Xudong Chen

List of Publications by Year in descending order

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117 papers	2,974 citations	201385 27 h-index	182168 51 g-index
118 all docs	118 docs citations	118 times ranked	2202 citing authors

#	Article	IF	Citations
1	Acoustic emission characteristics of fatigue failure process of self-compacting rubberized concrete pavement slabs. International Journal of Pavement Engineering, 2022, 23, 4149-4159.	2.2	2
2	Experimental study on fracture properties of concrete under cyclic loading using digital image correlation method. European Journal of Environmental and Civil Engineering, 2022, 26, 6243-6264.	1.0	5
3	The rate effect on fracture mechanics of dam concrete based on DIC and AE techniques. Journal of Strain Analysis for Engineering Design, 2022, 57, 496-510.	1.0	9
4	Experimental Study of Evolution of Fracture Process Zone in Dam Concrete under Cyclic Loading Using Digital Image Correlation. KSCE Journal of Civil Engineering, 2022, 26, 727-740.	0.9	2
5	Visual damage identification of concrete cylinders with steelâ€fiberâ€reinforced composite bars based on acoustic emission. Structural Control and Health Monitoring, 2022, 29, e2880.	1.9	1
6	Cyclic triaxial test investigation on tuffs with different water content at Badantoru Hydropower Station in Indonesia. Engineering Geology, 2022, 300, 106554.	2.9	9
7	Investigation on the dynamic compressive behavior of waste tires rubber-modified self-compacting concrete under multiple impacts loading. Journal of Cleaner Production, 2022, 336, 130289.	4.6	11
8	Experimental study on compressive strength and frost resistance of steam cured concrete with mineral admixtures. Construction and Building Materials, 2022, 325, 126725.	3.2	16
9	Assessment of damage in hydraulic concrete by gray wolf optimizationâ€support vector machine model and hierarchical clustering analysis of acoustic emission. Structural Control and Health Monitoring, 2022, 29, .	1.9	7
10	Mechanical characteristics and energy dissipation characteristics of dredged sand concrete during triaxial loading. Journal of Building Engineering, 2022, , 104700.	1.6	3
11	Dynamic splitting tensile behavior of rockâ€“concrete bimaterial disc with multiple material types under different interface inclination angle. Fatigue and Fracture of Engineering Materials and Structures, 2022, 45, 2313-2328.	1.7	6
12	Experimental study on fracture properties of dam concrete under postâ€peak cyclic loading based on DIC and acoustic emission techniques. Fatigue and Fracture of Engineering Materials and Structures, 2022, 45, 2646-2661.	1.7	3
13	Experimental and mesoscopic investigation of self-compacting rubberized concrete under dynamic splitting tension. Journal of Building Engineering, 2022, 57, 104942.	1.6	2
14	Uniaxial compression failure characteristics of 60-year-old bridge concrete under different loading rates. Case Studies in Construction Materials, 2022, 17, e01276.	0.8	0
15	Influence of freezeâ€“thaw cycles on apparent dynamic tensile strength, apparent dynamic fracture toughness and microstructure of concrete under impact loading. European Journal of Environmental and Civil Engineering, 2021, 25, 1977-2001.	1.0	9
16	Dynamic Mechanical Properties of Self-Compacting Rubberized Concrete under High Strain Rates. Journal of Materials in Civil Engineering, 2021, 33, .	1.3	13
17	A study of loading rate effect fracture behavior of concrete based on digital image correlation and finite-element method. Journal of Strain Analysis for Engineering Design, 2021, 56, 161-172.	1.0	4
18	Experimental study on loading rate and notch-to-depth ratio effects on flexural performance of self-compacting concrete with acoustic emission and digital image correlation technologies. Journal of Strain Analysis for Engineering Design, 2021, 56, 148-160.	1.0	9

