

# Yoon Young Kim

## List of Publications by Year in descending order

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191  
papers

4,833  
citations

87723

38  
h-index

143772

57  
g-index

192  
all docs

192  
docs citations

192  
times ranked

2250  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Review of magnetostrictive patch transducers and applications in ultrasonic nondestructive testing of waveguides. <i>Ultrasonics</i> , 2015, 62, 3-19.  | 2.1 | 211       |
| 2  | Mac-based mode-tracking in structural topology optimization. <i>Computers and Structures</i> , 2000, 74, 375-383.   | 2.4 | 144       |
| 3  | Mass-stiffness substructuring of an elastic metasurface for full transmission beam steering. <i>Journal of the Mechanics and Physics of Solids</i> , 2018, 112, 577-593.                      | 2.3 | 118       |
| 4  | Multi-resolution multi-scale topology optimization "a new paradigm. <i>International Journal of Solids and Structures</i> , 2000, 37, 5529-5559.  | 1.3 | 105       |
| 5  | Torsional wave experiments with a new magnetostrictive transducer configuration. <i>Journal of the Acoustical Society of America</i> , 2005, 117, 3459-3468.                                  | 0.5 | 92        |
| 6  | The matching pursuit approach based on the modulated Gaussian pulse for efficient guided-wave damage inspection. <i>Smart Materials and Structures</i> , 2005, 14, 548-560.                   | 1.8 | 88        |
| 7  | Transmodal Fabry-Pérot Resonance: Theory and Realization with Elastic Metamaterials. <i>Physical Review Letters</i> , 2017, 118, 205901.  | 2.9 | 85        |
| 8  | Topology optimization of muffler internal partitions for improving acoustical attenuation performance. <i>International Journal for Numerical Methods in Engineering</i> , 2009, 80, 455-477. | 1.5 | 83        |
| 9  | Elastic metamaterials for independent realization of negativity in density and stiffness. <i>Scientific Reports</i> , 2016, 6, 23630.   | 1.6 | 81        |
| 10 | Effectiveness of the continuous wavelet transform in the analysis of some dispersive elastic waves. <i>Journal of the Acoustical Society of America</i> , 2001, 110, 86-94.                   | 0.5 | 80        |
| 11 | An omnidirectional shear-horizontal guided wave EMAT for a metallic plate. <i>Ultrasonics</i> , 2016, 69, 58-66.  | 2.1 | 79        |
| 12 | Dispersion-based short-time Fourier transform applied to dispersive wave analysis. <i>Journal of the Acoustical Society of America</i> , 2005, 117, 2949-2960.                                | 0.5 | 73        |
| 13 | Topology optimization of beam cross sections. <i>International Journal of Solids and Structures</i> , 2000, 37, 477-493.  | 1.3 | 72        |
| 14 | Transmodal elastic metasurface for broad angle total mode conversion. <i>Applied Physics Letters</i> , 2018, 112, .   | 1.5 | 72        |
| 15 | Checkerboard-free topology optimization using non-conforming finite elements. <i>International Journal for Numerical Methods in Engineering</i> , 2003, 57, 1717-1735.                        | 1.5 | 70        |
| 16 | Metaporous layer to overcome the thickness constraint for broadband sound absorption. <i>Journal of Applied Physics</i> , 2015, 117, .  | 1.1 | 70        |
| 17 | Thin-walled closed box beam element for static and dynamic analysis. <i>International Journal for Numerical Methods in Engineering</i> , 1999, 45, 473-490.                                   | 1.5 | 68        |
| 18 | Parallelized structural topology optimization for eigenvalue problems. <i>International Journal of Solids and Structures</i> , 2004, 41, 2623-2641.   | 1.3 | 66        |

