# Amin Chabchoub

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/9577903/publications.pdf

Version: 2024-02-01

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|---|---|---|---|
| 72 papers | 3,407 citations | 172386 29 h-index | 138417 58 g-index |
| 73 all docs | 73 docs citations | 73 times ranked | 1275 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Nonlinear wave evolution with data-driven breaking. Nature Communications, 2022, 13, 2343. | 5.8 | 31 |
| 2 | Galilean-transformed solitons and supercontinuum generation in dispersive media. Physica D: Nonlinear Phenomena, 2022, 439, 133342. | 1.3 | 2 |
| 3 | â€œExtraordinaryâ€•modulation instability in optics and hydrodynamics. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, . | 3.3 | 36 |
| 4 | Stabilization of Unsteady Nonlinear Waves by Phase-Space Manipulation. Physical Review Letters, 2021, 126, 174501. | 2.9 | 11 |
| 5 | Directional Coherent Wave Group From an Assimilated Non-linear Wavefield. Frontiers in Physics, 2021, 9, . | 1.0 | 4 |
| 6 | The Peregrine Breather on the Zero-Background Limit as the Two-Soliton Degenerate Solution: An Experimental Study. Frontiers in Physics, 2021, 9, . | 1.0 | 9 |
| 7 | Phase Evolution of the Time- and Space-Like Peregrine Breather in a Laboratory. Fluids, 2021, 6, 308. | 0.8 | 4 |
| 8 | Higher-order rogue wave solutions to the Kadomtsevâ€“Petviashvili 1 equation. Physica D: Nonlinear Phenomena, 2021, 426, 132990. | 1.3 | 32 |
| 9 | Experiments on uni-directional and nonlinear wave group shoaling. Ocean Dynamics, 2021, 71, 1105. | 0.9 | 8 |
| 10 | Editorial: Peregrine Soliton and Breathers in Wave Physics: Achievements and Perspectives. Frontiers in Physics, 2021, 9, . | 1.0 | 3 |
| 11 | Experimental Realization of Periodic Deep-Water Wave Envelopes with and without Dissipation. Water Waves, 2020, 2, 113-122. | 0.3 | 4 |
| 12 | Experimental reconstruction of extreme sea waves by time reversal principle. Journal of Fluid Mechanics, 2020, 884, . | 1.4 | 11 |
| 13 | Stabilization of uni-directional water wave trains over an uneven bottom. Nonlinear Dynamics, 2020, 101, 1131-1145. | 2.7 | 6 |
| 14 | Ghost Interaction of Breathers. Frontiers in Physics, 2020, 8, . | 1.0 | 5 |
| 15 | Observation of modulation instability and rogue breathers on stationary periodic waves. Physical Review Research, 2020, 2, . | 1.3 | 34 |
| 16 | Phase-suppressed hydrodynamics of solitons on constant-background plane wave. Physical Review Fluids, 2020, 5, . | 1.0 | 3 |
| 17 | Dissipative solitons in forced cyclic and symmetric structures. Mechanical Systems and Signal Processing, 2019, 117, 280-292. | 4.4 | 3 |
| 18 | Theoretical and Experimental Studies of Breather Wave Molecules. , 2019, , . | | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Hydrodynamic X Waves. Physical Review Letters, 2019, 123, 184501. | 2.9 | 7 |
| 20 | On the Asymmetric Spectral Broadening of a Hydrodynamic Modulated Wave Train in the Optical Regime. Fluids, 2019, 4, 84. | 0.8 | 5 |
| 21 | Drifting breathers and Fermiâ€“Pastaâ€“Ulam paradox for water waves. Wave Motion, 2019, 90, 168-174. | 1.0 | 17 |
| 22 | Directional soliton and breather beams. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 9759-9763. | 3.3 | 17 |
| 23 | Predicting ocean rogue waves from point measurements: An experimental study for unidirectional waves. Physical Review E, 2019, 99, 032201. | 0.8 | 21 |
| 24 | Breather Wave Molecules. Physical Review Letters, 2019, 122, 084101. | 2.9 | 100 |
| 25 | A Unifying Framework for Describing Rogue Waves. Physics Magazine, 2019, 12, . | 0.1 | 0 |
| 26 | Statistics of Extreme Waves in Coastal Waters: Large Scale Experiments and Advanced Numerical Simulations. Fluids, 2019, 4, 99. | 0.8 | 47 |
| 27 | Phase Evolution of Peregrine-Like Solitons in Nonlinear Fiber Optics. , 2019, , . | | 0 |
| 28 | Rogue waves and analogies in optics and oceanography. Nature Reviews Physics, 2019, 1, 675-689. | 11.9 | 215 |
| 29 | Phase evolution of Peregrine-like breathers in optics and hydrodynamics. Physical Review E, 2019, 99, 012207. | 0.8 | 35 |
| 30 | Breather Rogue Waves in Random Seas. Physical Review Applied, 2018, 9, . | 1.5 | 17 |
| 31 | An experimental comparison of velocities underneath focussed breaking waves. Ocean Engineering, 2018, 155, 201-210. | 1.9 | 39 |
| 32 | Dark solitons, modulation instability and breathers in a chain of weakly nonlinear oscillators with cyclic symmetry. Journal of Sound and Vibration, 2018, 413, 467-481. | 2.1 | 15 |
| 33 | Drifting Rogue Packets. , 2018, , . | | 0 |
| 34 | Phase Domain Walls in Weakly Nonlinear Deep Water Surface Gravity Waves. Physical Review Letters, 2018, 120, 224102. | 2.9 | 5 |
| 35 | Nonlinear spectral analysis of Peregrine solitons observed in optics and in hydrodynamic experiments. Physical Review E, 2018, 98, 022219. | 0.8 | 49 |
| 36 | Experiments on higher-order and degenerate Akhmediev breather-type rogue water waves. Journal of Ocean Engineering and Marine Energy, 2017, 3, 385-394. | 0.9 | 12 |

