Paul D Wilcox

List of Publications by Year
in descending order

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	Defect detection in guided wave signals using nonlinear autoregressive exogenous method. Structural Health Monitoring, 2022, 21, 1012-1030.	7.5	9
2	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
3	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
4	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
5	Thickness measurement optimisation for permanently installed inductively coupled ultrasonic transducer systems. NDT and E International, 2022, 129, 102655.	3.7	1
6	Uncertainty Quantification for Deep Learning in Ultrasonic Crack Characterization. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 69, 2339-2351.	3.0	14
7	Deep learning in automated ultrasonic NDE â€“ Developments, axioms and opportunities. NDT and E International, 2022, 131, 102703.	3.7	43
8	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
9	Deep Learning for Ultrasonic Crack Characterization in NDE. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 1854-1865.	3.0	60
10	Laser Induced Phased Arrays (LIPA) to detect nested features in additively manufactured components. Materials and Design, 2020, 187, 108412.	7.0	42
11	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
12	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
13	Volumetric imaging through a doubly-curved surface using a 2D phased array. NDT and E International, 2020, 113, 102260.	3.7	16
14	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
15	Effect of surface compensation for imaging through doubly-curved surfaces using a 2D phased array. AIP Conference Proceedings, 2019, , .	0.4	2
16	Angular and frequency behaviour of elastodynamic scattering from embedded scatterers. Ultrasonics, 2019, 99, 105964.	3.9	6
17	Ray tracing and FMC simulation in curved composite structures. AIP Conference Proceedings, 2019, , .	0.4	0
18	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

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19	Rowâ€“Column Addressed Arrays for Nondestructive Evaluation Applications. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2019, 66, 1119-1128.	3.0	1
20	Optimisation of data acquisition and processing for laser induced ultrasonic phased arrays. Proceedings of Meetings on Acoustics, 2019, , .	0.3	3
21	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
22	Experimental Quantification of Noise in Linear Ultrasonic Imaging. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2019, 66, 79-90.	3.0	30
23	Ultrasonic Analytic-Signal Responses From Polymer-Matrix Composite Laminates. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 231-243.	3.0	34
24	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
25	A Non-Contact Ultrasonic Sensor for General Corrosion Inspection of Thin Plates. , 2018, , .		0
26	Methodologies for validating ray-based forward model using finite element method in ultrasonic array data simulation. AIP Conference Proceedings, 2018, , .	0.4	0
27	Sensitivity images for multi-view ultrasonic array inspection. AIP Conference Proceedings, 2018, , .	0.4	9
28	Investigation into distinguishing between small volumetric and crack-like defects using multi-view total focusing method images. AIP Conference Proceedings, 2017, , .	0.4	11
29	A Feasibility Study of Noncontact Ultrasonic Sensor for Nuclear Power Plant Inspection. Journal of Nuclear Engineering and Radiation Science, 2017, 3, .	0.4	1
30	A multi-objective structural optimization of an omnidirectional electromagnetic acoustic transducer. Ultrasonics, 2017, 81, 23-31.	3.9	18
31	Full matrix capture and the total focusing imaging algorithm using laser induced ultrasonic phased arrays. AIP Conference Proceedings, 2017, , .	0.4	12
32	Adapting the full matrix capture and the Total Focusing Method to laser ultrasonics for remote non destructive testing. , 2017, , .		2
33	Adapting the full matrix capture and the total focusing method to laser ultrasonics for remote non destructive testing. , 2017, , .		1
34	Investigation into angular and frequency dependence of scattering matrices of elastodynamic scatterers. AIP Conference Proceedings, 2016, , .	0.4	0
35	Laser induced ultrasonic phased array using full matrix capture data acquisition and total focusing method. Optics Express, 2016, 24, 21921.	3.4	57
36	Ultrasonic tracking of ply drops in composite laminates. AIP Conference Proceedings, 2016, , .	0.4	16