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|----|---|-----|-----------|
| 19 | Development of an omni-directional shear-horizontal wave magnetostrictive patch transducer for plates. <i>Ultrasonics</i> , 2013, 53, 1304-1308.  | 2.1 | 64        |
| 20 | Beam-focused shear-horizontal wave generation in a plate by a circular magnetostrictive patch transducer employing a planar solenoid array. <i>Smart Materials and Structures</i> , 2009, 18, 015009.                     | 1.8 | 63        |
| 21 | Multiple slow waves in metaporous layers for broadband sound absorption. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 015301.  | 1.3 | 63        |
| 22 | Effective mass density based topology optimization of locally resonant acoustic metamaterials for bandgap maximization. <i>Journal of Sound and Vibration</i> , 2016, 383, 89-107.  | 2.1 | 61        |
| 23 | Topology optimization of material-nonlinear continuum structures by the element connectivity parameterization. <i>International Journal for Numerical Methods in Engineering</i> , 2007, 69, 2196-2218.                   | 1.5 | 57        |
| 24 | A truly hyperbolic elastic metamaterial lens. <i>Applied Physics Letters</i> , 2014, 104, .   | 1.5 | 54        |
| 25 | Extreme stiffness hyperbolic elastic metamaterial for total transmission subwavelength imaging. <i>Scientific Reports</i> , 2016, 6, 24026.   | 1.6 | 54        |
| 26 | Optimal poroelastic layer sequencing for sound transmission loss maximization by topology optimization method. <i>Journal of the Acoustical Society of America</i> , 2007, 122, 2097-2106.                                | 0.5 | 53        |
| 27 | Omnidirectional lamb waves by axisymmetrically-configured magnetostrictive patch transducer. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2013, 60, 1928-1934.                        | 1.7 | 51        |
| 28 | Guided wave transduction experiment using a circular magnetostrictive patch and a figure-of-eight coil in nonferromagnetic plates. <i>Applied Physics Letters</i> , 2006, 88, 224101.                                     | 1.5 | 49        |
| 29 | Dynamic analysis of a linear motion guide having rolling elements for precision positioning devices. <i>Journal of Mechanical Science and Technology</i> , 2008, 22, 50-60.   | 0.7 | 49        |
| 30 | Design of phononic crystals for self-collimation of elastic waves using topology optimization method. <i>Structural and Multidisciplinary Optimization</i> , 2015, 51, 1199-1209.   | 1.7 | 45        |
| 31 | One-dimensional analysis of thin-walled closed beams having general cross-sections. <i>International Journal for Numerical Methods in Engineering</i> , 2000, 49, 653-668.  | 1.5 | 44        |
| 32 | Adaptive multiscale wavelet-Galerkin analysis for plane elasticity problems and its applications to multiscale topology design optimization. <i>International Journal of Solids and Structures</i> , 2003, 40, 6473-6496. | 1.3 | 44        |
| 33 | The element connectivity parameterization formulation for the topology design optimization of multiphysics systems. <i>International Journal for Numerical Methods in Engineering</i> , 2005, 64, 1649-1677.              | 1.5 | 44        |
| 34 | Negative refraction experiments with guided shear-horizontal waves in thin phononic crystal plates. <i>Applied Physics Letters</i> , 2011, 98, 011909.  | 1.5 | 43        |
| 35 | Doubly negative isotropic elastic metamaterial for sub-wavelength focusing: Design and realization. <i>Journal of Sound and Vibration</i> , 2017, 410, 169-186.   | 2.1 | 43        |
| 36 | Two-dimensional poroelastic acoustical foam shape design for absorption coefficient maximization by topology optimization method. <i>Journal of the Acoustical Society of America</i> , 2008, 123, 2094-2106.             | 0.5 | 42        |

