Zhi Yu Yang

List of Publications by Year
in descending order

70 papers	9,411 citations	270111 25 h-index	124990 64 g-index
70 all docs	70 docs citations	70 times ranked	4854 citing authors

#	Article	IF	Citations
1	Decorated membrane resonators as underground seismic wave barriers against high magnitude earthquakes. Journal of Applied Physics, 2020, 128, 084902.	1.1	1
2	An underground barrier of locally resonant metamaterial to attenuate surface elastic waves in solids. AIP Advances, 2020, 10, 075121.	0.6	1
3	Folded sheet resonators that aim at low frequency attenuation of surface elastic waves in solids. Journal of Applied Physics, 2020, 127, 164904.	1.1	7
4	Multiple-frequency perfect absorption by hybrid membrane resonators. Applied Physics Letters, 2020, 116, .	1.5	13
5	Active control of graphene-based membrane-type acoustic metamaterials using a low voltage. Nanoscale, 2019, 11, 16384-16392.	2.8	18
6	Coupled Decorated Membrane Resonators with Large Willis Coupling. Physical Review Applied, 2019, 12, .	1.5	13
7	Hybrid membrane resonators with fluid permeable cavity. Applied Physics Letters, 2019, 115, 181903.	1.5	0
8	Electromagnetic and acoustic double-shielding graphene-based metastructures. Nanoscale, 2019, 11, 1692-1699.	2.8	32
9	Super Damping of Mechanical Vibrations. Scientific Reports, 2019, 9, 17793.	1.6	11
10	Pressure Monopoles, Velocity Monopoles, and Hybrid Monopoles in Acoustics. Physical Review Applied, 2019, 11, .	1.5	2
11	High-efficiency ventilated metamaterial absorber at low frequency. Applied Physics Letters, 2018, 112, .	1.5	87
12	Hybrid membrane resonators for multiple frequency asymmetric absorption and reflection in large waveguide. Applied Physics Letters, 2017, 110, .	1.5	71
13	Wave Manipulations by Coherent Perfect Channeling. Scientific Reports, 2017, 7, 13907.	1.6	8
14	Graphene foam/carbon nanotube/poly(dimethyl siloxane) composites as excellent sound absorber. Composites Part A: Applied Science and Manufacturing, 2017, 102, 391-399.	3.8	54
15	Electrically and thermally conductive underwater acoustically absorptive graphene/rubber nanocomposites for multifunctional applications. Nanoscale, 2017, 9, 14476-14485.	2.8	70
16	Acoustic Coherent Perfect Absorbers as Sensitive Null Detectors. Scientific Reports, 2017, 7, 43574.	1.6	36
17	Voltage-tunable acoustic metasheet with highly asymmetric surfaces. Applied Physics Letters, 2017, 111, 194101.	1.5	14
18	Membrane-type resonator as an effective miniaturized tuned vibration mass damper. AIP Advances, 2016, 6, .	0.6	28

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19	Subwavelength perfect acoustic absorption in membrane-type metamaterials: a geometric perspective. EPJ Applied Metamaterials, 2015, 2, 10.	0.8	20
20	Hybrid resonance and the total absorption of low frequency acoustic waves. , 2015, , .		0
21	Geometric phase and band inversion in periodic acoustic systems. Nature Physics, 2015, 11, 240-244.	6.5	498
22	Active control of membrane-type acoustic metamaterial by electric field. Applied Physics Letters, 2015, 106, .	1.5	134
23	Sound absorption by subwavelength membrane structures: A geometric perspective. Comptes Rendus - Mecanique, 2015, 343, 635-644.	2.1	82
24	Subwavelength total acoustic absorption with degenerate resonators. Applied Physics Letters, 2015, 107, .	1.5	212
25	Homogenization scheme for acoustic metamaterials. Physical Review B, 2014, 89, .	1.1	100
26	Acoustic metasurface with hybrid resonances. Nature Materials, 2014, 13, 873-878.	13.3	801
27	Coupled Membranes with Doubly Negative Mass Density and Bulk Modulus. Physical Review Letters, 2013, 110, 134301.	2.9	276
28	Low-frequency narrow-band acoustic filter with large orifice. Applied Physics Letters, 2013, 103, .	1.5	91
29	Dark acoustic metamaterials as super absorbers for low-frequency sound. Nature Communications, 2012, 3, 756.	5.8	835
30	Acoustic metamaterial panels for sound attenuation in the 50â€“1000 Hz regime. Applied Physics Letters, 2010, 96, .	1.5	385
31	The absence of physical-aging effects on the surface relaxations of rubbed polystyrene. European Physical Journal E, 2008, 25, 291-298.	0.7	8
32	Relaxation times and energy barriers of rubbing-induced birefringence in glass-forming polymers. European Physical Journal E, 2008, 27, 413-420.	0.7	0
33	Membrane-Type Acoustic Metamaterial with Negative Dynamic Mass. Physical Review Letters, 2008, 101, 204301.	2.9	839
34	The absence of physical aging effects on the relaxation of rubbing-induced birefringence in polystyrene. European Physical Journal E, 2007, 24, 385-397.	0.7	1
35	Evolution of wetting layer of InAsâˆ•GaAs quantum dots studied by reflectance difference spectroscopy. Applied Physics Letters, 2006, 88, 071903.	1.5	21
36	Optical anisotropy and strain evolution of GaAs surfaces at the onset of the formation of InAs quantum dots. Journal of Applied Physics, 2006, 99, 073507.	1.1	2

