Francesco Fedele

List of Publications by Year
in descending order

86 papers	1,999 citations	304602 22 h-index	254106 43 g-index
86 all docs	86 docs citations	86 times ranked	1009 citing authors

#	Article	IF	Citations
1	Wave-height distributions and nonlinear effects. Ocean Engineering, 2007, 34, 1631-1649.	1.9	206
2	Real world ocean rogue waves explained without the modulational instability. Scientific Reports, 2016, 6, 27715.	1.6	189
3	Defect modes in one-dimensional photonic lattices. Optics Letters, 2005, 30, 1506.	1.7	117
4	On nonlinear wave groups and crest statistics. Journal of Fluid Mechanics, 2009, 620, 221-239.	1.4	111
5	Offshore stereo measurements of gravity waves. Coastal Engineering, 2012, 64, 127-138.	1.7	102
6	Spaceâ€“time measurements of oceanic sea states. Ocean Modelling, 2013, 70, 103-115.	1.0	71
7	On a unified breaking onset threshold for gravity waves in deep and intermediate depth water. Journal of Fluid Mechanics, 2018, 841, 463-488.	1.4	71
8	Linking Reduced Breaking Crest Speeds to Unsteady Nonlinear Water Wave Group Behavior. Physical Review Letters, 2014, 112, 114502.	2.9	70
9	Weakly nonlinear statistics of high random waves. Physics of Fluids, 2005, 17, 026601.	1.6	68
10	On the kurtosis of deep-water gravity waves. Journal of Fluid Mechanics, 2015, 782, 25-36.	1.4	66
11	Rogue waves in oceanic turbulence. Physica D: Nonlinear Phenomena, 2008, 237, 2127-2131.	1.3	64
12	Coupled complex adjoint sensitivities for frequency-domain fluorescence tomography: theory and vectorized implementation. Journal of Computational Physics, 2003, 187, 597-619.	1.9	59
13	Spaceâ€“Time Extremes in Short-Crested Storm Seas. Journal of Physical Oceanography, 2012, 42, 1601-1615.	0.7	54
14	Nonlinear SchrÃ¶dinger invariants and wave statistics. Physics of Fluids, 2010, 22, .	1.6	52
15	A Variational Stereo Method for the Three-Dimensional Reconstruction of Ocean Waves. IEEE Transactions on Geoscience and Remote Sensing, 2011, 49, 4445-4457.	2.7	46
16	The sinking of the El Faro: predicting real world rogue waves during Hurricane Joaquin. Scientific Reports, 2017, 7, 11188.	1.6	46
17	Long-Term Statistics and Extreme Waves of Sea Storms. Journal of Physical Oceanography, 2010, 40, 1106-1117.	0.7	45
18	Wave climate of the Adriatic Sea: a future scenario simulation. Natural Hazards and Earth System Sciences, 2012, 12, 2065-2076.	1.5	45

