

Xiaokang Yin

List of Publications by Year in descending order

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Version: 2024-02-01

60
papers

684
citations

623734

14
h-index

610901

24
g-index

60
all docs

60
docs citations

60
times ranked

352
citing authors

#	ARTICLE	IF	CITATIONS
1	High sensitivity rotating alternating current field measurement for arbitrary-angle underwater cracks. <i>NDT and E International</i> , 2016, 79, 123-131.	3.7	62
2	Non-destructive evaluation of concrete using a capacitive imaging technique: Preliminary modelling and experiments. <i>Cement and Concrete Research</i> , 2010, 40, 1734-1743.	11.0	50
3	Non-destructive evaluation of composite materials using a capacitive imaging technique. <i>Composites Part B: Engineering</i> , 2012, 43, 1282-1292.	12.0	50
4	A feed-through ACFM probe with sensor array for pipe string cracks inspection. <i>NDT and E International</i> , 2014, 67, 17-23.	3.7	50
5	Analysis of the lift-off effect of a U-shaped ACFM system. <i>NDT and E International</i> , 2013, 53, 31-35.	3.7	43
6	Detecting surface features on conducting specimens through an insulation layer using a capacitive imaging technique. <i>NDT and E International</i> , 2012, 52, 157-166.	3.7	33
7	Investigations into the measurement sensitivity distribution of coplanar capacitive imaging probes. <i>NDT and E International</i> , 2013, 58, 1-9.	3.7	30
8	Two-Step Interpolation Algorithm for Measurement of Longitudinal Cracks on Pipe Strings Using Circumferential Current Field Testing System. <i>IEEE Transactions on Industrial Informatics</i> , 2018, 14, 394-402.	11.3	29
9	Inner circumferential current field testing system with TMR sensor arrays for inner-wall cracks inspection in aluminum tubes. <i>Measurement: Journal of the International Measurement Confederation</i> , 2018, 122, 232-239.	5.0	18
10	Inspection of both inner and outer cracks in aluminum tubes using double frequency circumferential current field testing method. <i>Mechanical Systems and Signal Processing</i> , 2019, 127, 16-34.	8.0	18
11	Studies of the factors influencing the imaging performance of the capacitive imaging technique. <i>NDT and E International</i> , 2013, 60, 1-10.	3.7	17
12	An improved method of eddy current pulsed thermography to detect subsurface defects in glass fiber reinforced polymer composites. <i>Composite Structures</i> , 2020, 242, 112145.	5.8	17
13	Visual and Intelligent Identification Methods for Defects in Underwater Structure Using Alternating Current Field Measurement Technique. <i>IEEE Transactions on Industrial Informatics</i> , 2022, 18, 3853-3862.	11.3	17
14	Analysis of signals for inclined crack detection through alternating current field measurement with a U-shaped probe. <i>Insight: Non-Destructive Testing and Condition Monitoring</i> , 2017, 59, 121-128.	0.6	16
15	Multiple type defect detection in pipe by Helmholtz electromagnetic array probe. <i>NDT and E International</i> , 2017, 91, 97-107.	3.7	14
16	Preliminary studies on the design principles of capacitive imaging probes for non-destructive evaluation. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2011, 42, 447-470.	0.6	13
17	Circumferential current field testing system with TMR sensor array for non-contact detection and estimation of cracks on power plant piping. <i>Sensors and Actuators A: Physical</i> , 2017, 263, 542-553.	4.1	13
18	Lift-off Effect for Capacitive Imaging Sensors. <i>Sensors</i> , 2018, 18, 4286.	3.8	12

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19	A capacitive-inductive dual modality imaging system for non-destructive evaluation applications. Mechanical Systems and Signal Processing, 2020, 135, 106403.	8.0	12
20	Further investigations into capacitive imaging for NDE. Insight: Non-Destructive Testing and Condition Monitoring, 2009, 51, 484-490.	0.6	11
21	Bobbin Coil Probe With Sensor Arrays for Imaging and Evaluation of Longitudinal Cracks Inside Aluminum Tubes. IEEE Sensors Journal, 2018, 18, 6774-6781.	4.7	11
22	A Combined Inductive and Capacitive Non-Destructive Evaluation Technique Using a Single Spiral Coil Sensor. IEEE Sensors Journal, 2021, 21, 18187-18196.	4.7	10
23	Camera-Mirror Binocular Vision-Based Method for Evaluating the Performance of Industrial Robots. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-14.	4.7	10
24	Coiled Tubing Wall Thickness Evaluation System Using Pulsed Alternating Current Field Measurement Technique. IEEE Sensors Journal, 2020, 20, 10495-10501.	4.7	9
25	Corrosion Depth Inversion Method Based on the Lift-Off Effect of the Capacitive Imaging (CI) Technique. IEEE Access, 2020, 8, 22770-22779.	4.2	9
26	Identification of Tiny Surface Cracks in a Rugged Weld by Signal Gradient Algorithm Using the ACFM Technique. Sensors, 2020, 20, 380.	3.8	8
27	Capacitive Imaging Technique for the Inspection of Composite Sucker Rod. Chinese Journal of Mechanical Engineering (English Edition), 2019, 32, .	3.7	8
28	Investigation of optimal time-domain feature for non-surface defect detection through a pulsed alternating current field measurement technique. Measurement Science and Technology, 2018, 29, 015601.	2.6	7
29	Retrieving dimensions of surface features on conductors covered by insulation using the maximum Variation Ratio (MVR) in capacitive imaging. NDT and E International, 2021, 117, 102384.	3.7	7
30	Capacitive imaging using fused amplitude and phase information for improved defect detection. NDT and E International, 2021, 124, 102547.	3.7	7
31	Further Investigations into the Capacitive Imaging Technique Using a Multi-Electrode Sensor. Applied Sciences (Switzerland), 2018, 8, 2296.	2.5	6
32	Air-coupled ultrasonic spectroscopy of highly damping materials using pulse compression. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2009, 56, 1207-1217.	3.0	5
33	Design and characterization of planar capacitive imaging probe based on the measurement sensitivity distribution. , 2013, , .		5
34	Induced circumferential current for transverse crack detection on a pipe string. Insight: Non-Destructive Testing and Condition Monitoring, 2015, 57, 528-533.	0.6	5
35	Detection of Cracks in Metallic Objects by Arbitrary Scanning Direction Using a Double U-Shaped Orthogonal ACFM Probe. Materials Transactions, 2016, 57, 608-612.	1.2	5
36	Detection System Development of Drill Pipe Thread Based on ACFM Technique. IEEE Sensors Journal, 2021, 21, 23926-23933.	4.7	5

