# Fernando J MÃ©ndez

List of Publications by Year
in descending order



| 114 | 5,144 | 87843 38 | 95218 68 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 115 | 115 | 115 | 3866 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 1 | An empirical model to estimate the propagation of random breaking and nonbreaking waves over vegetation fields. Coastal Engineering, 2004, 51, 103-118. | 1.7 | 425 |
| 2 | A recent increase in global wave power as a consequence of oceanic warming. Nature Communications, 2019, 10, 205. | 5.8 | 283 |
| 3 | Analysis of clustering and selection algorithms for the study of multivariate wave climate. Coastal Engineering, 2011, 58, 453-462. | 1.7 | 210 |
| 4 | A Global Ocean Wave (GOW) calibrated reanalysis from 1948 onwards. Coastal Engineering, 2012, 65, 38-55. | 1.7 | 200 |
| 5 | Hydrodynamics induced by wind waves in a vegetation field. Journal of Geophysical Research, 1999, 104, 18383-18396. | 3.3 | 175 |
| 6 | A hybrid efficient method to downscale wave climate to coastal areas. Coastal Engineering, 2011, 58, 851-862. | 1.7 | 166 |
| 7 | Global extreme wave height variability based on satellite data. Geophysical Research Letters, 2011, 38, n/a-n/a. | 1.5 | 158 |
| 8 | Estimation of the long-term variability of extreme significant wave height using a time-dependent Peak Over Threshold (POT) model. Journal of Geophysical Research, 2006, 111, . | 3.3 | 146 |
| 9 | Variability of extreme wave heights in the northeast Pacific Ocean based on buoy measurements. Geophysical Research Letters, 2008, 35, . | 1.5 | 114 |
| 10 | Blind testing of shoreline evolution models. Scientific Reports, 2020, 10, 2137. | 1.6 | 112 |
| 11 | Changing extreme sea levels along European coasts. Coastal Engineering, 2014, 87, 4-14. | 1.7 | 102 |
| 12 | Analyzing Monthly Extreme Sea Levels with a Time-Dependent GEV Model. Journal of Atmospheric and Oceanic Technology, 2007, 24, 894-911. | 0.5 | 100 |
| 13 | Evaluating the performance of CMIP3 and CMIP5 global climate models over the north-east Atlantic region. Climate Dynamics, 2014, 43, 2663-2680. | 1.7 | 98 |
| 14 | High resolution downscaled ocean waves (DOW) reanalysis in coastal areas. Coastal Engineering, 2013, 72, 56-68. | 1.7 | 97 |
| 15 | A weather-type statistical downscaling framework for ocean wave climate. Journal of Geophysical Research: Oceans, 2014, 119, 7389-7405. | 1.0 | 91 |
| 16 | A global classification of coastal flood hazard climates associated with large-scale oceanographic forcing. Scientific Reports, 2017, 7, 5038. | 1.6 | 85 |
| 17 | A methodology for deriving extreme nearshore sea conditions for structural design and flood risk analysis. Coastal Engineering, 2014, 88, 15-26. | 1.7 | 84 |
| 18 | An integrated coastal modeling system for analyzing beach processes and beach restoration projects, SMC. Computers and Geosciences, 2007, 33, 916-931. | 2.0 | 83 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | High-resolution sea wind hindcasts over the Mediterranean area. Climate Dynamics, 2014, 42, 1857-1872. | 1.7 | 81 |
| 20 | The influence of seasonality on estimating return values of significant wave height. Coastal Engineering, 2009, 56, 211-219. | 1.7 | 79 |
| 21 | Statistical multi-model climate projections of surface ocean waves in Europe. Ocean Modelling, 2015, 96, 161-170. | 1.0 | 78 |
| 22 | Calibration of a Lagrangian Transport Model Using Drifting Buoys Deployed during thePrestigeOil Spill. Journal of Coastal Research, 2009, 251, 80-90. | 0.1 | 77 |
