

Paul D Wilcox

List of Publications by Year in descending order

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221
papers

9,208
citations

41344

49
h-index

43889

91
g-index

225
all docs

225
docs citations

225
times ranked

3630
citing authors

#	ARTICLE	IF	CITATIONS
1	Ultrasonic arrays for non-destructive evaluation: A review. NDT and E International, 2006, 39, 525-541.	3.7	822
2	Post-processing of the full matrix of ultrasonic transmit/receive array data for non-destructive evaluation. NDT and E International, 2005, 38, 701-711.	3.7	754
3	A rapid signal processing technique to remove the effect of dispersion from guided wave signals. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2003, 50, 419-427.	3.0	323
4	Efficient temperature compensation strategies for guided wave structural health monitoring. Ultrasonics, 2010, 50, 517-528.	3.9	304
5	Strategies for guided-wave structural health monitoring. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2007, 463, 2961-2981.	2.1	270
6	The effect of dispersion on long-range inspection using ultrasonic guided waves. NDT and E International, 2001, 34, 1-9.	3.7	252
7	Omni-directional guided wave transducer arrays for the rapid inspection of large areas of plate structures. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2003, 50, 699-709.	3.0	215
8	Defect detection using ultrasonic arrays: The multi-mode total focusing method. NDT and E International, 2010, 43, 123-133.	3.7	209
9	The temperature stability of guided wave structural health monitoring systems. Smart Materials and Structures, 2006, 15, 967-976.	3.5	203
10	Mode and Transducer Selection for Long Range Lamb Wave Inspection. Journal of Intelligent Material Systems and Structures, 2001, 12, 553-565.	2.5	202
11	The wavenumber algorithm for full-matrix imaging using an ultrasonic array. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2008, 55, 2450-2462.	3.0	200
12	Chirp excitation of ultrasonic guided waves. Ultrasonics, 2013, 53, 265-270.	3.9	198
13	Flexible interdigital PVDF transducers for the generation of Lamb waves in structures. Ultrasonics, 1997, 35, 489-498.	3.9	186
14	The use of non-collinear mixing for nonlinear ultrasonic detection of plasticity and fatigue. Journal of the Acoustical Society of America, 2009, 126, EL117-EL122.	1.1	184
15	Independent trapping and manipulation of microparticles using dexterous acoustic tweezers. Applied Physics Letters, 2014, 104, 154103.	3.3	168
16	The effect of load on guided wave propagation. Ultrasonics, 2007, 47, 111-122.	3.9	135
17	Evaluation of the damage detection capability of a sparse-array guided-wave SHM system applied to a complex structure under varying thermal conditions. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2009, 56, 2666-2678.	3.0	134
18	Dexterous manipulation of microparticles using Bessel-function acoustic pressure fields. Applied Physics Letters, 2013, 102, .	3.3	127

