Moncho Gomez Gesteira

List of Publications by Year in descending order

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240 papers

9,458 citations

52 h-index

34105

51608

g-index

86

246 all docs 246 docs citations

246 times ranked

5694 citing authors

#	Article	IF	Citations
1	DualSPHysics: Open-source parallel CFD solver based on Smoothed Particle Hydrodynamics (SPH). Computer Physics Communications, 2015, 187, 204-216.	7.5	549
2	State-of-the-art of classical SPH for free-surface flows. Journal of Hydraulic Research/De Recherches Hydrauliques, 2010, 48, 6-27.	1.7	281
3	SPHysics – development of a free-surface fluid solver – Part 1: Theory and formulations. Computers and Geosciences, 2012, 48, 289-299.	4.2	270
4	A sensitivity study of the WRF model in wind simulation for an area of high wind energy. Environmental Modelling and Software, 2012, 33, 23-34.	4.5	240
5	Using a Three-Dimensional Smoothed Particle Hydrodynamics Method for Wave Impact on a Tall Structure. Journal of Waterway, Port, Coastal and Ocean Engineering, 2004, 130, 63-69.	1.2	231
6	WRF wind simulation and wind energy production estimates forced by different reanalyses: Comparison with observed data for Portugal. Applied Energy, 2014, 117, 116-126.	10.1	193
7	Applicability of Smoothed Particle Hydrodynamics for estimation of sea wave impact on coastal structures. Coastal Engineering, 2015, 96, 1-12.	4.0	189
8	Long-crested wave generation and absorption for SPH-based DualSPHysics model. Coastal Engineering, 2017, 127, 37-54.	4.0	183
9	GPUs, a New Tool of Acceleration in CFD: Efficiency and Reliability on Smoothed Particle Hydrodynamics Methods. PLoS ONE, 2011, 6, e20685.	2.5	175
10	Europe, China and the United States: Three different approaches to the development of offshore wind energy. Renewable and Sustainable Energy Reviews, 2019, 109, 55-70.	16.4	165
11	Green water overtopping analyzed with a SPH model. Ocean Engineering, 2005, 32, 223-238.	4.3	162
12	Potential impacts of climate change on European wind energy resource under the CMIP5 future climate projections. Renewable Energy, 2017, 101, 29-40.	8.9	158
13	New multi-GPU implementation for smoothed particle hydrodynamics on heterogeneous clusters. Computer Physics Communications, 2013, 184, 1848-1860.	7.5	142
14	Modeling Dam Break Behavior over a Wet Bed by a SPH Technique. Journal of Waterway, Port, Coastal and Ocean Engineering, 2008, 134, 313-320.	1.2	136
15	DualSPHysics: from fluid dynamics to multiphysics problems. Computational Particle Mechanics, 2022, 9, 867-895.	3.0	131
16	Optimization strategies for CPU and GPU implementations of a smoothed particle hydrodynamics method. Computer Physics Communications, 2013, 184, 617-627.	7.5	129
17	Numerical modelling of armour block sea breakwater with smoothed particle hydrodynamics. Computers and Structures, 2014, 130, 34-45.	4.4	125
18	Neighbour lists in smoothed particle hydrodynamics. International Journal for Numerical Methods in Fluids, 2011, 67, 2026-2042.	1.6	115