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|----|--|-----|-----------|
| 37 | Non-resonant metasurface for broadband elastic wave mode splitting. Applied Physics Letters, 2020, 116, .  | 1.5 | 42        |
| 38 | Topology optimization for the design of perfect mode-converting anisotropic elastic metamaterials. Composite Structures, 2018, 201, 161-177.   | 3.1 | 41        |
| 39 | Automatic Synthesis of a Planar Linkage Mechanism With Revolute Joints by Using Spring-Connected Rigid Block Models. Journal of Mechanical Design, Transactions of the ASME, 2007, 129, 930-940.                             | 1.7 | 38        |
| 40 | Megahertz-range guided pure torsional wave transduction and experiments using a magnetostrictive transducer. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2010, 57, 1225-1229.                   | 1.7 | 37        |
| 41 | Adjoining of negative stiffness and negative density bands in an elastic metamaterial. Applied Physics Letters, 2016, 108, .   | 1.5 | 37        |
| 42 | Far-field subwavelength imaging for ultrasonic elastic waves in a plate using an elastic hyperlens. Applied Physics Letters, 2011, 98, .   | 1.5 | 36        |
| 43 | Topology optimization of metasurfaces for anomalous reflection of longitudinal elastic waves. Computer Methods in Applied Mechanics and Engineering, 2019, 357, 112582.  | 3.4 | 36        |
| 44 | Elastic Metamaterial Insulator for Broadband Low-Frequency Flexural Vibration Shielding. Physical Review Applied, 2017, 8, .   | 1.5 | 35        |
| 45 | Inverted bi-prism phononic crystals for one-sided elastic wave transmission applications. Applied Physics Letters, 2012, 100, .  | 1.5 | 34        |
| 46 | An Energy conversion model for cantilevered piezoelectric vibration energy harvesters using only measurable parameters. International Journal of Precision Engineering and Manufacturing - Green Technology, 2015, 2, 51-57. | 2.7 | 34        |
| 47 | Multiscale Galerkin method using interpolation wavelets for two-dimensional elliptic problems in general domains. International Journal for Numerical Methods in Engineering, 2004, 59, 225-253.                             | 1.5 | 33        |
| 48 | Slow-wave metamaterial open panels for efficient reduction of low-frequency sound transmission. Applied Physics Letters, 2018, 112, .  | 1.5 | 33        |
| 49 | Topology optimization of planar linkage mechanisms. International Journal for Numerical Methods in Engineering, 2014, 98, 265-286.   | 1.5 | 31        |
| 50 | Elastic metamaterial-based impedance-varying phononic bandgap structures for bandpass filters. Journal of Sound and Vibration, 2015, 353, 58-74.   | 2.1 | 31        |
| 51 | Analysis of thin-walled curved box beam under in-plane flexure. International Journal of Solids and Structures, 2003, 40, 6111-6123.   | 1.3 | 30        |
| 52 | Monolayer metamaterial for full mode-converting transmission of elastic waves. Applied Physics Letters, 2019, 115, .   | 1.5 | 30        |
| 53 | A one-dimensional theory of thin-walled curved rectangular box beams under torsion and out-of-plane bending. International Journal for Numerical Methods in Engineering, 2002, 53, 1675-1693.                                | 1.5 | 29        |
| 54 | Application of magnetomechanical sensors for modal testing. Journal of Sound and Vibration, 2003, 268, 799-808.  | 2.1 | 29        |

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|----|---|-----|-----------|
| 55 | Integrated topology and shape optimization software for compliant MEMS mechanism design. <i>Advances in Engineering Software</i> , 2008, 39, 1-14.  | 1.8 | 28        |
| 56 | Analysis of internal wave reflection within a magnetostrictive patch transducer for high-frequency guided torsional waves. <i>Ultrasonics</i> , 2011, 51, 647-652.  | 2.1 | 28        |
| 57 | Effective material parameter retrieval of anisotropic elastic metamaterials with inherent nonlocality. <i>Journal of Applied Physics</i> , 2016, 120, .   | 1.1 | 28        |
| 58 | Tuned double-coil EMATs for omnidirectional symmetric mode lamb wave generation. <i>NDT and E International</i> , 2016, 83, 38-47.  | 1.7 | 28        |
| 59 | Theory for Perfect Transmodal Fabry-Perot Interferometer. <i>Scientific Reports</i> , 2018, 8, 69.  | 1.6 | 28        |
| 60 | Wireless frequency-tuned generation and measurement of torsional waves using magnetostrictive nickel gratings in cylinders. <i>Sensors and Actuators A: Physical</i> , 2006, 126, 73-77.                                    | 2.0 | 27        |
| 61 | Topology optimization for three-phase materials distribution in a dissipative expansion chamber by unified multiphase modeling Approach. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015, 287, 191-211. | 3.4 | 27        |
| 62 | Longitudinal wave steering using beam-type elastic metagratings. <i>Mechanical Systems and Signal Processing</i> , 2021, 156, 107688.   | 4.4 | 27        |
| 63 | Hat interpolation wavelet-based multi-scale Galerkin method for thin-walled box beam analysis. <i>International Journal for Numerical Methods in Engineering</i> , 2002, 53, 1575-1592.                                     | 1.5 | 26        |
| 64 | Topology optimization using non-conforming finite elements: three-dimensional case. <i>International Journal for Numerical Methods in Engineering</i> , 2005, 63, 859-875.  | 1.5 | 26        |
| 65 | Damage detection by the topology design formulation using modal parameters. <i>International Journal for Numerical Methods in Engineering</i> , 2007, 69, 1480-1498.  | 1.5 | 26        |
| 66 | Topology optimization of planar linkage systems involving general joint types. <i>Mechanism and Machine Theory</i> , 2016, 104, 130-160.  | 2.7 | 26        |
| 67 | Off-centered Double-slit Metamaterial for Elastic Wave Polarization Anomaly. <i>Scientific Reports</i> , 2017, 7, 15378.  | 1.6 | 26        |
| 68 | Higher order analysis of thin-walled beams with axially varying quadrilateral cross sections. <i>Computers and Structures</i> , 2017, 179, 127-139.   | 2.4 | 25        |
| 69 | The optimal design and experimental verification of the bias magnet configuration of a magnetostrictive sensor for bending wave measurement. <i>Sensors and Actuators A: Physical</i> , 2003, 107, 225-232.                 | 2.0 | 23        |
| 70 | Rigid body modeling issue in acoustical topology optimization. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2009, 198, 1017-1030.   | 3.4 | 23        |
| 71 | Asymptotic theory of bimodal quarter-wave impedance matching for full mode-converting transmission. <i>Physical Review B</i> , 2018, 98, .  | 1.1 | 23        |
| 72 | The role of S-Shape mapping functions in the SIMP approach for topology optimization. <i>Journal of Mechanical Science and Technology</i> , 2003, 17, 1496-1506.  | 0.4 | 22        |

