

Shejuan Xie

List of Publications by Year in descending order

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51
papers

802
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567281

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times ranked

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citing authors

#	ARTICLE	IF	CITATIONS
1	Quantitative non-destructive evaluation of wall thinning defect in double-layer pipe of nuclear power plants using pulsed ECT method. <i>NDT and E International</i> , 2015, 75, 87-95.	3.7	69
2	Super tough magnetic hydrogels for remotely triggered shape morphing. <i>Journal of Materials Chemistry B</i> , 2018, 6, 2713-2722.	5.8	68
3	Magnetic double-network hydrogels for tissue hyperthermia and drug release. <i>Journal of Materials Chemistry B</i> , 2019, 7, 1311-1321.	5.8	67
4	Efficient Numerical Solver for Simulation of Pulsed Eddy-Current Testing Signals. <i>IEEE Transactions on Magnetics</i> , 2011, 47, 4582-4591.	2.1	59
5	Development of a very fast simulator for pulsed eddy current testing signals of local wall thinning. <i>NDT and E International</i> , 2012, 51, 45-50.	3.7	45
6	A novel magnetic force transmission eddy current array probe and its application for nondestructive testing of defects in pipeline structures. <i>Sensors and Actuators A: Physical</i> , 2020, 309, 112030.	4.1	43
7	Features extraction and discussion in a novel frequency-band-selecting pulsed eddy current testing method for the detection of a certain depth range of defects. <i>NDT and E International</i> , 2020, 111, 102211.	3.7	41
8	A hybrid nondestructive testing method of pulsed eddy current testing and electromagnetic acoustic transducer techniques for simultaneous surface and volumetric defects inspection. <i>NDT and E International</i> , 2017, 86, 153-163.	3.7	40
9	Sizing of Wall Thinning Defects Using Pulsed Eddy Current & Testing Signals Based on a Hybrid Inverse Analysis Method. <i>IEEE Transactions on Magnetics</i> , 2013, 49, 1653-1656.	2.1	35
10	Quantitative Inversion of Stress and Crack in Ferromagnetic Materials Based on Metal Magnetic Memory Method. <i>IEEE Transactions on Magnetics</i> , 2018, 54, 1-11.	2.1	27
11	An efficient electromagnetic and thermal modelling of eddy current pulsed thermography for quantitative evaluation of blade fatigue cracks in heavy-duty gas turbines. <i>Mechanical Systems and Signal Processing</i> , 2020, 142, 106781.	8.0	23
12	Quantitative mapping of depth profile of fatigue cracks using eddy current pulsed thermography assisted by PCA and 2D wavelet transformation. <i>Mechanical Systems and Signal Processing</i> , 2022, 175, 109139.	8.0	18
13	Assessment of local conductivity distribution in stress corrosion crack region using direct current potential drop method. <i>Corrosion Science</i> , 2017, 123, 197-208.	6.6	17
14	Influence of Plastic Deformation and Fatigue Damage on Electromagnetic Properties of 304 Austenitic Stainless Steel. <i>IEEE Transactions on Magnetics</i> , 2018, 54, 1-10.	2.1	16
15	Quantitative Non-Destructive Testing of Metallic Foam Based on Direct Current Potential Drop Method. <i>IEEE Transactions on Magnetics</i> , 2012, 48, 375-378.	2.1	15
16	A novel frequency-band-selecting pulsed eddy current testing method for the detection of a certain depth range of defects. <i>NDT and E International</i> , 2019, 107, 102154.	3.7	15
17	IRT-GAN: A generative adversarial network with a multi-headed fusion strategy for automated defect detection in composites using infrared thermography. <i>Composite Structures</i> , 2022, 290, 115543.	5.8	15
18	Inversion Technique for Quantitative Infrared Thermography Evaluation of Delamination Defects in Multilayered Structures. <i>IEEE Transactions on Industrial Informatics</i> , 2020, 16, 4592-4602.	11.3	14