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37	Optimization of array element pitch for NDE applications. , 2015, , .		4
38	Introduction to the 2014 IUS special issue on ultrasonics. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2015, 62, 993-996.	3.0	1
39	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
40	Tunable beam shaping with a phased array acousto-optic modulator. Optics Express, 2015, 23, 26.	3.4	35
41	Simulation of the ultrasonic array response from real branched cracks using an efficient finite element method. , 2014, , .		1
42	Passive wireless ultrasonic transducer systems. , 2014, , .		1
43	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
44	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
45	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
46	Independent trapping and manipulation of microparticles using dexterous acoustic tweezers. Applied Physics Letters, 2014, 104, 154103.	3.3	168
47	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
48	A probabilistic approach for the optimisation of ultrasonic array inspection techniques. NDT and E International, 2014, 68, 43-52.	3.7	20
49	Efficient immersion imaging of components with nonplanar surfaces. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2014, 61, 1284-1295.	3.0	40
50	Nonlinear Ultrasonic Phased Array Imaging. Physical Review Letters, 2014, 113, 144301.	7.8	81
51	Comparison of ultrasonic array imaging algorithms for nondestructive evaluation. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2013, 60, 1732-1745.	3.0	51
52	Efficient computation of delay law for imaging structure with a complex surface. , 2013, , .		0
53	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
54	Investigation of inductively coupled ultrasonic transducer system for NDE. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2013, 60, 1115-1125.	3.0	16

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55	Chirp excitation of ultrasonic guided waves. Ultrasonics, 2013, 53, 265-270.	3.9	198
56	Imaging composite material using ultrasonic arrays. NDT and E International, 2013, 53, 8-17.	3.7	93
57	Dexterous manipulation of microparticles using Bessel-function acoustic pressure fields. Applied Physics Letters, 2013, 102, .	3.3	127
58	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
59	Ultrasonic arrays in NDE: Beyond the B-scan. AIP Conference Proceedings, 2013, , .	0.4	17
60	Effective dynamic moduli and density of fiber-reinforced composites. , 2013, , .		0
61	Ultrasonic array imaging in nondestructive evaluation: total focusing method with using circular coherence factor. , 2013, , .		2
62	Coherent acoustic wave propagation in media with pair-correlated spheres. Journal of the Acoustical Society of America, 2012, 131, 2036-2047.	1.1	18
63	Acoustic radiation force analysis using finite difference time domain method. Journal of the Acoustical Society of America, 2012, 131, 3664-3670.	1.1	12
64	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
65	Effect of roughness on imaging and characterizing rough crack-like defect using ultrasonic arrays. AIP Conference Proceedings, 2012, , .	0.4	1
66	Autofocus imaging: Experimental results in an anisotropic austenitic weld. , 2012, , .		0
67	Efficient counter-propagating wave acoustic micro-particle manipulation. Applied Physics Letters, 2012, 101, .	3.3	29
68	Two-dimensional manipulation of microparticles using phase-controllable ultrasonic standing waves. , 2012, , .		1
69	Efficient finite element modeling of elastodynamic scattering with non-reflecting boundary conditions. , 2012, , .		7
70	Ultrasonic wave-based defect localization using probabilistic modeling. , 2012, , .		2
71	The development of a 2D ultrasonic array system for the in situ inspection of single crystal turbine blades. , 2012, , .		3
72	The effect of beam directivity on the inspection of anisotropic materials using ultrasonic arrays. , 2012, , .		1

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73	Imaging composite material using ultrasonic arrays. AIP Conference Proceedings, 2012, , .	0.4	5
74	Detection of near-surface and surface-breaking defects using ultrasonic arrays. , 2012, , .		4
75	Enhanced detection through low-order stochastic modeling for guided-wave structural health monitoring. Structural Health Monitoring, 2012, 11, 149-160.	7.5	32
76	Inductively coupled transducer system for damage detection in composites. , 2012, , .		3
77	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
78	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
79	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
80	Effective dynamic constitutive parameters of acoustic metamaterials with random microstructure. New Journal of Physics, 2012, 14, 033014.	2.9	12
81	Accurate finite element modelling of guided wave scattering from irregular defects. NDT and E International, 2012, 45, 46-54.	3.7	40
82	Scattering of guided waves by flat-bottomed cavities with irregular shapes. Wave Motion, 2012, 49, 375-387.	2.0	43
83	A Magnetically Sprung Generator for Energy Harvesting Applications. IEEE/ASME Transactions on Mechatronics, 2012, 17, 415-424.	5.8	55
84	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
85	Longitudinal wave scattering from rough crack-like defects. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2011, 58, 2171-2180.	3.0	38
86	Maximum a posteriori probability estimation for localizing damage using ultrasonic guided waves. Proceedings of SPIE, 2011, , .	0.8	0
87	Scattering of guided waves by through-thickness cavities with irregular shapes. Wave Motion, 2011, 48, 586-602.	2.0	57
88	Effects of array transducer inconsistencies on total focusing method imaging performance. NDT and E International, 2011, 44, 361-368.	3.7	44
89	Modelling wave propagation through creep damaged material. NDT and E International, 2011, 44, 456-462.	3.7	8
90	EFFICIENT FINITE ELEMENT MODELING OF ELASTODYNAMIC SCATTERING FROM NEAR SURFACE AND SURFACE-BREAKING DEFECTS. , 2011, , .		2