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|----|---|-----|-----------|
| 73 | Optimal layout design of three-dimensional geometrically non-linear structures using the element connectivity parameterization method. <i>International Journal for Numerical Methods in Engineering</i> , 2007, 69, 1278-1304. | 1.5 | 22        |
| 74 | Maximization of operating frequency ranges of hyperbolic elastic metamaterials by topology optimization. <i>Structural and Multidisciplinary Optimization</i> , 2015, 52, 1023-1040.  | 1.7 | 22        |
| 75 | Topology optimization design for total sound absorption in porous media. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020, 360, 112723.  | 3.4 | 22        |
| 76 | Perfect transmission of elastic waves obliquely incident at solid–solid interfaces. <i>Extreme Mechanics Letters</i> , 2022, 51, 101606.  | 2.0 | 22        |
| 77 | Radiation pattern of Lamb waves generated by a circular magnetostrictive patch transducer. <i>Applied Physics Letters</i> , 2007, 90, 054102.   | 1.5 | 21        |
| 78 | Power enhancing by reversing mode sequence in tuned mass-spring unit attached vibration energy harvester. <i>AIP Advances</i> , 2013, 3, .  | 0.6 | 21        |
| 79 | Higher-order beam analysis of box beams connected at angled joints subject to out-of-plane bending and torsion. <i>International Journal for Numerical Methods in Engineering</i> , 2008, 75, 1361-1384.                        | 1.5 | 20        |
| 80 | Wave attenuation and dissipation mechanisms in viscoelastic phononic crystals. <i>Journal of Applied Physics</i> , 2013, 113, 106101.   | 1.1 | 20        |
| 81 | Add-on unidirectional elastic metamaterial plate cloak. <i>Scientific Reports</i> , 2016, 6, 20731.   | 1.6 | 20        |
| 82 | New accurate efficient modeling techniques for the vibration analysis of T-joint thin-walled box structures. <i>International Journal of Solids and Structures</i> , 2002, 39, 2893-2909.                                       | 1.3 | 19        |
| 83 | Characterization of anisotropic acoustic metamaterial slabs. <i>Journal of Applied Physics</i> , 2016, 119, .   | 1.1 | 19        |
| 84 | Topology optimization of vehicle rear suspension mechanisms. <i>International Journal for Numerical Methods in Engineering</i> , 2018, 113, 1412-1433.  | 1.5 | 19        |
| 85 | Inverse kinematics of binary manipulators by using the continuous-variable-based optimization method. , 2006, 22, 33-42.  |     | 18        |
| 86 | Topology optimization of planar linkage mechanisms for path generation without prescribed timing. <i>Structural and Multidisciplinary Optimization</i> , 2017, 56, 501-517.   | 1.7 | 18        |
| 87 | Higher-order Vlasov torsion theory for thin-walled box beams. <i>International Journal of Mechanical Sciences</i> , 2021, 195, 106231.  | 3.6 | 18        |
| 88 | Ultrasonic flow measurement using a high-efficiency longitudinal-to-shear wave mode-converting meta-slab wedge. <i>Sensors and Actuators A: Physical</i> , 2020, 310, 112080.   | 2.0 | 18        |
| 89 | Coil configuration design for the Lorentz force maximization by the topology optimization method: applications to optical pickup coil design. <i>Sensors and Actuators A: Physical</i> , 2005, 121, 221-229.                    | 2.0 | 17        |
| 90 | Higher-order in-plane bending analysis of box beams connected at an angled joint considering cross-sectional bending warping and distortion. <i>Thin-Walled Structures</i> , 2009, 47, 1478-1489.                               | 2.7 | 17        |

