

Alexander Velichko

List of Publications by Year in descending order

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24
papers

518
citations

759233

12
h-index

677142

22
g-index

24
all docs

24
docs citations

24
times ranked

300
citing authors

#	ARTICLE	IF	CITATIONS
1	Local scattering ultrasound imaging. Scientific Reports, 2021, 11, 993.	3.3	11
2	Optimal Extraction of Ultrasonic Scattering Features in Coarse Grained Materials. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 2238-2250.	3.0	3
3	The use of full-skip ultrasonic data and Bayesian inference for improved characterisation of crack-like defects. NDT and E International, 2021, 121, 102467.	3.7	9
4	Ultrasonic Defect Characterization Using the Scattering Matrix: A Performance Comparison Study of Bayesian Inversion and Machine Learning Schemas. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 3143-3155.	3.0	15
5	Quantification of the Effect of Multiple Scattering on Array Imaging Performance. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 92-105.	3.0	6
6	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
7	The effect of distortion models on characterisation of real defects using ultrasonic arrays. NDT and E International, 2020, 113, 102263.	3.7	9
8	Grain Scattering Noise Modeling and Its Use in the Detection and Characterization of Defects Using Ultrasonic Arrays. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2019, 66, 1798-1813.	3.0	10
9	Angular and frequency behaviour of elastodynamic scattering from embedded scatterers. Ultrasonics, 2019, 99, 105964.	3.9	6
10	Detection and characterisation of defects in highly scattering materials using ultrasonic arrays. , 2019, , .		0
11	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
12	Ultrasonic defect characterisationâ€™Use of amplitude, phase, and frequency information. Journal of the Acoustical Society of America, 2018, 143, 349-360.	1.1	12
13	Strategies for data acquisition using ultrasonic phased arrays. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2018, 474, 20180451.	2.1	12
14	Near-field model of ultrasonic array data. AIP Conference Proceedings, 2017, , .	0.4	0
15	Combining Simulated and Experimental Data to Simulate Ultrasonic Array Data From Defects in Materials With High Structural Noise. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 2198-2206.	3.0	17
16	Characterization of defects using ultrasonic arrays: a dynamic classifier approach. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2015, 62, 2146-2160.	3.0	21
17	Ultrasonic characterization of crack-like defects using scattering matrix similarity metrics. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2015, 62, 545-559.	3.0	44
18	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

#	ARTICLE	IF	CITATIONS
19	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
20	An analytical comparison of ultrasonic array imaging algorithms. Journal of the Acoustical Society of America, 2010, 127, 2377-2384.	1.1	54
21	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
22	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
23	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
24	Guided wave arrays for high resolution inspection. Journal of the Acoustical Society of America, 2008, 123, 186-196.	1.1	57