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19	Properties of Defect Modes in One-Dimensional Optically Induced Photonic Lattices. Studies in Applied Mathematics, 2005, 115, 279-301.	1.1	40
20	A comparison of exact and approximate adjoint sensitivities in fluorescence tomography. IEEE Transactions on Medical Imaging, 2003, 22, 1215-1223.	5.4	31
21	Geometric numerical schemes for the KdV equation. Computational Mathematics and Mathematical Physics, 2013, 53, 221-236.	0.2	28
22	On certain properties of the compact Zakharov equation. Journal of Fluid Mechanics, 2014, 748, 692-711.	1.4	24
23	Large nearshore storm waves off the Irish coast. Scientific Reports, 2019, 9, 15406.	1.6	23
24	Geometric phases of water waves. Europhysics Letters, 2014, 107, 69001.	0.7	21
25	Fluorescence photon migration by the boundary element method. Journal of Computational Physics, 2005, 210, 109-132.	1.9	20
26	Revisiting the stability of pulsatile pipe flow. European Journal of Mechanics, B/Fluids, 2005, 24, 237-254.	1.2	19
27	Euler characteristics of oceanic sea states. Mathematics and Computers in Simulation, 2012, 82, 1102-1111.	2.4	19
28	Special solutions to a compact equation for deep-water gravity waves. Journal of Fluid Mechanics, 2012, 712, 646-660.	1.4	18
29	A family of narrow-band non-linear stochastic processes for the mechanics of sea waves. European Journal of Mechanics, B/Fluids, 2002, 21, 125-137.	1.2	16
30	Kinematics of fluid particles on the sea surface: Hamiltonian theory. Journal of Fluid Mechanics, 2016, 801, 260-288.	1.4	16
31	Expected Shape of Extreme Waves in Storm Seas. , 2007, , .		14
32	Wave Statistics and Spectra via a Variational Wave Acquisition Stereo System. , 2008, , .		13
33	Hamiltonian form and solitary waves of the spatial Dysthe equations. JETP Letters, 2012, 94, 840-844.	0.4	13
34	Symmetry reduction of turbulent pipe flows. Journal of Fluid Mechanics, 2015, 779, 390-410.	1.4	13
35	Interval-Based Approach for Uncertainty Propagation in Inverse Problems. Journal of Engineering Mechanics - ASCE, 2015, 141, .	1.6	13
36	Nonlinear Spaceâ€“Time Evolution of Wave Groups With a High Crest. Journal of Offshore Mechanics and Arctic Engineering, 2005, 127, 46-51.	0.6	12

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37	Extreme Events in Nonlinear Random Seas. Journal of Offshore Mechanics and Arctic Engineering, 2006, 128, 11-16.	0.6	12
38	Explaining extreme waves by a theory of stochastic wave groups. Computers and Structures, 2007, 85, 291-303.	2.4	12
39	Geometric Seismic-Wave Inversion by the Boundary Element Method. Bulletin of the Seismological Society of America, 2012, 102, 802-811.	1.1	12
40	Successive wave crests in Gaussian seas. Probabilistic Engineering Mechanics, 2005, 20, 355-363.	1.3	11
41	Solitary wave interaction in a compact equation for deep-water gravity waves. JETP Letters, 2012, 95, 622-625.	0.4	11
42	On wave groups in a Gaussian sea. Ocean Engineering, 2006, 33, 2225-2239.	1.9	8
43	Space-Time Waves and Spectra in the Northern Adriatic Sea via a Wave Acquisition Stereo System. , 2011, , .		8
44	Uncertainty Analysis of Static Plane Problems by Intervals. SAE International Journal of Materials and Manufacturing, 0, 8, 374-381.	0.3	7
45	Crest speeds of unsteady surface water waves. Journal of Fluid Mechanics, 2020, 899, .	1.4	7
46	The Equivalent Power Storm Model for Long-Term Predictions of Extreme Wave Events. , 2009, , .		6
47	Surface Waves in Laterally Heterogeneous Media. Journal of Engineering Mechanics - ASCE, 2013, 139, 1158-1165.	1.6	6
48	Variational Stereo Imaging of Oceanic Waves With Statistical Constraints. IEEE Transactions on Image Processing, 2013, 22, 4211-4223.	6.0	6
49	Are Rogue Waves Really Unexpected?. Journal of Physical Oceanography, 2016, 46, 1495-1508.	0.7	6
50	Travelling waves in axisymmetric pipe flows. Fluid Dynamics Research, 2012, 44, 045509.	0.6	5
51	On the persistence of breathers at deep water. JETP Letters, 2014, 98, 523-527.	0.4	5
52	Vortexons in axisymmetric Poiseuille pipe flows. Europhysics Letters, 2013, 101, 34003.	0.7	4
53	Interval Finite Element Analysis of Structural Dynamic Problems. SAE International Journal of Materials and Manufacturing, 0, 8, 382-389.	0.3	4
54	Some special solutions to the Hyperbolic NLS equation. Communications in Nonlinear Science and Numerical Simulation, 2018, 57, 202-220.	1.7	4

