Ye Lu

List of Publications by Year
in descending order

73 papers	3,531 citations	172207 29 h-index	138251 58 g-index
77 all docs	77 docs citations	77 times ranked	2119 citing authors

#	Article	IF	Citations
1	Guided Lamb waves for identification of damage in composite structures: A review. Journal of Sound and Vibration, 2006, 295, 753-780.	2.1	1,218
2	Quantitative assessment of through-thickness crack size based on Lamb wave scattering in aluminium plates. NDT and E International, 2008, 41, 59-68.	1.7	141
3	Functionalized composite structures for new generation airframes: a review. Composites Science and Technology, 2005, 65, 1436-1446.	3.8	137
4	Concrete crack detection with handwriting script interferences using faster regionâ€based convolutional neural network. Computer-Aided Civil and Infrastructure Engineering, 2020, 35, 373-388.	6.3	131
5	Probabilistic Damage Identification Based on Correlation Analysis Using Guided Wave Signals in Aluminum Plates. Structural Health Monitoring, 2010, 9, 133-144.	4.3	111
6	Crack identification in aluminium plates using Lamb wave signals of a PZT sensor network. Smart Materials and Structures, 2006, 15, 839-849.	1.8	100
7	Probability of the presence of damage estimated from an active sensor network in a composite panel of multiple stiffeners. Composites Science and Technology, 2009, 69, 2054-2063.	3.8	94
8	Locating fatigue damage using temporal signal features of nonlinear Lamb waves. Mechanical Systems and Signal Processing, 2015, 60-61, 182-197.	4.4	93
9	Assessment of debonding in sandwich CF/EP composite beams using A0 Lamb wave at low frequency. Composite Structures, 2011, 93, 483-491.	3.1	81
10	Guided waves for damage identification in pipeline structures: A review. Structural Control and Health Monitoring, 2017, 24, e2007.	1.9	72
11	Guided waves for damage detection in rebar-reinforced concrete beams. Construction and Building Materials, 2013, 47, 370-378.	3.2	70
12	Artificial Neural Network (ANN)-based Crack Identification in Aluminum Plates with Lamb Wave Signals. Journal of Intelligent Material Systems and Structures, 2009, 20, 39-49.	1.4	64
13	Damage detection in rebar-reinforced concrete beams based on time reversal of guided waves. Structural Health Monitoring, 2014, 13, 347-358.	4.3	61
14	Fatigue crack detection in pipes with multiple mode nonlinear guided waves. Structural Health Monitoring, 2019, 18, 180-192.	4.3	58
15	Imaging-based crack detection on concrete surfaces using You Only Look Once network. Structural Health Monitoring, 2021, 20, 484-499.	4.3	57
16	Nonlinear Lamb waves for fatigue damage identification in FRP-reinforced steel plates. Ultrasonics, 2017, 80, 87-95.	2.1	53
17	Debonding Detection in Composite Sandwich Structures Based on Guided Waves. AIAA Journal, 2012, 50, 1697-1706.	1.5	52
18	Quantitative evaluation of crack orientation in aluminium plates based on Lamb waves. Smart Materials and Structures, 2007, 16, 1907-1914.	1.8	50