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19	Sensitivity of the WRF model wind simulation and wind energy production estimates to planetary boundary layer parameterizations for onshore and offshore areas in the Iberian Peninsula. Applied Energy, 2014, 135, 234-246.	10.1	115
20	SPHysics $\hat{a} \in \text{``development of a free-surface fluid solver } \hat{a} \in \text{``Part 2: Efficiency and test cases. Computers and Geosciences, 2012, 48, 300-307.}$	4.2	110
21	Has upwelling strengthened along worldwide coasts over 1982-2010?. Scientific Reports, 2015, 5, 10016.	3.3	109
22	Towards simulating floating offshore oscillating water column converters with Smoothed Particle Hydrodynamics. Coastal Engineering, 2017, 126, 11-26.	4.0	103
23	Comparative analysis of upwelling influence between the western and northern coast of the Iberian Peninsula. Continental Shelf Research, 2011, 31, 388-399.	1.8	100
24	Offshore wind energy resource simulation forced by different reanalyses: Comparison with observed data in the Iberian Peninsula. Applied Energy, 2014, 134, 57-64.	10.1	98
25	SPH–DCDEM model for arbitrary geometries in free surface solid–fluid flows. Computer Physics Communications, 2016, 202, 131-140.	7.5	98
26	SPH simulation of floating structures with moorings. Coastal Engineering, 2019, 153, 103560.	4.0	90
27	SPATIOTEMPORAL STRUCTURES IN DISCRETELY-COUPLED ARRAYS OF NONLINEAR CIRCUITS: A REVIEW. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1995, 05, 17-50.	1.7	83
28	3D SPH Simulation of large waves mitigation with a dike. Journal of Hydraulic Research/De Recherches Hydrauliques, 2007, 45, 631-642.	1.7	82
29	Comparison of reanalyzed, analyzed, satellite-retrieved and NWP modelled winds with buoy data along the Iberian Peninsula coast. Remote Sensing of Environment, 2014, 152, 480-492.	11.0	81
30	Coastal sea surface temperature warming trend along the continental part of the Atlantic Arc (1985–2005). Journal of Geophysical Research, 2008, 113, .	3.3	79
31	Smoothed Particle Hydrodynamics for coastal engineering problems. Computers and Structures, 2013, 120, 96-106.	4.4	77
32	The state of climate in NW Iberia. Climate Research, 2011, 48, 109-144.	1.1	77
33	Inter- and intra-annual analysis of the salinity and temperature evolution in the Galician RÃas Baixas–ocean boundary (northwest Spain). Journal of Geophysical Research, 2005, 110, .	3.3	75
34	On the suitability of offshore wind energy resource in the United States of America for the 21st century. Applied Energy, 2020, 262, 114537.	10.1	75
35	Brownian Motion of Spiral Waves Driven by Spatiotemporal Structured Noise. Physical Review Letters, 2000, 84, 2734-2737.	7.8	73
36	Spatiotemporal evolution of upwelling regime along the western coast of the Iberian Peninsula. Journal of Geophysical Research, 2008, 113 , .	3.3	71

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37	Recent and historical range shifts of two canopy-forming seaweeds in North Spain and the link with trends in sea surface temperature. Acta Oecologica, 2013, 51, 1-10.	1.1	69
38	Ekman transport along the Galician coast (northwest Spain) calculated from forecasted winds. Journal of Geophysical Research, 2006, 111 , .	3.3	66
39	A Smooth Particle Hydrodynamics discretization for the modelling of free surface flows and rigid body dynamics. International Journal for Numerical Methods in Fluids, 2015, 78, 581-593.	1.6	66
40	Differences in coastal and oceanic SST trends due to the strengthening of coastal upwelling along the Benguela current system. Continental Shelf Research, 2012, 34, 79-86.	1.8	65
41	An Accelerated Tool for Flood Modelling Based on Iber. Water (Switzerland), 2018, 10, 1459.	2.7	64
42	Wind and Tidal Influence on Water Circulation in a Galician Ria (NW Spain). Estuarine, Coastal and Shelf Science, 2000, 51, 161-176.	2.1	63
43	Offshore winds and wind energy production estimates derived from ASCAT, OSCAT, numerical weather prediction models and buoys – A comparative study for the Iberian Peninsula Atlantic coast. Renewable Energy, 2017, 102, 433-444.	8.9	63
44	Ocean surface wind simulation forced by different reanalyses: Comparison with observed data along the Iberian Peninsula coast. Ocean Modelling, 2012, 56, 31-42.	2.4	62
45	Wind energy resource over Europe under CMIP6 future climate projections: What changes from CMIP5 to CMIP6. Renewable and Sustainable Energy Reviews, 2021, 151, 111594.	16.4	61
46	Modified dynamic boundary conditions (mDBC) for general-purpose smoothed particle hydrodynamics (SPH): application to tank sloshing, dam break and fish pass problems. Computational Particle Mechanics, 2022, 9, 1-15.	3.0	59
47	Coastal warming and wind-driven upwelling: A global analysis. Science of the Total Environment, 2018, 639, 1501-1511.	8.0	57
48	Parametric resonance of a vortex in an active medium. Physical Review E, 1994, 50, 4258-4261.	2.1	56
49	Hydrographic characterization of a winter-upwelling event in the Ria of Pontevedra (NW Spain). Estuarine, Coastal and Shelf Science, 2003, 56, 869-876.	2.1	56
50	A two-dimensional particle tracking model for pollution dispersion in A Coruña and Vigo Rias (NW) Tj ETQq0 0 0 22, 167-177.	rgBT /Ove 0.7	erlock 10 Tf 5 55
51	Hydrography of the Pontevedra Ria: Intra-annual spatial and temporal variability in a Galician coastal system (NW Spain). Journal of Geophysical Research, 2001, 106, 19845-19857.	3.3	55
52	Differences in coastal and oceanic SST warming rates along the Canary upwelling ecosystem from 1982 to 2010. Continental Shelf Research, 2012, 47, 1-6.	1.8	53
53	Comparison of different wind products and buoy wind data with seasonality and interannual climate variability in the southern Bay of Biscay (2000–2009). Deep-Sea Research Part II: Topical Studies in Oceanography, 2014, 106, 38-48.	1.4	53
54	Spiral breakup induced by an electric current in a Belousov–Zhabotinsky medium. Chaos, 1994, 4, 519-524.	2.5	50