| 23 | The Prestige Oil Spill in Cantabria (Bay of Biscay). Part I: Operational Forecasting System for Quick Response, Risk Assessment, and Protection of Natural Resources. Journal of Coastal Research, 2006, 226, 1474-1489. | 0.1 | 76 |
| 24 | Long-term changes in the frequency, intensity and duration of extreme storm surge events in southern Europe. Climate Dynamics, 2016, 46, 1503-1516. | 1.7 | 76 |
| 25 | Long-term changes in sea-level components in Latin America and the Caribbean. Global and Planetary Change, 2013, 104, 34-50. | 1.6 | 72 |
| 26 | Extreme wave climate variability in southern Europe using satellite data. Journal of Geophysical Research, 2010, 115, . | 3.3 | 70 |
| 27 | Variability of multivariate wave climate in Latin America and the Caribbean. Global and Planetary Change, 2013, 100, 70-84. | 1.6 | 68 |
| 28 | A perturbation method to solve dispersion equations for water waves over dissipative media. Coastal Engineering, 2004, 51, 81-89. | 1.7 | 66 |
| 29 | Directional Calibration of Wave Reanalysis Databases Using Instrumental Data. Journal of Atmospheric and Oceanic Technology, 2011, 28, 1466-1485. | 0.5 | 66 |
| 30 | Seasonality and duration in extreme value distributions of significant wave height. Ocean Engineering, 2008, 35, 131-138. | 1.9 | 64 |
| 31 | Predicting Climateâ€Driven Coastlines With a Simple and Efficient Multiscale Model. Journal of Geophysical Research F: Earth Surface, 2019, 124, 1596-1624. | 1.0 | 64 |
| 32 | An approach to assess flooding and erosion risk for open beaches in a changing climate. Coastal Engineering, 2014, 87, 50-76. | 1.7 | 61 |
| 33 | Morphodynamic classification of sandy beaches in low energetic marine environment. Marine Geology, 2007, 242, 235-246. | 0.9 | 56 |
| 34 | ESTELA: a method for evaluating the source and travel time of the wave energy reaching a local area. Ocean Dynamics, 2014, 64, 1181-1191. | 0.9 | 52 |
| 35 | A multiscale climate emulator for longâ€term morphodynamics (MUSCLEâ€morpho). Journal of Geophysical Research: Oceans, 2016, 121, 775-791. | 1.0 | 44 |
| 36 | A Climate Index Optimized for Longshore Sediment Transport Reveals Interannual and Multidecadal Littoral Cell Rotations. Journal of Geophysical Research F: Earth Surface, 2018, 123, 1958-1981. | 1.0 | 42 |

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|---|---|---|---|
| 37 | A method for finding the optimal predictor indices for local wave climate conditions. Ocean Dynamics, 2014, 64, 1025-1038. | 0.9 | 39 |
| 38 | Transformation model of wave height distribution on planar beaches. Coastal Engineering, 2004, 50, 97-115. | 1.7 | 38 |
| 39 | Coastal waters classification based on physical attributes along the NE Atlantic region. An approach for rocky macroalgae potential distribution. Estuarine, Coastal and Shelf Science, 2012, 112, 105-114. | 0.9 | 38 |
| 40 | Comparative Coastal Risk Index (CCRI): A multidisciplinary risk index for Latin America and the Caribbean. PLoS ONE, 2017, 12, e0187011. | 1.1 | 38 |
| 41 | Global reconstructed daily surge levels from the 20th Century Reanalysis (1871â€“2010). Global and Planetary Change, 2017, 148, 9-21. | 1.6 | 37 |
| 42 | Wave-Induced Mean Magnitudes in Permeable Submerged Breakwaters. Journal of Waterway, Port, Coastal and Ocean Engineering, 2001, 127, 7-15. | 0.5 | 35 |
| 43 | Exploring the interannual variability of extreme wave climate in the Northeast Atlantic Ocean. Ocean Modelling, 2012, 59-60, 31-40. | 1.0 | 32 |
