Roshanka Ranasinghe

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/590659/publications.pdf

Version: 2024-02-01

150 papers	7,480 citations	44042 48 h-index	58549 82 g-index
161 all docs	161 docs citations	161 times ranked	4546 citing authors

#	Article	IF	Citations
1	Climate change driven shoreline change at Hasaki Beach Japan: A novel application of the Probabilistic Coastline Recession (PCR) model. Coastal Engineering, 2022, 172, 104079.	1.7	9
2	Regime Shifts in Future Shoreline Dynamics of Saudi Arabia. Frontiers in Marine Science, 2022, 8, .	1.2	6
3	African heritage sites threatened as sea-level rise accelerates. Nature Climate Change, 2022, 12, 256-262.	8.1	53
4	Climate Change and Reservoir Impacts on 21st-Century Streamflow and Fluvial Sediment Loads in the Irrawaddy River, Myanmar. Frontiers in Earth Science, 2021, 9, .	0.8	13
5	A global analysis of extreme coastal water levels with implications for potential coastal overtopping. Nature Communications, 2021, 12, 3775.	5.8	84
6	Twenty-first-century projections of shoreline change along inlet-interrupted coastlines. Scientific Reports, 2021, 11, 14038.	1.6	21
7	Extreme sea levels at different global warming levels. Nature Climate Change, 2021, 11, 746-751.	8.1	111
8	A Clustering Approach for Predicting Dune Morphodynamic Response to Storms Using Typological Coastal Profiles: A Case Study at the Dutch Coast. Frontiers in Marine Science, 2021, 8, .	1.2	5
9	Projected Streamflow and Sediment Supply under Changing Climate to the Coast of the Kalu River Basin in Tropical Sri Lanka over the 21st Century. Water (Switzerland), 2021, 13, 3031.	1.2	4
10	Editorial: Coasts Under Changing Climate: Observations and Modeling. Frontiers in Marine Science, 2021, 8, .	1.2	2
11	Instant Flood Risk Modelling (Inform) Tool for Co-Design of Flood Risk Management Strategies with Stakeholders in Can Tho City, Vietnam. Water (Switzerland), 2021, 13, 3131.	1.2	1
12	An Integrated, Probabilistic Modeling Approach to Assess the Evolution of Barrier-Island Systems Over the Twenty-First Century. Frontiers in Marine Science, 2021, 8, .	1.2	2
13	Probabilistic projections of the stability of small tidal inlets at century time scale using a reduced complexity approach. Scientific Reports, 2021, 11, 22921.	1.6	2
14	Mapping spatial variability in shoreline change hotspots from satellite data; a case study in southeast Australia. Estuarine, Coastal and Shelf Science, 2020, 246, 107018.	0.9	24
15	Uncertainties in projections of sandy beach erosion due to sea level rise: an analysis at the European scale. Scientific Reports, 2020, 10, 11895.	1.6	44
16	Hydrological Model Calibration with Streamflow and Remote Sensing Based Evapotranspiration Data in a Data Poor Basin. Remote Sensing, 2020, 12, 3768.	1.8	34
17	A Holistic Modeling Approach to Project the Evolution of Inlet-Interrupted Coastlines Over the 21st Century. Frontiers in Marine Science, 2020, 7, .	1.2	18
18	Projections of global-scale extreme sea levels and resulting episodic coastal flooding over the 21st Century. Scientific Reports, 2020, 10, 11629.	1.6	280