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19	A Probabilistic Diagnostic Algorithm for Identification of Multiple Notches Using Digital Damage Fingerprints (DDFs). Journal of Intelligent Material Systems and Structures, 2009, 20, 1439-1450.	1.4	49
20	A damage diagnostic imaging algorithm based on the quantitative comparison of Lamb wave signals. Smart Materials and Structures, 2010, 19, 065008.	1.8	49
21	Bolted Sleeve Joints for Connecting Pultruded FRP Tubular Components. Journal of Composites for Construction, 2016, 20, .	1.7	45
22	Guided waves for debonding identification in CFRP-reinforced concrete beams. Construction and Building Materials, 2017, 131, 388-399.	3.2	42
23	Identification of dual notches based on time-reversal lamb waves and a damage diagnostic imaging algorithm. Journal of Intelligent Material Systems and Structures, 2011, 22, 1983-1992.	1.4	39
24	Dispersion analysis of Lamb waves and damage detection for aluminum structures using ridge in the time-scale domain. Measurement Science and Technology, 2009, 20, 095704.	1.4	38
25	Nonlinear aspects of â€œbreathingâ€•crack-disturbed plate waves: 3-D analytical modeling with experimental validation. International Journal of Mechanical Sciences, 2019, 159, 140-150.	3.6	38
26	Numerical simulation and fatigue life estimation of BGA packages under random vibration loading. Microelectronics Reliability, 2015, 55, 2777-2785.	0.9	36
27	Identification of incipient pitting corrosion in reinforced concrete structures using guided waves and piezoelectric wafer transducers. Structural Health Monitoring, 2019, 18, 164-171.	4.3	32
28	Sensor Networks for Structures Health Monitoring: Placement, Implementations, and Challengesâ€”A Review. Vibration, 2021, 4, 551-584.	0.9	30
29	Time-domain Analyses and Correlations of Lamb Wave Signals for Damage Detection in a Composite Panel of Multiple Stiffeners. Journal of Composite Materials, 2009, 43, 3211-3230.	1.2	29
30	Debonding detection in CFRP-reinforced steel structures using anti-symmetrical guided waves. Composite Structures, 2020, 253, 112813.	3.1	29
31	A quantitative identification approach for delamination in laminated composite beams using digital damage fingerprints (DDFs). Composite Structures, 2006, 75, 559-570.	3.1	28
32	Detection and assessment of pitting corrosion in rebars using scattering of ultrasonic guided waves. NDT and E International, 2019, 101, 53-61.	1.7	28
33	Mechanical and Electrical Characterisation of Steel Fiber and Carbon Black Engineered Cementitious Composites. Procedia Engineering, 2017, 188, 325-332.	1.2	25
34	Artificial Neural Network (ANN)-based Crack Identification in Aluminum Plates with Lamb Wave Signals. Journal of Intelligent Material Systems and Structures, 2009, 20, 39-49.	1.4	21
35	Monitoring of delamination onset and growth during Mode I and Mode II interlaminar fracture tests using guided waves. Composites Science and Technology, 2012, 72, 145-151.	3.8	21
36	Nonlinear Lamb wave based DORT method for detection of fatigue cracks. NDT and E International, 2017, 92, 22-29.	1.7	21

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37	Identification of fatigue crack under vibration by nonlinear guided waves. Mechanical Systems and Signal Processing, 2022, 163, 108138.	4.4	21
38	Sensitivity of longitudinal guided wave modes to pitting corrosion of rebars embedded in reinforced concrete. Construction and Building Materials, 2020, 239, 117855.	3.2	17
39	Nonlinear guided waves for fatigue crack evaluation in steel joints with digital image correlation validation. Smart Materials and Structures, 2020, 29, 035031.	1.8	17
40	Damage Identification in Thick Steel Beam Based on Guided Ultrasonic Waves. Journal of Intelligent Material Systems and Structures, 2010, 21, 225-232.	1.4	16
41	Conjunctive and compromised data fusion schemes for identification of multiple notches in an aluminium plate using lamb wave signals. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2010, 57, 2005-2016.	1.7	16
42	Damage detection of fatigue cracks under nonlinear boundary condition using subharmonic resonance. Ultrasonics, 2017, 77, 152-159.	2.1	16
43	Removal of temperature effect in impedance-based damage detection using the cointegration method. Journal of Intelligent Material Systems and Structures, 2019, 30, 2189-2197.	1.4	16
44	A coupled, non-isothermal gas shale flow model: Application to evaluation of gas-in-place in shale with core samples. Journal of Petroleum Science and Engineering, 2017, 158, 361-379.	2.1	15
45	3D reconstruction of concrete defects using optical laser triangulation and modified spacetime analysis. Automation in Construction, 2022, 142, 104469.	4.8	14
46	Advanced numerical simulations considering crack orientation for fatigue damage quantification using nonlinear guided waves. Ultrasonics, 2022, 124, 106738.	2.1	13
47	A New Method for the Estimation of Lost Gas During the Measurement of the Gas Content of Coal. SPE Reservoir Evaluation and Engineering, 2017, 20, 627-638.	1.1	11
48	Detection of crack development in steel fibre engineered cementitious composite using electrical resistivity tomography. Smart Materials and Structures, 2019, 28, 125011.	1.8	11
49	Epoxy Enhanced by Recycled Milled Carbon Fibres in Adhesively-Bonded CFRP for Structural Strengthening. Polymers, 2014, 6, 76-92.	2.0	10
50	Structural condition assessment using entropy-based time series analysis. Journal of Intelligent Material Systems and Structures, 2017, 28, 1941-1956.	1.4	9
51	Development of elasto-magnetic (EM) sensor for monitoring cable tension using an innovative ratio measurement method. Smart Materials and Structures, 2018, 27, 115003.	1.8	9
52	Damage detection in composite structures with high-damping materials using time reversal method. Nondestructive Testing and Evaluation, 2018, 33, 329-345.	1.1	8
53	Identification of Zero Effect State in Corroded RCC Structures Using Guided Waves and Embedded Piezoelectric Wafer Transducers (PWT). Procedia Engineering, 2017, 188, 209-216.	1.2	8
54	Passive detection and localization of fatigue cracking in aluminum plates using Greenâ€™s function reconstruction from ambient noise. Ultrasonics, 2017, 81, 187-195.	2.1	7