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|---|---|---|---|
| 37 | Nonconservative higher-order hydrodynamic modulation instability. Physical Review E, 2017, 96, 022219. | 0.8 | 26 |
| 38 | Spectral up- and downshifting of Akhmediev breathers under wind forcing. Physics of Fluids, 2017, 29, . | 1.6 | 26 |
| 39 | The Hydrodynamic Nonlinear SchrÃ¶dinger Equation: Space and Time. Fluids, 2016, 1, 23. | 0.8 | 41 |
| 40 | Chapter 12 Time Reversal of Linear and Nonlinear Water Waves. , 2016, , 401-436. | | 0 |
| 41 | The Velocity Field Underneath Linear and Nonlinear Breaking Rogue Waves. , 2016, , . | | 1 |
| 42 | Non-Gaussian properties of second-order wave orbital velocity. Coastal Engineering, 2016, 110, 42-49. | 1.7 | 11 |
| 43 | Hydrodynamic and Optical Waves: A Common Approach for Unidimensional Propagation. Lecture Notes in Physics, 2016, , 1-22. | 0.3 | 4 |
| 44 | Hydrodynamic Envelope Solitons and Breathers. Lecture Notes in Physics, 2016, , 55-87. | 0.3 | 3 |
| 45 | Experimental Observation and Theoretical Description of Multisoliton Fission in Shallow Water. Physical Review Letters, 2016, 117, 144102. | 2.9 | 51 |
| 46 | Tracking Breather Dynamics in Irregular Sea State Conditions. Physical Review Letters, 2016, 117, 144103. | 2.9 | 59 |
| 47 | Modulation Instability and Phase-Shifted Fermi-Pasta-Ulam Recurrence. Scientific Reports, 2016, 6, 28516. | 1.6 | 112 |
| 48 | Modulation Instability and Extreme Events Beyond Initial Three Wave Systems. , 2016, , . | | 1 |
| 49 | Time-reversal of nonlinear waves: Applicability and limitations. Physical Review Fluids, 2016, 1, . | 1.0 | 15 |
| 50 | 3D Stereo Imaging of Abnormal Waves in a Wave Basin. , 2015, , . | | 7 |
| 51 | Superregular Breathers in Optics and Hydrodynamics: Omnipresent Modulation Instability beyond Simple Periodicity. Physical Review X, 2015, 5, . | 2.8 | 91 |
| 52 | The nonlinear SchrÃ¶dinger equation and the propagation of weakly nonlinear waves in optical fibers and on the water surface. Annals of Physics, 2015, 361, 490-500. | 1.0 | 75 |
| 53 | Initial wave breaking dynamics of Peregrine-type rogue waves: A numerical and experimental study. European Journal of Mechanics, B/Fluids, 2015, 49, 71-76. | 1.2 | 42 |
| 54 | Gray solitons on the surface of water. Physical Review E, 2014, 89, 011002. | 0.8 | 16 |