| 44 | Future regional projections of extreme temperatures in Europe: a nonstationary seasonal approach. Climatic Change, 2012, 113, 371-392. | 1.7 | 32 |
| 45 | A Multimodal Wave Spectrumâ€“Based Approach for Statistical Downscaling of Local Wave Climate. Journal of Physical Oceanography, 2017, 47, 375-386. | 0.7 | 32 |
| 46 | Wave climate projections along the French coastline: Dynamical versus statistical downscaling methods. Ocean Modelling, 2014, 84, 35-50. | 1.0 | 31 |
| 47 | Forecasting seasonal to interannual variability in extreme sea levels. ICES Journal of Marine Science, 2009, 66, 1490-1496. | 1.2 | 30 |
| 48 | Extreme wave climate changes in Central-South America. Climatic Change, 2013, 119, 277-290. | 1.7 | 30 |
| 49 | Autoregressive logistic regression applied to atmospheric circulation patterns. Climate Dynamics, 2014, 42, 537-552. | 1.7 | 28 |
| 50 | Spectral Ocean Wave Climate Variability Based on Atmospheric Circulation Patterns. Journal of Physical Oceanography, 2014, 44, 2139-2152. | 0.7 | 28 |
| 51 | Downscaling Changing Coastlines in a Changing Climate: The Hybrid Approach. Journal of Geophysical Research F: Earth Surface, 2018, 123, 229-251. | 1.0 | 27 |
| 52 | HyCReWW: A Hybrid Coral Reef Wave and Water level metamodel. Computers and Geosciences, 2019, 127, 85-90. | 2.0 | 27 |
| 53 | An extreme value model for maximum wave heights based on weather types. Journal of Geophysical Research: Oceans, 2016, 121, 1262-1273. | 1.0 | 26 |
| 54 | A methodology to assess the probability of marine litter accumulation in estuaries. Marine Pollution Bulletin, 2019, 144, 309-324. | 2.3 | 26 |

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|---|---|---|---|
| 55 | Models for the Turbulent Diffusion Terms of Shallow Water Equations. Journal of Hydraulic Engineering, 2005, 131, 217-223. | 0.7 | 23 |
| 56 | A method for spatial calibration of wave hindcast data bases. Continental Shelf Research, 2008, 28, 391-398. | 0.9 | 23 |
| 57 | Multivariate Wave Climate Using Self-Organizing Maps. Journal of Atmospheric and Oceanic Technology, 2011, 28, 1554-1568. | 0.5 | 23 |
| 58 | Regression Models for Outlier Identification (Hurricanes and Typhoons) in Wave Hindcast Databases. Journal of Atmospheric and Oceanic Technology, 2012, 29, 267-285. | 0.5 | 23 |
| 59 | The effect of temporal dependence on the estimation of the frequency of extreme ocean climate events. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2006, 462, 1683-1697. | 1.0 | 22 |
| 60 | Pseudo-optimal parameter selection of non-stationary generalized extreme value models for environmental variables. Environmental Modelling and Software, 2010, 25, 1592-1607. | 1.9 | 21 |
| 61 | Probabilistic relationships between wind and surface water circulation patterns in the SE Bay of Biscay. Ocean Dynamics, 2015, 65, 1289-1303. | 0.9 | 21 |
| 62 | An atmospheric-to-marine synoptic classification for statistical downscaling marine climate. Ocean Dynamics, 2016, 66, 1589-1601. | 0.9 | 21 |
| 63 | Timeâ€Varying Emulator for Short and Longâ€Term Analysis of Coastal Flood Hazard Potential. Journal of Geophysical Research: Oceans, 2019, 124, 9209-9234. | 1.0 | 21 |
| 64 | The Application of Ensemble Wave Forcing to Quantify Uncertainty of Shoreline Change Predictions. Journal of Geophysical Research F: Earth Surface, 2021, 126, e2019JF005506. | 1.0 | 21 |
| 65 | A Multiscale Approach to Shoreline Prediction. Geophysical Research Letters, 2021, 48, . | 1.5 | 20 |
