Changsheng Chen

List of Publications by Year
in descending order

121 papers	6,507 citations	66315 42 h-index	71651 76 g-index
123 all docs	123 docs citations	123 times ranked	3878 citing authors

#	Article	IF	Citations
1	Remote silicate supply regulates spring phytoplankton bloom magnitude in the Gulf of Maine. Limnology and Oceanography Letters, 2022, 7, 277-285.	1.6	6
2	Modeling Atlantic sea scallop (<scp><i>Placopecten magellanicus</i></scp>) scope for growth on the Northeast U.S. Shelf. Fisheries Oceanography, 2022, 31, 271-290.	0.9	3
3	A Wet/Dry Point Treatment Method of FVCOM, Part I: Stability Experiments. Journal of Marine Science and Engineering, 2022, 10, 896.	1.2	4
4	Air-sea interaction processes during hurricane Sandy: Coupled WRF-FVCOM model simulations. Progress in Oceanography, 2022, 206, 102855.	1.5	7
5	A Wet/Dry Point Treatment Method of FVCOM, Part II: Application to the Okatee/Colleton River in South Carolina. Journal of Marine Science and Engineering, 2022, 10, 982.	1.2	5
6	Impacts of sea level rise on future storm-induced coastal inundations over massachusetts coast. Natural Hazards, 2021, 106, 375-399.	1.6	14
7	Observational and modeling studies of oceanic responses and feedbacks to typhoons Hato and Mangkhut over the northern shelf of the South China Sea. Progress in Oceanography, 2021, 191, 102507.	1.5	6
8	Slopeâ€‘Intensified Stormâ€‘Induced Nearâ€‘Inertial Oscillations in the South China Sea. Journal of Geophysical Research: Oceans, 2021, 126, e2020JC016713.	1.0	9
9	Spatially varying phytoplankton seasonality on the Northwest Atlantic Shelf: a model-based assessment of patterns, drivers, and implications. ICES Journal of Marine Science, 2021, 78, 1920-1934.	1.2	7
10	Impact of larval behaviors on dispersal and connectivity of sea scallop larvae over the northeast U.S. shelf. Progress in Oceanography, 2021, 195, 102604.	1.5	14
11	Impacts of fluvial flood on physical and biogeochemical environments in estuaryâ€"shelf continuum in the East China Sea. Journal of Hydrology, 2021, 598, 126441.	2.3	10
12	Impact of Vegetation on Lateral Exchanges in a Salt Marshâ€"Tidal Creek System. Journal of Geophysical Research F: Earth Surface, 2021, 126, e2020JF005856.	1.0	2
13	The Lagrangian-based Floating Macroalgal Growth and Drift Model (FMGDM v1.0): application to the Yellow Sea green tide. Geoscientific Model Development, 2021, 14, 6049-6070.	1.3	9
14	Wave-ice dynamical interaction: a numerical model and its application. Acta Oceanologica Sinica, 2021, 40, 129-137.	0.4	0
15	Influence of suspended sediment front on nutrients and phytoplankton dynamics off the Changjiang Estuary: A FVCOM-ERSEM coupled model experiment. Journal of Marine Systems, 2020, 204, 103292.	0.9	51
16	Applications of an unstructured grid surface wave model (FVCOM-SWAVE) to the Arctic Ocean: The interaction between ocean waves and sea ice. Ocean Modelling, 2020, 145, 101532.	1.0	18
17	Impacts of Oceanic Mixed Layer on Hurricanes: A Simulation Experiment With Hurricane Sandy. Journal of Geophysical Research: Oceans, 2020, 125, e2019JC015851.	1.0	5
18	Changes in sea ice and future accessibility along the Arctic Northeast Passage. Global and Planetary Change, 2020, 195, 103319.	1.6	39

