# Hua Xia

List of Publications by Year
in descending order



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|---|---|---|---|
| 64 papers | 1,903 citations | 293460 24 h-index | 274796 44 g-index |
| 66 all docs | 66 docs citations | 66 times ranked | 1441 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Field theory spin and momentum in water waves. Science Advances, 2022, 8, eabm1295. | 4.7 | 25 |
| 2 | Fluctuation-Induced Interaction in Turbulent Flows. Physical Review Letters, 2022, 128, 024503. | 2.9 | 5 |
| 3 | Rolling spinners on the water surface. Science Advances, 2021, 7, . | 4.7 | 4 |
| 4 | Surface waves control bacterial attachment and formation of biofilms in thin layers. Science Advances, 2020, 6, eaaz9386. | 4.7 | 18 |
| 5 | Nonequilibrium Thermodynamics of Turbulence-Driven Rotors. Physical Review Letters, 2020, 124, 254501. | 2.9 | 6 |
| 6 | Diffusion of ellipsoids in laboratory two-dimensional turbulent flow. Physics of Fluids, 2019, 31, . | 1.6 | 3 |
| 7 | Generation of Vortex Lattices at the Liquidâ€“Gas Interface Using Rotating Surface Waves. Fluids, 2019, 4, 74. | 0.8 | 2 |
| 8 | Tunable diffusion in wave-driven two-dimensional turbulence. Journal of Fluid Mechanics, 2019, 865, 811-830. | 1.4 | 12 |
| 9 | Local anisotropy of laboratory two-dimensional turbulence affects pair dispersion. Physics of Fluids, 2019, 31, 025111. | 1.6 | 7 |
| 10 | Confinement of surface spinners in liquid metamaterials. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 25424-25429. | 3.3 | 6 |
| 11 | Passive propulsion in turbulent flows. Physical Review Fluids, 2019, 4, . | 1.0 | 8 |
| 12 | Extreme concentration fluctuations due to local reversibility of mixing in turbulent flows. Modern Physics Letters B, 2018, 32, 1840028. | 1.0 | 1 |
| 13 | Rectification of chaotic fluid motion in two-dimensional turbulence. Physical Review Fluids, 2018, 3, . | 1.0 | 14 |
| 14 | Wave-based liquid-interface metamaterials. Nature Communications, 2017, 8, 14325. | 5.8 | 50 |
| 15 | Two-dimensional turbulence in three-dimensional flows. Physics of Fluids, 2017, 29, . | 1.6 | 33 |
| 16 | WAVE-GENERATED FLOWS ON THE WATER SURFACE. International Journal of Modern Physics Conference Series, 2016, 42, 1660179. | 0.7 | 0 |
| 17 | Braid Entropy of Two-Dimensional Turbulence. Scientific Reports, 2016, 5, 18564. | 1.6 | 13 |
| 18 | SIMULTANEOUS OBSERVATION OF ENERGY AND ENSTROPHY CASCADES IN THIN-LAYER TURBULENCE. International Journal of Modern Physics Conference Series, 2016, 42, 1660185. | 0.7 | 1 |

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|---|---|---|---|
| 19 | Inhibition of wave-driven two-dimensional turbulence by viscoelastic films of proteins. Physical Review E, 2015, 92, 023027. | 0.8 | 11 |
| 20 | Wave-particle interaction in the Faraday waves. European Physical Journal E, 2015, 38, 106. | 0.7 | 13 |
| 21 | LAGRANGIAN CORRELATION AND SPECTRA IN 2D TURBULENCE. International Journal of Modern Physics Conference Series, 2014, 34, 1460378. | 0.7 | 1 |
| 22 | TURBULENCE DRIVEN BY FARADAY SURFACE WAVES. International Journal of Modern Physics Conference Series, 2014, 34, 1460379. | 0.7 | 2 |
| 23 | Taylor Particle Dispersion during Transition to Fully Developed Two-Dimensional Turbulence. Physical Review Letters, 2014, 112, 104501. | 2.9 | 21 |
| 24 | Flightâ€“crash events in turbulence. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 7558-7563. | 3.3 | 72 |
| 25 | Three-Dimensional Fluid Motion in Faraday Waves: Creation of Vorticity and Generation of Two-Dimensional Turbulence. Physical Review X, 2014, 4, . | 2.8 | 35 |
| 26 | Generation and reversal of surface flows by propagating waves. Nature Physics, 2014, 10, 658-663. | 6.5 | 44 |
| 27 | Inverse Energy Cascade and Emergence of Large Coherent Vortices in Turbulence Driven by Faraday Waves. Physical Review Letters, 2013, 110, 194501. | 2.9 | 74 |
| 28 | Lagrangian scale of particle dispersion in turbulence. Nature Communications, 2013, 4, 2013. | 5.8 | 47 |
| 29 | Propagating solitons generated by localized perturbations on the surface of deep water. Physical Review E, 2012, 85, 026313. | 0.8 | 5 |
| 30 | Parametrically Excited Water Surface Ripples as Ensembles of Oscillons. Physical Review Letters, 2012, 108, 034502. | 2.9 | 43 |
| 31 | STRUCTURE FORMATION IN SPECTRALLY CONDENSED TURBULENCE. International Journal of Modern Physics Conference Series, 2012, 19, 257-261. | 0.7 | 1 |
| 32 | TURBULENCE IN THICK LAYERS. International Journal of Modern Physics Conference Series, 2012, 19, 390-395. | 0.7 | 0 |
| 33 | Oscillon Dynamics and Rogue Wave Generation in Faraday Surface Ripples. Physical Review Letters, 2012, 109, 114502. | 2.9 | 48 |
| 34 | Robust inverse energy cascade and turbulence structure in three-dimensional layers of fluid. Physics of Fluids, 2011, 23, . | 1.6 | 31 |
| 35 | Upscale energy transfer in thick turbulent fluidÂlayers. Nature Physics, 2011, 7, 321-324. | 6.5 | 139 |
| 36 | Turbulence in fluid layers. Journal of Physics: Conference Series, 2011, 318, 012001. | 0.3 | 2 |

