Xiao-Xing Su

List of Publications by Year
in descending order

30 papers	670 citations	840776 11 h-index	713466 21 g-index
30 all docs	30 docs citations	30 times ranked	486 citing authors

#	Article	IF	Citations
1	Stimulated Brillouin scattering in a sub-wavelength anisotropic waveguide with slightly-misaligned material and structural axes: misalignment-sensitive behaviors and underlying physics. Journal of Optics (United Kingdom), 2022, 24, 045002.	2.2	1
2	Three-dimensional acoustic circuits with coupled resonators in phononic crystals. Journal of Sound and Vibration, 2022, 536, 117115.	3.9	4
3	A fast interrogation system of FBG sensors based on low loss jammed-array wideband sawtooth filter. Optical Fiber Technology, 2019, 48, 128-133.	2.7	10
4	A matrix-exponential decomposition based time-domain method for calculating the defect states of scalar waves in two-dimensional periodic structures. Journal of Computational Physics, 2017, 337, 403-420.	3.8	2
5	Theoretical study on the stimulated Brillouin scattering in a sub-wavelength anisotropic waveguide: acousto-optical coupling coefficients and effects of transverse anisotropies. Journal of the Optical Society of America B: Optical Physics, 2017, 34, 2599.	2.1	5
6	A matrixâ€exponential decompositionâ€based timeâ€domain method for band structure calculation of oneâ€dimensional periodic structures. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2016, 29, 773-791.	1.9	1
7	Theoretical research on a two-dimensional phoxonic crystal liquid sensor by utilizing surface optical and acoustic waves. Sensors and Actuators A: Physical, 2016, 242, 123-131.	4.1	27
8	Band structure calculation of one-dimensional periodic structures by a time-domain method based on matrix-exponential decomposition technique. , 2015, , .		0
9	Multi-objective optimization of two-dimensional porous phononic crystals. Journal Physics D: Applied Physics, 2014, 47, 155301.	2.8	87
10	Research on the GPU implementation of the FDTD method for thetwo-dimensional phononic band structure calculations. , 2014, , .		0
11	Topology optimization of simultaneous photonic and phononic bandgaps and highly effective phoxonic cavity. Journal of the Optical Society of America B: Optical Physics, 2014, 31, 2946.	2.1	32
12	Acousto-optical interaction of surface acoustic and optical waves in a two-dimensional phoxonic crystal hetero-structure cavity. Optics Express, 2014, 22, 28443.	3.4	25
13	Topology optimization of two-dimensional asymmetrical phononic crystals. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 434-441.	2.1	67
14	Simultaneous guiding of slow elastic and light waves in three-dimensional topology-type phoxonic crystals with a line defect. Journal of Optics (United Kingdom), 2014, 16, 085002.	2.2	10
15	Topological optimization of two-dimensional phononic crystals based on the finite element method and genetic algorithm. Structural and Multidisciplinary Optimization, 2014, 50, 593-604.	3.5	147
16	Three-dimensional dielectric phoxonic crystals with network topology. Optics Express, 2013, 21, 2727.	3.4	30
17	Effects of material parameters on elastic band gaps of three-dimensional solid phononic crystals. Physica Scripta, 2013, 87, 055604.	2.5	15
18	An improvement of the filter diagonalization-based post-processing method applied to finite difference time domain calculations of three-dimensional phononic band structures. Physica Scripta, 2012, 86, 045401.	2.5	0

#	Article	IF	Citations
19	Elastic band structures of two-dimensional solid phononic crystal with negative Poisson's ratios. Physica B: Condensed Matter, 2012, 407, 4186-4192.	2.7	11
20	Topology optimization of two-dimensional phononic crystals using FEM and genetic algorithm. , 2012, , .		3
21	Effects of Poisson's ratio on the band gaps and defect states in two-dimensional vacuum/solid porous phononic crystals. Ultrasonics, 2012, 52, 255-265.	3.9	31
22	Topology optimization of two-dimensional phononic crystals using FDTD and genetic algorithm. , 2011, , .		0
23	Finite difference time domain calculation of three-dimensional phononic band structures using a postprocessing method based on the filter diagonalization. Physica Scripta, 2011, 84, 045404.	2.5	4
24	Effects of poisson's ratio on the band gaps of three-dimensional solid/solid phononic crystals. , 2011, , .		0
25	Large bandgaps of two-dimensional phononic crystals with cross-like holes. Journal of Applied Physics, 2011, 110, .	2.5	137
26	A postprocessing method based on high-resolution spectral estimation for FDTD calculation of phononic band structures. Physica B: Condensed Matter, 2010, 405, 2444-2449.	2.7	12
27	A postprocessing method based on chirp Z transform for FDTD calculation of point defect states in two-dimensional phononic crystals. Physica B: Condensed Matter, 2010, 405, 3645-3649.	2.7	8
28	Calculation of three-dimensional phononic band structures using the combined method of FDTD and filter diagonalization. , 2010, , .		0
29	Calculation of energy bands of two-dimensional phononic crystals with a hexagonal lattice by using FDTD method. , 2009, , .		0
30	Dynamic response of the half-space subjected to a moving point load and thermal stress. Physica Scripta, 0, , .	2.5	1