

Hong Zhang

List of Publications by Year in descending order

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docs citations

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times ranked

316
citing authors

#	ARTICLE	IF	CITATIONS
1	The Non-Destructive Test of Steel Corrosion in Reinforced Concrete Bridges Using a Micro-Magnetic Sensor. <i>Sensors</i> , 2016, 16, 1439.	3.8	63
2	Bridge deformation prediction based on SHM data using improved VMD and conditional KDE. <i>Engineering Structures</i> , 2022, 261, 114285.	5.3	58
3	Bridge Structure Deformation Prediction Based on GNSS Data Using Kalman-ARIMA-GARCH Model. <i>Sensors</i> , 2018, 18, 298.	3.8	57
4	Quantitative Study on Corrosion of Steel Strands Based on Self-Magnetic Flux Leakage. <i>Sensors</i> , 2018, 18, 1396.	3.8	47
5	Eddy current pulsed phase thermography for subsurface defect quantitatively evaluation. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	37
6	Health Monitoring and Evaluation of Long-Span Bridges Based on Sensing and Data Analysis: A Survey. <i>Sensors</i> , 2017, 17, 603.	3.8	27
7	Experimental analysis of the correlation between bending strength and SMFL of corroded RC beams. <i>Construction and Building Materials</i> , 2019, 214, 594-605.	7.2	27
8	Research on the Method of Predicting Corrosion width of Cables Based on the Spontaneous Magnetic Flux Leakage. <i>Materials</i> , 2019, 12, 2154.	2.9	25
9	An SMFL-based non-destructive quantification method for the localized corrosion cross-sectional area of rebar. <i>Corrosion Science</i> , 2021, 192, 109793.	6.6	22
10	Experimental Study on Corrosion of Unstressed Steel Strand based on Metal Magnetic Memory. <i>KSCE Journal of Civil Engineering</i> , 2019, 23, 1320-1329.	1.9	19
11	A new judging criterion for corrosion testing of reinforced concrete based on self-magnetic flux leakage. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2017, 54, 123-130.	0.6	18
12	Bearing Capacity Model of Corroded RC Eccentric Compression Columns Based on Hermite Interpolation and Fourier Fitting. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 24.	2.5	18
13	Statistical quantitative evaluation of bending strength of corroded RC beams via SMFL technique. <i>Engineering Structures</i> , 2020, 209, 110168.	5.3	18
14	Nondestructive Testing for Corrosion Evaluation of Metal under Coating. <i>Journal of Sensors</i> , 2021, 2021, 1-16.	1.1	18
15	Cable Tension Monitoring Based on the Elasto-Magnetic Effect and the Self-Induction Phenomenon. <i>Materials</i> , 2019, 12, 2230.	2.9	17
16	Experimental Study on Residual Bending Strength of Corroded Reinforced Concrete Beam Based on Micromagnetic Sensor. <i>Sensors</i> , 2018, 18, 2635.	3.8	16
17	Damage Identification of Long-Span Bridges Using the Hybrid of Convolutional Neural Network and Long Short-Term Memory Network. <i>Algorithms</i> , 2021, 14, 180.	2.1	14
18	Research on Internal Force Detection Method of Steel Bar in Elastic and Yielding Stage Based on Metal Magnetic Memory. <i>Materials</i> , 2019, 12, 1167.	2.9	13

