## Yi Chen

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5561313/publications.pdf

Version: 2024-02-01

30 papers	1,025 citations	19 h-index	477307 29 g-index
30	30	30	684
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Topological phase transition in mechanical honeycomb lattice. Journal of the Mechanics and Physics of Solids, 2019, 122, 54-68.	4.8	119
2	Broadband solid cloak for underwater acoustics. Physical Review B, 2017, 95, .	3.2	109
3	Latticed pentamode acoustic cloak. Scientific Reports, 2015, 5, 15745.	3.3	106
4	Programmable elastic valley Hall insulator with tunable interface propagation routes. Extreme Mechanics Letters, 2019, 28, 76-80.	4.1	76
5	Mapping acoustical activity in 3D chiral mechanical metamaterials onto micropolar continuum elasticity. Journal of the Mechanics and Physics of Solids, 2020, 137, 103877.	4.8	54
6	Roton-like acoustical dispersion relations in 3D metamaterials. Nature Communications, 2021, 12, 3278.	12.8	53
7	Micropolar continuum modelling of bi-dimensional tetrachiral lattices. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2014, 470, 20130734.	2.1	51
8	Dirac degeneracy and elastic topological valley modes induced by local resonant states. Physical Review B, 2020, 101, .	3.2	49
9	Broadband and High-Transmission Metasurface for Converting Underwater Cylindrical Waves to Plane Waves. Physical Review Applied, 2019, 12, .	3.8	45
10	Experimental observation of roton-like dispersion relations in metamaterials. Science Advances, 2021, 7, eabm2189.	10.3	41
11	Design of an underwater acoustic bend by pentamode metafluid. Journal of the Acoustical Society of America, 2018, 143, 1029-1034.	1.1	40
12	Micropolar modeling of planar orthotropic rectangular chiral lattices. Comptes Rendus - Mecanique, 2014, 342, 273-283.	2.1	33
13	Metagel with Broadband Tunable Acoustic Properties Over Air–Water–Solid Ranges. Advanced Functional Materials, 2019, 29, 1903699.	14.9	31
14	Influences of imperfectness and inner constraints on an acoustic cloak with unideal pentamode materials. Journal of Sound and Vibration, 2019, 458, 62-73.	3.9	29
15	Large characteristic lengths in 3D chiral elastic metamaterials. Communications Materials, 2021, 2, .	6.9	27
16	Design of arbitrary shaped pentamode acoustic cloak based on quasi-symmetric mapping gradient algorithm. Journal of the Acoustical Society of America, 2016, 140, EL405-EL409.	1.1	23
17	Theory and Realization of Nonresonant Anisotropic Singly Polarized Solids Carrying Only Shear Waves. Physical Review Applied, 2019, 12, .	3.8	23
18	Isotropic Chiral Acoustic Phonons in 3D Quasicrystalline Metamaterials. Physical Review Letters, 2020, 124, 235502.	7.8	22

#	Article	IF	CITATIONS
19	Highly anisotropic hexagonal lattice material for low frequency water sound insulation. Extreme Mechanics Letters, 2020, 40, 100916.	4.1	21
20	Nonlocal interaction engineering of 2D roton-like dispersion relations in acoustic and mechanical metamaterials. Communications Materials, 2022, 3, .	6.9	15
21	Analytical and Experimental Investigation on Sound Transmission of Double Thin Plates with Magnetic Negative Stiffness. International Journal of Applied Mechanics, 2018, 10, 1850054.	2.2	11
22	Chiral triclinic metamaterial crystals supporting isotropic acoustical activity and isotropic chiral phonons. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2021, 477, 20200764.	2.1	9
23	Scattering Analysis and Optimization of Spherical Acoustic Cloak with Unideal Pentamode Material. Acta Mechanica Solida Sinica, 2020, 33, 347-360.	1.9	8
24	Cubic metamaterial crystal supporting broadband isotropic chiral phonons. Physical Review Materials, 2021, 5, .	2.4	7
25	Tunable network sound absorber based on additive manufacturing. Journal of the Acoustical Society of America, 2021, 150, 94-101.	1.1	7
26	Two-dimensional water acoustic waveguide based on pressure compensation method. Review of Scientific Instruments, 2018, 89, 024902.	1.3	6
27	Polynomial stress functions of anisotropic plane problems and their applications in hybrid finite elements. Acta Mechanica, 2012, 223, 493-503.	2.1	4
28	Longitudinal elastic wave control by pre-deforming semi-linear materials. Journal of the Acoustical Society of America, 2017, 142, 1229-1235.	1.1	4
29	Hydrogels: Metagel with Broadband Tunable Acoustic Properties Over Air–Water–Solid Ranges (Adv.) Tj ETÇ	<sup>1</sup> 14.9.78	443 <u>1</u> 4 rgBT / (
30	Multi-focus multi-photon 3D printing of microstructured chiral mechanical metamaterials with large characteristic length. , 2021, , .		0