Shuzeng Zhang

List of Publications by Year
in descending order

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		840776	940533
39	349	11	16
papers	citations	h-index	g-index

39	39	39	163
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ultrasonic measurement model-based non-destructive detection method for curved components using an immersion spherically focused transducer. Nondestructive Testing and Evaluation, 2022, 37, 184-202.	2.1	7
2	Design and Application of Partial Immersion Focused Ultrasonic Transducers for Austenitic Weld Inspection. Sensors, 2022, 22, 2671.	3.8	3
3	Fast Fourier transform method for determining velocities of ultrasonic Rayleigh waves using a comb transducer. Ultrasonics, 2022, 124, 106754.	3.9	2
4	Modeling of wave fields generated by ultrasonic transducers using a quasi-Monte Carlo method. Journal of the Acoustical Society of America, 2021, 149, 7-15.	1.1	3
5	Absolute Measurement of Material Nonlinear Parameters Using Noncontact Air-Coupled Reception. Materials, 2021, 14, 244.	2.9	1
6	Investigation of frequency-dependent attenuation coefficients for multiple solids using a reliable pulse-echo ultrasonic measurement technique. Measurement: Journal of the International Measurement Confederation, 2021, 177, 109270.	5.0	17
7	Determining the Responsivity of Air-Coupled Piezoelectric Transducers Using a Comparative Method: Theory and Experiments. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 3114-3125.	3.0	1
8	3D ultrasonic imaging based on synthetic aperture focusing technique and space-dependent threshold for detecting submillimetre flaws in strongly scattering metallic materials. NDT and E International, 2021, 124, 102523.	3.7	10
9	Sizing Small Crack-like Flaws through Non-ideal Part Surface Using Ultrasonic Measurement Model. Research in Nondestructive Evaluation, 2020, 31, 147-163.	1.1	1
10	Dual Element Transducer Approach for Second Harmonic Generation and Material Nonlinearity Measurement of Solids in the Pulse-Echo Method. Journal of Nondestructive Evaluation, 2020, 39, 1.	2.4	6
11	Characterizing Microstructural Evolution of TP304 Stainless Steel Using a Pulse-Echo Nonlinear Method. Materials, 2020, 13, 1395.	2.9	5
12	Optimization and Validation of Dual Element Ultrasound Transducers for Improved Pulse-Echo Measurements of Material Nonlinearity. IEEE Sensors Journal, 2020, 20, 13596-13606.	4.7	11
13	Simultaneously Determining Sensitivity and Effective Geometrical Parameters of Ultrasonic Piezoelectric Transducers Using a Self-Reciprocity Method. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2019, 66, 1649-1657.	3.0	7
14	Measurement of shear wave attenuation coefficient using a contact pulse-echo method with consideration of partial reflection effects. Measurement Science and Technology, 2019, 30, 115601.	2.6	11
15	Characterization of Aging Treated 6061 Aluminum Alloy Using Nonlinear Rayleigh Wave. Journal of Nondestructive Evaluation, 2019, 38, 1.	2.4	11
16	Modeling Flaw Pulse-Echo Signals in Cylindrical Components Using an Ultrasonic Line-Focused Transducer with Consideration of Wave Mode Conversion. Sensors, 2019, 19, 2744.	3.8	4
17	Application of Fresnel Zone Plate Focused Beam to Optimized Sensor Design for Pulse-Echo Harmonic Generation Measurements. Sensors, 2019, 19, 1373.	3.8	6
18	Investigation of Material Nonlinearity Measurements Using the Third-Harmonic Generation. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 3635-3646.	4.7	3

#	Article	IF	Citations
19	Improvement of pulse-echo harmonic generation from a traction-free boundary through phase shift of a dual element transducer. Ultrasonics, 2018, 87, 145-151.	3.9	4
20	Acoustic nonlinearity parameter measurements in a pulse-echo setup with the stress-free reflection boundary. Journal of the Acoustical Society of America, 2018, 143, EL237-EL242.	1.1	14
21	Calibration of focused circular transducers using a multi-Gaussian beam model. Applied Acoustics, 2018, 133, 182-185.	3.3	8
22	Experimental investigation of material nonlinearity using the Rayleigh surface waves excited and detected by angle beam wedge transducers. Ultrasonics, 2018, 89, 118-125.	3.9	14
23	Effects of the Oxide Coating Thickness on the Small Flaw Sizing Using an Ultrasonic Test Technique. Coatings, 2018, 8, 69.	2.6	4
24	Modeling linear Rayleigh wave sound fields generated by angle beam wedge transducers. AIP Advances, 2017, 7, .	1.3	8
25	Focused ultrasonic beam behavior at a stress-free boundary and applicability for measuring nonlinear parameter in a reflection mode. AIP Conference Proceedings, 2017, , .	0.4	0
26	Calibration of focused ultrasonic transducers and absolute measurements of fluid nonlinearity with diffraction and attenuation corrections. Journal of the Acoustical Society of America, 2017, 142, 984-990.	1.1	13
27	Receiver calibration and the nonlinearity parameter measurement of thick solid samples with diffraction and attenuation corrections. Ultrasonics, 2017, 81, 147-157.	3.9	28
28	Theoretical and experimental investigation of the pulse-echo nonlinearity acoustic sound fields of focused transducers. Applied Acoustics, 2017, 117, 145-149.	3.3	37
29	Analytical Diffraction Corrections for Circular Focused Transducers Expressed Using the Multi-Gaussian Beam Model. Acta Acustica United With Acustica, 2017, 103, 717-720.	0.8	9
30	Measurement of Rayleigh Wave Beams Using Angle Beam Wedge Transducers as the Transmitter and Receiver with Consideration of Beam Spreading. Sensors, 2017, 17, 1449.	3.8	16
31	A self-reciprocity calibration method for broadband focused transducers. Journal of the Acoustical Society of America, 2016, 140, EL236-EL241.	1.1	11
32	A novel and practical approach for determination of the acoustic nonlinearity parameter using a pulse-echo method. AIP Conference Proceedings, 2016, , .	0.4	7
33	Development of attenuation and diffraction corrections for linear and nonlinear Rayleigh surface waves radiating from a uniform line source. AIP Advances, 2016, 6, 045313.	1.3	3
34	Development of explicit diffraction corrections for absolute measurements of acoustic nonlinearity parameters in the quasilinear regime. Ultrasonics, 2016, 70, 199-203.	3.9	8
35	Nonlinear Rayleigh wave sound fields generated by a wedge transducer. AIP Conference Proceedings, 2016, , .	0.4	1
36	A novel method for extracting acoustic nonlinearity parameters with diffraction corrections. Journal of Mechanical Science and Technology, 2016, 30, 643-652.	1.5	10

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37	Assessment of Acoustic Nonlinearity Parameters Using an Optimized Data-Fitting Method with Multi-Gaussian Beam Model-Based Diffraction Corrections. Research in Nondestructive Evaluation, 2016, 27, 230-250.	1.1	13
38	Simultaneous evaluation of acoustic nonlinearity parameter and attenuation coefficients using the finite amplitude method. AIP Advances, 2015, 5, .	1.3	11
39	Significance of accurate diffraction corrections for the second harmonic wave in determining the acoustic nonlinearity parameter. AIP Advances, 2015, 5, .	1.3	21