#	Article	IF	Citations
19	Reply to: Sandy beaches can survive sea-level rise. Nature Climate Change, 2020, 10, 996-997.	8.1	15
20	Projected 21st century changes in extreme wind-wave events. Science Advances, 2020, 6, eaaz7295.	4.7	99
21	Implications of ambiguity in Antarctic ice sheet dynamics for future coastal erosion estimates: a probabilistic assessment. Climatic Change, 2020, 162, 859-876.	1.7	1
22	Sandy coastlines under threat of erosion. Nature Climate Change, 2020, 10, 260-263.	8.1	411
23	An assessment of measured and computed depth of closure around Japan. Scientific Reports, 2020, 10, 2987.	1.6	15
24	On the need for a new generation of coastal change models for the 21st century. Scientific Reports, 2020, 10, 2010.	1.6	75
25	Probabilistic Application of an Integrated Catchment-Estuary-Coastal System Model to Assess the Evolution of Inlet-Interrupted Coasts Over the 21st Century. Frontiers in Marine Science, 2020, 7, .	1.2	6
26	Quantitative assessment of the environmental risk due to climate change-driven coastline recession: A case study in Trincomalee coastal area, Sri Lanka. Climate Risk Management, 2019, 25, 100192.	1.5	5
27	Towards efficient uncertainty quantification with high-resolution morphodynamic models: A multifidelity approach applied to channel sedimentation. Coastal Engineering, 2019, 152, 103520.	1.7	7
28	Disentangling the relative impacts of climate change and human activities on fluvial sediment supply to the coast by the worldâ€™s large rivers: Pearl River Basin, China. Scientific Reports, 2019, 9, 9236.	1.6	40
29	A practical framework of quantifying climate change-driven environmental losses (QuantiCEL) in coastal areas in developing countries. Environmental Science and Policy, 2019, 101, 302-310.	2.4	8
30	Climate change-driven losses in ecosystem services of coastal wetlands: A case study in the West coast of Bangladesh. Ocean and Coastal Management, 2019, 169, 273-283.	2.0	53
31	Comparison of Coastal Vulnerability Index applications for Barcelona Province. Ocean and Coastal Management, 2019, 178, 104799.	2.0	96
32	Morphodynamic Acceleration Techniques for Multi-Timescale Predictions of Complex Sandy Interventions. Journal of Marine Science and Engineering, 2019, 7, 78.	1.2	21
33	Response of the Bight of Benin (Gulf of Guinea, West Africa) coastline to anthropogenic and natural forcing, Part 2: Sources and patterns of sediment supply, sediment cells, and recent shoreline change. Continental Shelf Research, 2019, 173, 93-103.	0.9	53
34	Quantifying uncertainties of sandy shoreline change projections as sea level rises. Scientific Reports, 2019, 9, 42.	1.6	67
35	Assessment of Complementary Medium-Resolution Satellite Imageries for Nearshore Bathymetry Estimation. Journal of the Indian Society of Remote Sensing, 2019, 47, 537-540.	1.2	4
36	Global distribution of nearshore slopes with implications for coastal retreat. Earth System Science Data, 2019, 11, 1515-1529.	3.7	55

#	Article	IF	Citations
37	Sea Level Rise and Coastal Erosion. , 2018, , 1505-1519.		2
38	Shallow water bathymetry mapping using Support Vector Machine (SVM) technique and multispectral imagery. International Journal of Remote Sensing, 2018, 39, 4431-4450.	1.3	95
39	The State of the Worldâ€™s Beaches. Scientific Reports, 2018, 8, 6641.	1.6	549
40	Laboratory investigation of the Bruun Rule and beach response to sea level rise. Coastal Engineering, 2018, 136, 183-202.	1.7	53
41	Assessing climate change impacts on the stability of small tidal inlets: Part 2 - Data rich environments. Marine Geology, 2018, 395, 65-81.	0.9	26
42	Climate Change, Coasts and Coastal Risk. Journal of Marine Science and Engineering, 2018, 6, 141.	1.2	5
43	Investigating the Stability of Double-Inlet Tidal Systems Using a Process-Based Modelling Approach. Journal of Coastal Research, 2018, 85, 161-165.	0.1	0
44	Regional Scale Risk-Informed Land-Use Planning Using Probabilistic Coastline Recession Modelling and Economical Optimisation: East Coast of Sri Lanka. Journal of Marine Science and Engineering, 2018, 6, 120.	1.2	22
45	Effects of different precipitation inputs on streamflow simulation in the Irrawaddy River Basin, Myanmar. Journal of Hydrology: Regional Studies, 2018, 19, 265-278.	1.0	28
46	A Multi-Scale Conceptual Model of Flood-Tide Delta Morphodynamics in Micro-Tidal Estuaries. Geosciences (Switzerland), 2018, 8, 324.	1.0	11
47	Assessing Future Coastline Change in the Vicinity of Tidal Inlets via Reduced Complexity Modelling. Journal of Coastal Research, 2018, 85, 636-640.	0.1	10
48	Quantifying Economic Value of Coastal Ecosystem Services: A Review. Journal of Marine Science and Engineering, 2018, 6, 5.	1.2	107
49	An Effective Modelling Approach to Support Probabilistic Flood Forecasting in Coastal Citiesâ€"Case Study: Can Tho, Mekong Delta, Vietnam. Journal of Marine Science and Engineering, 2018, 6, 55.	1.2	5
50	Rip current circulation and surf zone retention on a double barred beach. Marine Geology, 2018, 405, 12-22.	0.9	14
51	Analysing decadal-scale crescentic bar dynamics using satellite imagery: A case study at Anmok beach, South Korea. Marine Geology, 2018, 405, 1-11.	0.9	14
52	Developing a framework to quantify potential Sea level rise-driven environmental losses: A case study in Semarang coastal area, Indonesia. Environmental Science and Policy, 2018, 89, 216-230.	2.4	19
53	Two and three-dimensional shoreline behaviour at a MESO-MACROTIDAL barred beach. Journal of Coastal Conservation, 2017, 21, 381-392.	0.7	3
54	Shoreline resilience to individual storms and storm clusters on a meso-macrotidal barred beach. Geomorphology, 2017, 290, 265-276.	1.1	58