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|-----|---|-----|-----------|
| 91  | Unified multiphase modeling for evolving, acoustically coupled systems consisting of acoustic, elastic, poroelastic media and septa. <i>Journal of Sound and Vibration</i> , 2012, 331, 5518-5536.          | 2.1 | 17        |
| 92  | Analysis of Thin-Walled Straight Beams with Generally Shaped Closed Sections Using Numerically Determined Sectional Deformation Functions. <i>Journal of Structural Engineering</i> , 2012, 138, 1427-1435. | 1.7 | 17        |
| 93  | High-frequency lowest torsional wave mode ultrasonic inspection using a necked pipe waveguide unit. <i>Ultrasonics</i> , 2015, 62, 237-243.   | 2.1 | 17        |
| 94  | Multiple beam splitting in elastic phononic crystal plates. <i>Ultrasonics</i> , 2015, 56, 178-182.   | 2.1 | 17        |
| 95  | Generation of omni-directional shear-horizontal waves in a ferromagnetic plate by a magnetostrictive patch transducer. <i>NDT and E International</i> , 2016, 80, 6-14.                                     | 1.7 | 17        |
| 96  | Analysis of two box beams-joint systems under in-plane bending and axial loads by one-dimensional higher-order beam theory. <i>International Journal of Solids and Structures</i> , 2016, 90, 69-94.        | 1.3 | 16        |
| 97  | Noncontact Damage Detection of a Rotating Shaft Using the Magnetostrictive Effect. <i>Journal of Nondestructive Evaluation</i> , 2003, 22, 141-150.   | 1.1 | 15        |
| 98  | Design of a Bias Magnetic System of a Magnetostrictive Sensor for Flexural Wave Measurement. <i>IEEE Transactions on Magnetics</i> , 2004, 40, 3331-3338.   | 1.2 | 15        |
| 99  | Damage size estimation by the continuous wavelet ridge analysis of dispersive bending waves in a beam. <i>Journal of Sound and Vibration</i> , 2005, 287, 707-722.  | 2.1 | 15        |
| 100 | Vibration analysis of piecewise straight thin-walled box beams without using artificial joint springs. <i>Journal of Sound and Vibration</i> , 2009, 326, 647-670.  | 2.1 | 15        |
| 101 | Mobile robot path planning algorithm by equivalent conduction heat flow topology optimization. <i>Structural and Multidisciplinary Optimization</i> , 2012, 45, 703-715.                                    | 1.7 | 15        |
| 102 | Conical Refraction of Elastic Waves by Anisotropic Metamaterials and Application for Parallel Translation of Elastic Waves. <i>Scientific Reports</i> , 2017, 7, 10072.                                     | 1.6 | 15        |
| 103 | Topology optimization with displacement-based nonconforming finite elements for incompressible materials. <i>Journal of Mechanical Science and Technology</i> , 2009, 23, 442-451.                          | 0.7 | 14        |
| 104 | The Spring-Connected Rigid Block Model Based Automatic Synthesis of Planar Linkage Mechanisms: Numerical Issues and Remedies. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2012, 134, .  | 1.7 | 14        |
| 105 | Exact matching at a joint of multiply-connected box beams under out-of-plane bending and torsion. <i>Engineering Structures</i> , 2016, 124, 96-112.  | 2.6 | 14        |
| 106 | Dispersion analysis with 45°-rotated augmented supercells and applications in phononic crystal design. <i>Wave Motion</i> , 2016, 61, 63-72.  | 1.0 | 14        |
| 107 | Omnidirectional shear horizontal wave based tomography for damage detection in a metallic plate with the compensation for the transfer functions of transducer. <i>Ultrasonics</i> , 2018, 88, 72-83.       | 2.1 | 14        |
| 108 | Higher-order beam theory for static and vibration analysis of composite thin-walled box beam. <i>Composite Structures</i> , 2018, 206, 140-154.   | 3.1 | 14        |