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|---|---|---|---|
| 55 | Two-stage linear-nonlinear shaping of an optical frequency comb as rogue nonlinear-SchrÃ¶dinger-equation-solution generator. Physical Review A, 2014, 89, . | 1.0 | 47 |
| 56 | Theoretical and experimental evidence of non-symmetric doubly localized rogue waves. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2014, 470, 20140318. | 1.0 | 50 |
| 57 | Hydrodynamics of periodic breathers. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20140005. | 1.6 | 63 |
| 58 | Time-Reversal Generation of Rogue Waves. Physical Review Letters, 2014, 112, 124101. | 2.9 | 87 |
| 59 | Dynamics of Unstable Stokes Waves: A Numerical and Experimental Study. , 2014, , . | | 0 |
| 60 | Super-rogue waves in simulations based on weakly nonlinear and fully nonlinear hydrodynamic equations. Physical Review E, 2013, 88, 012909. | 0.8 | 65 |
| 61 | Hydrodynamic Supercontinuum. Physical Review Letters, 2013, 111, 054104. | 2.9 | 57 |
| 62 | Experiments on wind-perturbed rogue wave hydrodynamics using the Peregrine breather model. Physics of Fluids, 2013, 25, . | 1.6 | 59 |
| 63 | Observation of rogue wave triplets in water waves. Physics Letters, Section A: General, Atomic and Solid State Physics, 2013, 377, 2590-2593. | 0.9 | 64 |
| 64 | Deep-Water Waves: on the Nonlinear SchrÃ¶dinger Equation and its Solutions. Journal of Theoretical and Applied Mechanics (Bulgaria), 2013, 43, . | 0.6 | 10 |
| 65 | Experimental Observation of Dark Solitons on the Surface of Water. Physical Review Letters, 2013, 110, 124101. | 2.9 | 87 |
| 66 | Experimental study of spatiotemporally localized surface gravity water waves. Physical Review E, 2012, 86, 016311. | 0.8 | 60 |
| 67 | Super Rogue Waves: Observation of a Higher-Order Breather in Water Waves. Physical Review X, 2012, 2, . | 2.8 | 199 |
| 68 | Observation of a hierarchy of up to fifth-order rogue waves in a water tank. Physical Review E, 2012, 86, 056601. | 0.8 | 172 |
| 69 | Spectral properties of the Peregrine soliton observed in a water wave tank. Journal of Geophysical Research, 2012, 117, . | 3.3 | 18 |
| 70 | Observation of rogue wave holes in a water wave tank. Journal of Geophysical Research, 2012, 117, . | 3.3 | 21 |
| 71 | Rogue Wave Observation in a Water Wave Tank. Physical Review Letters, 2011, 106, 204502. | 2.9 | 960 |
| 72 | Short-Term Prediction of the Sea State Dynamics. Proceedings in Applied Mathematics and Mechanics, 2011, 11, 699-700. | 0.2 | 0 |