Jean-Claude Dutay

List of Publications by Year
in descending order

46 papers	3,496 citations	185998 28 h-index	223531 46 g-index
77 all docs	77 docs citations	77 times ranked	4260 citing authors

#	Article	IF	Citations
1	Freshwater influx to the Eastern Mediterranean Sea from the melting of the Fennoscandian ice sheet during the last deglaciation. Scientific Reports, 2022, 12, 8466.	1.6	3
2	Global Ocean Sediment Composition and Burial Flux in the Deep Sea. Global Biogeochemical Cycles, 2021, 35, e2020GB006769.	1.9	46
3	Evaluating the impact of Mediterranean overflow on the large-scale Atlantic Ocean circulation using neodymium isotopic composition. Palaeogeography, Palaeoclimatology, Palaeoecology, 2021, 570, 110359.	1.0	5
4	Changes in rivers inputs during the last decades significantly impacted the biogeochemistry of the eastern Mediterranean basin: A modelling study. Progress in Oceanography, 2020, 181, 102242.	1.5	14
5	Modelling the impact of biogenic particle flux intensity and composition on sedimentary Pa/Th. Quaternary Science Reviews, 2020, 240, 106394.	1.4	5
6	Carbon isotopes and Paâ•Th response to forced circulation changes: a model perspective. Climate of the Past, 2020, 16, 867-883.	1.3	5
7	²³⁰Th Normalization: New Insights on an Essential Tool for Quantifying Sedimentary Fluxes in the Modern and Quaternary Ocean. Paleoceanography and Paleoclimatology, 2020, 35, e2019PA003820.	1.3	56
8	Development of a sequential tool, LMDZ-NEMO-med-V1, to conduct global-to-regional past climate simulation for the Mediterranean basin: an Early Holocene case study. Geoscientific Model Development, 2020, 13, 2337-2354.	1.3	2
9	Biogeochemical response of the Mediterranean Sea to the transient SRES-A2 climate change scenario. Biogeosciences, 2019, 16, 135-165.	1.3	36
10	Simulating the Occurrence of the Last Sapropel Event (S1): Mediterranean Basin Ocean Dynamics Simulations Using Nd Isotopic Composition Modeling. Paleoceanography and Paleoclimatology, 2019, 34, 237-251.	1.3	19
11	Modeling the impacts of atmospheric deposition of nitrogen and desert dust-derived phosphorus on nutrients and biological budgets of the Mediterranean Sea. Progress in Oceanography, 2018, 163, 21-39.	1.5	46
12	Modeling the biogeochemical impact of atmospheric phosphate deposition from desert dust and combustion sources to the Mediterranean Sea. Biogeosciences, 2018, 15, 2499-2524.	1.3	49
13	A global scavenging and circulation ocean model of thorium-230 and protactinium-231 with improved particle dynamics (NEMOâ€“ProThorPÂ0.1). Geoscientific Model Development, 2018, 11, 3537-3556.	1.3	22
14	High-resolution regional modelling of natural and anthropogenic radiocarbon in the Mediterranean Sea. Biogeosciences, 2017, 14, 1197-1213.	1.3	6
15	Manganese in the west Atlantic Ocean in the context of the first global ocean circulation model of manganese. Biogeosciences, 2017, 14, 1123-1152.	1.3	75
16	Biogeochemical protocols and diagnostics for the CMIP6 Ocean Model Intercomparison Project (OMIP). Geoscientific Model Development, 2017, 10, 2169-2199.	1.3	137
17	Variable reactivity of particulate organic matter in a global ocean biogeochemical model. Biogeosciences, 2017, 14, 2321-2341.	1.3	46
18	Hosing experiment using LMDZ-NEMOMED8Â: study of the last sapropel event in the Mediterranean Sea. Quaternaire, 2017, , 195-200.	0.1	1