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19	Maximum-likelihood estimation of damage location in guided-wave structural health monitoring. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2011, 467, 2575-2596.	2.1	119
20	The rapid monitoring of structures using interdigital Lamb wave transducers. Smart Materials and Structures, 2000, 9, 304-309.	3.5	118
21	Omnidirectional guided wave inspection of large metallic plate structures using an EMAT array. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2005, 52, 653-665.	3.0	118
22	Defect characterization using an ultrasonic array to measure the scattering coefficient matrix. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2008, 55, 2254-2265.	3.0	111
23	Advanced post-processing for scanned ultrasonic arrays: Application to defect detection and classification in non-destructive evaluation. Ultrasonics, 2008, 48, 636-642.	3.9	110
24	An Investigation Into the Temperature Stability of a Guided Wave Structural Health Monitoring System Using Permanently Attached Sensors. IEEE Sensors Journal, 2007, 7, 905-912.	4.7	93
25	Advanced Reflector Characterization with Ultrasonic Phased Arrays in NDE Applications. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2007, 54, 1541-1550.	3.0	93
26	Autofocusing ultrasonic imagery for non-destructive testing and evaluation of specimens with complicated geometries. NDT and E International, 2010, 43, 78-85.	3.7	93
27	Imaging composite material using ultrasonic arrays. NDT and E International, 2013, 53, 8-17.	3.7	93
28	Manipulation of particles in two dimensions using phase controllable ultrasonic standing waves. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2012, 468, 337-360.	2.1	91
29	Quantitative experimental measurements of matrix cracking and delamination using acoustic emission. Composites Part A: Applied Science and Manufacturing, 2010, 41, 612-623.	7.6	84
30	The post-processing of ultrasonic array data using the total focusing method. Insight: Non-Destructive Testing and Condition Monitoring, 2004, 46, 677-680.	0.6	83
31	Modeling the excitation of guided waves in generally anisotropic multilayered media. Journal of the Acoustical Society of America, 2007, 121, 60-69.	1.1	83
32	Accurate depth measurement of small surface-breaking cracks using an ultrasonic array post-processing technique. NDT and E International, 2014, 68, 105-112.	3.7	82
33	Nonlinear Ultrasonic Phased Array Imaging. Physical Review Letters, 2014, 113, 144301.	7.8	81
34	A generalized approach for efficient finite element modeling of elastodynamic scattering in two and three dimensions. Journal of the Acoustical Society of America, 2010, 128, 1004-1014.	1.1	74
35	The excitation and detection of Lamb waves with planar coil electromagnetic acoustic transducers. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2005, 52, 2370-2383.	3.0	72
36	Manipulation of microparticles using phase-controllable ultrasonic standing waves. Journal of the Acoustical Society of America, 2010, 128, EL195-EL199.	1.1	72

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37	Global crack detection using bispectral analysis. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2006, 462, 1515-1530.	2.1	69
38	Guided wave testing of rail. Insight: Non-Destructive Testing and Condition Monitoring, 2003, 45, 413-420.	0.6	68
39	The Use of Ultrasonic Arrays to Characterize Crack-Like Defects. Journal of Nondestructive Evaluation, 2010, 29, 222-232.	2.4	67
40	Deep Learning for Ultrasonic Crack Characterization in NDE. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 1854-1865.	3.0	60
41	Efficient frequency-domain finite element modeling of two-dimensional elastodynamic scattering. Journal of the Acoustical Society of America, 2010, 127, 155-165.	1.1	58
42	Guided wave arrays for high resolution inspection. Journal of the Acoustical Society of America, 2008, 123, 186-196.	1.1	57
43	Scattering of guided waves by through-thickness cavities with irregular shapes. Wave Motion, 2011, 48, 586-602.	2.0	57
44	Laser induced ultrasonic phased array using full matrix capture data acquisition and total focusing method. Optics Express, 2016, 24, 21921.	3.4	57
45	A Magnetically Sprung Generator for Energy Harvesting Applications. IEEE/ASME Transactions on Mechatronics, 2012, 17, 415-424.	5.8	55
46	Excitation and scattering of guided waves: Relationships between solutions for plates and pipes. Journal of the Acoustical Society of America, 2009, 125, 3623-3631.	1.1	54
47	An analytical comparison of ultrasonic array imaging algorithms. Journal of the Acoustical Society of America, 2010, 127, 2377-2384.	1.1	54
48	Factors affecting the ultrasonic intermodulation crack detection technique using bispectral analysis. NDT and E International, 2008, 41, 223-234.	3.7	51
49	Comparison of ultrasonic array imaging algorithms for nondestructive evaluation. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2013, 60, 1732-1745.	3.0	51
50	Application of the bispectrum for detection of small nonlinearities excited sinusoidally. Journal of Sound and Vibration, 2010, 329, 4279-4293.	3.9	50
51	Ultrasonic imaging algorithms with limited transmission cycles for rapid nondestructive evaluation. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2009, 56, 1932-1944.	3.0	48
52	Effects of array transducer inconsistencies on total focusing method imaging performance. NDT and E International, 2011, 44, 361-368.	3.7	44
53	Imaging algorithms for locating damage via in situ ultrasonic sensors. , 2008, , .		43
54	Scattering of guided waves by flat-bottomed cavities with irregular shapes. Wave Motion, 2012, 49, 375-387.	2.0	43