#	ARTICLE	IF	CITATIONS
19	A FVCOM study of the potential coastal flooding in apponagansett bay and clarks cove, Dartmouth Town (MA). Natural Hazards, 2020, 103, 2787-2809.	1.6	7
20	Dynamic Response of the Fluid Mud to a Tropical Storm. Journal of Geophysical Research: Oceans, 2020, 125, e2019JC015419.	1.0	18
21	Interannual Variabilities of Nutrients and Phytoplankton off the Changjiang Estuary in Response to Changing River Inputs. Journal of Geophysical Research: Oceans, 2020, 125, no.	1.0	23
22	A view of physical mechanisms for transporting harmful algal blooms to Massachusetts Bay. Marine Pollution Bulletin, 2020, 154, 111048.	2.3	8
23	Seasonal and Interannual Variability of Bering Strait Throughflow from AO-FVCOM and Observation. Journal of Ocean University of China, 2019, 18, 615-625.	0.6	1
24	FVCOM one-way and two-way nesting using ESMF: Development and validation. Ocean Modelling, 2018, 124, 94-110.	1.0	13
25	Modeling North Atlantic Nor'easters With Modern Wave Forecast Models. Journal of Geophysical Research: Oceans, 2018, 123, 533-557.	1.0	14
26	Flow Regimes and Adjustment to Wind‐Driven Motions in Lake Pontchartrain Estuary: A Modeling Experiment Using FVCOM. Journal of Geophysical Research: Oceans, 2018, 123, 8460-8488.	1.0	19
27	Formation of Concentrated Benthic Suspension in a Time‐Dependent Salt Wedge Estuary. Journal of Geophysical Research: Oceans, 2018, 123, 8581-8607.	1.0	16
28	Physical control of the distributions of a key Arctic copepod in the Northeast Chukchi Sea. Deep-Sea Research Part II: Topical Studies in Oceanography, 2017, 144, 37-51.	0.6	6
29	Coastal amplification of supply and transport (CAST): a new hypothesis about the persistence of Calanus finmarchicus in the Gulf of Maine. ICES Journal of Marine Science, 2017, 74, 1865-1874.	1.2	21
30	Impacts of oceanographic factors on interannual variability of the winter-spring cohort of neon flying squid abundance in the Northwest Pacific Ocean. Acta Oceanologica Sinica, 2017, 36, 48-59.	0.4	9
31	Identification of persistent benthic assemblages in areas with different temperature variability patterns through broad-scale mapping. PLoS ONE, 2017, 12, e0177333.	1.1	3
32	Downwelling wind, tides, and estuarine plume dynamics. Journal of Geophysical Research: Oceans, 2016, 121, 4245-4263.	1.0	25
33	Seasonal and interannual variability of the Arctic sea ice: A comparison between AO-FVCOM and observations. Journal of Geophysical Research: Oceans, 2016, 121, 8320-8350.	1.0	19
34	Studies of the Canadian Arctic Archipelago water transport and its relationship to basin‐local forcings: Results from AO‐FVCOM. Journal of Geophysical Research: Oceans, 2016, 121, 4392-4415.	1.0	24
35	Surface circulation in Block Island Sound and adjacent coastal and shelf regions: A FVCOM-CODAR comparison. Progress in Oceanography, 2016, 143, 26-45.	1.5	22
36	Circulation in the Arctic Ocean: Results from a high-resolution coupled ice-sea nested Global-FVCOM and Arctic-FVCOM system. Progress in Oceanography, 2016, 141, 60-80.	1.5	52

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37	Estimation of critical shear stress for erosion in the <scp>C</scp>hangjiang <scp>E</scp>stuary: A synergy research of observation, <scp>GOCI</scp> sensing and modeling. Journal of Geophysical Research: Oceans, 2015, 120, 8439-8465.	1.0	52
38	Impact of multichannel river network on the plume dynamics in the <scp>P</scp>earl <scp>R</scp>iver estuary. Journal of Geophysical Research: Oceans, 2015, 120, 5766-5789.	1.0	33
39	Spatio-temporal patterns of stratification on the Northwest Atlantic shelf. Progress in Oceanography, 2015, 134, 123-137.	1.5	45
40	Low-salinity plume detachment under non-uniform summer wind off the Changjiang Estuary. Estuarine, Coastal and Shelf Science, 2015, 156, 61-70.	0.9	18
41	Model study of nutrient and phytoplankton dynamics in the Gulf of Maine: patterns and drivers for seasonal and interannual variability. ICES Journal of Marine Science, 2015, 72, 388-402.	1.2	26
42	Observed wintertime tidal and subtidal currents over the continental shelf in the northern <scp>S</scp>outh <scp>C</scp>hina <scp>S</scp>ea. Journal of Geophysical Research: Oceans, 2014, 119, 5289-5310.	1.0	14
43	Dispersal and survival of chub mackerel (Scomber Japonicus) larvae in the East China Sea. Ecological Modelling, 2014, 283, 70-84.	1.2	19
44	The March 11, 2011 Tǒhoku M9.0 earthquake-induced tsunami and coastal inundation along the Japanese coast: A model assessment. Progress in Oceanography, 2014, 123, 84-104.	1.5	27
45	Process modeling studies of physical mechanisms of the formation of an anticyclonic eddy in the central Red Sea. Journal of Geophysical Research: Oceans, 2014, 119, 1445-1464.	1.0	28
46	An integrated East China Sea–Changjiang Estuary model system with aim at resolving multi-scale regional–shelf–estuarine dynamics. Ocean Dynamics, 2013, 63, 881-900.	0.9	58
47	Extratropical storm inundation testbed: Intermodel comparisons in Scituate, Massachusetts. Journal of Geophysical Research: Oceans, 2013, 118, 5054-5073.	1.0	55
48	Impact of current–wave interaction on storm surge simulation: A case study for Hurricane Bob. Journal of Geophysical Research: Oceans, 2013, 118, 2685-2701.	1.0	57
49	Observational and model studies of the circulation in the Gulf of Tonkin, South China Sea. Journal of Geophysical Research: Oceans, 2013, 118, 6495-6510.	1.0	32
50	Reply to comment on "Current separation and upwelling over the southeast shelf of Vietnam in the South China Sea". Journal of Geophysical Research: Oceans, 2013, 118, 1624-1624.	1.0	2
51	Coastal flooding in Scituate (MA): A FVCOM study of the 27 December 2010 nor'easter. Journal of Geophysical Research: Oceans, 2013, 118, 6030-6045.	1.0	66
52	Current separation and upwelling over the southeast shelf of Vietnam in the South China Sea. Journal of Geophysical Research, 2012, 117, .	3.3	48
53	A dike–groyne algorithm in a terrain-following coordinate ocean model (FVCOM): Development, validation and application. Ocean Modelling, 2012, 47, 26-40.	1.0	43
54	Observing system simulation experiments of dissolved oxygen monitoring in Massachusetts Bay. Journal of Geophysical Research, 2012, 117, .	3.3	19