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91	THE ULTRASONIC MEASUREMENT OF CRYSTALLOGRAPHIC ORIENTATION FOR IMAGING ANISOTROPIC COMPONENTS WITH 2D ARRAYS. , 2011, , .		1
92	A STUDY INTO THE EFFECTS OF AN AUSTENITIC WELD ON ULTRASONIC ARRAY IMAGING PERFORMANCE. AIP Conference Proceedings, 2011, , .	0.4	5
93	Manipulation of microparticles in two dimensions using counter-propagating ultrasonic waves. , 2011, , .		0
94	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
95	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
96	SCATTERING OF PLANE GUIDED WAVES OBLIQUELY INCIDENT ON STRAIGHT FEATURES. , 2011, , .		1
97	NONLINEAR ULTRASONIC CHARACTERIZATION USING THE NONCOLLINEAR METHOD. AIP Conference Proceedings, 2011, , .	0.4	6
98	MONTE-CARLO INVERSION OF TRAVEL-TIME DATA FOR THE ESTIMATION OF WELD MODEL PARAMETERS. , 2011, , .		2
99	DEFECT CHARACTERIZATION USING TWO-DIMENSIONAL ARRAYS. , 2011, , .		5
100	COMPARISON OF THE INSPECTIONS OF SMOOTH AND ROUGH CRACK-LIKE DEFECTS USING ULTRASONIC ARRAYS. , 2011, , .		0
101	ARRAY IMAGING OF NOISY MATERIALS. AIP Conference Proceedings, 2011, , .	0.4	10
102	Efficient methods to model the scattering of ultrasonic guided waves in 3D. Proceedings of SPIE, 2010, , .	0.8	1
103	Efficient imaging techniques using an ultrasonic array. , 2010, , .		6
104	A magnetically sprung vibration harvester. Proceedings of SPIE, 2010, , .	0.8	0
105	Efficient finite element modeling of scattering for 2D and 3D problems. Proceedings of SPIE, 2010, , .	0.8	1
106	Non-linear material characterisation using the noncollinear method. , 2010, , .		0
107	Manipulation of microparticles using phase-controllable ultrasonic standing waves. Journal of the Acoustical Society of America, 2010, 128, EL195-EL199.	1.1	72
108	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

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109	Defect detection using ultrasonic arrays: The multi-mode total focusing method. NDT and E International, 2010, 43, 123-133.	3.7	209
110	The Use of Ultrasonic Arrays to Characterize Crack-Like Defects. Journal of Nondestructive Evaluation, 2010, 29, 222-232.	2.4	67
111	Application of the bispectrum for detection of small nonlinearities excited sinusoidally. Journal of Sound and Vibration, 2010, 329, 4279-4293.	3.9	50
112	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
113	Efficient temperature compensation strategies for guided wave structural health monitoring. Ultrasonics, 2010, 50, 517-528.	3.9	304
114	Guided wave propagation as a measure of axial loads in rails. Proceedings of SPIE, 2010, , .	0.8	19
115	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
116	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
117	INSPECTION OF SINGLE CRYSTAL AEROSPACE COMPONENTS WITH ULTRASONIC ARRAYS. , 2010, , .		2
118	EFFICIENT DATA CAPTURE AND POST-PROCESSING FOR REAL-TIME IMAGING USING AN ULTRASONIC ARRAY. , 2010, , .		2
119	STRATEGIES FOR ULTRASOUND IMAGING USING TWO-DIMENSIONAL ARRAYS. AIP Conference Proceedings, 2010, , .	0.4	7
120	THE CHARACTERIZATION OF CRACK-LIKE DEFECTS USING ULTRASONIC IMAGES. , 2010, , .		2
121	3D ultrasonic inspection of anisotropic aerospace components. Insight: Non-Destructive Testing and Condition Monitoring, 2010, 52, 72-77.	0.6	13
122	EFFICIENT FINITE ELEMENT MODELLING OF ELASTODYNAMIC SCATTERING. , 2010, , .		0
123	A MODEL-BASED AUTOFOCUS ALGORITHM FOR ULTRASONIC IMAGING USING A FLEXIBLE ARRAY. , 2010, , .		1
124	An analytical comparison of ultrasonic array imaging algorithms. Journal of the Acoustical Society of America, 2010, 127, 2377-2384.	1.1	54
125	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
126	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