| 66 | Marine climate variability based on weather patterns for a complicated island setting: The New Zealand case. International Journal of Climatology, 2019, 39, 1777-1786. | 1.5 | 19 |
| 67 | Steps to Develop Early Warning Systems and Future Scenarios of Storm Wave-Driven Flooding Along Coral Reef-Lined Coasts. Frontiers in Marine Science, 2020, 7, . | 1.2 | 19 |
| 68 | Sensitivity analysis of time-dependent generalized extreme value models for ocean climate variables. Advances in Water Resources, 2010, 33, 833-845. | 1.7 | 18 |
| 69 | Mixed extreme wave climate model for reanalysis databases. Stochastic Environmental Research and Risk Assessment, 2013, 27, 757-768. | 1.9 | 18 |
| 70 | A nearshore long-term infragravity wave analysis for open harbours. Coastal Engineering, 2015, 97, 78-90. | 1.7 | 18 |
| 71 | A methodology to evaluate regional-scale offshore wind energy resources. , 2011, , . | | 17 |
| 72 | Multiscale climate emulator of multimodal wave spectra: MUSCLE-spectra. Journal of Geophysical Research: Oceans, 2017, 122, 1400-1415. | 1.0 | 17 |

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|---|---|---|---|
| 73 | A multivariate, stochastic, climate-based wave emulator for shoreline change modelling. Ocean Modelling, 2020, 154, 101695. | 1.0 | 17 |
| 74 | Surfing wave climate variability. Global and Planetary Change, 2014, 121, 19-25. | 1.6 | 16 |
| 75 | Controls of Multimodal Wave Conditions in a Complex Coastal Setting. Geophysical Research Letters, 2017, 44, 12,315. | 1.5 | 16 |
| 76 | Climate-based Monte Carlo simulation of trivariate sea states. Coastal Engineering, 2013, 80, 107-121. | 1.7 | 14 |
| 77 | A simplified method to downscale wave dynamics on vertical breakwaters. Coastal Engineering, 2013, 71, 68-77. | 1.7 | 14 |
| 78 | Identification of storm events and contiguous coastal sections for deterministic modeling of extreme coastal flood events in response to climate change. Coastal Engineering, 2018, 140, 316-330. | 1.7 | 14 |
| 79 | Projecting Climate Dependent Coastal Flood Risk With a Hybrid Statistical Dynamical Model. Earth's Future, 2021, 9, e2021EF002285. | 2.4 | 14 |
| 80 | Historical and future storm surge around New Zealand: From the 19th century to the end of the 21st century. International Journal of Climatology, 2020, 40, 1512-1525. | 1.5 | 13 |
| 81 | A multivariate approach to estimate design loads for offshore wind turbines. Wind Energy, 2013, 16, 1091-1106. | 1.9 | 12 |
| 82 | Directional correction of modeled sea and swell wave heights using satellite altimeter data. Ocean Modelling, 2018, 131, 103-114. | 1.0 | 12 |
| 83 | Daily synoptic conditions associated with occurrences of compound events in estuaries along North Atlantic coastlines. International Journal of Climatology, 2022, 42, 5694-5713. | 1.5 | 12 |
| 84 | Ecological typologies of large areas. An application in the Mediterranean Sea. Journal of Environmental Management, 2018, 205, 59-72. | 3.8 | 11 |
| 85 | Climate-induced variability in South Atlantic wave direction over the past three millennia. Scientific Reports, 2020, 10, 18553. | 1.6 | 11 |
| 86 | Influence of the NAO on the northwestern Mediterranean wave climate. Scientia Marina, 2010, 74, 55-64. | 0.3 | 11 |
| 87 | Long-term tidal level distribution using a wave-by-wave approach. Advances in Water Resources, 2007, 30, 2271-2282. | 1.7 | 10 |
| 88 | Directional calibrated wind and wave reanalysis databases using instrumental data for optimal design of off-shore wind farms. , 2011, , . | | 10 |