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55	Summertime primary production in northwest South China Sea: Interaction of coastal eddy, upwelling and biological processes. Continental Shelf Research, 2012, 48, 110-121.	0.9	53
56	Life history and biogeography of Calanus copepods in the Arctic Ocean: An individual-based modeling study. Progress in Oceanography, 2012, 96, 40-56.	1.5	81
57	Observing system simulation experiments with ensemble Kalman filters in Nantucket Sound, Massachusetts. Journal of Geophysical Research, 2011, 116, .	3.3	25
58	Summertime tidal flushing of Barataria Bay: Transports of water and suspended sediments. Journal of Geophysical Research, 2011, 116, .	3.3	30
59	An unstructured-grid, finite-volume sea ice model: Development, validation, and application. Journal of Geophysical Research, 2011, 116, .	3.3	39
60	Tidal dynamics in the Gulf of Maine and New England Shelf: An application of FVCOM. Journal of Geophysical Research, 2011, 116, .	3.3	86
61	Processes controlling retention of spring‐spawned Atlantic cod (*Gadus morhua*) in the western Gulf of Maine and their relationship to an index of recruitment success. Fisheries Oceanography, 2011, 20, 32-46.	0.9	55
62	A FVCOM-based unstructured grid wave, current, sediment transport model, I. Model description and validation. Journal of Ocean University of China, 2011, 10, 1-8.	0.6	59
63	Understanding climate impacts on recruitment and spatial dynamics of Atlantic cod in the Gulf of Maine: Integration of observations and modeling. Progress in Oceanography, 2010, 87, 251-263.	1.5	32
64	A nonhydrostatic version of FVCOM: 1. Validation experiments. Journal of Geophysical Research, 2010, 115, .	3.3	69
65	Wetland‐estuarine‐shelf interactions in the Plum Island Sound and Merrimack River in the Massachusetts coast. Journal of Geophysical Research, 2010, 115, .	3.3	46
66	A nonhydrostatic version of FVCOM: 2. Mechanistic study of tidally generated nonlinear internal waves in Massachusetts Bay. Journal of Geophysical Research, 2010, 115, .	3.3	36
67	Sensitivity analysis of sea scallop (*Placopecten magellanicus*) larvae trajectories to hydrodynamic model configuration on Georges Bank and adjacent coastal regions. Fisheries Oceanography, 2009, 18, 173-184.	0.9	14
68	An unstructured-grid finite-volume surface wave model (FVCOM-SWAVE): Implementation, validations and applications. Ocean Modelling, 2009, 28, 153-166.	1.0	128
69	Application and comparison of Kalman filters for coastal ocean problems: An experiment with FVCOM. Journal of Geophysical Research, 2009, 114, .	3.3	34
70	Saltwater intrusion into the Changjiang River: A model‐guided mechanism study. Journal of Geophysical Research, 2009, 114, .	3.3	131
71	A new high‐resolution unstructured grid finite volume Arctic Ocean model (AO‐FVCOM): An application for tidal studies. Journal of Geophysical Research, 2009, 114, .	3.3	70
72	Critical Issues for Circulation Modeling of Narragansett Bay and Mount Hope Bay. , 2008, , 281-300.		3