#	Article	IF	Citations
55	Assessing climate change impacts on the stability of small tidal inlets: Part 1 - Data poor environments. Marine Geology, 2017, 390, 331-346.	0.9	25
56	The initial morphological response of the Sand Engine: A process-based modelling study. Coastal Engineering, 2017, 119, 1-14.	1.7	95
57	Variations in the Wave Climate and Sediment Transport Due to Climate Change along the Coast of Vietnam. Journal of Marine Science and Engineering, 2016, 4, 86.	1.2	16
58	Potential of Video Cameras in Assessing Event and Seasonal Coastline Behaviour: Grand Popo, Benin (Gulf of Guinea). Journal of Coastal Research, 2016, 75, 442-446.	0.1	22
59	A morphological modeling study to compare different methods of wave climate schematization and evaluate strategies to reduce erosion losses from a beach nourishment project. Coastal Engineering, 2016, 112, 69-86.	1.7	28
60	Pulsations in Surf Zone Currents on a High Energy Mesotidal Beach in New Zealand. Journal of Coastal Research, 2016, 75, 378-382.	0.1	0
61	Synthetic Imagery for the Automated Detection of Rip Currents. Journal of Coastal Research, 2016, 75, 912-916.	0.1	9
62	Linkages between sediment composition, wave climate and beach profile variability at multiple timescales. Marine Geology, 2016, 381, 194-208.	0.9	21
63	Assessing climate change impacts on open sandy coasts: A review. Earth-Science Reviews, 2016, 160, 320-332.	4.0	216
64	Impacts of Climate Change on Extreme Wave Climate Along the Western Coast of Sri Lanka. , 2016, , .		0
65	Modeling of Coastal Morphological Processes. , 2016, , 611-634.		2
66	A Rapid, Low-Cost Approach to Coastal Vulnerability Assessment at a National Level. Journal of Coastal Research, 2016, 320, 932-945.	0.1	34
67	Wave breaking patterns control rip current flow regimes and surfzone retention. Marine Geology, 2016, 382, 176-190.	0.9	17
68	Assessing climate change impacts on the stability of small tidal inlet systems: Why and how?. Earth-Science Reviews, 2016, 154, 369-380.	4.0	49
69	Data-driven and hybrid coastal morphological prediction methods for mesoscale forecasting. Geomorphology, 2016, 256, 49-67.	1.1	35
70	Natural hazards in Australia: sea level and coastal extremes. Climatic Change, 2016, 139, 69-83.	1.7	70
71	Comparison of empirical statistical methods for downscaling daily climate projections from CMIP5 GCMs: a case study of the Huai River Basin, China. International Journal of Climatology, 2016, 36, 145-164.	1.5	48
72	Drawing the line on coastline recession risk. Ocean and Coastal Management, 2016, 122, 87-94.	2.0	29

