, 317-325.	0.3	30
31	How to restore mangroves for greenbelt creation along eroding coasts with abandoned aquaculture ponds. Estuarine, Coastal and Shelf Science, 2020, 235, 106576.	2.1	29
32	Hydrodynamic conditioning of diversity and functional traits in subtidal estuarine macrozoobenthic communities. Estuarine, Coastal and Shelf Science, 2017, 197, 80-92.	2.1	28
33	Opportunities for Protecting and Restoring Tropical Coastal Ecosystems by Utilizing a Physical Connectivity Approach. Frontiers in Marine Science, 2017, 4, .	2.5	26
34	Estuarine biofilm patterns: Modern analogues for Precambrian selfâ€organization. Earth Surface Processes and Landforms, 2020, 45, 1141-1154.	2.5	26
35	Dynamic equilibrium behaviour observed on two contrasting tidal flats from daily monitoring of bed-level changes. Geomorphology, 2018, 311, 114-126.	2.6	25
36	Diversity, trait displacements and shifts in assemblage structure of tidal flat deposit feeders along a gradient of hydrodynamic stress. Marine Ecology - Progress Series, 2010, 406, 79-89.	1.9	25

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37	Ecological evaluation of an experimental beneficial use scheme for dredged sediment disposal in shallow tidal waters. Marine Pollution Bulletin, 2011, 62, 99-108.	5.0	22
38	Patterns and drivers of daily bed-level dynamics on two tidal flats with contrasting wave exposure. Scientific Reports, 2017, 7, 7088.	3.3	22
39	Long-term salt marsh vertical accretion in a tidal bay with reduced sediment supply. Estuarine, Coastal and Shelf Science, 2014, 146, 14-23.	2.1	20
40	Remote Sensing of Epibenthic Shellfish Using Synthetic Aperture Radar Satellite Imagery. Remote Sensing, 2015, 7, 3710-3734.	4.0	20
41	Modelling aeolian sand transport and morphological development in two beach nourishment areas. Earth Surface Processes and Landforms, 2000, 25, 77-92.	2.5	17
42	Self-organization of river vegetation leads to emergent buffering of river flows and water levels. Proceedings of the Royal Society B: Biological Sciences, 2020, 287, 20201147.	2.6	17
43	Turbulenceâ€mediated facilitation of resource uptake in patchy stream macrophytes. Limnology and Oceanography, 2019, 64, 714-727.	3.1	16
44	Seasonal and Spatial Variability in Patchiness of Microphytobenthos on Intertidal Flats From Sentinel-2 Satellite Imagery. Frontiers in Marine Science, 2020, 7, .	2.5	16
45	Effects of mud sedimentation on lugworm ecosystem engineering. Journal of Sea Research, 2011, 65, 170-181.	1.6	15
46	On the use of large-scale biodegradable artificial reefs for intertidal foreshore stabilization. Ecological Engineering, 2021, 170, 106354.	3.6	14
47	Spatial variability in macrofaunal diet composition and grazing pressure on microphytobenthos in intertidal areas. Limnology and Oceanography, 2020, 65, 2819-2834.	3.1	13
48	Flow-divergence feedbacks control propagule retention by in-stream vegetation: the importance of spatial patterns for facilitation. Aquatic Sciences, 2019, 81, 1.	1.5	12
49	Response of intertidal benthic macrofauna to migrating megaripples and hydrodynamics. Marine Ecology - Progress Series, 2017, 585, 17-30.	1.9	12
50	Drivers of the spatial phytoplankton gradient in estuarineâ€"coastal systems: generic implications of a case study in a Dutch tidal bay. Biogeosciences, 2020, 17, 4135-4152.	3.3	11
51	Plants face the flow in V formation: A study of plant patch alignment in streams. Limnology and Oceanography, 2019, 64, 1087-1102.	3.1	10
52	Synchronized high-resolution bed-level change and biophysical data from 10Âmarshâ€"mudflat sites in northwestern Europe. Earth System Science Data, 2021, 13, 405-416.	9.9	9
53	The development of a digital terrain model for the geomorphological engineering of the â€˜rollingâ€™ foredune of Terschelling, the Netherlands. Journal of Coastal Conservation, 1996, 2, 55-62.	1.6	8
54	Ecosystem Engineering Effects of Aster tripolium and Salicornia procumbens Salt Marsh on Macrofaunal Community Structure. Estuaries and Coasts, 2012, 35, 714-726.	2.2	8

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55	Biophysical control of intertidal benthic macroalgae revealed by high-frequency multispectral camera images. Journal of Sea Research, 2014, 90, 111-120.	1.6	8
56	How grazing management can maximize erosion resistance of salt marshes. Journal of Applied Ecology, 2021, 58, 1533-1544.	4.0	8
57	The impact of sea bottom effects on the retrieval of water constituent concentrations from MERIS and OLCI images in shallow tidal waters supported by radiative transfer modeling. Remote Sensing of Environment, 2020, 237, 111596.	11.0	7
58	Conditional effects of tides and waves on shortâ€term marsh sedimentation dynamics. Earth Surface Processes and Landforms, 2018, 43, 2243-2255.	2.5	6
59	Salt marsh fragmentation in a mesotidal estuary: Implications for medium to long-term management. Science of the Total Environment, 2022, 846, 157410.	8.0	6
60	Using Remote Sensing to Identify Drivers behind Spatial Patterns in the Bio-physical Properties of a Saltmarsh Pioneer. Remote Sensing, 2019, 11, 511.	4.0	5
61	Algalâ€Induced Biogeomorphic Feedbacks Lay the Groundwork for Coastal Wetland Development. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2021JG006515.	3.0	5
62	Shellfish Reefs Increase Water Storage Capacity on Intertidal Flats Over Extensive Spatial Scales. Ecosystems, 2018, 21, 360-372.	3.4	4
63	Indicators of Expansion and Retreat of Phragmites Based on Optical and Radar Satellite Remote Sensing: a Case Study on the Danube Delta. Wetlands, 2021, 41, 1.	1.5	4
64	Flow Velocity and Morphology of a Submerged Patch of the Aquatic Species Veronica anagallis-aquatica L.. GeoPlanet: Earth and Planetary Sciences, 2016, , 141-152.	0.2	4
65	Timing recovery of ecosystems in sequential remotely sensed and simulated data. Protocol Exchange, 0, , .	0.3	2
66	The importance of marshes providing soil stabilization to resist fastâ€flow erosion in case of a dike breach. Ecological Applications, 2022, , e2622.	3.8	2
67	Low altitude remote sensing. Proceedings of SPIE, 2008, , .	0.8	1