

Karsten Trulsen

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3865775/publications.pdf>

Version: 2024-02-01

52
papers

2,772
citations

293460

24
h-index

263392

45
g-index

56
all docs

56
docs citations

56
times ranked

972
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Extreme wave statistics of surface elevation and velocity field of gravity waves over a two-dimensional bathymetry. <i>Journal of Fluid Mechanics</i> , 2022, 939, . | 1.4 | 10 |
| 2 | Variational Boussinesq model for kinematics calculation of surface gravity waves over bathymetry. <i>Wave Motion</i> , 2021, 100, 102665. | 1.0 | 8 |
| 3 | The deconvolution as a method to deal with gaps in ocean wave measurements. <i>Ocean Engineering</i> , 2021, 219, 108373. | 1.9 | 1 |
| 4 | Statistical properties of wave kinematics in long-crested irregular waves propagating over non-uniform bathymetry. <i>Physics of Fluids</i> , 2021, 33, . | 1.6 | 20 |
| 5 | Extreme wave statistics of long-crested irregular waves over a shoal. <i>Journal of Fluid Mechanics</i> , 2020, 882, . | 1.4 | 56 |
| 6 | Extreme Wave Statistics in Combined and Partitioned Windsea and Swell. <i>Water Waves</i> , 2020, 2, 169-184. | 0.3 | 14 |
| 7 | “Three Sisters” Measured As a Triple Rogue Wave Group. , 2019, , . | | 3 |
| 8 | Modulational Instability and Rogue Waves in Crossing Sea States. <i>Journal of Physical Oceanography</i> , 2018, 48, 1317-1331. | 0.7 | 36 |
| 9 | Rogue Waves in the Ocean, the Role of Modulational Instability, and Abrupt Changes of Environmental Conditions that Can Provoke Non Equilibrium Wave Dynamics. <i>Springer Oceanography</i> , 2018, , 239-247. | 0.2 | 15 |
| 10 | Consistency between Sea Surface Reconstructions from Nautical X-Band Radar Doppler and Amplitude Measurements. <i>Journal of Atmospheric and Oceanic Technology</i> , 2018, 35, 1201-1220. | 0.5 | 18 |
| 11 | Extreme wave statistics of counter-propagating, irregular, long-crested sea states. <i>Physics of Fluids</i> , 2018, 30, . | 1.6 | 15 |
| 12 | Bimodality of Directional Distributions in Ocean Wave Spectra: A Comparison of Data-Adaptive Estimation Techniques. <i>Journal of Atmospheric and Oceanic Technology</i> , 2018, 35, 365-384. | 0.5 | 6 |
| 13 | On dispersion of directional surface gravity waves. <i>Journal of Fluid Mechanics</i> , 2017, 812, 681-697. | 1.4 | 7 |
| 14 | Surface wave predictions in weakly nonlinear directional seas. <i>Applied Ocean Research</i> , 2017, 65, 79-89. | 1.8 | 30 |
| 15 | An operational wave monitoring system based on a Dopplerized marine radar. , 2017, , . | | 1 |
| 16 | Development of frequency-dependent ocean wave directional distributions. <i>Applied Ocean Research</i> , 2016, 59, 304-312. | 1.8 | 12 |
| 17 | Crossing sea state and rogue wave probability during the Prestige accident. <i>Journal of Geophysical Research: Oceans</i> , 2015, 120, 7113-7136. | 1.0 | 48 |
| 18 | Measurement of the dispersion relation for random surface gravity waves. <i>Journal of Fluid Mechanics</i> , 2015, 766, 326-336. | 1.4 | 20 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Freak waves in weakly nonlinear unidirectional wave trains over a sloping bottom in shallow water. <i>Physics of Fluids</i> , 2013, 25, . | 1.6 | 47 |
| 20 | Laboratory evidence of freak waves provoked by non-uniform bathymetry. <i>Physics of Fluids</i> , 2012, 24, . | 1.6 | 73 |
| 21 | Evolution of skewness and kurtosis of weakly nonlinear unidirectional waves over a sloping bottom. <i>Natural Hazards and Earth System Sciences</i> , 2012, 12, 631-638. | 1.5 | 58 |
| 22 | Fourth-order coupled nonlinear Schrödinger equations for gravity waves on deep water. <i>Physics of Fluids</i> , 2011, 23, . | 1.6 | 27 |
| 23 | Hamiltonian form of the modified nonlinear Schrödinger equation for gravity waves on arbitrary depth. <i>Journal of Fluid Mechanics</i> , 2011, 670, 404-426. | 1.4 | 66 |
| 24 | Evolution of weakly nonlinear random directional waves: laboratory experiments and numerical simulations. <i>Journal of Fluid Mechanics</i> , 2010, 664, 313-336. | 1.4 | 143 |