#	Article	IF	Citations
73	THE RELATIVE CONTRIBUTION OF SEA LEVEL RISE AND STORM EROSION TO NET COASTLINE RECESSION. , 2015, , .		0
74	Identification of biomarkers to measure HIV-specific mucosal and systemic CD8+ T-cell immunity using single cell Fluidigm 48.48 Dynamic arrays. Vaccine, 2015, 33, 7315-7327.	1.7	5
75	Processâ€based modeling of kilometerâ€scale alongshore sandbar variability. Earth Surface Processes and Landforms, 2015, 40, 995-1005.	1.2	11
76	ON THE GENERIC UTILIZATION OF PROBABILISTIC METHODS FOR QUANTIFICATION OF UNCERTAINTY IN PROCESS-BASED MORPHODYNAMIC MODEL APPLICATIONS. Coastal Engineering Proceedings, 2015, 1, 88.	0.1	1
77	A QUALITATIVE ASSESSMENT OF CLIMATE CHANGE IMPACTS ON THE STABILITY OF SMALL TIDAL INLETS VIA SCHEMATISED NUMERICAL MODELLING. Coastal Engineering Proceedings, 2015, 1, 3.	0.1	0
78	A hybrid beach morphology model applied to a high energy sandy beach. Ocean Dynamics, 2015, 65, 1411-1422.	0.9	3
79	Risk-Averse Economic Optimization in the Adaptation of River Dikes to Climate Change. Water Resources Management, 2015, 29, 359-377.	1.9	3
80	Response of the Bight of Benin (Gulf of Guinea, West Africa) coastline to anthropogenic and natural forcing, Part1: Wave climate variability and impacts on the longshore sediment transport. Continental Shelf Research, 2015, 110, 48-59.	0.9	115
81	Moving from deterministic towards probabilistic coastal hazard and risk assessment: Development of a modelling framework and application to Narrabeen Beach, New South Wales, Australia. Coastal Engineering, 2015, 96, 92-99.	1.7	45
82	Aeolian sediment transport on a beach with a varying sediment supply. Aeolian Research, 2014, 15, 235-244.	1.1	37
83	Probabilistic estimation of coastal dune erosion and recession by statistical simulation of storm events. Applied Ocean Research, 2014, 47, 53-62.	1.8	25
84	The effects of storm clustering on beach profile variability. Marine Geology, 2014, 348, 103-112.	0.9	125
85	Probabilistic modelling of extreme storms along the Dutch coast. Coastal Engineering, 2014, 86, 1-13.	1.7	77
86	The large-scale influence of the Great Barrier Reef matrix on wave attenuation. Coral Reefs, 2014, 33, 1167-1178.	0.9	41
87	Aeolian sediment transport in supply limited situations. Aeolian Research, 2014, 12, 75-85.	1.1	53
88	An argument for probabilistic coastal hazard assessment: Retrospective examination of practice in New South Wales, Australia. Ocean and Coastal Management, 2014, 95, 147-155.	2.0	10
89	The influence of sea state on formation speed of alongshore variability in surf zone sand bars. Coastal Engineering, 2014, 91, 45-59.	1.7	6
90	Projections of climate changeâ€driven variations in the offshore wave climate off south eastern Australia. International Journal of Climatology, 2013, 33, 1615-1632.	1.5	36