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55	Consequences of winter upwelling events on biogeochemical and phytoplankton patterns in a western Galician ria (NW Iberian peninsula). Estuarine, Coastal and Shelf Science, 2007, 73, 409-422.	2.1	50
56	Hybridization of the Wave Propagation Model SWASH and the Meshfree Particle Method SPH for Real Coastal Applications. Coastal Engineering Journal, 2015, 57, 1550024-1-1550024-34.	1.9	50
57	Influence of atmospheric modes on coastal upwelling along the western coast of the Iberian Peninsula, 1985 to 2005. Climate Research, 2008, 36, 169-179.	1.1	50
58	Evaluation of the Seasonal Variations in the Residual Circulation in the RıÌa of Vigo (NW Spain) by Means of a 3D Baroclinic Model. Estuarine, Coastal and Shelf Science, 1998, 47, 661-670.	2.1	48
59	Present warming within the context of cooling–warming cycles observed since 1854 in the Bay of Biscay. Continental Shelf Research, 2009, 29, 1053-1059.	1.8	48
60	Summer upwelling frequency along the western Cantabrian coast from 1967 to 2007. Journal of Marine Systems, 2010, 79, 218-226.	2.1	47
61	Combining offshore wind and solar photovoltaic energy to stabilize energy supply under climate change scenarios: A case study on the western Iberian Peninsula. Renewable and Sustainable Energy Reviews, 2022, 157, 112037.	16.4	47
62	On the accuracy of DualSPHysics to assess violent collisions with coastal structures. Computers and Fluids, 2019, 179, 604-612.	2.5	46
63	Efficiency and survivability analysis of a point-absorber wave energy converter using DualSPHysics. Renewable Energy, 2020, 162, 1763-1776.	8.9	46
64	Projections of wind energy resources in the Caribbean for the 21st century. Energy, 2019, 178, 356-367.	8.8	45
65	DualSPHysics: A numerical tool to simulate real breakwaters. Journal of Hydrodynamics, 2018, 30, 95-105.	3.2	44
66	Climate change impacts on the future offshore wind energy resource in China. Renewable Energy, 2021, 175, 731-747.	8.9	44
67	SPHysics-FUNWAVE hybrid model for coastal wave propagation. Journal of Hydraulic Research/De Recherches Hydrauliques, 2010, 48, 85-93.	1.7	43
68	Resolved Simulation of a Granular-Fluid Flow with a Coupled SPH-DCDEM Model. Journal of Hydraulic Engineering, 2017, 143, .	1.5	43
69	Reduced Nearshore Warming Associated With Eastern Boundary Upwelling Systems. Frontiers in Marine Science, 2019, 6, .	2.5	43
70	Upwelling along the western coast of the Iberian Peninsula: dependence of trends on fitting strategy. Climate Research, 2011, 48, 213-218.	1.1	43
71	Ekman transport along the Galician Coast (NW, Spain) calculated from QuikSCAT winds. Journal of Marine Systems, 2008, 72, 101-115.	2.1	41
72	A winter upwelling event in the Northern Galician Rias: Frequency and oceanographic implications. Estuarine, Coastal and Shelf Science, 2009, 82, 573-582.	2.1	41