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127	REVERSIBLE BACK-PROPAGATION IMAGING ALGORITHM FOR POST-PROCESSING OF ULTRASONIC ARRAY DATA. , 2009, , .		2
128	QUANTIFICATION OF SHM SENSOR ARRAY PERFORMANCE. , 2009, , .		1
129	ULTRASONIC IMAGING USING A FLEXIBLE ARRAY: IMPROVEMENTS TO THE MAXIMUM CONTRAST AUTOFOCUS ALGORITHM. , 2009, , .		0
130	STRAIN MAPPING IN METALS USING ULTRASONIC ARRAY SPECKLE IMAGES. , 2009, , .		1
131	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
132	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
133	An annular array with fiber composite microstructure for far field NDT imaging applications. , 2009, , .		0
134	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
135	A practical technique for quantifying the performance of acoustic emission systems on plate-like structures. Ultrasonics, 2009, 49, 538-548.	3.9	14
136	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
137	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
138	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
139	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
140	SHM in complex structural components. , 2009, , .		1
141	A practical approach for quantifying acoustic emission signals using diffuse field measurements. , 2009, , .		0
142	THE WAVENUMBER ALGORITHM: FAST FOURIER-DOMAIN IMAGING USING FULL MATRIX CAPTURE. , 2009, , .		2
143	THE USE OF SCATTERING MATRIX TO MODEL MULTI-MODAL ARRAY INSPECTION WITH THE TFM. , 2009, , .		5
144	POST-PROCESSING OF THE FULL MATRIX OF ULTRASONIC TRANSMIT-RECEIVE ARRAY DATA FOR GUIDED WAVE PIPE INSPECTION. , 2009, , .		5

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145	Efficient finite element modeling of elastodynamic scattering. , 2009, , .		0
146	Ultrasonic array speckle image correlation for internal strain and displacement measurement in metals. Proceedings of SPIE, 2009, , .	0.8	1
147	Design considerations for the acoustic emission testing of large composite specimens. Proceedings of SPIE, 2009, , .	0.8	1
148	High resolution guided wave pipe inspection. Proceedings of SPIE, 2009, , .	0.8	0
149	Quantification of sensor geometry performance for guided wave SHM. , 2009, , .		5
150	Factors affecting the ultrasonic intermodulation crack detection technique using bispectral analysis. NDT and E International, 2008, 41, 223-234.	3.7	51
151	Flexible piezoelectric transducer for ultrasonic inspection of non-planar components. Ultrasonics, 2008, 48, 367-375.	3.9	28
152	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
153	Lamb wave propagation in negative Poisson's ratio composites. Proceedings of SPIE, 2008, , .	0.8	7
154	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
155	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
156	Guided wave arrays for high resolution inspection. Journal of the Acoustical Society of America, 2008, 123, 186-196.	1.1	57
157	Acoustic emission from pitting corrosion in stressed stainless steel plate. Corrosion Engineering Science and Technology, 2008, 43, 54-63.	1.4	3
158	A COMPARISON OF TEMPERATURE COMPENSATION METHODS FOR GUIDED WAVE STRUCTURAL HEALTH MONITORING. AIP Conference Proceedings, 2008, , .	0.4	17
159	EXCITATION AND SCATTERING OF GUIDED WAVESâ€"RELATIONSHIPS BETWEEN SOLUTIONS FOR PLATES AND PIPES. AIP Conference Proceedings, 2008, , .	0.4	2
160	ULTRASONIC ARRAYS: A COMPARISON BETWEEN MEDICAL AND NDE REQUIREMENTS. AIP Conference Proceedings, 2008, , .	0.4	5
161	FEASIBILY OF USING ULTRASONIC ARRAY IMAGES FOR MAPPING STRAIN IN ENGINEERING COMPONENTS. AIP Conference Proceedings, 2008, , .	0.4	2
162	A POST-PROCESSING TECHNIQUE FOR GUIDED WAVE ARRAY DATA FOR THE INSPECTION OF PLATE STRUCTURES. AIP Conference Proceedings, 2008, , .	0.4	0