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55	Deep learning in automated ultrasonic NDE “ Developments, axioms and opportunities. NDT and E International, 2022, 131, 102703.	3.7	43
56	Laser Induced Phased Arrays (LIPA) to detect nested features in additively manufactured components. Materials and Design, 2020, 187, 108412.	7.0	42
57	Accurate finite element modelling of guided wave scattering from irregular defects. NDT and E International, 2012, 45, 46-54.	3.7	40
58	Efficient immersion imaging of components with nonplanar surfaces. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2014, 61, 1284-1295.	3.0	40
59	Longitudinal wave scattering from rough crack-like defects. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2011, 58, 2171-2180.	3.0	38
60	Proof of principle study of ultrasonic particle manipulation by a circular array device. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2012, 468, 3571-3586.	2.1	36
61	Reversible back-propagation imaging algorithm for postprocessing of ultrasonic array data. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2009, 56, 2492-2503.	3.0	35
62	Tunable beam shaping with a phased array acousto-optic modulator. Optics Express, 2015, 23, 26.	3.4	35
63	Ultrasonic Analytic-Signal Responses From Polymer-Matrix Composite Laminates. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 231-243.	3.0	34
64	Strategies for overcoming the effect of temperature on guided wave structural health monitoring. , 2007, 6532, 590.		32
65	Enhanced detection through low-order stochastic modeling for guided-wave structural health monitoring. Structural Health Monitoring, 2012, 11, 149-160.	7.5	32
66	A Model for Multiview Ultrasonic Array Inspection of Small Two-Dimensional Defects. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2019, 66, 1129-1139.	3.0	32
67	Mode and Transducer Selection for Long Range Lamb Wave Inspection. Key Engineering Materials, 1999, 167-168, 152-161.	0.4	31
68	Guided wave SHM with a distributed sensor network. , 2008, , .		31
69	Effect of roughness on imaging and sizing rough crack-like defects using ultrasonic arrays. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2012, 59, 939-948.	3.0	30
70	Experimental Quantification of Noise in Linear Ultrasonic Imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2019, 66, 79-90.	3.0	30
71	Efficient counter-propagating wave acoustic micro-particle manipulation. Applied Physics Letters, 2012, 101, .	3.3	29
72	Monte carlo inversion of ultrasonic array data to map anisotropic weld properties. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2012, 59, 2487-2497.	3.0	29

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73	Development of a computer model for an ultrasonic polymer film transducer system. NDT and E International, 1998, 31, 51-64.	3.7	28
74	Long Range Inspection of Rail Using Guided Waves. AIP Conference Proceedings, 2003, , .	0.4	28
75	Flexible piezoelectric transducer for ultrasonic inspection of non-planar components. Ultrasonics, 2008, 48, 367-375.	3.9	28
76	Plane Wave Imaging Techniques for Immersion Testing of Components With Nonplanar Surfaces. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 1303-1316.	3.0	28
77	Simulation of ultrasonic array imaging of composite materials with defects. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2013, 60, 1935-1948.	3.0	26
78	Low-frequency vibration modulation of guided waves to image nonlinear scatterers for structural health monitoring. Smart Materials and Structures, 2009, 18, 065006.	3.5	24
79	Quantification of the Effect of Array Element Pitch on Imaging Performance. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 600-616.	3.0	24
80	Scattering of plane guided waves obliquely incident on a straight feature with uniform cross-section. Journal of the Acoustical Society of America, 2010, 128, 2715-2725.	1.1	22
81	3-D reconstruction of sub-wavelength scatterers from the measurement of scattered fields in elastic waveguides. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2014, 61, 1864-1879.	3.0	21
82	Remote inspection system for impact damage in large composite structure. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2015, 471, 20140631.	2.1	21
83	A probabilistic approach for the optimisation of ultrasonic array inspection techniques. NDT and E International, 2014, 68, 43-52.	3.7	20
84	On the development and testing of a guided ultrasonic wave array for structural integrity monitoring. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2006, 53, 777-785.	3.0	20
85	Progress Towards a Forward Model of the Complete Acoustic Emission Process. Advanced Materials Research, 2006, 13-14, 69-76.	0.3	19
86	Guided wave propagation as a measure of axial loads in rails. Proceedings of SPIE, 2010, , .	0.8	19
87	Data Fusion of Multiview Ultrasonic Imaging for Characterization of Large Defects. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 2387-2401.	3.0	19
88	A deep learning based methodology for artefact identification and suppression with application to ultrasonic images. NDT and E International, 2022, 126, 102575.	3.7	19
89	An EMAT Array for the Rapid Inspection of Large Structures Using Guided Waves. AIP Conference Proceedings, 2003, , .	0.4	18
90	Acoustic Emission in Wide Composite Specimens. Advanced Materials Research, 2006, 13-14, 325-332.	0.3	18