| 25 | Interpretations and observations of ocean wave spectra. <i>Ocean Dynamics</i> , 2010, 60, 973-991. | 0.9 | 33 |
| 26 | Can swell increase the number of freak waves in a wind sea?. <i>Journal of Fluid Mechanics</i> , 2010, 650, 57-79. | 1.4 | 26 |
| 27 | Statistical Properties of Directional Ocean Waves: The Role of the Modulational Instability in the Formation of Extreme Events. <i>Physical Review Letters</i> , 2009, 102, 114502. | 2.9 | 206 |
| 28 | Statistical properties of mechanically generated surface gravity waves: a laboratory experiment in a three-dimensional wave basin. <i>Journal of Fluid Mechanics</i> , 2009, 627, 235-257. | 1.4 | 170 |
| 29 | Freak wave statistics on collinear currents. <i>Journal of Fluid Mechanics</i> , 2009, 637, 267-284. | 1.4 | 61 |
| 30 | Influence of crest and group length on the occurrence of freak waves. <i>Journal of Fluid Mechanics</i> , 2007, 582, 463-472. | 1.4 | 116 |
| 31 | Weakly Nonlinear Sea Surface Waves – Freak Waves and Deterministic Forecasting. , 2007, , 191-209. | | 8 |
| 32 | Weakly nonlinear and stochastic properties of ocean wave fields. Application to an extreme wave event. , 2006, , 49-106. | | 12 |
| 33 | Probability distributions of surface gravity waves during spectral changes. <i>Journal of Fluid Mechanics</i> , 2005, 542, 195. | 1.4 | 237 |
| 34 | Spatial Extreme Value Analysis of Nonlinear Simulations of Random Surface Waves. , 2004, , 285. | | 26 |
| 35 | High-order evolution equation for nonlinear wave-packet propagation with surface tension accounting. <i>Comptes Rendus - Mecanique</i> , 2003, 331, 197-201. | 2.1 | 1 |
| 36 | Evolution of a narrow-band spectrum of random surface gravity waves. <i>Journal of Fluid Mechanics</i> , 2003, 478, 1-10. | 1.4 | 129 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Internal Tides in the Strait of Gibraltar. <i>Journal of Physical Oceanography</i> , 2002, 32, 3193-3206. | 0.7 | 61 |
| 38 | Wave Scattering Around a Vertical Cylinder: Fully Nonlinear Potential Flow Calculations Compared With Low Order Perturbation Results and Experiment. , 2002, , 359. | | 5 |
| 39 | The nonlinear Schrödinger method for water wave kinematics on finite depth. <i>Wave Motion</i> , 2001, 33, 379-395. | 1.0 | 10 |
| 40 | On weakly nonlinear modulation of waves on deep water. <i>Physics of Fluids</i> , 2000, 12, 2432. | 1.6 | 151 |
| 41 | Wave Kinematics Computed With the Nonlinear Schrödinger Method for Deep Water. <i>Journal of Offshore Mechanics and Arctic Engineering</i> , 1999, 121, 126-130. | 0.6 | 3 |
| 42 | Laboratory evidence of three-dimensional frequency downshift of waves in a long tank. <i>Physics of Fluids</i> , 1999, 11, 235-237. | 1.6 | 20 |
| 43 | Note on Breather Type Solutions of the NLS as Models for Freak-Waves. <i>Physica Scripta</i> , 1999, T82, 48. | 1.2 | 325 |
| 44 | Crest pairing predicted by modulation theory. <i>Journal of Geophysical Research</i> , 1998, 103, 3143-3147. | 3.3 | 9 |
| 45 | Effects of weak wind and damping on Wilton's ripples. <i>Journal of Fluid Mechanics</i> , 1997, 335, 141-163. | 1.4 | 7 |
| 46 | Frequency downshift in three-dimensional wave trains in a deep basin. <i>Journal of Fluid Mechanics</i> , 1997, 352, 359-373. | 1.4 | 72 |
| 47 | A modified nonlinear Schrödinger equation for broader bandwidth gravity waves on deep water. <i>Wave Motion</i> , 1996, 24, 281-289. | 1.0 | 255 |
| 48 | A Resonating Triad of Gravity-Capillary Waves on a Long Gravity Wave. <i>Fluid Mechanics and Its Applications</i> , 1996, , 165-176. | 0.1 | 2 |
| 49 | Modulation of three resonating gravity-capillary waves by a long gravity wave. <i>Journal of Fluid Mechanics</i> , 1995, 290, 345-376. | 1.4 | 15 |
| 50 | Nonlinear resonance of free surface waves in a current over a sinusoidal bottom: a numerical study. <i>Journal of Fluid Mechanics</i> , 1994, 279, 377-405. | 1.4 | 17 |
| 51 | Double reflection of capillary/gravity waves by a non-uniform current: a boundary-layer theory. <i>Journal of Fluid Mechanics</i> , 1993, 251, 239-271. | 1.4 | 36 |
| 52 | Frequency Down-Shift Through Self Modulation and Breaking. , 1990, , 561-572. | | 25 |