Hong Zhang

List of Publications by Year
in descending order

46	640	567281	610901
papers	citations	15	24
		h-index	g-index

46	46	46	316
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Corrosion non-destructive testing of loaded steel strand based on self-magnetic flux leakage effect. Nondestructive Testing and Evaluation, 2022, 37, 56-70.	2.1	10
2	Quantitative Detection of Corroded Reinforced Concrete of Different Sizes Based on SMFL. KSCE Journal of Civil Engineering, 2022, 26, 143-154.	1.9	7
3	Experimental study on rebar stress measurement based on force-magnetic coupling under excited magnetic field. Measurement: Journal of the International Measurement Confederation, 2022, 189, 110620.	5.0	4
4	Corrosion damage evaluation of loaded steel strand based on self-magnetic flux leakage. Journal of Magnetism and Magnetic Materials, 2022, 549, 168998.	2.3	7
5	Research on Corrosion Circumferential Area Characterization for Steel Cable Bundle Based on Metal Magnetic Memory. Journal of Materials Engineering and Performance, 2022, 31, 2732-2742.	2.5	4
6	Bridge deformation prediction based on SHM data using improved VMD and conditional KDE. Engineering Structures, 2022, 261, 114285.	5.3	58
7	Study on the Shear Strength of Root-Soil Composite and Root Reinforcement Mechanism. Forests, 2022, 13, 898.	2.1	7
8	Aerodynamic Forces on a Bluff Cylinder in Sinusoidal Streamwise Winds with Different Angles of Attack. Buildings, 2022, 12, 1033.	3.1	2
9	Research on the Detection of the Broken Wire Damage of a Cable in the Circumferential Directions Based on Self-magnetic Flux Leakage. KSCE Journal of Civil Engineering, 2021, 25, 879-890.	1.9	4
10	Nondestructive Testing for Corrosion Evaluation of Metal under Coating. Journal of Sensors, 2021, 2021, 1-16.	1.1	18
11	Damage Identification of Long-Span Bridges Using the Hybrid of Convolutional Neural Network and Long Short-Term Memory Network. Algorithms, 2021, 14, 180.	2.1	14
12	An SMFL-based non-destructive quantification method for the localized corrosion cross-sectional area of rebar. Corrosion Science, 2021, 192, 109793.	6.6	22
13	Influence of cable tension history on the monitoring of cable tension using magnetoelastic inductance method. Structural Health Monitoring, 2021, 20, 3392-3405.	7.5	10
14	Permanent deformation limits of long-span track cable-stayed bridges based on service performance analysis. Journal of Low Frequency Noise Vibration and Active Control, 2020, , 146134842097012.	2.9	1
15	A Study on the Performance Evaluation of the Corroded Steel Cable by Safety Factor Based on the Strength Condition. Journal of Materials Engineering and Performance, 2020, 29, 2227-2234.	2.5	1
16	Statistical quantitative evaluation of bending strength of corroded RC beams via SMFL technique. Engineering Structures, 2020, 209, 110168.	5.3	18
17	Parameters That Influence Corrosion Detection in Reinforced Concrete Based on Eddy Current Thermography. Advances in Civil Engineering, 2020, 2020, 1-9.	0.7	2
18	Cable Tension Monitoring Based on the Elasto-Magnetic Effect and the Self-Induction Phenomenon. Materials, 2019, 12, 2230.	2.9	17

