

Michael J S Lowe

List of Publications by Year in descending order

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42
papers

753
citations

706676

14
h-index

591227

27
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42
all docs

42
docs citations

42
times ranked

596
citing authors

#	ARTICLE	IF	CITATIONS
1	Finite element model for waves guided along solid systems of arbitrary section coupled to infinite solid media. Journal of the Acoustical Society of America, 2008, 123, 696-708.	0.5	129
2	Guided wave propagation in three-layer pavement structures. Journal of the Acoustical Society of America, 2004, 116, 2902-2913.	0.5	98
3	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.	1.7	72
4	Finite element modelling of elastic wave scattering within a polycrystalline material in two and three dimensions. Journal of the Acoustical Society of America, 2015, 138, 2326-2336.	0.5	67
5	Mode selection for corrosion detection in pipes and vessels via guided wave tomography. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2013, 60, 1165-1177.	1.7	57
6	Improved detection of rough defects for ultrasonic nondestructive evaluation inspections based on finite element modeling of elastic wave scattering. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2015, 62, 1797-1808.	1.7	34
7	Use of Microwaves for the Detection of Water as a Cause of Corrosion Under Insulation. Journal of Nondestructive Evaluation, 2012, 31, 65-76.	1.1	32
8	On the dimensionality of elastic wave scattering within heterogeneous media. Journal of the Acoustical Society of America, 2016, 140, 4360-4366.	0.5	24
9	Model-Based Design of Low Frequency Lamb Wave EMATs for Mode Selectivity. Journal of Nondestructive Evaluation, 2015, 34, 1.	1.1	22
10	Investigation of guided wave propagation in pipes fully and partially embedded in concrete. Journal of the Acoustical Society of America, 2016, 140, 4528-4539.	0.5	21
11	Experimental Studies of the Inspection of Areas With Restricted Access Using A0 Lamb Wave Tomography. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 1455-1467.	1.7	21
12	The application of Fermat's principle for imaging anisotropic and inhomogeneous media with application to austenitic steel weld inspection. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2009, 465, 3401-3423.	1.0	19
13	A methodology for evaluating detection performance of ultrasonic array imaging algorithms for coarse-grained materials. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2014, 61, 2042-2053.	1.7	16
14	Attenuation of Rayleigh waves due to surface roughness. Journal of the Acoustical Society of America, 2021, 149, 4298-4308.	0.5	15
15	A generic hybrid model for bulk elastodynamics, with application to ultrasonic nondestructive evaluation. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2012, 59, 1239-1252.	1.7	14
16	Can ultrasound attenuation measurement be used to characterise grain statistics in castings?. Ultrasonics, 2021, 115, 106441.	2.1	12
17	The Guiding of Ultrasound by a Welded Joint in a Plate. AIP Conference Proceedings, 2007, , .	0.3	10
18	The Effect of Bends on the Long-Range Microwave Inspection of Thermally Insulated Pipelines for the Detection of Water. Journal of Nondestructive Evaluation, 2012, 31, 117-127.	1.1	9

#	ARTICLE	IF	CITATIONS
19	Non-Contact Surface Wave Measurements Using a Microphone. , 2006, , .		8
20	Corrosion monitoring with tangential radiography and limited view computed tomography. AIP Conference Proceedings, 2016, , .	0.3	8
21	NON-CONTACT SURFACE WAVE SCANNING OF PAVEMENTS USING A ROLLING MICROPHONE ARRAY. AIP Conference Proceedings, 2008, , .	0.3	7
22	The effect of variation in phased array element performance for Non-Destructive Evaluation (NDE). Ultrasonics, 2013, 53, 1065-1078.	2.1	7
23	A Guided Wave Inspection Technique for Wedge Features. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 997-1008.	1.7	6
24	Evaluation of Multilayered Pavement Structures from Measurements of Surface Waves. AIP Conference Proceedings, 2006, , .	0.3	5
25	Improved FE simulation of ultrasound in plastics. AIP Conference Proceedings, 2016, , .	0.3	5
26	Propagation of guided waves in aircraft structure. AIP Conference Proceedings, 2000, , .	0.3	4
27	Modelling based radiography for NDE of subsea pipelines. AIP Conference Proceedings, 2016, , .	0.3	4
28	Guided wave tomography performance analysis. AIP Conference Proceedings, 2016, , .	0.3	4
29	Simulating the ultrasonic scattering from complex surface-breaking defects with a three-dimensional hybrid model. NDT and E International, 2018, 97, 32-41.	1.7	4
30	Finite-element and semi-analytical study of elastic wave propagation in strongly scattering polycrystals. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2022, 478, 20210850.	1.0	4
31	Establishment and validation of the Channelized Hotelling Model Observer for image assessment in industrial radiography. NDT and E International, 2018, 98, 1-7.	1.7	3
32	Eliminating backwall effects in the phased array imaging of near backwall defects. Journal of the Acoustical Society of America, 2018, 144, 1075-1088.	0.5	3
33	Appraising scattering theories for polycrystals of any symmetry using finite elements. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2022, 380, .	1.6	3
34	Guided wave attenuation in coated pipes buried in sand. AIP Conference Proceedings, 2016, , .	0.3	2
35	<title>Guided wave inspection of chemical plant pipework</title>. , 1996, , .		1
36	FINITE ELEMENT BASED HYBRID MODELS FOR ULTRASONIC NDE USING COMMERCIAL PACKAGES. , 2010, , .		1

#	ARTICLE	IF	CITATIONS
37	Rough surface reconstruction for ultrasonic NDE simulation. , 2014, , .		1
38	Non-Contact Surface Wave Testing While Moving. , 2007, , .		1
39	GENERIC TIME-DOMAIN HYBRID MODELS FOR ULTRASONIC NDE. , 2011, , .		0
40	Experimental study of A0 Lamb wave tomography. , 2015, , .		0
41	Multi-band finite element simulation of ultrasound attenuation by soft tissue. , 2021, , .		0
42	Short Range Pipe Guided Wave Testing Using SH0 Plane Wave Imaging for Improved Quantification Accuracy. Sensors, 2022, 22, 2973.	2.1	0