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91	Coherent acoustic wave propagation in media with pair-correlated spheres. Journal of the Acoustical Society of America, 2012, 131, 2036-2047.	1.1	18
92	A multi-objective structural optimization of an omnidirectional electromagnetic acoustic transducer. Ultrasonics, 2017, 81, 23-31.	3.9	18
93	A COMPARISON OF TEMPERATURE COMPENSATION METHODS FOR GUIDED WAVE STRUCTURAL HEALTH MONITORING. AIP Conference Proceedings, 2008, , .	0.4	17
94	Ultrasonic arrays in NDE: Beyond the B-scan. AIP Conference Proceedings, 2013, , .	0.4	17
95	Investigation of inductively coupled ultrasonic transducer system for NDE. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2013, 60, 1115-1125.	3.0	16
96	Ultrasonic tracking of ply drops in composite laminates. AIP Conference Proceedings, 2016, , .	0.4	16
97	Volumetric imaging through a doubly-curved surface using a 2D phased array. NDT and E International, 2020, 113, 102260.	3.7	16
98	Quantification of environmental compensation strategies for guided wave structural health monitoring. , 2008, , .		15
99	Least-squares estimation of imaging parameters for an ultrasonic array using known geometric image features. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2011, 58, 414-426.	3.0	15
100	Post-processing of guided wave array data for high resolution pipe inspection. Journal of the Acoustical Society of America, 2009, 126, 2973-2982.	1.1	14
101	A practical technique for quantifying the performance of acoustic emission systems on plate-like structures. Ultrasonics, 2009, 49, 538-548.	3.9	14
102	The inspection of anisotropic single-crystal components using a 2-D ultrasonic array. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2010, 57, 2742-2752.	3.0	14
103	One-dimensional time-domain finite-element modelling of nonlinear wave propagation for non-destructive evaluation. NDT and E International, 2014, 61, 45-52.	3.7	14
104	Uncertainty Quantification for Deep Learning in Ultrasonic Crack Characterization. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 69, 2339-2351.	3.0	14
105	Strategies for Guided Wave Structural Health Monitoring. AIP Conference Proceedings, 2007, , .	0.4	13
106	3D ultrasonic inspection of anisotropic aerospace components. Insight: Non-Destructive Testing and Condition Monitoring, 2010, 52, 72-77.	0.6	13
107	Characterisation of small embedded two-dimensional defects using multi-view Total Focusing Method imaging algorithm. NDT and E International, 2021, 119, 102413.	3.7	13
108	Fusion of multi-view ultrasonic data for increased detection performance in non-destructive evaluation. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20200086.	2.1	13

