Fuh-Gwo Yuan

List of Publications by Year
in descending order

80 papers	2,951 citations	172207 29 h-index	174990 52 g-index
80 all docs	80 docs citations	80 times ranked	2502 citing authors

#	Article	IF	Citations
1	Carbon nanotube yarn strain sensors. Nanotechnology, 2010, 21, 305502.	1.3	201
2	A lightweight yet sound-proof honeycomb acoustic metamaterial. Applied Physics Letters, 2015, 106, .	1.5	187
3	Focusing guided waves using surface bonded elastic metamaterials. Applied Physics Letters, 2013, 103, .	1.5	139
4	Mechanical and electrical property improvement in CNT/Nylon composites through drawing and stretching. Composites Science and Technology, 2011, 71, 1677-1683.	3.8	121
5	Nonlinear bending and vibration analysis of functionally graded porous tubes via a nonlocal strain gradient theory. Composite Structures, 2018, 203, 614-623.	3.1	117
6	Producing superior composites by winding carbon nanotubes onto a mandrel under a poly(vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 5	5.4	114
7	On nonlinear bending behavior of FG porous curved nanotubes. International Journal of Engineering Science, 2019, 135, 58-74.	2.7	104
8	On buckling and postbuckling behavior of nanotubes. International Journal of Engineering Science, 2017, 121, 130-142.	2.7	96
9	On vibrations of porous nanotubes. International Journal of Engineering Science, 2018, 125, 23-35.	2.7	91
10	Thermal buckling and post-buckling analysis of functionally graded beams based on a general higher-order shear deformation theory. Applied Mathematical Modelling, 2017, 47, 340-357.	2.2	84
11	Scaling effect of flexoelectric $(Ba,Sr)TiO_3$ microcantilevers. Physica Status Solidi - Rapid Research Letters, 2011, 5, 350-352.	1.2	73
12	Flexoelectric strain gradient detection using Ba0.64Sr0.36TiO3 for sensing. Applied Physics Letters, 2012, 101, .	1.5	72
13	Non-contact ultrasonic technique for Lamb wave characterization in composite plates. Ultrasonics, 2016, 64, 162-169.	2.1	61
14	On wave propagation of porous nanotubes. International Journal of Engineering Science, 2018, 130, 62-74.	2.7	60
15	Fundamental understanding of wave generation and reception using d36 type piezoelectric transducers. Ultrasonics, 2015, 57, 135-143.	2.1	58
16	Nonlinear analysis of bending, thermal buckling and post-buckling for functionally graded tubes by using a refined beam theory. Composite Structures, 2017, 165, 74-82.	3.1	58
17	Guided wave generation, sensing and damage detection using in-plane shear piezoelectric wafers. Smart Materials and Structures, 2014, 23, 015014.	1.8	57
18	Lamb wave-based subwavelength damage imaging using the DORT-MUSIC technique in metallic plates. Structural Health Monitoring, 2016, 15, 65-80.	4.3	57

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19	Damage identification for composite structures using a cross-correlation reverse-time migration technique. Structural Health Monitoring, 2015, 14, 558-570.	4.3	53
20	A rapid, fully non-contact, hybrid system for generating Lamb wave dispersion curves. Ultrasonics, 2015, 61, 62-70.	2.1	53
21	A trapezoidal flexoelectric accelerometer. Journal of Intelligent Material Systems and Structures, 2014, 25, 271-277.	1.4	50
22	Uncertainty Reduction of Damage Growth Properties Using Structural Health Monitoring. Journal of Aircraft, 2010, 47, 2030-2038.	1.7	43
23	Flexoelectricity in barium strontium titanate thin film. Applied Physics Letters, 2014, 105, .	1.5	42
24	Augmented reality for enhanced visual inspection through knowledge-based deep learning. Structural Health Monitoring, 2021, 20, 426-442.	4.3	41
25	Damage imaging using non-contact air-coupled transducer/laser Doppler vibrometer system. Structural Health Monitoring, 2016, 15, 193-203.	4.3	38
26	3D printing of electroactive PVDF thin films with high β-phase content. Smart Materials and Structures, 2019, 28, 065017.	1.8	37
27	Probabilistic fatigue damage prognosis using surrogate models trained via three-dimensional finite element analysis. Structural Health Monitoring, 2017, 16, 291-308.	4.3	36
28	A cubic triangular finite element for flat plates with shear. International Journal for Numerical Methods in Engineering, 1989, 28, 109-126.	1.5	35
29	Impact damage visualization in a honeycomb composite panel through laser inspection using zero-lag cross-correlation imaging condition. Ultrasonics, 2018, 87, 152-165.	2.1	32
30	A higher order finite element for laminated beams. Composite Structures, 1990, 14, 125-150.	3.1	30
31	Impact source identification in finite isotropic plates using a time-reversal method: theoretical study. Smart Materials and Structures, 2010, 19, 105028.	1.8	30
32	Damage Modes Recognition and Hilbert-Huang Transform Analyses of CFRP Laminates Utilizing Acoustic Emission Technique. Applied Composite Materials, 2016, 23, 155-178.	1.3	30
33	Research on nonlinear bending behaviors of FGM infinite cylindrical shallow shells resting on elastic foundations in thermal environments. Composite Structures, 2017, 170, 111-121.	3.1	29
34	Guided torsional wave generation of a linear in-plane shear piezoelectric array in metallic pipes. Ultrasonics, 2016, 65, 69-77.	2.1	28
35	A probabilistic fatigue life prediction for adhesively bonded joints via ANNs-based hybrid model. International Journal of Fatigue, 2021, 151, 106352.	2.8	28
36	Stabilizing carbon nanotube yarns using chemical vapor infiltration. Composites Science and Technology, 2014, 90, 82-87.	3.8	26