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73	Analysis of the influence of river discharge and wind on the Ebro turbid plume using MODIS-Aqua and MODIS-Terra data. Journal of Marine Systems, 2015, 142, 40-46.	2.1	41
74	Comparison between CCMP, QuikSCAT and buoy winds along the Iberian Peninsula coast. Remote Sensing of Environment, 2013, 137, 173-183.	11.0	40
7 5	Negative estuarine circulation in the Ria of Pontevedra (NW Spain). Estuarine, Coastal and Shelf Science, 2004, 60, 301-312.	2.1	39
76	Foreword: SPH for free-surface flows. Journal of Hydraulic Research/De Recherches Hydrauliques, 2010, 48, 3-5.	1.7	39
77	NW Iberian Peninsula coastal upwelling future weakening: Competition between wind intensification and surface heating. Science of the Total Environment, 2020, 703, 134808.	8.0	39
78	Influence of teleconnection patterns on precipitation variability and on river flow regimes in the Miño River basin (NW Iberian Peninsula). Climate Research, 2006, 32, 63-73.	1.1	38
79	Mechanism of the electric-field-induced vortex drift in excitable media. Physical Review E, 1993, 48, R3232-R3235.	2.1	37
80	Spatioâ€ŧemporal Upwelling Trends along the Canary Upwelling System (1967–2006). Annals of the New York Academy of Sciences, 2008, 1146, 320-337.	3.8	37
81	Why coastal upwelling is expected to increase along the western Iberian Peninsula over the next century?. Science of the Total Environment, 2017, 592, 243-251.	8.0	37
82	Characterization of fall–winter upwelling recurrence along the Galician western coast (NW Spain) from 2000 to 2005: Dependence on atmospheric forcing. Journal of Marine Systems, 2008, 72, 145-158.	2.1	36
83	Changes in sea surface temperature seasonality in the Bay of Biscay over the last decades (1982–2014). Journal of Marine Systems, 2015, 150, 91-101.	2.1	36
84	On the accuracy of CORDEX RCMs to project future winds over the Iberian Peninsula and surrounding ocean. Applied Energy, 2018, 228, 289-300.	10.1	36
85	Hydrodynamics of river plume intrusion into an adjacent estuary: The Minho River and Ria de Vigo. Journal of Marine Systems, 2019, 189, 87-97.	2.1	35
86	Oceanographical patterns during a summer upwelling–downwelling event in the Northern Galician Rias: Comparison with the whole Ria system (NW of Iberian Peninsula). Continental Shelf Research, 2010, 30, 1362-1372.	1.8	34
87	Observation of a turbid plume using MODIS imagery: The case of Douro estuary (Portugal). Remote Sensing of Environment, 2014, 154, 127-138.	11.0	34
88	Combined Effects of the North Atlantic Oscillation and the Arctic Oscillation on Sea Surface Temperature in the Albor \tilde{A}_i n Sea. PLoS ONE, 2013, 8, e62201.	2.5	34
89	Hydrographic and atmospheric analysis of an autumnal upwelling event in the Ria of Vigo (NW Iberian) Tj ETQq1	1 0.78431 2:1	14 ggBT /Over
90	How will Somali coastal upwelling evolve under future warming scenarios?. Scientific Reports, 2016, 6, 30137.	3.3	32