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109	Quantitative structural health monitoring using acoustic emission. , 2006, , .		12
110	Acoustic radiation force analysis using finite difference time domain method. Journal of the Acoustical Society of America, 2012, 131, 3664-3670.	1.1	12
111	Effective dynamic constitutive parameters of acoustic metamaterials with random microstructure. New Journal of Physics, 2012, 14, 033014.	2.9	12
112	Full matrix capture and the total focusing imaging algorithm using laser induced ultrasonic phased arrays. AIP Conference Proceedings, 2017, , .	0.4	12
113	Guided Wave Acoustic Emission from Fatigue Crack Growth in Aluminium Plate. Advanced Materials Research, 2006, 13-14, 23-28.	0.3	11
114	A Model of a Magnetically Sprung Vibration Generator for Power Harvesting Applications. , 2007, , .		11
115	Investigation into distinguishing between small volumetric and crack-like defects using multi-view total focusing method images. AIP Conference Proceedings, 2017, , .	0.4	11
116	An investigation into the feasibility of internal strain measurement in solids by correlation of ultrasonic images. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2011, 467, 2247-2270.	2.1	10
117	ARRAY IMAGING OF NOISY MATERIALS. AIP Conference Proceedings, 2011, , .	0.4	10
118	Design of Two-Dimensional Ultrasonic Phased Array Transducers. Journal of Pressure Vessel Technology, Transactions of the ASME, 2005, 127, 336-344.	0.6	9
119	The Long Term Stability of Guided Wave Structural Health Monitoring Systems. AIP Conference Proceedings, 2006, , .	0.4	9
120	Sensitivity images for multi-view ultrasonic array inspection. AIP Conference Proceedings, 2018, , .	0.4	9
121	Defect detection in guided wave signals using nonlinear autoregressive exogenous method. Structural Health Monitoring, 2022, 21, 1012-1030.	7.5	9
122	Modelling wave propagation through creep damaged material. NDT and E International, 2011, 44, 456-462.	3.7	8
123	Domain Adapted Deep-Learning for Improved Ultrasonic Crack Characterization Using Limited Experimental Data. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 69, 1485-1496.	3.0	8
124	11D-2 Total Focussing Method for Volumetric Imaging in Immersion Non Destructive Evaluation. Proceedings IEEE Ultrasonics Symposium, 2007, , .	0.0	7
125	Lamb wave propagation in negative Poisson's ratio composites. Proceedings of SPIE, 2008, , .	0.8	7
126	STRATEGIES FOR ULTRASOUND IMAGING USING TWO-DIMENSIONAL ARRAYS. AIP Conference Proceedings, 2010, , .	0.4	7

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127	Efficient finite element modeling of elastodynamic scattering with non-reflecting boundary conditions. , 2012, , .		7
128	Exploiting the Full Data Set from Ultrasonic Arrays by Post-Processing. AIP Conference Proceedings, 2006, , .	0.4	6
129	Efficient imaging techniques using an ultrasonic array. , 2010, , .		6
130	NONLINEAR ULTRASONIC CHARACTERIZATION USING THE NONCOLLINEAR METHOD. AIP Conference Proceedings, 2011, , .	0.4	6
131	Semi-analytical finite element analysis of the influence of axial loads on elastic waveguides. , 0, , .		6
132	Angular and frequency behaviour of elastodynamic scattering from embedded scatterers. Ultrasonics, 2019, 99, 105964.	3.9	6
133	Establishing the Limits of Validity of the Superposition of Experimental and Analytical Ultrasonic Responses for Simulating Imaging Data. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2019, 66, 101-108.	3.0	6
134	Post-processing of ultrasonic phased array data for optimal performance. Insight: Non-Destructive Testing and Condition Monitoring, 2005, 47, 88-90.	0.6	6
135	Model of an Electromagnetic Vibration Generator. , 2006, , .		5
136	Bispectral Analysis of Ultrasonic Inter-Modulation Data for Improved Defect Detection. AIP Conference Proceedings, 2006, , .	0.4	5
137	ULTRASONIC ARRAYS: A COMPARISON BETWEEN MEDICAL AND NDE REQUIREMENTS. AIP Conference Proceedings, 2008, , .	0.4	5
138	THE USE OF SCATTERING MATRIX TO MODEL MULTI-MODAL ARRAY INSPECTION WITH THE TFM. , 2009, , .		5
139	POST-PROCESSING OF THE FULL MATRIX OF ULTRASONIC TRANSMIT-RECEIVE ARRAY DATA FOR GUIDED WAVE PIPE INSPECTION. , 2009, , .		5
140	Quantification of sensor geometry performance for guided wave SHM. , 2009, , .		5
141	A STUDY INTO THE EFFECTS OF AN AUSTENITIC WELD ON ULTRASONIC ARRAY IMAGING PERFORMANCE. AIP Conference Proceedings, 2011, , .	0.4	5
142	DEFECT CHARACTERIZATION USING TWO-DIMENSIONAL ARRAYS. , 2011, , .		5
143	Imaging composite material using ultrasonic arrays. AIP Conference Proceedings, 2012, , .	0.4	5
144	A structural model for high pressure helical wire-wound thermoplastic hose. International Journal of Solids and Structures, 2002, 39, 1307-1326.	2.7	4