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37	Impact source identification in finite isotropic plates using a time-reversal method: experimental study. Smart Materials and Structures, 2012, 21, 105025.	1.8	25
38	A quantitative damage imaging technique based on enhanced CCRTM for composite plates using 2D scan. Smart Materials and Structures, 2016, 25, 105022.	1.8	25
39	Enhanced Î²-Phase in Direct Ink Writing PVDF Thin Films by Intercalation of Graphene. Journal of Inorganic and Organometallic Polymers and Materials, 2020, 30, 1497-1502.	1.9	25
40	Conversion of evanescent Lamb waves into propagating waves via a narrow aperture edge. Journal of the Acoustical Society of America, 2015, 137, 3523-3533.	0.5	24
41	Lamb-wave-based two-dimensional areal scan damage imaging using reverse-time migration with a normalized zero-lag cross-correlation imaging condition. Structural Health Monitoring, 2017, 16, 444-457.	4.3	24
42	Improvement of Progressive Damage Model to Predicting Crashworthy Composite Corrugated Plate. Applied Composite Materials, 2018, 25, 45-66.	1.3	23
43	Extraction of guided wave dispersion curve in isotropic and anisotropic materials by Matrix Pencil method. Ultrasonics, 2018, 89, 143-154.	2.1	22
44	Impact diagnosis in stiffened structural panels using a deep learning approach. Structural Health Monitoring, 2021, 20, 681-691.	4.3	21
45	A semi-analytical approach for SH guided wave mode conversion from evanescent into propagating. Ultrasonics, 2018, 84, 430-437.	2.1	20
46	Wave reflection and transmission in composite beams containing semi-infinite delamination. Journal of Sound and Vibration, 2008, 313, 676-695.	2.1	19
47	Damage imaging in a stiffened curved composite sandwich panel with wavenumber index via Riesz transform. Structural Health Monitoring, 2020, 19, 902-916.	4.3	19
48	Miniature horizontal axis wind turbine system for multipurpose application. Energy, 2014, 75, 216-224.	4.5	18
49	Predictive Model of Dynamic Mechanical Properties of VE Damper Based on Acrylic Rubberâ€"Graphene Oxide Composites Considering Aging Damage. Journal of Aerospace Engineering, 2022, 35, .	0.8	17
50	Automated In-Process Cure Monitoring of Composite Laminates Using a Guided Wave-Based System With High-Temperature Piezoelectric Transducers. Journal of Nondestructive Evaluation, Diagnostics and Prognostics of Engineering Systems, 2018, 1, 021008-021008-8.	0.7	15
51	Damage imaging of reinforced concrete structures using electromagnetic migration algorithm. International Journal of Solids and Structures, 2006, 43, 5886-5908.	1.3	14
52	Design of an Orthotropic Piezoelectric Composite Material Phased Array Transducer for Damage Detection in a Concrete Structure. Research in Nondestructive Evaluation, 2016, 27, 204-215.	0.5	14
53	Design and optimization of an OPFC ultrasonic linear phased array transducer. International Journal of Mechanics and Materials in Design, 2017, 13, 57-69.	1.7	14
54	An enhanced performance of a horizontal diamagnetic levitation mechanismâ€"based vibration energy harvester for low frequency applications. Journal of Intelligent Material Systems and Structures, 2017, 28, 578-594.	1.4	13