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55	Field test investigations for condition monitoring of a concrete culvert bridge using vibration responses. Structural Control and Health Monitoring, 2020, 27, e2614.	1.9	7
56	Piezo-activated guided wave propagation and interaction with damage in tubular structures. Smart Structures and Systems, 2010, 6, 835-849.	1.9	7
57	An intelligent data fusion framework for structural health monitoring. , 2016, , .		6
58	Quantitative fatigue crack evaluation in pipeline structures using nonlinear cylindrical waves. Smart Materials and Structures, 2019, 28, 025015.	1.8	6
59	A simplified analytical model for the investigation of contact acoustic nonlinearity in pipe structures. International Journal of Mechanical Sciences, 2021, 197, 106328.	3.6	6
60	Sensor Networks for Structural Health Monitoring. Journal of Sensors, 2020, 2020, 1-2.	0.6	3
61	A split spectrum processing of noise-contaminated wave signals for damage identification. Smart Structures and Systems, 2012, 10, 253-269.	1.9	3
62	Instantaneous identification of tension in bridge cables using synchrosqueezing wave-packet transform of acceleration responses. Structure and Infrastructure Engineering, 2024, 20, 199-214.	2.0	3
63	Molecular Dynamics Simulations of Graphene Pull-Out from Calcium Silicate Hydrate. , 2015, , .		2
64	Monitoring of surface-fatigue crack propagation in a welded steel angle structure using guided waves and principal component analysis. , 2012, , .		1
65	Fatigue damage localization using time-domain features extracted from nonlinear Lamb waves. , 2014, , .		1
66	Co-Integration-Based Compensation Technique for Dynamic Load Effects on the Electro-mechanical Impedance Method. Journal of Vibration and Acoustics, Transactions of the ASME, 2020, 142, .	1.0	1
67	Lamb Wave Based Damage Identification in Structures With Complex Geometry. , 2008, , .		0
68	Damage Detection in Thick Steel Beam Using Lamb Waves. , 2008, , .		0
69	Lamb Wave Based Monitoring of Fatigue Crack Growth Using Principal Component Analysis. Key Engineering Materials, 0, 558, 260-267.	0.4	0
70	A gradient-based algorithm for trend and outlier prediction in dynamic data streams. , 2017, , .		0
71	Mode Selectivity and Frequency Dependence of Guided Waves Generated by Piezoelectric Wafer Transducers in Rebars Embedded in Concrete. Lecture Notes in Mechanical Engineering, 2021, , 687-694.	0.3	0
72	Guided Wave Based Debonding Detection in CFRP-Reinforced Steel Structures. Smart Innovation, Systems and Technologies, 2020, , 1013-1021.	0.5	0

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73	Advances in corrosion monitoring of reinforced concrete using active and passive sensing approaches. , 2022, , 407-429.		0