#	Article	IF	Citations
91	A New Alternative to Saving Our Beaches from Sea-Level Rise: The Sand Engine. Journal of Coastal Research, 2013, 290, 1001-1008.	0.1	229
92	Probabilistic estimation of storm erosion using analytical, semi-empirical, and process based storm erosion models. Coastal Engineering, 2013, 82, 64-75.	1.7	72
93	Contemporary hydrodynamics and morphological change of a microtidal estuary: a numerical modelling study. Ocean Dynamics, 2013, 63, 21-41.	0.9	18
94	Re-evaluation and improvement of three commonly used bulk longshore sediment transport formulas. Coastal Engineering, 2013, 75, 29-39.	1.7	63
95	Numerical modeling of low-frequency wave dynamics over a fringing coral reef. Coastal Engineering, 2013, 73, 178-190.	1.7	143
96	Climate-change impact assessment for inlet-interrupted coastlines. Nature Climate Change, 2013, 3, 83-87.	8.1	126
97	Coupled sandbar patterns and obliquely incident waves. Journal of Geophysical Research F: Earth Surface, 2013, 118, 1677-1692.	1.0	14
98	A machine learning approach for estimation of shallow water depths from optical satellite images and sonar measurements. Journal of Hydroinformatics, 2013, 15, 1408-1424.	1.1	25
99	Video-Based Detection of Shorelines at Complex Mesoâ€“Macro Tidal Beaches. Journal of Coastal Research, 2012, 28, 1040.	0.1	36
100	Climate Change Impacts on the Stability of Small Tidal Inlets: A Numerical Modelling Study Using the Realistic Analogue Approach. The International Journal of Ocean and Climate Systems, 2012, 3, 163-171.	0.8	2
101	The morphological response of large tidal inlet/basin systems to relative sea level rise. Climatic Change, 2012, 113, 253-276.	1.7	91
102	On bar growth and decay during interannual net offshore migration. Coastal Engineering, 2012, 60, 190-200.	1.7	104
103	Dune behavior and aeolian transport on decadal timescales. Coastal Engineering, 2012, 67, 41-53.	1.7	89
104	An analysis of the cross-shore beach morphodynamics of a sandy and a composite gravel beach. Marine Geology, 2012, 299-302, 33-42.	0.9	35
105	Estimating coastal recession due to sea level rise: beyond the Bruun rule. Climatic Change, 2012, 110, 561-574.	1.7	189
106	Climate and variability bias adjustment of climate model-derived winds for a southeast Australian dynamical wave model. Ocean Dynamics, 2012, 62, 87-104.	0.9	38
107	MODELLING INFRAGRAVITY WAVES AND CURRENTS ACROSS A FRINGING CORAL REEF. Coastal Engineering Proceedings, 2012, 1, 29.	0.1	2
108	QUANTIFYING NEARSHORE MORPHOLOGICAL RECOVERY TIME SCALES USING ARGUS VIDEO IMAGING: PALM BEACH, SYDNEY AND DUCK, NORTH CAROLINA. Coastal Engineering Proceedings, 2012, 1, 24.	0.1	13

#	Article	IF	Citations
109	RE-ASSESSMENT AND UPDATE OF BULK LONGSHORE SEDIMENT TRANSPORT FORMULAS. Coastal Engineering Proceedings, 2012, , 28.	0.1	3
110	VORTICAL VLF MOTIONS UNDER SHORE-NORMAL INCIDENT WAVES. Coastal Engineering Proceedings, 2012, 1, 58.	0.1	1
111	AN ANALYSIS OF CROSS-SHORE PROFILE EVOLUTION OF A SAND AND A COMPOSITE SAND-GRAVEL BEACHES. Coastal Engineering Proceedings, 2012, 1, 18.	0.1	1
112	A NEW CONCEPTUAL MODEL FOR AEOLIAN TRANSPORT RATES ON BEACHES. Coastal Engineering Proceedings, 2012, 1, 39.	0.1	0
113	HOW TO WEIGH COASTAL HAZARD AGAINST ECONOMIC CONSEQUENCE. Coastal Engineering Proceedings, 2012, , 31.	0.1	0
114	A reevaluation of coastal embayment rotation: The dominance of cross-shore versus alongshore sediment transport processes, Collaroy-Narrabeen Beach, southeast Australia. Journal of Geophysical Research, 2011, 116, .	3.3	125
115	A risk-informed approach to coastal zone management. Australian Journal of Civil Engineering, 2011, 9, 47-60.	0.6	9
116	Hydrodynamic variability along a low-energy estuarine beach located in an open estuary. Australian Journal of Civil Engineering, 2011, 9, 113-128.	0.6	1
117	Tidal asymmetry of a shallow, well-mixed estuary and the implications on net sediment transport: A numerical modelling study. Australian Journal of Civil Engineering, 2011, 9, 1-18.	0.6	5
118	Assessment and integration of conventional, RTK-GPS and image-derived beach survey methods for daily to decadal coastal monitoring. Coastal Engineering, 2011, 58, 194-205.	1.7	153
119	Morphodynamic upscaling with the MORFAC approach: Dependencies and sensitivities. Coastal Engineering, 2011, 58, 806-811.	1.7	114
120	MORPHODYNAMIC UPSCALING WITH THE MORFAC APPROACH. Coastal Engineering Proceedings, 2011, , 59.	0.1	2
121	ON THE EFFECTIVENESS OF MANGROVES IN ATTENUATING CYCLONE - INDUCED WAVES. Coastal Engineering Proceedings, 2011, , 50.	0.1	15
122	A HYBRID MODEL OF SWASH-ZONE LONGSHORE SEDIMENT TRANSPORT ON REFLECTIVE BEACHES. Coastal Engineering Proceedings, 2011, , 29.	0.1	2
123	ON THE INITIATION OF NEARSHORE MORPHOLOGICAL RHYTHMICITY. Coastal Engineering Proceedings, 2011, 1, 47.	0.1	2
124	Interannual variability and controls of the Sydney wave climate. International Journal of Climatology, 2010, 30, 1322-1335.	1.5	42
125	Shoreline response to a single shore-parallel submerged breakwater. Coastal Engineering, 2010, 57, 1006-1017.	1.7	61
126	Estuarine shoreline processes in a dynamic low-energy system. Ocean Dynamics, 2010, 60, 285-298.	0.9	25