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55	Intensity and Duration of Sea Storms off the Californian Coast. , 2002, , 126.		3
56	Wave-Height Distributions and Nonlinear Effects. , 2006, , 1.		3
57	Envelope and Phase Statistics of Large Waves. , 2008, , .		3
58	Non-Linear Space-Time Evolution of Wave Groups With a High Crest. , 2003, , .		3
59	Two-Dimensional Seismic Wave Modeling and Inversion by the Boundary Element Method. , 2012, , .		2
60	Beyond Waves and Spectra: Euler Characteristics of Oceanic Sea States. , 2009, , .		2
61	Space-Time Extremes in Sea Storms. , 2011, , .		2
62	Weak Statistical Constraints for Variational Stereo Imaging of Oceanic Waves. Lecture Notes in Computer Science, 2012, , 520-531.	1.0	2
63	Multiphase groundwater flow and transport using a new localized collocation method (LOCOM). Developments in Water Science, 2002, , 241-248.	0.1	1
64	Single-degree of freedom Hermite collocation for multiphase flow and transport in porous media. International Journal for Numerical Methods in Fluids, 2004, 44, 1337-1354.	0.9	1
65	On the statistics of oceanic waves. International Journal of Reliability and Safety, 2009, 3, 258.	0.2	1
66	A Variational Wave Acquisition Stereo System for the 3-D Reconstruction of Oceanic Sea States. , 2011, , .		1
67	Interval-based Inverse Problems with Uncertainties. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1079-1084.	0.4	1
68	Camassaâ€“Holm equations and vortexons for axisymmetric pipe flows. Fluid Dynamics Research, 2014, 46, 015503.	0.6	1
69	Adjoint Active Surfaces for Localization and Imaging. IEEE Transactions on Image Processing, 2015, 24, 316-331.	6.0	1
70	Rogue Waves in Oceanic Turbulence. , 2008, , .		1
71	Extreme Waves of Sea Storms. , 2010, , .		1
72	Defect Modes in One-dimensional Optically-induced Photonic Lattices. , 2005, , .		1

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73	Localized-adjoint-finite-element-method for sub-grid stabilization of convection-dominated transport on a triangular mesh. Developments in Water Science, 2002, , 389-396.	0.1	0
74	On the Linear Stability of Weakly Rarefied Flows in Microchannels. , 2005, , .		0
75	Camassaâ€“Holm Type Equations for Axisymmetric Poiseuille Pipe Flows. Procedia IUTAM, 2013, 9, 16-24.	1.2	0
76	Two Variational Stereo Methods for Space-Time Measurements of Ocean Waves. , 2013, , .		0
77	Joint 4-D Variational Stereo Reconstruction and Camera Calibration Refinement for Oceanic Sea State Measurements. , 2014, , .		0
78	Interval Finite Element Approach for Modal Analysis of Linear Elastic Structures Under Uncertainty. Conference Proceedings of the Society for Experimental Mechanics, 2016, , 143-150.	0.3	0
79	Structural dynamic problems in time domain under uncertainty: an interval finite element approach. International Journal of Reliability and Safety, 2018, 12, 122.	0.2	0
80	Boundary Element Solution of the Coupled Fluorescence Diffusion Equations. , 2004, , .		0
81	Observation of Defect Modes in Optically-induced Photonic Lattices. , 2005, , .		0
82	Extreme Waves and Stochastic Wave Groups. , 2006, , .		0
83	Transport, Growth, and Stability of Disturbances in Weakly Rarefied Channel Flows. Journal of Computational and Theoretical Nanoscience, 2006, 3, 497-505.	0.4	0
84	Nonlinear Wave Statistics. , 2010, , .		0
85	Improving 3-D Variational Stereo Reconstruction of Oceanic Sea States by Camera Calibration Refinement. , 2013, , .		0
86	On the Momentary Stability of the Laminar Boundary Layer Beneath a Stokes Wave. Water Waves, 0, , .	0.3	0