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73	A numerical study of tidal asymmetry in Okatee Creek, South Carolina. Estuarine, Coastal and Shelf Science, 2008, 78, 190-202.	0.9	60
74	Influence of local and external processes on the annual nitrogen cycle and primary productivity on Georges Bank: A 3-D biologicalâ€"physical modeling study. Journal of Marine Systems, 2008, 73, 31-47.	0.9	51
75	Tidal pumping and nutrient fluxes on Georges Bank: A process-oriented modeling study. Journal of Marine Systems, 2008, 74, 528-544.	0.9	34
76	Physical mechanisms for the offshore detachment of the Changjiang Diluted Water in the East China Sea. Journal of Geophysical Research, 2008, 113, .	3.3	104
77	A modelâ€dye comparison experiment in the tidal mixing front zone on the southern flank of Georges Bank. Journal of Geophysical Research, 2008, 113, .	3.3	20
78	Complexity of the flooding/drying process in an estuarine tidalâ€creek saltâ€marsh system: An application of FVCOM. Journal of Geophysical Research, 2008, 113, .	3.3	79
79	FVCOM validation experiments: Comparisons with ROMS for three idealized barotropic test problems. Journal of Geophysical Research, 2008, 113, .	3.3	64
80	Modeling the influence of low-salinity water inflow on winter-spring phytoplankton dynamics in the Nova Scotian Shelfâ€"Gulf of Maine region. Journal of Plankton Research, 2008, 30, 1399-1416.	0.8	50
81	A finite volume numerical approach for coastal ocean circulation studies: Comparisons with finite difference models. Journal of Geophysical Research, 2007, 112, .	3.3	202
82	Influence of model geometrical fitting and turbulence parameterization on phytoplankton simulation in the Gulf of Maine. Deep-Sea Research Part II: Topical Studies in Oceanography, 2006, 53, 2808-2832.	0.6	11
83	Spring phytoplankton bloom and associated lower trophic level food web dynamics on Georges Bank: 1-D and 2-D model studies. Deep-Sea Research Part II: Topical Studies in Oceanography, 2006, 53, 2656-2683.	0.6	19
84	An Unstructured Grid, Finite-Volume Coastal Ocean Model (FVCOM) System. Oceanography, 2006, 19, 78-89.	0.5	487
85	Using MM5 to Hindcast the Ocean Surface Forcing Fields over the Gulf of Maine and Georges Bank Region*. Journal of Atmospheric and Oceanic Technology, 2005, 22, 131-145.	0.5	39
86	Impacts of suspended sediment on the ecosystem in Lake Michigan: A comparison between the 1998 and 1999 plume events. Journal of Geophysical Research, 2004, 109, .	3.3	32
87	A modeling study of benthic detritus flux's impacts on heterotrophic processes in Lake Michigan. Journal of Geophysical Research, 2004, 109, .	3.3	4
88	Response of Lake Superior to mesoscale wind forcing: A comparison between currents driven by QuikSCAT and buoy winds. Journal of Geophysical Research, 2004, 109, .	3.3	14
89	Does the Taiwan warm current exist in winter?. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	79
90	A Non-orthogonal Primitive Equation Coastal Ocean Circulation Model: Application to Lake Superior. Journal of Great Lakes Research, 2004, 30, 41-54.	0.8	24