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|---|---|---|---|
| 37 | Modulation instability and capillary wave turbulence. Europhysics Letters, 2010, 91, 14002. | 0.7 | 38 |
| 38 | Capillary Rogue Waves. Physical Review Letters, 2010, 104, 104503. | 2.9 | 330 |
| 39 | Turbulence Decay Rate as a Measure of Flow Dimensionality. Physical Review Letters, 2010, 105, 264501. | 2.9 | 40 |
| 40 | Xiaet al.Reply:. Physical Review Letters, 2009, 102, . | 2.9 | 5 |
| 41 | Phase Randomization of Three-Wave Interactions in Capillary Waves. Physical Review Letters, 2009, 103, 064502. | 2.9 | 35 |
| 42 | Spectrally condensed turbulence in thin layers. Physics of Fluids, 2009, 21, . | 1.6 | 99 |
| 43 | Universality of Kolmogorov law in spectrally condensed turbulence in thin layers. Springer Proceedings in Physics, 2009, , 709-710. | 0.1 | 2 |
| 44 | Spectrally Condensed Fluid Turbulence and L-H Transitions in Plasma. Plasma and Fusion Research, 2009, 4, 012-012. | 0.3 | 3 |
| 45 | Observation of weak turbulence spectra of capillary waves. Springer Proceedings in Physics, 2009, , 725-728. | 0.1 | 0 |
| 46 | Turbulence-Condensate Interaction in Two Dimensions. Physical Review Letters, 2008, 101, 194504. | 2.9 | 69 |
| 47 | Suppression of Turbulence by Self-Generated and Imposed Mean Flows. Physical Review Letters, 2007, 99, 164502. | 2.9 | 54 |
| 48 | Experimental progress on zonal flow physics in toroidal plasmas. Nuclear Fusion, 2007, 47, S718-S726. | 1.6 | 109 |
| 49 | SPECTRAL TRANSFER ANALYSIS IN PLASMA TURBULENCE STUDIES. , 2007, , . | | 0 |
| 50 | Spectra of quasi-2D turbulence in plasma and fluid during spectral condensation. , 2007, , 274-276. | | 0 |
| 51 | Zonal flows, GAM, and radial electric field in the H-1 heliac. European Physical Journal D, 2006, 56, 1353-1359. | 0.4 | 1 |
| 52 | MeanEÃ—Bflows and GAM-like oscillations in the H-1 heliac. Plasma Physics and Controlled Fusion, 2006, 48, S17-S29. | 0.9 | 22 |
| 53 | Strong ExB Shear Flows in the Transport-Barrier Region inH-Mode Plasma. Physical Review Letters, 2006, 97, 255003. | 2.9 | 23 |
| 54 | Experimental Studies of Plasma Turbulence. World Scientific Lecture Notes in Complex Systems, 2006, , 233-279. | 0.1 | 0 |

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|---|---|---|---|
| 55 | Spectral condensation of turbulence in plasmas and fluids and its role in low-to-high phase transitions in toroidal plasma. Physical Review E, 2005, 71, 046409. | 0.8 | 70 |
| 56 | Fluctuations and stability of plasmas in the H-1NF heliac. Nuclear Fusion, 2004, 44, 279-286. | 1.6 | 17 |
| 57 | Spectral energy transfer and generation of turbulent structures in toroidal plasma. Physics of Plasmas, 2004, 11, 561-571. | 0.7 | 37 |
| 58 | Spectral Energy Transfer, Generation of Zonal Flows and Their Role in Confinement Transitions. Fusion Science and Technology, 2004, 46, 279-287. | 0.6 | 2 |
| 59 | Turbulent Transport Reduction and Randomization of Coherent Fluctuations by Zonal Flows in Toroidal Plasma. Physical Review Letters, 2003, 90, 125002. | 2.9 | 31 |
| 60 | Multichannel visible spectroscopy diagnostic for particle transport studies in the H-1 heliac. Review of Scientific Instruments, 2003, 74, 2048-2051. | 0.6 | 5 |
| 61 | Inverse Energy Cascade Correlated with Turbulent-Structure Generation in Toroidal Plasma. Physical Review Letters, 2003, 91, 155001. | 2.9 | 58 |
| 62 | Measurements of poloidal rotation velocity using cross-correlation spectroscopy in the H-1 heliac. Review of Scientific Instruments, 2003, 74, 2044-2047. | 0.6 | 1 |
| 63 | Experimental Evidence of Nonlinear Spectral Power Transfer In Zonal Flow Generation. AIP Conference Proceedings, 2003, , . | 0.3 | 0 |
| 64 | Observation of internal kink instability purely driven by suprathermal electrons in the HL-1M tokamak. Nuclear Fusion, 2002, 42, 491-495. | 1.6 | 55 |