#	Article	IF	Citations
127	Rising seas and retreating coastlines. Climatic Change, 2009, 97, 465-468.	1.7	91
128	Quantifying the storm erosion hazard for coastal planning. Coastal Engineering, 2009, 56, 90-93.	1.7	48
129	PROCESS-DETERMINED COASTAL EROSION HAZARDS. , 2009, , .		1
130	Sea Level Rise and Coastal Erosion. , 2009, , 1023-1037.		12
131	ROTATION AND OSCILLATION OF AN EMBAYED BEACH. , 2009, , .		0
132	Statistical simulation of wave climate and extreme beach erosion. Coastal Engineering, 2008, 55, 375-390.	1.7	189
133	Shoreline Implications of Flood-Tide Delta Morphodynamics: The Case of Port Stephens (SE Australia). , 2007, , 1417.		6
134	Processes driving circulation, exchange and flushing within intermittently closing and opening lakes and lagoons. Marine and Freshwater Research, 2007, 58, 709.	0.7	21
135	Coupled and noncoupled behavior of threeâ€dimensional morphological patterns in a double sandbar system. Journal of Geophysical Research, 2007, 112, .	3.3	61
136	Observations of rip spacing, persistence and mobility at a long, straight coastline. Marine Geology, 2007, 236, 209-221.	0.9	69
137	ACCESSING THE ACCURACY AND APPLICABILITY OF A MULTI-DECADAL BEACH SURVEY DATASET. , 2007, , .		2
138	Rip spacing and persistence on an embayed beach. Journal of Geophysical Research, 2006, 111, .	3.3	100
139	Shoreline response to multi-functional artificial surfing reefs: A numerical and physical modelling study. Coastal Engineering, 2006, 53, 589-611.	1.7	63
140	Shoreline response to submerged structures: A review. Coastal Engineering, 2006, 53, 65-79.	1.7	129
141	Vertical mixing processes in Intermittently Closed and Open Lakes and Lagoons, and the dissolved oxygen response. Estuarine, Coastal and Shelf Science, 2006, 69, 205-216.	0.9	61
142	Numerical Modeling of Beach Profile Change Caused by Overwash. , 2006, , 1.		6
143	Morphodynamics of intermediate beaches: a video imaging and numerical modelling study. Coastal Engineering, 2004, 51, 629-655.	1.7	154
144	The Southern Oscillation Index, wave climate, and beach rotation. Marine Geology, 2004, 204, 273-287.	0.9	224

#	Article	IF	Citations
145	The Seasonal Closure of Tidal Inlets: Causes and Effects. Coastal Engineering Journal, 2003, 45, 601-627.	0.7	81
146	Processes Governing Rip Spacing, Persistence, and Strength in a Swell Dominated, Microtidal Environment. , 2001, , 454.		1
147	Tidal inlet velocity asymmetry in diurnal regimes. Continental Shelf Research, 2000, 20, 2347-2366.	0.9	52
148	Circulation and mixing characteristics of a seasonally open tidal inlet: a field study. Marine and Freshwater Research, 1999, 50, 281.	0.7	31
149	The seasonal closure of tidal inlets: Wilson Inletâ€"a case study. Coastal Engineering, 1999, 37, 37-56.	1.7	47
150	A morphodynamic model to simulate the seasonal closure of tidal inlets. Coastal Engineering, 1999, 37, 1-36.	1.7	84