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91	A modeling study of the Satilla River estuary, Georgia. I: Flooding-drying process and water exchange over the salt marsh-estuary-shelf complex. Estuaries and Coasts, 2003, 26, 651-669.	1.7	89
92	A modeling study of the Satilla River estuary, Georgia. II: suspended sediment. Estuaries and Coasts, 2003, 26, 670-679.	1.7	17
93	Influence of diurnal heating on stratification and residual circulation of Georges Bank. Journal of Geophysical Research, 2003, 108, .	3.3	20
94	Physical-biological sources for dense algal blooms near the Changjiang River. Geophysical Research Letters, 2003, 30, n/a-n/a.	1.5	135
95	Wind-induced, cross-frontal exchange on Georges Bank: A mechanism for early summer on-bank biological particle transport. Journal of Geophysical Research, 2003, 108, .	3.3	10
96	Model study of the cross-frontal water exchange on Georges Bank: A three-dimensional Lagrangian experiment. Journal of Geophysical Research, 2003, 108, .	3.3	15
97	An Unstructured Grid, Finite-Volume, Three-Dimensional, Primitive Equations Ocean Model: Application to Coastal Ocean and Estuaries. Journal of Atmospheric and Oceanic Technology, 2003, 20, 159-186.	0.5	1,343
98	The Role of Qiongzhou Strait in the Seasonal Variation of the South China Sea Circulation. Journal of Physical Oceanography, 2002, 32, 103-121.	0.7	78
99	Cross-frontal transport along the Keweenaw coast in Lake Superior: a Lagrangian model study. Dynamics of Atmospheres and Oceans, 2002, 36, 83-102.	0.7	12
100	A model study of the coupled biological and physical dynamics in Lake Michigan. Ecological Modelling, 2002, 152, 145-168.	1.2	90
101	Influences of suspended sediments on the ecosystem in Lake Michigan: a 3-D coupled bio-physical modeling experiment. Ecological Modelling, 2002, 152, 169-190.	1.2	37
102	Title is missing!. Journal of Oceanography, 2002, 58, 403-420.	0.7	23
103	Effect of winter wind variability on plankton transport over Georges Bank. Deep-Sea Research Part II: Topical Studies in Oceanography, 2001, 48, 137-158.	0.6	21
104	A 3-D prognostic numerical model study of the Georges Bank ecosystem. Part I: physical model. Deep-Sea Research Part II: Topical Studies in Oceanography, 2001, 48, 419-456.	0.6	46
105	A 3-D prognostic numerical model study of the Georges bank ecosystem. Part II: biological–physical model. Deep-Sea Research Part II: Topical Studies in Oceanography, 2001, 48, 457-482.	0.6	63
106	Prognostic Modeling Studies of the Keweenaw Current in Lake Superior. Part II: Simulation. Journal of Physical Oceanography, 2001, 31, 396-410.	0.7	33
107	Prognostic Modeling Studies of the Keweenaw Current in Lake Superior. Part I: Formation and Evolution. Journal of Physical Oceanography, 2001, 31, 379-395.	0.7	78
108	A Modeling Study of the Episodic Cross-Frontal Water Transport over the Inner Shelf of the South Atlantic Bight. Journal of Physical Oceanography, 2000, 30, 1722-1742.	0.7	15

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109	Physical processes controlling the formation, evolution, and perturbation of the low-salinity front in the inner shelf off the southeastern United States: A modeling study. Journal of Geophysical Research, 1999, 104, 1259-1288.	3.3	35
110	Influences of physical processes on the ecosystem in Jiaozhou Bay: A coupled physical and biological model experiment. Journal of Geophysical Research, 1999, 104, 29925-29949.	3.3	49
111	Tidal mixing and cross-frontal particle exchange over a finite amplitude asymmetric bank: A model study with application to Georges Bank. Journal of Marine Research, 1998, 56, 1163-1201.	0.3	58
112	A numerical study of wind-induced, near-inertial oscillations over the Texas-Louisiana shelf. Journal of Geophysical Research, 1997, 102, 15583-15593.	3.3	31
113	Influences of river discharge on biological production in the inner shelf: A coupled biological and physical model of the Louisiana-Texas Shelf. Journal of Marine Research, 1997, 55, 293-320.	0.3	29
114	Plankton production in tidal fronts: A model of Georges Bank in summer. Journal of Marine Research, 1996, 54, 631-651.	0.3	116
115	Near-inertial oscillations over the Texas-Louisiana shelf. Journal of Geophysical Research, 1996, 101, 3509-3524.	3.3	71
116	A Numerical Study of Stratified Tidal Rectification over Finite-Amplitude Banks. Part I: Symmetric Banks. Journal of Physical Oceanography, 1995, 25, 2090-2110.	0.7	107
117	A Numerical Study of Stratified Tidal Rectification over Finite-Amplitude Banks. Part II: Georges Bank. Journal of Physical Oceanography, 1995, 25, 2111-2128.	0.7	72
118	Variability of water properties in late spring in the northern Great South Channel. Continental Shelf Research, 1995, 15, 415-431.	0.9	24
119	Variability of currents in late spring in the northern Great South Channel. Continental Shelf Research, 1995, 15, 451-473.	0.9	30
120	Comparison of winter and summer hydrographic observations in the Yellow and East China Seas and adjacent Kuroshio during 1986. Continental Shelf Research, 1994, 14, 909-929.	0.9	185
121	The structure of the Kuroshio southwest of Kyushu: velocity, transport and potential vorticity fields. Deep-sea Research Part A, Oceanographic Research Papers, 1992, 39, 245-268.	1.6	43