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|-----|---|-----|-----------|
| 109 | Zero-frequency Bragg gap by spin-harnessed metamaterial. <i>New Journal of Physics</i> , 2018, 20, 083035.  | 1.2 | 14        |
| 110 | Shear horizontal wave transduction in plates by magnetostrictive gratings. <i>Journal of Mechanical Science and Technology</i> , 2007, 21, 693-698.   | 0.7 | 13        |
| 111 | Optimization of Support Locations of Beam and Plate Structures Under Self-Weight by Using a Sprung Structure Model. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2009, 131, .  | 1.7 | 13        |
| 112 | Waveguide tapering for beam-width control in a waveguide transducer. <i>Ultrasonics</i> , 2014, 54, 953-960.  | 2.1 | 13        |
| 113 | An experimental method to design piezoelectric energy harvesting skin using operating deflection shapes and its application for self-powered operation of a wireless sensor network. <i>Journal of Intelligent Material Systems and Structures</i> , 2015, 26, 1128-1137. | 1.4 | 13        |
| 114 | Near-zero effective impedance with finite phase velocity for sensing and actuation enhancement by resonator pairing. <i>Nature Communications</i> , 2018, 9, 5255.  | 5.8 | 13        |
| 115 | Bi-annular shear-horizontal wave MPT tailored to generate the SH1 mode in a plate. <i>Ultrasonics</i> , 2019, 99, 105958.   | 2.1 | 13        |
| 116 | Topology Optimization of Planar Gear-Linkage Mechanisms. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2019, 141, 0323011-3230118.  | 1.7 | 13        |
| 117 | A note on hinge-free topology design using the special triangulation of design elements. <i>Communications in Numerical Methods in Engineering</i> , 2005, 21, 701-710.   | 1.3 | 12        |
| 118 | Multiscale multiresolution genetic algorithm with a golden sectioned population composition. <i>International Journal for Numerical Methods in Engineering</i> , 2008, 74, 349-367.   | 1.5 | 12        |
| 119 | Realization of high-performance bandpass filter by impedance-mirroring. <i>Journal of Sound and Vibration</i> , 2015, 355, 86-92.   | 2.1 | 12        |
| 120 | Data-driven approach for a one-dimensional thin-walled beam analysis. <i>Computers and Structures</i> , 2020, 231, 106207.  | 2.4 | 12        |
| 121 | Magnetostrictive grating with an optimal yoke for generating high-output frequency-tuned SH waves in a plate. <i>Sensors and Actuators A: Physical</i> , 2007, 137, 141-146.  | 2.0 | 11        |
| 122 | Theoretical aspects of the internal element connectivity parameterization approach for topology optimization. <i>International Journal for Numerical Methods in Engineering</i> , 2008, 76, 775-797.  | 1.5 | 11        |
| 123 | Exact Matching Condition at a Joint of Thin-Walled Box Beams Under Out-of-Plane Bending and Torsion. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2012, 79, .   | 1.1 | 11        |
| 124 | Dispersion suppression of guided elastic waves by anisotropic metamaterial. <i>Journal of the Acoustical Society of America</i> , 2015, 138, EL77-EL82.   | 0.5 | 11        |
| 125 | Guided wave scattering analysis for a plate with arbitrarily shaped elastic inclusions using the T-matrix method. <i>Journal of Sound and Vibration</i> , 2016, 360, 97-111.  | 2.1 | 11        |
| 126 | Topology optimization of anisotropic metamaterials tracing the target EFC and field polarization. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2018, 333, 176-196.  | 3.4 | 11        |