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91	New insights into the Western Iberian Buoyant Plume: Interaction between the Douro and Minho River plumes under winter conditions. Progress in Oceanography, 2016, 141, 30-43.	3.2	32
92	Dependence of the water residence time in Ria of Pontevedra (NW Spain) on the seawater inflow and the river discharge. Estuarine, Coastal and Shelf Science, 2003, 58, 567-573.	2.1	31
93	Comparative analysis between operational weather prediction models and QuikSCAT wind data near the Galician coast. Journal of Marine Systems, 2008, 72, 256-270.	2.1	30
94	Coastal and oceanic SST variability along the western Iberian Peninsula. Continental Shelf Research, 2011, 31, 2012-2017.	1.8	29
95	An Unusual Two Layered Tidal Circulation Induced by Stratification and Wind in the Rıle of Pontevedra (NW Spain). Estuarine, Coastal and Shelf Science, 2001, 52, 555-563.	2.1	28
96	An overview of offshore wind energy resources in Europe under present and future climate. Annals of the New York Academy of Sciences, 2019, 1436, 70-97.	3.8	27
97	Ria–ocean exchange driven by tides in the Ria of Ferrol (NW Spain). Estuarine, Coastal and Shelf Science, 2004, 61, 15-24.	2.1	26
98	Modeling the Minho River plume intrusion into the Rias Baixas (NW Iberian Peninsula). Continental Shelf Research, 2014, 85, 30-41.	1.8	26
99	A numerical study of a taut-moored point-absorber wave energy converter with a linear power take-off system under extreme wave conditions. Applied Energy, 2022, 311, 118629.	10.1	25
100	Integration of UAV Photogrammetry and SPH Modelling of Fluids to Study Runoff on Real Terrains. PLoS ONE, 2014, 9, e111031.	2.5	24
101	Characterization of Iberian turbid plumes by means of synoptic patterns obtained through MODIS imagery. Journal of Sea Research, 2017, 126, 12-25.	1.6	24
102	Influence of Eastern Upwelling systems on marine heatwaves occurrence. Global and Planetary Change, 2021, 196, 103379.	3.5	24
103	Seasonal and interannual variability of the Douro turbid river plume, northwestern Iberian Peninsula. Remote Sensing of Environment, 2017, 194, 401-411.	11.0	23
104	Study of reentry initiation in coupled parallel fibers [cardiology]. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 1995, 42, 665-671.	0.1	22
105	Predictability of the spring rainfall in Northwestern Iberian Peninsula from sea surfaces temperature of ENSO areas. Climatic Change, 2011, 107, 329-341.	3.6	22
106	Assessment of Wind Pattern Accuracy from the QuikSCAT Satellite and the WRF Model along the Galician Coast (Northwest Iberian Peninsula). Monthly Weather Review, 2013, 141, 742-753.	1.4	22
107	Assessment of chlorophyll variability along the northwestern coast of Iberian Peninsula. Journal of Sea Research, 2014, 93, 2-11.	1.6	22
108	Quasi-static mooring solver implemented in SPH. Journal of Ocean Engineering and Marine Energy, 2016, 2, 381-396.	1.7	22

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109	A Delphi method to classify wave energy resource for the 21st century: Application to the NW Iberian Peninsula. Energy, 2021, 235, 121396.	8.8	22
110	Influence of Coastal Upwelling on SST Trends along the South Coast of Java. PLoS ONE, 2016, 11, e0162122.	2.5	22
111	Long-term vortex interaction in active media. Physical Review E, 1996, 54, 2999-3002.	2.1	21
112	Boundary-imposed spiral drift. Physical Review E, 1996, 53, 5480-5483.	2.1	21
113	Wind influence on water exchange between the ria of Ferrol (NW Spain) and the shelf. Estuarine, Coastal and Shelf Science, 2003, 56, 1055-1064.	2.1	21
114	Seasonality of coastal upwelling trends under future warming scenarios along the southern limit of the canary upwelling system. Progress in Oceanography, 2017, 153, 16-23.	3.2	21
115	Hydrographic behavior of the Galician Rias Baixas (NW Spain) under the spring intrusion of the Miño River. Journal of Marine Systems, 2006, 60, 144-152.	2.1	20
116	Atmospheric modes influence on Iberian Poleward Current variability. Continental Shelf Research, 2011, 31, 425-432.	1.8	20
117	Variability of Coastal and Ocean Water Temperature in the Upper 700 m along the Western Iberian Peninsula from 1975 to 2006. PLoS ONE, 2012, 7, e50666.	2.5	20
118	Influence of upwelling on SST trends in La Guajira system. Journal of Geophysical Research: Oceans, 2016, 121, 2469-2480.	2.6	20
119	Social-ecological vulnerability to climate change in small-scale fisheries managed under spatial property rights systems. Marine Policy, 2020, 121, 104192.	3.2	20
120	Smooth particle hydrodynamics simulations of long-duration violent three-dimensional sloshing in tanks. Ocean Engineering, 2021, 229, 108925.	4.3	20
121	Effects of heat waves on human mortality, Galicia, Spain. Climate Research, 2011, 48, 333-341.	1.1	20
122	Influence of the critical curvature on spiral initiation in an excitable medium. Physical Review E, 1994, 50, 4646-4649.	2.1	19
123	Towards an automatic early warning system of flood hazards based on precipitation forecast: the case of the Miño RiverÂ(NW Spain). Natural Hazards and Earth System Sciences, 2019, 19, 2583-2595.	3.6	19
124	Assessment of Hybrid Wind-Wave Energy Resource for the NW Coast of Iberian Peninsula in a Climate Change Context. Applied Sciences (Switzerland), 2020, 10, 7395.	2.5	19
125	Modelling the distribution of microplastics released by wastewater treatment plants in Ria de Vigo (NW Iberian Peninsula). Marine Pollution Bulletin, 2021, 166, 112227.	5.0	19
126	@sV-shaped stable nonspiral patterns. Physical Review E, 1995, 51, R845-R847.	2.1	18