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55	Enhanced damage imaging of a metallic plate using matching pursuit algorithm with multiple wavepaths. Ultrasonics, 2018, 89, 84-101.	2.1	13
56	Guided wave-based system for real-time cure monitoring of composites using piezoelectric discs and phase-shifted fiber Bragg gratings. Journal of Composite Materials, 2019, 53, 969-979.	1.2	13
57	Visualization of hidden damage from scattered wavefield reconstructed using an integrated high-speed camera system. Structural Health Monitoring, 2021, 20, 2300-2316.	4.3	13
58	Direct Measurement of Opening Mode Stress Intensity Factors Using Flexoelectric Strain Gradient Sensors. Experimental Mechanics, 2015, 55, 313-320.	1.1	12
59	Air-Coupled Nondestructive Evaluation Dissected. Journal of Nondestructive Evaluation, 2018, 37, 1.	1.1	12
60	Adaptive signal decomposition and dispersion removal based on the matching pursuit algorithm using dispersion-based dictionary for enhancing damage imaging. Ultrasonics, 2020, 103, 106087.	2.1	12
61	Development of Time-Reversal Method for Impact Source Identification on Plate Structures. Shock and Vibration, 2013, 20, 561-573.	0.3	11
62	Fabrication and measurement of a flexoelectric micro-pyramid composite. AIP Advances, 2014, 4, .	0.6	11
63	Imaging of local porosity/voids using a fully non-contact air-coupled transducer and laser Doppler vibrometer system. Structural Health Monitoring, 2017, 16, 164-173.	4.3	11
64	Energyâ€absorption performance of composite corrugated plates with corrugatedâ€shape ditch plug initiator. Polymer Composites, 2019, 40, 1708-1717.	2.3	11
65	Development of Viscoelastic Damper Based on NBR and Organic Small-Molecule Composites. Journal of Materials in Civil Engineering, 2022, 34, .	1.3	11
66	Experimental study on identifying cracks of increasing size using ultrasonic excitation. Structural Health Monitoring, 2012, 11, 95-108.	4.3	9
67	Higher-order finite element for short beams. AIAA Journal, 1988, 26, 1415-1417.	1.5	8
68	IWSHM 2017: Damage-scattered wave extraction in an integral stiffened isotropic plate: a baseline-subtraction-free approach. Structural Health Monitoring, 2018, 17, 1365-1376.	4.3	6
69	Hidden damage visualization using laser speckle photometry. NDT and E International, 2022, 131, 102700.	1.7	6
70	Fatigue Damage Diagnosticsâ€"Prognostics Framework for Remaining Life Estimation in Adhesive Joints. AIAA Journal, 2022, 60, 4874-4892.	1.5	5
71	An intermetallic Feâ€"Zr catalyst used for growing long carbon nanotube arrays. Materials Letters, 2010, 64, 1947-1950.	1.3	3
72	Lamb waves based fast subwavelength imaging using a DORT-MUSIC algorithm. AIP Conference Proceedings, 2016, , .	0.3	3

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73	Lamb wave-based BVID imaging for a curved composite sandwich panel. AIP Conference Proceedings, 2017, , .	0.3	3
74	Research on the Actuation Performance of 2D-Orthotropic Piezoelectric Composite Materials Linear Phased Array Transducer. Journal of Nanoscience and Nanotechnology, 2019, 19, 5205-5210.	0.9	3
75	Study on Experiment and Modeling of Viscoelastic Damper Considering Interfacial Effect of Matrix Rubber/Carbon Black. Journal of Engineering Materials and Technology, Transactions of the ASME, 2021, 143, .	0.8	3
76	An anisotropic ultrasonic transducer for Lamb wave applications. Smart Structures and Systems, 2016, 17, 1055-1065.	1.9	3
77	Impact damage imaging in a curved composite panel with wavenumber index via Riesz transform. , 2018, , .		3
78	Damage Detection in Composite Structures Using Time-Reversal Migration Technique. , 2018, , .		2
79	Damage Identification Using Electromagnetic Waves Based on Born Imaging Algorithm. Journal of Engineering Mechanics - ASCE, 2009, 135, 717-728.	1.6	1
80	Feasibility study of detecting railroad spike damage using a non-contact NDE system. , 2022, , .		0