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|-----|---|-----|-----------|
| 127 | Mathematical Model Development, Experimental Validation and Design Parameter Study of A Folded Two-Degree-of-Freedom Piezoelectric Vibration Energy Harvester. International Journal of Precision Engineering and Manufacturing - Green Technology, 2019, 6, 893-906. | 2.7 | 11        |
| 128 | Directional quantification of power dissipation in sound-absorbing metaporous layers. Journal of Sound and Vibration, 2021, 512, 116375.  | 2.1 | 11        |
| 129 | Non-contact modal testing by the electromagnetic acoustic principle: Applications to bending and torsional vibrations of metallic pipes. Journal of Sound and Vibration, 2013, 332, 740-751.  | 2.1 | 10        |
| 130 | Experiments of wave cancellation with elastic phononic crystal. Ultrasonics, 2016, 72, 128-133.   | 2.1 | 10        |
| 131 | Analysis and design of an annular-array MPT for the efficient generation of omnidirectional shear-horizontal waves in plates. Smart Materials and Structures, 2019, 28, 075005.   | 1.8 | 10        |
| 132 | Elastic complementary meta-layer for ultrasound penetration through solid/liquid/gas barriers. International Journal of Mechanical Sciences, 2021, 206, 106619.   | 3.6 | 10        |
| 133 | Filtering technique to control member size in topology design optimization. Journal of Mechanical Science and Technology, 2004, 18, 253-261.  | 0.4 | 9         |
| 134 | Minimum scale controlled topology optimization and experimental test of a micro thermal actuator. Sensors and Actuators A: Physical, 2008, 141, 603-609.  | 2.0 | 9         |
| 135 | Unified topology and joint types optimization of general planar linkage mechanisms. Structural and Multidisciplinary Optimization, 2018, 57, 1955-1983.   | 1.7 | 9         |
| 136 | Consistent higher-order beam theory for thin-walled box beams using recursive analysis: Membrane deformation under doubly symmetric loads. Engineering Structures, 2019, 197, 109430.   | 2.6 | 9         |
| 137 | Simultaneous Shape and Topology Optimization of Planar Linkage Mechanisms Based on the Spring-Connected Rigid Block Model. Journal of Mechanical Design, Transactions of the ASME, 2020, 142, .   | 1.7 | 9         |
| 138 | Magnetic circuit design by topology optimization for Lorentz force maximization in a microspeaker. Journal of Mechanical Science and Technology, 2008, 22, 1699-1706.   | 0.7 | 8         |
| 139 | Application of a Ground Beam-Joint Topology Optimization Method for Multi-Piece Frame Structure Design. Journal of Mechanical Design, Transactions of the ASME, 2008, 130, .  | 1.7 | 8         |
| 140 | Optimal distribution of holes in a partition interfacing two cavities for controlling the eigenfrequencies by acoustical topology optimization. Computer Methods in Applied Mechanics and Engineering, 2009, 198, 2175-2189.  | 3.4 | 8         |
| 141 | Broadband sound blocking in phononic crystals with rotationally symmetric inclusions. Journal of the Acoustical Society of America, 2015, 138, EL217-EL222.   | 0.5 | 8         |
| 142 | Topology optimization of thin-walled box beam structures based on the higher-order beam theory. International Journal for Numerical Methods in Engineering, 2016, 106, 576-590.   | 1.5 | 8         |
| 143 | Bulk-surface relationship of an electronic structure for high-throughput screening of metal oxide catalysts. Applied Surface Science, 2016, 370, 279-290.   | 3.1 | 8         |
| 144 | Finite prism method based topology optimization of beam cross section for buckling load maximization. Structural and Multidisciplinary Optimization, 2018, 57, 55-70.   | 1.7 | 8         |

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|-----|---|-----|-----------|
| 145 | Consistent higher-order beam theory for thin-walled box beams using recursive analysis: Edge-bending deformation under doubly symmetric loads. <i>Engineering Structures</i> , 2020, 206, 110129.                                 | 2.6 | 8         |
| 146 | Topology Optimization of Linkage Mechanisms Simultaneously Considering Both Kinematic and Compliance Characteristics. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2021, 143, .                                | 1.7 | 8         |
| 147 | Analytic solutions for fundamental eigenfrequencies of optical actuators in six directions of motion. <i>International Journal of Solids and Structures</i> , 2001, 38, 1327-1339.  | 1.3 | 7         |
| 148 | A direct hybrid finite element-wave based modelling technique for efficient analysis of poroelastic materials in steady-state acoustic problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2016, 304, 55-80. | 3.4 | 7         |
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