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37	Performance evaluation of capacitive imaging sensors with different geometries. Insight: Non-Destructive Testing and Condition Monitoring, 2018, 60, 676-684.	0.6	5
38	New parameters for the ACFM inspection of different materials. Insight: Non-Destructive Testing and Condition Monitoring, 2016, 58, 313-317.	0.6	4
39	Visual Inspection of Irregular Cracks in Steel Structure by Double Gradient Fusion Algorithm Using Alternating Current Field Measurement Technique. IEEE Sensors Journal, 2022, 22, 8881-8890.	4.7	4
40	A novel fatigue crack angle quantitative monitoring method based on rotating alternating current field measurement. Measurement: Journal of the International Measurement Confederation, 2022, 195, 111101.	5.0	4
41	DoF-Dependent and Equal-Partition Based Lens Distortion Modeling and Calibration Method for Close-Range Photogrammetry. Sensors, 2020, 20, 5934.	3.8	3
42	CAPACITIVE IMAGING TECHNIQUE FOR NDE. AIP Conference Proceedings, 2011, , .	0.4	2
43	Negative measurement sensitivity values of planar capacitive imaging probes. AIP Conference Proceedings, 2014, , .	0.4	2
44	Further capacitive imaging experiments using modified probes. AIP Conference Proceedings, 2016, , .	0.4	2
45	Characterizing surface features on conducting specimens through an insulation layer using the capacitive imaging technique. AIP Conference Proceedings, 2016, , .	0.4	2
46	An Electromagnetic Helmholtz-Coil Probe for Arbitrary Orientation Crack Detection on the Surface of Pipeline. Materials Transactions, 2017, 58, 641-645.	1.2	2
47	Frequency optimisation of circumferential current field testing system for highly-sensitive detection of longitudinal cracks on a pipe string. Insight: Non-Destructive Testing and Condition Monitoring, 2017, 59, 378-382.	0.6	2
48	A Novel Non-Destructive Evaluation (NDE) Technique Using Coplanar Capacitive Imaging Probes. Journal of Testing and Evaluation, 2014, 42, 713-724.	0.7	2
49	A Novel Dual-Mode Sensor for the Detection of Interface Flaw in "Insulator-Conductor" Composite Structures. IEEE Sensors Journal, 2023, 23, 4568-4576.	4.7	2
50	Modeling and simulation of crack detection for underwater structures using an ACFM method. AIP Conference Proceedings, 2013, , .	0.4	1
51	Developing and testing of a novel portable ACFM intelligent instrument. , 2014, , .		1
52	In-service detection of longitudinal cracks on drill pipes using induced circumferential current. Insight: Non-Destructive Testing and Condition Monitoring, 2016, 58, 435-438.	0.6	1
53	Application of induced circumferential current for cracks inspection on pipe string. AIP Conference Proceedings, 2016, , .	0.4	1
54	Detection and evaluation of weld defects in stainless steel using alternating current field measurement. AIP Conference Proceedings, 2018, , .	0.4	1

#	ARTICLE	IF	CITATIONS
55	Monocular stereo vision based method for validating path accuracy of industrial robots. , 2021, , .		1
56	The detection of axial cracks in pipe string using a feed-through ACFM probe. , 2014, , .		0
57	Application of metal magnetic memory technology on defects detection of jack-up platform. AIP Conference Proceedings, 2016, , .	0.4	0
58	Circumferential Current Field Testing Method for Innerwall Cracks Detection in Aluminum Tube. , 2017, , .		0
59	Positive and negative variations in capacitive images for given defects under varying experimental conditions. AIP Conference Proceedings, 2018, , .	0.4	0
60	Magnetic compression effect for the enhancement of crack response signals in non-ferromagnetic conductive tubes. Insight: Non-Destructive Testing and Condition Monitoring, 2018, 60, 542-546.	0.6	0