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19	A new array eddy current testing probe for inspection of small-diameter tubes in Tokamak fusion devices. <i>Fusion Engineering and Design</i> , 2020, 157, 111627.	1.9	14
20	A novel circumferential eccentric eddy current probe and its application for defect detection of small-diameter tubes. <i>Sensors and Actuators A: Physical</i> , 2021, 331, 113023.	4.1	12
21	Development of a Fast Numerical Simulator for Infrared Thermography Testing Signals of Delamination Defect in a Multilayered Plate. <i>IEEE Transactions on Industrial Informatics</i> , 2018, 14, 5544-5552.	11.3	11
22	Efficient numerical simulation of eddy current pulsed thermography NDT signals based on FEM-BEM method and energy equivalent principle. <i>Infrared Physics and Technology</i> , 2019, 101, 138-145.	2.9	10
23	A numerical simulation method of nonlinear magnetic flux leakage testing signals for nondestructive evaluation of plastic deformation in a ferromagnetic material. <i>Mechanical Systems and Signal Processing</i> , 2021, 155, 107670.	8.0	10
24	Numerical simulation method for IR thermography NDE of delamination defect in multilayered plate. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2016, 52, 381-389.	0.6	9
25	Reconstruction of cracks in a carbon fiber-reinforced polymer laminate plate from signals of eddy current testing. <i>Journal of Composite Materials</i> , 2020, 54, 3527-3536.	2.4	9
26	A Fast Forward Simulation Scheme for Eddy Current Testing of Crack in a Structure of Carbon Fiber Reinforced Polymer Laminate. <i>IEEE Access</i> , 2019, 7, 152278-152288.	4.2	8
27	Quantitative evaluation of electrical conductivity inside stress corrosion crack with electromagnetic NDE methods. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2020, 378, 20190589.	3.4	8
28	On the deformation and failure mechanisms of hydrogen alloyed metallic glasses. <i>Journal of Applied Physics</i> , 2022, 131, .	2.5	7
29	Efficient numerical simulation of DC potential drop signals for application to NDT of metallic foam. <i>COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering</i> , 2013, 33, 147-156.	0.9	6
30	An Efficient Numerical Scheme for Sizing of Cavity Defect in Metallic Foam From Signals of DC Potential Drop Method. <i>IEEE Transactions on Magnetics</i> , 2014, 50, 125-128.	2.1	6
31	An FEM-BEM method for halo current problem and its application to HL-2M Tokamak. <i>Fusion Engineering and Design</i> , 2018, 136, 667-673.	1.9	6
32	Nondestructive evaluation of plastic damage in a RAFM steel considering the influence of loading history. <i>Journal of Nuclear Materials</i> , 2019, 523, 248-259.	2.7	6
33	Joint effect of residual stress and plastic deformation on pulsed eddy current response signals in 304 austenitic stainless steel. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2020, 63, 19-30.	0.6	6
34	Sizing of metallic foam bubble flaws using direct current potential drop signals with the help of the neural network method. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2011, 36, 339-353.	0.6	5
35	Reconstruction of stress corrosion cracks using signals of pulsed eddy current testing. <i>Nondestructive Testing and Evaluation</i> , 2013, 28, 145-154.	2.1	5
36	Detectability evaluation of eddy current testing probes for inspection of defects in carbon fiber reinforced polymer laminates. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2017, 55, 185-193.	0.6	5

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37	A numerical study on eddy current signal characteristics of imitative stress corrosion cracks. International Journal of Applied Electromagnetics and Mechanics, 2017, 55, 257-269.	0.6	5
38	Advanced Multi-Media Element for Simulating Distribution of Magnetic Flux Density Influenced by Narrow Crack. IEEE Transactions on Magnetics, 2019, 55, 1-4.	2.1	5
39	Numerical simulation methods for motion-induced eddy current testing signals based on Ar formulation and edge finite elements. NDT and E International, 2022, 129, 102651.	3.7	4
40	Quantitative sizing of compound location defects based on PECT-EMAT hybrid testing methods. Mechanical Systems and Signal Processing, 2022, 178, 109267.	8.0	4
41	Simultaneous evaluation of residual stress and plastic deformation in ferromagnetic steel by using an integrated NDE method. International Journal of Applied Electromagnetics and Mechanics, 2017, 55, 77-85.	0.6	3
42	Evaluation of wall thinning defect in magnetic material based on PECT method under magnetic saturation. International Journal of Applied Electromagnetics and Mechanics, 2017, 55, 49-59.	0.6	2
43	A simulation method to evaluate electrical conductivity of closed-cell aluminum foam. International Journal of Applied Electromagnetics and Mechanics, 2018, 58, 289-307.	0.6	2
44	Mechanical Property and Damage Evolution of Polymer-Bonded eXplosive Substitute Under Biaxial Compression. International Journal of Applied Mechanics, 2019, 11, 1950033.	2.2	2
45	Reconstruction of complex shaped crack from ECT signals based on a fast forward solver using an advanced multi-media element. International Journal of Applied Electromagnetics and Mechanics, 2020, 64, 621-629.	0.6	2
46	Numerical methods for the magneto-mechanical coupling analysis of in-vessel components in Tokamak devices. Theoretical and Applied Mechanics Letters, 2019, 9, 173-179.	2.8	1
47	A mechanism study on influence of strong external magnetic field on fracture properties of a ferromagnetic steel. AIP Advances, 2019, 9, 075219.	1.3	1
48	Evaluation of electromagnetic force in tokamak first wall based on magnetic field measurement and inverse analysis. International Journal of Applied Electromagnetics and Mechanics, 2019, 59, 427-437.	0.6	1
49	Nondestructive material reliability evaluation for Cu-alloy of combustion chamber. Journal of Fluid Science and Technology, 2014, 9, JFST0075-JFST0075.	0.6	0
50	A Stable FEM-BEM Hybrid Method for the Numerical Simulation of Magnetomechanical Coupled Problem With Both Inductive and Conductive Current Excitations Aiming to Application to Tokamak In-Vessel Structures. IEEE Transactions on Plasma Science, 2020, 48, 2902-2907.	1.3	0
51	Measurement method for deformation and contact force of the fuel assembly for China fast reactor under thermal gradient. Annals of Nuclear Energy, 2020, 141, 107270.	1.8	0