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19	Prediction of Bridge Monitoring Information Chaotic Using Time Series Theory by Multi-step BP and RBF Neural Networks. <i>Intelligent Automation and Soft Computing</i> , 2013, 19, 305-314.	2.1	12
20	Quantitative Evaluation of Corrosion Degrees of Steel Bars Based on Self-Magnetic Flux Leakage. <i>Metals</i> , 2019, 9, 952.	2.3	11
21	Non-Destructive Testing of Steel Corrosion Fluctuation Parameters Based on Spontaneous Magnetic Flux Leakage and Its Relationship with Steel Bar Diameter. <i>Materials</i> , 2019, 12, 4116.	2.9	10
22	Corrosion non-destructive testing of loaded steel strand based on self-magnetic flux leakage effect. <i>Nondestructive Testing and Evaluation</i> , 2022, 37, 56-70.	2.1	10
23	Influence of cable tension history on the monitoring of cable tension using magnetoelastic inductance method. <i>Structural Health Monitoring</i> , 2021, 20, 3392-3405.	7.5	10
24	A New Method for Internal Force Detection of Steel Bars Covered by Concrete Based on the Metal Magnetic Memory Effect. <i>Metals</i> , 2019, 9, 661.	2.3	8
25	Alignment control for a long span urban rail-transit cable-stayed bridge considering dynamic train loads. <i>Science China Technological Sciences</i> , 2016, 59, 1759-1770.	4.0	7
26	Quantitative Detection of Corroded Reinforced Concrete of Different Sizes Based on SMFL. <i>KSCE Journal of Civil Engineering</i> , 2022, 26, 143-154.	1.9	7
27	Corrosion damage evaluation of loaded steel strand based on self-magnetic flux leakage. <i>Journal of Magnetism and Magnetic Materials</i> , 2022, 549, 168998.	2.3	7
28	Study on the Shear Strength of Root-Soil Composite and Root Reinforcement Mechanism. <i>Forests</i> , 2022, 13, 898.	2.1	7
29	Prediction Of Bridge Life Based On Svm Pattern Recognition. <i>Intelligent Automation and Soft Computing</i> , 2011, 17, 1009-1016.	2.1	5
30	Research on the Detection of the Broken Wire Damage of a Cable in the Circumferential Directions Based on Self-magnetic Flux Leakage. <i>KSCE Journal of Civil Engineering</i> , 2021, 25, 879-890.	1.9	4
31	CORROSION DETECTION OF BRIDGE REINFORCED CONCRETE WITH INDUCTION HEATING AND INFRARED THERMOGRAPHY. <i>International Journal of Robotics and Automation</i> , 2018, 33, .	0.1	4
32	Experimental study on rebar stress measurement based on force-magnetic coupling under excited magnetic field. <i>Measurement: Journal of the International Measurement Confederation</i> , 2022, 189, 110620.	5.0	4
33	Research on Corrosion Circumferential Area Characterization for Steel Cable Bundle Based on Metal Magnetic Memory. <i>Journal of Materials Engineering and Performance</i> , 2022, 31, 2732-2742.	2.5	4
34	Study of Tower Surface Crack Size Effect Based on Weibull Theory. <i>Intelligent Automation and Soft Computing</i> , 2013, 19, 581-588.	2.1	2
35	Prediction study on mechanical and thermodynamic properties of orthorhombic Mg ₂ SiO ₄ under high temperature. <i>Physica B: Condensed Matter</i> , 2014, 449, 95-103.	2.7	2
36	Discussing the Initial Temperature Difference Correction Method for Vibrational Chord Strain Gauge in Bridge Construction Monitoring. <i>Intelligent Automation and Soft Computing</i> , 2016, 22, 331-339.	2.1	2

#	ARTICLE	IF	CITATIONS
37	Parameters That Influence Corrosion Detection in Reinforced Concrete Based on Eddy Current Thermography. <i>Advances in Civil Engineering</i> , 2020, 2020, 1-9.	0.7	2
38	EXPERIMENTAL STUDY ON DETECTION OF REBAR CORROSION IN CONCRETE BASED ON METAL MAGNETIC MEMORY. <i>International Journal of Robotics and Automation</i> , 2017, 32, .	0.1	2
39	Aerodynamic Forces on a Bluff Cylinder in Sinusoidal Streamwise Winds with Different Angles of Attack. <i>Buildings</i> , 2022, 12, 1033.	3.1	2
40	A New Safety Evaluation Method For Long-Span Bridges With Tele-Monitoring Systems. <i>Intelligent Automation and Soft Computing</i> , 2010, 16, 635-644.	2.1	1
41	THE TESTING SCHEME FOR STEEL CORROSION IN THE REINFORCED CONCRETE VIA NEAR FIELD EFFECT OF METER-BAND WAVE. <i>Progress in Electromagnetics Research Letters</i> , 2017, 66, 127-134.	0.7	1
42	Permanent deformation limits of long-span track cable-stayed bridges based on service performance analysis. <i>Journal of Low Frequency Noise Vibration and Active Control</i> , 2020, , 146134842097012.	2.9	1
43	A Study on the Performance Evaluation of the Corroded Steel Cable by Safety Factor Based on the Strength Condition. <i>Journal of Materials Engineering and Performance</i> , 2020, 29, 2227-2234.	2.5	1
44	The weakened Weibel instability of collimated fast electron beam in nanotube array. <i>Laser and Particle Beams</i> , 2017, 35, 120-125.	1.0	0
45	ELECTROMAGNETIC RETARDED POTENTIAL INDUCED BY QUANTUM VACUUM POLARIZATION. <i>Progress in Electromagnetics Research M</i> , 2017, 58, 21-27.	0.9	0
46	Design and Practice of Structural Health Monitoring System for Large Span Urban Rail Transit Bridge Based on Internet of Things. , 2019, , .		0