| 89 | Evaluation of global wave energy resource. , 2011, , . | | 10 |
| 90 | Seas and swells throughout New Zealand: A new partitioned hindcast. Ocean Modelling, 2021, 168, 101897. | 1.0 | 10 |

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|---|---|---|---|
| 91 | A probability distribution for depth-limited extreme wave heights in a sea state. Coastal Engineering, 2007, 54, 878-882. | 1.7 | 9 |
| 92 | Climateâ€Based Emulator of Distant Swell Trains and Local Seas Approaching a Pacific Atoll. Journal of Geophysical Research: Oceans, 2021, 126, e2020JC016919. | 1.0 | 8 |
| 93 | Introducing marine climate variability into life cycle management of coastal and offshore structures. , 2009, , . | | 4 |
| 94 | A Meta-Modelling Approach for Estimating Long-Term Wave Run-Up and Total Water Level on Beaches. Journal of Coastal Research, 2018, 342, 475-489. | 0.1 | 4 |
| 95 | Corrientes de retorno en medios reflejantes y disipativos. IngenierÃa Del Agua, 1998, 5, . | 0.2 | 4 |
| 96 | Wind wave footprint of tropical cyclones from satellite data. International Journal of Climatology, 2023, 43, 372-381. | 1.5 | 4 |
| 97 | A Perturbation Method for Wave and Wave-Induced Currents Computations in Beach Morphology Models. , 2001, , 393. | | 3 |
| 98 | Is the extreme wave climate in the NE Pacific increasing?. , 2010, , . | | 3 |
| 99 | Improving construction management of port infrastructures using an advanced computer-based system. Automation in Construction, 2017, 81, 122-133. | 4.8 | 3 |
| 100 | Characterizing storm-induced coastal change hazards along the United States West Coast. Scientific Data, 2022, 9, . | 2.4 | 3 |
| 101 | Analyzing the multidimensional wave climate with self organizing maps. , 2009, , . | | 2 |
| 102 | A methodology to define extreme wave climate using reanalysis data bases. , 2011, , . | | 2 |
| 103 | THE NEW COASTAL MODELLING SYSTEM SMC-BRAZIL AND ITS APPLICATION TO THE EROSIONAL PROBLEM IN THE MASSAGUAÃ‡U BEACH (SAO PAULO, BRAZIL). Coastal Engineering Proceedings, 2015, 1, 49. | 0.1 | 2 |
| 104 | On the feasibility of the use of wind SAR to downscale waves on shallow water. Ocean Science, 2016, 12, 39-49. | 1.3 | 2 |
| 105 | A hybrid regional climate downscaling for the southern Brazil coastal region. International Journal of Climatology, 2022, 42, 6753-6770. | 1.5 | 2 |
| 106 | Spatial and temporal variability of nearshore wave energy resources along Spain: Methodology and results. , 2010, , . | | 1 |
| 107 | An Engineering Approach for Modeling Hurricane Extreme Waves Using Analytical and Numerical Tools. , 2012, , . | | 1 |
| 108 | Reply to â€œOn the new wave height distributionâ€• Coastal Engineering, 2006, 53, 709. | 1.7 | 0 |

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|---|---|---|---|
| 109 | A multivariate approach to estimate design loads for offshore wind turbines. , 2011, , . | | 0 |
| 110 | Downscaling wave energy resources to coastal areas. , 2011, , . | | 0 |
| 111 | Numerical Analysis and Diagnosis of the Hydrodynamic Effects Produced by Hurricane Gordon along the Coast of Spain. Weather and Forecasting, 2014, 29, 666-683. | 0.5 | 0 |
| 112 | CAN WE DISTINGUISH COASTAL IMPACTS OF THE DIFFERENT ENSO FLAVORS?. , 2015, , . | | 0 |
| 113 | A CLIMATE-BASED MULTIVARIATE WAVE EMULATOR FOR LONG-TERM MORPHODYNAMIC SIMULATIONS. , 2015, , . | | 0 |
| 114 | Wave climates: deep water to shoaling zone. , 2020, , 39-59. | | 0 |