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163	Guided wave SHM with a distributed sensor network. , 2008, , .		31
164	Quantification of environmental compensation strategies for guided wave structural health monitoring. , 2008, , .		15
165	An autofocus algorithm for flexible ultrasonic arrays based on maximisation of image contrast. Proceedings of SPIE, 2008, , .	0.8	2
166	Defect characterization using ultrasonic arrays. , 2008, , .		2
167	Imaging algorithms for locating damage via in situ ultrasonic sensors. , 2008, , .		43
168	A Model of a Magnetically Sprung Vibration Generator for Power Harvesting Applications. , 2007, , .		11
169	Strategies for overcoming the effect of temperature on guided wave structural health monitoring. , 2007, 6532, 590.		32
170	11D-2 Total Focussing Method for Volumetric Imaging in Immersion Non Destructive Evaluation. Proceedings IEEE Ultrasonics Symposium, 2007, , .	0.0	7
171	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
172	Strategies for Guided Wave Structural Health Monitoring. AIP Conference Proceedings, 2007, , .	0.4	13
173	Sensitivity limitations for guided wave structural health monitoring. , 2007, , .		2
174	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
175	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
176	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
177	The Factors Affecting the Sensitivity of the Ultrasonic Inter-Modulation Technique. AIP Conference Proceedings, 2007, , .	0.4	0
178	Quantification of Acoustic Emission from Crack Growth in Plate Structures. AIP Conference Proceedings, 2007, , .	0.4	1
179	Implementation of Advanced Array Signal Processing Techniques in Commercial Array Controller. AIP Conference Proceedings, 2007, , .	0.4	2
180	The effect of load on guided wave propagation. Ultrasonics, 2007, 47, 111-122.	3.9	135

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181	Acoustic Emission in Wide Composite Specimens. Advanced Materials Research, 2006, 13-14, 325-332.	0.3	18
182	Global crack detection using bispectral analysis. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2006, 462, 1515-1530.	2.1	69
183	Ultrasonic arrays for non-destructive evaluation: A review. NDT and E International, 2006, 39, 525-541.	3.7	822
184	Model of an Electromagnetic Vibration Generator. , 2006, , .		5
185	Bispectral Analysis of Ultrasonic Inter-Modulation Data for Improved Defect Detection. AIP Conference Proceedings, 2006, , .	0.4	5
186	Exploiting the Full Data Set from Ultrasonic Arrays by Post-Processing. AIP Conference Proceedings, 2006, , .	0.4	6
187	Load Measurement in Structural Members Using Guided Acoustic Waves. AIP Conference Proceedings, 2006, , .	0.4	3
188	The Long Term Stability of Guided Wave Structural Health Monitoring Systems. AIP Conference Proceedings, 2006, , .	0.4	9
189	Guided Wave Acoustic Emission from Fatigue Crack Growth in Aluminium Plate. Advanced Materials Research, 2006, 13-14, 23-28.	0.3	11
190	Progress Towards a Forward Model of the Complete Acoustic Emission Process. Advanced Materials Research, 2006, 13-14, 69-76.	0.3	19
191	Structural health monitoring using sparse distributed networks of guided wave sensors. , 2006, 6173, 469.		2
192	The temperature stability of guided wave structural health monitoring systems. Smart Materials and Structures, 2006, 15, 967-976.	3.5	203
193	Quantitative structural health monitoring using acoustic emission. , 2006, , .		12
194	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
195	Design of Two-Dimensional Ultrasonic Phased Array Transducers. Journal of Pressure Vessel Technology, Transactions of the ASME, 2005, 127, 336-344.	0.6	9
196	A Guided Ultrasonic Waves Array for Structural Integrity Monitoring. AIP Conference Proceedings, 2005, , .	0.4	3
197	Broadband Attenuation Measurement for an Absorbing Plate. AIP Conference Proceedings, 2005, , .	0.4	1
198	Signal Processing of Ultrasonic Array Data. AIP Conference Proceedings, 2005, , .	0.4	1

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199	Post-processing of the full matrix of ultrasonic transmitâ€“receive array data for non-destructive evaluation. NDT and E International, 2005, 38, 701-711.	3.7	754
200	Application of Guided Wave Signal Processing to Acoustic Emission Data. AIP Conference Proceedings, 2005, , .	0.4	1
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