#	Article	IF	Citations
19	A New Method for Internal Force Detection of Steel Bars Covered by Concrete Based on the Metal Magnetic Memory Effect. Metals, 2019, 9, 661.	2.3	8
20	Research on the Method of Predicting Corrosion width of Cables Based on the Spontaneous Magnetic Flux Leakage. Materials, 2019, 12, 2154.	2.9	25
21	Quantitative Evaluation of Corrosion Degrees of Steel Bars Based on Self-Magnetic Flux Leakage. Metals, 2019, 9, 952.	2.3	11
22	Bearing Capacity Model of Corroded RC Eccentric Compression Columns Based on Hermite Interpolation and Fourier Fitting. Applied Sciences (Switzerland), 2019, 9, 24.	2.5	18
23	Research on Internal Force Detection Method of Steel Bar in Elastic and Yielding Stage Based on Metal Magnetic Memory. Materials, 2019, 12, 1167.	2.9	13
24	Experimental analysis of the correlation between bending strength and SMFL of corroded RC beams. Construction and Building Materials, 2019, 214, 594-605.	7.2	27
25	Experimental Study on Corrosion of Unstressed Steel Strand based on Metal Magnetic Memory. KSCE Journal of Civil Engineering, 2019, 23, 1320-1329.	1.9	19
26	Non-Destructive Testing of Steel Corrosion Fluctuation Parameters Based on Spontaneous Magnetic Flux Leakage and Its Relationship with Steel Bar Diameter. Materials, 2019, 12, 4116.	2.9	10
27	Design and Practice of Structural Health Monitoring System for Large Span Urban Rail Transit Bridge Based on Internet of Things. , 2019, , .		0
28	Bridge Structure Deformation Prediction Based on GNSS Data Using Kalman-ARIMA-GARCH Model. Sensors, 2018, 18, 298.	3.8	57
29	Quantitative Study on Corrosion of Steel Strands Based on Self-Magnetic Flux Leakage. Sensors, 2018, 18, 1396.	3.8	47
30	Experimental Study on Residual Bending Strength of Corroded Reinforced Concrete Beam Based on Micromagnetic Sensor. Sensors, 2018, 18, 2635.	3.8	16
31	CORROSION DETECTION OF BRIDGE REINFORCED CONCRETE WITH INDUCTION HEATING AND INFRARED THERMOGRAPHY. International Journal of Robotics and Automation, 2018, 33, .	0.1	4
32	The weakened Weibel instability of collimated fast electron beam in nanotube array. Laser and Particle Beams, 2017, 35, 120-125.	1.0	0
33	A new judging criterion for corrosion testing of reinforced concrete based on self-magnetic flux leakage. International Journal of Applied Electromagnetics and Mechanics, 2017, 54, 123-130.	0.6	18
34	Health Monitoring and Evaluation of Long-Span Bridges Based on Sensing and Data Analysis: A Survey. Sensors, 2017, 17, 603.	3.8	27
35	THE TESTING SCHEME FOR STEEL CORROSION IN THE REINFORCED CONCRETE VIA NEAR FIELD EFFECT OF METER-BAND WAVE. Progress in Electromagnetics Research Letters, 2017, 66, 127-134.	0.7	1
36	ELECTROMAGNETIC RETARDED POTENTIAL INDUCED BY QUANTUM VACUUM POLARIZATION. Progress in Electromagnetics Research M, 2017, 58, 21-27.	0.9	0

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37	EXPERIMENTAL STUDY ON DETECTION OF REBAR CORROSION IN CONCRETE BASED ON METAL MAGNETIC MEMORY. International Journal of Robotics and Automation, 2017, 32, .	0.1	2
38	The Non-Destructive Test of Steel Corrosion in Reinforced Concrete Bridges Using a Micro-Magnetic Sensor. Sensors, 2016, 16, 1439.	3.8	63
39	Alignment control for a long span urban rail-transit cable-stayed bridge considering dynamic train loads. Science China Technological Sciences, 2016, 59, 1759-1770.	4.0	7
40	Discussing the Initial Temperature Difference Correction Method for Vibrational Chord Strain Gauge in Bridge Construction Monitoring. Intelligent Automation and Soft Computing, 2016, 22, 331-339.	2.1	2
41	Prediction study on mechanical and thermodynamic properties of orthorhombic Mg2SiO4 under high temperature. Physica B: Condensed Matter, 2014, 449, 95-103.	2.7	2
42	Study of Tower Surface Crack Size Effect Based on Weibull Theory. Intelligent Automation and Soft Computing, 2013, 19, 581-588.	2.1	2
43	Eddy current pulsed phase thermography for subsurface defect quantitatively evaluation. Applied Physics Letters, 2013, 103, .	3.3	37
44	Prediction of Bridge Monitoring Information Chaotic Using Time Series Theory by Multi-step BP and RBF Neural Networks. Intelligent Automation and Soft Computing, 2013, 19, 305-314.	2.1	12
45	Prediction Of Bridge Life Based On Svm Pattern Recognition. Intelligent Automation and Soft Computing, 2011, 17, 1009-1016.	2.1	5
46	A New Safety Evaluation Method For Long-Span Bridges With Tele-Monitoring Systems. Intelligent Automation and Soft Computing, 2010, 16, 635-644.	2.1	1