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145	Detection of near-surface and surface-breaking defects using ultrasonic arrays. , 2012, , .		4
146	Optimization of array element pitch for NDE applications. , 2015, , .		4
147	A Guided Ultrasonic Waves Array for Structural Integrity Monitoring. AIP Conference Proceedings, 2005, , .	0.4	3
148	Load Measurement in Structural Members Using Guided Acoustic Waves. AIP Conference Proceedings, 2006, , .	0.4	3
149	Acoustic emission from pitting corrosion in stressed stainless steel plate. Corrosion Engineering Science and Technology, 2008, 43, 54-63.	1.4	3
150	The development of a 2D ultrasonic array system for the in situ inspection of single crystal turbine blades. , 2012, , .		3
151	Inductively coupled transducer system for damage detection in composites. , 2012, , .		3
152	Optimisation of data acquisition and processing for laser induced ultrasonic phased arrays. Proceedings of Meetings on Acoustics, 2019, , .	0.3	3
153	Structural health monitoring using sparse distributed networks of guided wave sensors. , 2006, 6173, 469.		2
154	Sensitivity limitations for guided wave structural health monitoring. , 2007, , .		2
155	Implementation of Advanced Array Signal Processing Techniques in Commercial Array Controller. AIP Conference Proceedings, 2007, , .	0.4	2
156	EXCITATION AND SCATTERING OF GUIDED WAVESâ€™ RELATIONSHIPS BETWEEN SOLUTIONS FOR PLATES AND PIPES. AIP Conference Proceedings, 2008, , .	0.4	2
157	FEASIBILITY OF USING ULTRASONIC ARRAY IMAGES FOR MAPPING STRAIN IN ENGINEERING COMPONENTS. AIP Conference Proceedings, 2008, , .	0.4	2
158	An autofocus algorithm for flexible ultrasonic arrays based on maximisation of image contrast. Proceedings of SPIE, 2008, , .	0.8	2
159	Defect characterization using ultrasonic arrays. , 2008, , .		2
160	REVERSIBLE BACK-PROPAGATION IMAGING ALGORITHM FOR POST-PROCESSING OF ULTRASONIC ARRAY DATA. , 2009, , .		2
161	THE WAVENUMBER ALGORITHM: FAST FOURIER-DOMAIN IMAGING USING FULL MATRIX CAPTURE. , 2009, , .		2
162	INSPECTION OF SINGLE CRYSTAL AEROSPACE COMPONENTS WITH ULTRASONIC ARRAYS. , 2010, , .		2