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127	Drift of Interacting Asymmetrical Spiral Waves. Physical Review Letters, 1997, 78, 779-782.	7.8	18
128	Wave competition in excitable modulated media. Physical Review E, 1997, 56, 6298-6301.	2.1	18
129	Miño River dams discharge on neighbor Galician Rias Baixas (NW Iberian Peninsula): Hydrological, chemical and biological changes in water column. Estuarine, Coastal and Shelf Science, 2006, 70, 52-62.	2.1	18
130	Use of a probabilistic particle tracking model to simulate the Prestige oil spill. Journal of Marine Systems, 2008, 72, 159-166.	2.1	18
131	Modulation of sea surface temperature warming in the <scp>B</scp> ay of <scp>B</scp> iscay by <scp>L</scp> oire and <scp>G</scp> ironde <scp>R</scp> ivers. Journal of Geophysical Research: Oceans, 2016, 121, 966-979.	2.6	18
132	Differences in coastal and oceanic SST trends north of Yucatan Peninsula. Journal of Marine Systems, 2018, 182, 46-55.	2.1	18
133	Evaluating the Future Efficiency of Wave Energy Converters along the NW Coast of the Iberian Peninsula. Energies, 2020, 13, 3563.	3.1	18
134	Modelling a Heaving Point-Absorber with a Closed-Loop Control System Using the DualSPHysics Code. Energies, 2021, 14, 760.	3.1	18
135	Modeling salinity drop in estuarine areas under extreme precipitation events within a context of climate change: Effect on bivalve mortality in Galician RÃas Baixas. Science of the Total Environment, 2021, 790, 148147.	8.0	18
136	Influence of Canary upwelling system on coastal SST warming along the 21st century using CMIP6 GCMs. Global and Planetary Change, 2022, 208, 103692.	3.5	18
137	How can ocean warming at the NW Iberian Peninsula affect mussel aquaculture?. Science of the Total Environment, 2020, 709, 136117.	8.0	17
138	MIDAS: A New Integrated Flood Early Warning System for the Miño River. Water (Switzerland), 2020, 12, 2319.	2.7	17
139	General properties of the electric-field-induced vortex drift in excitable media. Chaos, Solitons and Fractals, 1996, 7, 585-595.	5.1	16
140	Influence of the Minho River plume on the Rias Baixas (NW of the Iberian Peninsula). Journal of Marine Systems, 2014, 139, 248-260.	2.1	16
141	A dipoleâ€like <scp>SST</scp> trend in the <scp>S</scp> omalia region during the monsoon season. Journal of Geophysical Research: Oceans, 2015, 120, 597-607.	2.6	16
142	Influence of main forcing affecting the Tagus turbid plume under high river discharges using MODIS imagery. PLoS ONE, 2017, 12, e0187036.	2.5	16
143	Experimental Study of a Moored Floating Oscillating Water Column Wave-Energy Converter and of a Moored Cubic Box. Energies, 2019, 12, 1834.	3.1	16
144	The impact of climate change on the geographical distribution of habitat-forming macroalgae in the RÃas Baixas. Marine Environmental Research, 2020, 161, 105074.	2.5	16