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37	Large g factors of higher-lying excitons detected with reflectance difference spectroscopy in GaAs-based quantum wells. Applied Physics Letters, 2006, 89, 051903.	1.5	13
38	The effects of thermal annealing on the relaxation of rubbing-induced birefringence in polystyrene. European Physical Journal E, 2005, 17, 139-147.	0.7	3
39	Measurements of sound transmission through panels of locally resonant materials between impedance tubes. Applied Acoustics, 2005, 66, 751-765.	1.7	72
40	Molecular Segmental Distortion in Rubbed Polystyrene. Macromolecules, 2004, 37, 3378-3380.	2.2	5
41	ZnSSe-based ultra-violet photodiodes with extremely high detectivity. Optical Materials, 2003, 23, 21-26.	1.7	13
42	Infrared passbands from fractal slit patterns on a metal plate. Applied Physics Letters, 2003, 83, 2106-2108.	1.5	30
43	Broadband locally resonant sonic shields. Applied Physics Letters, 2003, 83, 5566-5568.	1.5	171
44	Dewetting of Polymer Films with Built-In Topographical Defects. Langmuir, 2002, 18, 8510-8517.	1.6	45
45	Rubbing-induced molecular alignment and its relaxation in polystyrene thin films. Journal of Polymer Science, Part B: Polymer Physics, 2001, 39, 2906-2914.	2.4	10
46	In-plane optical anisotropy of symmetric and asymmetric (001) GaAs/Al(Ga)As superlattices and quantum wells. Journal of Applied Physics, 2001, 90, 1266-1270.	1.1	5
47	Temporal evolution of relaxation in rubbed polystyrene thin films. Physical Review E, 2001, 63, 061603.	0.8	10
48	Title is missing!. Journal of Materials Science Letters, 2000, 19, 1315-1318.	0.5	4
49	Locally Resonant Sonic Materials. Science, 2000, 289, 1734-1736.	6.0	4,009
50	Observation of in-plane optical anisotropy of spin-cast rigid-rod electroluminescent polymer films. Applied Physics Letters, 2000, 76, 1416-1418.	1.5	19
51	Polishing-related optical anisotropy of semi-insulating GaAs studied by reflectance difference spectroscopy. Journal of Applied Physics, 2000, 88, 1695-1697.	1.1	7
52	In-plane anisotropic strain of ZnO closely packed microcrystallites grown on tilted (0001) sapphire. Journal of Applied Physics, 2000, 88, 2480-2483.	1.1	17
53	Effect of arsenic precipitates on Fermi level in GaAs grown by molecular-beam epitaxy at low temperature. Journal of Applied Physics, 2000, 87, 2923-2925.	1.1	4
54	Matrix effects and mechanisms of the spectral shifts of coumarin 440 doped in solâ€“gel-derived gel glass. Journal of Applied Physics, 2000, 88, 2503-2508.	1.1	27

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55	Observation of ZnSe/GaAs interface states by photomodulation reflectance difference spectroscopy. Applied Physics Letters, 1999, 75, 528-530.	1.5	3
56	ZnSe/GaAs interface state probed by time-resolved reflectance difference spectroscopy. Applied Physics Letters, 1999, 74, 3663-3665.	1.5	2
57	Theory of linear electro-optic effect near the E1 and the E1+Î”1 energies. Applied Physics Letters, 1998, 73, 1667-1669.	1.5	9
58	Comparison between optical techniques for the measurement of the surface electric field in (100) oriented GaAs. Applied Physics Letters, 1998, 73, 1520-1522.	1.5	13
59	ZnSTe-based Schottky barrier ultraviolet detectors with nanosecond response time. Applied Physics Letters, 1998, 73, 2251-2253.	1.5	22
60	Study of ZnSe/GaAs interface state by femtosecond time-resolved reflectance difference spectroscopy. , 1998, , .		0
61	Determination of interface layer strain of Si/SiO2 interfaces by reflectance difference spectroscopy. Applied Physics Letters, 1997, 71, 87-89.	1.5	11
62	High performance ZnSTe photovoltaic visible-blind ultraviolet detectors. Applied Physics Letters, 1997, 71, 3847-3849.	1.5	22
63	Optical anisotropy of InAs submonolayer quantum wells in a (311) GaAs matrix. Physical Review B, 1997, 56, 6770-6773.	1.1	5
64	Reflectance-difference spectroscopy study of the Fermi-level position of low-temperature-grown GaAs. Physical Review B, 1997, 55, R7379-R7382.	1.1	16
65	Numerical simulation of ZnSe/GaAs interface reflectance difference spectroscopy. Journal of Applied Physics, 1996, 80, 4621-4625.	1.1	6
66	Optical anisotropy of the interface. Journal of Crystal Growth, 1996, 159, 741-745.	0.7	0
67	Aluminumâ€doped nâ€type ZnSTe alloy grown by molecular beam epitaxy. Applied Physics Letters, 1996, 69, 2519-2521.	1.5	24
68	Observation of ZnSe/GaAs interface states by reflectance difference spectroscopy. Applied Physics Letters, 1995, 66, 2235-2237.	1.5	14
69	Optical properties of HgTe/CdTe superlattices in the normal, semimetallic, and inverted-band regimes. Physical Review B, 1994, 49, 8096-8108.	1.1	29
70	Highly efficient and ultra-fast visible-blind ultra-violet detectors. , 0, , .		0