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19	Hydrothermal impacts on trace element and isotope ocean biogeochemistry. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20160035.	1.6	59
20	High-resolution neodymium characterization along the Mediterranean margins and modelling of <i>Îµ</i>_{Nd} distribution in the Mediterranean basins. Biogeosciences, 2016, 13, 5259-5276.	1.3	23
21	Modelling of the anthropogenic tritium transient and its decay product helium-3 in the Mediterranean Sea using a high-resolution regional model. Ocean Science, 2015, 11, 323-342.	1.3	13
22	Simulated anthropogenic CO₂ storage and acidification of the Mediterranean Sea. Biogeosciences, 2015, 12, 781-802.	1.3	77
23	Simulation of the mantle and crustal helium isotope signature in the Mediterranean Sea using a high-resolution regional circulation model. Ocean Science, 2015, 11, 965-978.	1.3	5
24	Modelling the role of marine particle on large scale 231Pa, 230Th, Iron and Aluminium distributions. Progress in Oceanography, 2015, 133, 66-72.	1.5	12
25	New insights into the organic carbon export in the Mediterranean Sea from 3-D modeling. Biogeosciences, 2015, 12, 7025-7046.	1.3	42
26	On the effects of circulation, sediment resuspension and biological incorporation by diatoms in an ocean model of aluminium*. Biogeosciences, 2014, 11, 3757-3779.	1.3	29
27	Consequences of shoaling of the Central American Seaway determined from modeling Nd isotopes. Paleoceanography, 2014, 29, 176-189.	3.0	83
28	Aluminium in an ocean general circulation model compared with the West Atlantic Geotraces cruises. Journal of Marine Systems, 2013, 126, 3-23.	0.9	48
29	Model of the Regional Coupled Earth system (MORCE): Application to process and climate studies in vulnerable regions. Environmental Modelling and Software, 2012, 35, 1-18.	1.9	57
30	Modelling Nd-isotopes with a coarse resolution ocean circulation model: Sensitivities to model parameters and source/sink distributions. Geochimica Et Cosmochimica Acta, 2011, 75, 5927-5950.	1.6	136
31	Marine ecosystemsâ€™ responses to climatic and anthropogenic forcings in the Mediterranean. Progress in Oceanography, 2011, 91, 97-166.	1.5	385
32	Helium isotopic constraints on simulated ocean circulations: implications for abyssal theories. Environmental Fluid Mechanics, 2010, 10, 257-273.	0.7	11
33	Hydrothermal contribution to the oceanic dissolved iron inventory. Nature Geoscience, 2010, 3, 252-256.	5.4	353
34	Modeling the Nd isotopic composition in the North Atlantic basin using an eddy-permitting model. Ocean Science, 2010, 6, 789-797.	1.3	11
35	Reconstructing the Nd oceanic cycle using a coupled dynamical â€“ biogeochemical model. Biogeosciences, 2009, 6, 2829-2846.	1.3	185
36	Quantifying the roles of ocean circulation and biogeochemistry in governing ocean carbon-13 and atmospheric carbon dioxide at the last glacial maximum. Climate of the Past, 2009, 5, 695-706.	1.3	91

#	Article	IF	Citations
37	Influence of particle size and type on ²³¹Pa and ²³⁰Th simulation with a global coupled biogeochemicalâ€ocean general circulation model: A first approach. Geochemistry, Geophysics, Geosystems, 2009, 10, .	1.0	40
38	A modeling sensitivity study of the influence of the Atlantic meridional overturning circulation on neodymium isotopic composition at the Last Glacial Maximum. Climate of the Past, 2008, 4, 191-203.	1.3	30
39	Isotopic Nd compositions and concentrations of the lithogenic inputs into the ocean: A compilation, with an emphasis on the margins. Chemical Geology, 2007, 239, 156-164.	1.4	208
40	Modeling the neodymium isotopic composition with a global ocean circulation model. Chemical Geology, 2007, 239, 165-177.	1.4	113
41	Impact of circulation on export production, dissolved organic matter, and dissolved oxygen in the ocean: Results from Phase II of the Ocean Carbonâ€cycle Model Intercomparison Project (OCMIPâ€2). Global Biogeochemical Cycles, 2007, 21, .	1.9	211
42	Effects of mesoscale eddies on global ocean distributions of CFC-11, CO₂, and Î”¹⁴C. Ocean Science, 2007, 3, 461-482.	1.3	35
43	Evaluation of OCMIP-2 ocean models' deep circulation with mantle helium-3. Journal of Marine Systems, 2004, 48, 15-36.	0.9	46
44	Evaluating global ocean carbon models: The importance of realistic physics. Global Biogeochemical Cycles, 2004, 18, n/a-n/a.	1.9	210
45	Evaluation of ocean carbon cycle models with data-based metrics. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	168
46	Evaluation of ocean model ventilation with CFC-11: comparison of 13 global ocean models. Ocean Modelling, 2002, 4, 89-120.	1.0	192