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145	Percolation thresholds in chemical disordered excitable media. Physical Review E, 1998, 58, R1183-R1186.	2.1	15
146	Upwelling influence on the number of extreme hot SST days along the Canary upwelling ecosystem. Journal of Geophysical Research: Oceans, 2014, 119, 3029-3040.	2.6	15
147	Smoothed particle hydrodynamics: Applications to migration of radionuclides in confined aqueous systems. Journal of Contaminant Hydrology, 2016, 187, 65-78.	3.3	15
148	Transient oceanic and tidal contributions to water exchange and residence times in a coastal upwelling system in the NE Atlantic: the Pontevedra Ria, Galicia. Marine Pollution Bulletin, 2004, 49, 235-248.	5 . O	14
149	A geometrical-kinematical approach to spiral wave formation: super-spiral waves. Physica D: Nonlinear Phenomena, 1993, 64, 420-430.	2.8	13
150	Assessing the response of exploited marine populations in a context of rapid climate change: the case of blackspot seabream from the Strait of Gibraltar. Animal Biodiversity and Conservation, 2014, 37, 35-47.	0.5	13
151	Analysis of two sources of variability of basin outflow hydrographs computed with the 2D shallow water model lber: Digital Terrain Model and unstructured mesh size. Journal of Hydrology, 2022, 612, 128182.	5 . 4	13
152	Relationship between monthly rainfall in northwest Iberian Peninsula and North Atlantic sea surface temperature. International Journal of Climatology, 2010, 30, 980-990.	3 . 5	12
153	Coastal processes in northwestern Iberia, Spain. Continental Shelf Research, 2011, 31, 367-375.	1.8	12
154	IberWQ: A GPU Accelerated Tool for 2D Water Quality Modeling in Rivers and Estuaries. Water (Switzerland), 2020, 12, 413.	2.7	12
155	Comparison between the role of discontinuities in cardiac conduction and in a one-dimensional hardware model. Physical Review E, 1999, 59, 5962-5969.	2.1	11
156	The influence of summer upwelling at the western boundary of the Cantabrian coast. Estuarine, Coastal and Shelf Science, 2012, 98, 138-144.	2.1	11
157	Unusual Circulation Patterns of the Rias Baixas Induced by Minho Freshwater Intrusion (NW of the) Tj ETQq1 10.	.784314 rş 2.5	gBT /Overloc
158	Outside the paradigm of upwelling rias in NW Iberian Peninsula: Biogeochemical and phytoplankton patterns of a non-upwelling ria. Estuarine, Coastal and Shelf Science, 2014, 138, 1-13.	2.1	11
159	Loire and Gironde turbid plumes: Characterization and influence on thermohaline properties. Journal of Sea Research, 2017, 130, 7-16.	1.6	11
160	Coastal upwelling trends under future warming scenarios from the <scp>CORDEX</scp> project along the Galician coast (<scp>NW</scp> Iberian Peninsula). International Journal of Climatology, 2017, 37, 3427-3438.	3.5	11
161	The Bay of Biscay as a trapping zone for exogenous plastics of different sizes. Journal of Sea Research, 2020, 163, 101929.	1.6	11
162	Unidirectional mechanism for reentrant activity generation in excitable media. Physical Review E, 2002, 66, 016215.	2.1	10

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163	Analysis of the hydrological safety of dams combining two numerical tools: Iber and DualSPHysics. Journal of Hydrodynamics, 2018, 30, 87-94.	3.2	10
164	Integrated High-resolution Numerical Model for the NW Iberian Peninsula Coast and Main Estuarine Systems. Journal of Coastal Research, 2018, 85, 66-70.	0.3	10
165	Sustainable resource management: water practice issues. Sustainable Water Resources Management, 2019, 5, 3-9.	2.1	10
166	Analysis of the effect of atmospheric oscillations on physical condition of pre–reproductive bluefin tuna from the Strait of Gibraltar. Animal Biodiversity and Conservation, 2013, 36, 225-233.	0.5	10
167	The Mathematics of Smoothed Particle Hydrodynamics (SPH) Consistency. Frontiers in Applied Mathematics and Statistics, 2021, 7, .	1.3	10
168	Harnessing of Different WECs to Harvest Wave Energy along the Galician Coast (NW Spain). Journal of Marine Science and Engineering, 2022, 10, 719.	2.6	10
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