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163	EFFICIENT DATA CAPTURE AND POST-PROCESSING FOR REAL-TIME IMAGING USING AN ULTRASONIC ARRAY. , 2010, , .		2
164	THE CHARACTERIZATION OF CRACK-LIKE DEFECTS USING ULTRASONIC IMAGES. , 2010, , .		2
165	EFFICIENT FINITE ELEMENT MODELING OF ELASTODYNAMIC SCATTERING FROM NEAR SURFACE AND SURFACE-BREAKING DEFECTS. , 2011, , .		2
166	MONTE-CARLO INVERSION OF TRAVEL-TIME DATA FOR THE ESTIMATION OF WELD MODEL PARAMETERS. , 2011, , .		2
167	Ultrasonic wave-based defect localization using probabilistic modeling. , 2012, , .		2
168	Ultrasonic array imaging in nondestructive evaluation: total focusing method with using circular coherence factor. , 2013, , .		2
169	Obtaining geometries of real cracks and using an efficient finite element method to simulate their ultrasonic array response. Insight: Non-Destructive Testing and Condition Monitoring, 2014, 56, 492-498.	0.6	2
170	Adapting the full matrix capture and the Total Focusing Method to laser ultrasonics for remote non destructive testing. , 2017, , .		2
171	Effect of surface compensation for imaging through doubly-curved surfaces using a 2D phased array. AIP Conference Proceedings, 2019, , .	0.4	2
172	Acoustic Emission in Wide Composite Specimens. Advanced Materials Research, 0, , 325-332.	0.3	2
173	Rail Steel Health Analysis Based on a Novel Genetic Density-based Clustering Technique and Manifold Representation of Acoustic Emission Signals. Applied Artificial Intelligence, 2022, 36, .	3.2	2
174	Broadband Attenuation Measurement for an Absorbing Plate. AIP Conference Proceedings, 2005, , .	0.4	1
175	Signal Processing of Ultrasonic Array Data. AIP Conference Proceedings, 2005, , .	0.4	1
176	Application of Guided Wave Signal Processing to Acoustic Emission Data. AIP Conference Proceedings, 2005, , .	0.4	1
177	Quantification of Acoustic Emission from Crack Growth in Plate Structures. AIP Conference Proceedings, 2007, , .	0.4	1
178	QUANTIFICATION OF SHM SENSOR ARRAY PERFORMANCE. , 2009, , .		1
179	STRAIN MAPPING IN METALS USING ULTRASONIC ARRAY SPECKLE IMAGES. , 2009, , .		1
180	SHM in complex structural components. , 2009, , .		1

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181	Ultrasonic array speckle image correlation for internal strain and displacement measurement in metals. Proceedings of SPIE, 2009, , .	0.8	1
182	Design considerations for the acoustic emission testing of large composite specimens. Proceedings of SPIE, 2009, , .	0.8	1
183	Efficient methods to model the scattering of ultrasonic guided waves in 3D. Proceedings of SPIE, 2010, , .	0.8	1
184	Efficient finite element modeling of scattering for 2D and 3D problems. Proceedings of SPIE, 2010, , .	0.8	1
185	A MODEL-BASED AUTOFOCUS ALGORITHM FOR ULTRASONIC IMAGING USING A FLEXIBLE ARRAY. , 2010, , .		1
186	THE ULTRASONIC MEASUREMENT OF CRYSTALLOGRAPHIC ORIENTATION FOR IMAGING ANISOTROPIC COMPONENTS WITH 2D ARRAYS. , 2011, , .		1
187	SCATTERING OF PLANE GUIDED WAVES OBLIQUELY INCIDENT ON STRAIGHT FEATURES. , 2011, , .		1
188	Effect of roughness on imaging and characterizing rough crack-like defect using ultrasonic arrays. AIP Conference Proceedings, 2012, , .	0.4	1
189	Two-dimensional manipulation of microparticles using phase-controllable ultrasonic standing waves. , 2012, , .		1
190	The effect of beam directivity on the inspection of anisotropic materials using ultrasonic arrays. , 2012, , .		1
191	Investigation of capacitively coupled ultrasonic transducer system for nondestructive evaluation. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2013, 60, 2586-2596.	3.0	1
192	Simulation of the ultrasonic array response from real branched cracks using an efficient finite element method. , 2014, , .		1
193	Passive wireless ultrasonic transducer systems. , 2014, , .		1
194	Introduction to the 2014 IUS special issue on ultrasonics. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2015, 62, 993-996.	3.0	1
195	A Feasibility Study of Noncontact Ultrasonic Sensor for Nuclear Power Plant Inspection. Journal of Nuclear Engineering and Radiation Science, 2017, 3, .	0.4	1
196	Adapting the full matrix capture and the total focusing method to laser ultrasonics for remote non destructive testing. , 2017, , .		1
197	Rowâ€œColumn Addressed Arrays for Nondestructive Evaluation Applications. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2019, 66, 1119-1128.	3.0	1
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