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19	Experimental study on the pore structure variation of self-compacting rubberised concrete under fatigue load. Road Materials and Pavement Design, 2021, 22, 716-733.	2.0	9
20	Experimental Study on Monitoring of Dike Piping Process Based on Acoustic Emission Technology. Journal of Nondestructive Evaluation, 2021, 40, 1.	1.1	2
21	Investigation on micro-structure of self-compacting concrete modified by recycled grinded tire rubber based on X-ray computed tomography technology. Journal of Cleaner Production, 2021, 290, 125838.	4.6	16
22	Fatigue behavior and prediction model of self-compacting concrete under constant amplitude load and incremental amplitude load. International Journal of Fatigue, 2021, 145, 106107.	2.8	6
23	Experimental Study on the Stress-Strain Behavior of Self-Compacting Concrete Modified by Waste Rubber under Uniaxial Tension with Acoustic Emission Technique. Journal of Testing and Evaluation, 2021, 49, 4276-4297.	0.4	1
24	Quantitative statistical analysis of the crack propagation and fracture process of selfâ€compacting rubber concrete based on acoustic emission. Structural Control and Health Monitoring, 2021, 28, e2743.	1.9	4
25	Investigation of tensile fracture of rubberized selfâ€compacting concrete by acoustic emission and digital image correlation. Structural Control and Health Monitoring, 2021, 28, e2744.	1.9	7
26	Fracture behavior and crack mode of steel slag pervious concrete using acoustic emission technique. Structural Control and Health Monitoring, 2021, 28, e2796.	1.9	6
27	Acoustic emission characteristics in deterioration behavior of dam concrete under post-peak cyclic test. Construction and Building Materials, 2021, 292, 123324.	3.2	11
28	Resistance to cracking of concrete containing waste rubber aggregates under cyclic loading using the acoustic emission technique. Materialpruefung/Materials Testing, 2021, 63, 865-871.	0.8	0
29	Experimental and numerical study on crack propagation and coalescence in rock-like materials under compression. Journal of Strain Analysis for Engineering Design, 2021, 56, 548-562.	1.0	4
30	Experimental Study on Concrete Fracture Process Zone Using Digital Image Correlation Technique. Journal of Testing and Evaluation, 2021, 49, 896-914.	0.4	4
31	Research on Direct Tensile Experiment of Rock-Concrete Interface Using Acoustic Emission Technology. Russian Journal of Nondestructive Testing, 2021, 57, 1082-1095.	0.3	1
32	Experimental study on flexural fatigue performance of rubberised concrete for pavement. International Journal of Pavement Engineering, 2020, 21, 1135-1146.	2.2	7
33	Experimental investigation of concrete fracture behavior with different loading rates based on acoustic emission. Construction and Building Materials, 2020, 237, 117472.	3.2	81
34	Experimental Study on Damage Evolution Behavior of Self-Compacting Rubberized Concrete under Direct Tensile Fatigue Loading. KSCE Journal of Civil Engineering, 2020, 24, 3300-3308.	0.9	6
35	Using flocculation and subsequent biomanipulation to control microcystis blooms: A laboratory study. Harmful Algae, 2020, 99, 101917.	2.2	7
36	Analysis of the Crack Evolution Process in Crumb Rubber Concrete Based on Acoustic Emission Technology. KSCE Journal of Civil Engineering, 2020, 24, 2088-2098.	0.9	8

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37	Experimental Study on Crack Propagation of Concrete Under Various Loading Rates with Digital Image Correlation Method. International Journal of Concrete Structures and Materials, 2020, 14, .	1.4	16
38	Experimental and numerical study on tensile strength and failure pattern of high performance steel fiber reinforced concrete under dynamic splitting tension. Construction and Building Materials, 2020, 259, 119796.	3.2	43
39	Evaluation of Fracture Process Zone in the Flexural Response of Different Concrete Materials Using DIC Method. KSCE Journal of Civil Engineering, 2020, 24, 2435-2448.	0.9	7
40	Dynamic Compressive Behavior of 10-Year-Old Concrete Cores after Exposure to High Temperatures. Journal of Materials in Civil Engineering, 2020, 32, .	1.3	7
41	Development of fracture process zone in full-graded dam concrete under three-point bending by DIC and acoustic emission. Engineering Fracture Mechanics, 2020, 230, 106972.	2.0	63
42	Experimental Study on Damage Evaluation, Pore Structure and Impact Tensile Behavior of 10-Year-Old Concrete Cores After Exposure to High Temperatures. International Journal of Concrete Structures and Materials, 2020, 14, .	1.4	11
43	Experimental Study on Post-peak Cyclic Characteristics of Self-compacting Concrete Combined with AE and DIC Techniques. Journal of Advanced Concrete Technology, 2020, 18, 386-395.	0.8	7
44	Effect of pre-cyclic damage and high temperature on residual tensile behavior of concrete. Fire Safety Journal, 2019, 108, 102853.	1.4	11
45	Experimental study on cyclic tensile behaviour of air-entrained concrete after frost damage. Sadhana - Academy Proceedings in Engineering Sciences, 2019, 44, 1.	0.8	3
46	3D mesoscale modeling and fracture property study of rubberized self-compacting concrete based on uniaxial tension test. Theoretical and Applied Fracture Mechanics, 2019, 104, 102363.	2.1	17
47	Experimental study on direct tension behavior of concrete through combined digital image correlation and acoustic emission techniques. Structural Concrete, 2019, 20, 2042-2055.	1.5	17
48	Experimental study on the pH for activating ground granulated blast-furnace slag activity at different temperatures. Sadhana - Academy Proceedings in Engineering Sciences, 2019, 44, 1.	0.8	8
49	Development of cemented paste backfill based on the addition of three mineral additions using the mixture design modeling approach. Construction and Building Materials, 2019, 229, 116919.	3.2	12
50	Dynamic Mechanical Performance of Self-compacting Concrete Containing Crumb Rubber under High Strain Rates. KSCE Journal of Civil Engineering, 2019, 23, 3669-3681.	0.9	27
51	Experimental study on fracture behavior of three-graded concrete under cyclic loading after initial static loading. Theoretical and Applied Fracture Mechanics, 2019, 103, 102272.	2.1	16
52	Determination of the Optimal Decomposition Layer of Wavelet De-Noising Based on Signal Band Feature. Russian Journal of Nondestructive Testing, 2019, 55, 39-47.	0.3	8
53	Effect of Temperature and pH on Early Hydration Rate and Apparent Activation Energy of Alkali-Activated Slag. Advances in Materials Science and Engineering, 2019, 2019, 1-13.	1.0	3
54	Experimental study on fatigue properties of normal and rubberized self-compacting concrete under bending. Construction and Building Materials, 2019, 205, 10-20.	3.2	57

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55	Experimental Study and Analytical Modeling on Fatigue Properties of Pervious Concrete Made with Natural and Recycled Aggregates. International Journal of Concrete Structures and Materials, 2019, 13, .	1.4	26
56	Experimental study on acoustic emission characteristic of fatigue crack growth of self-compacting concrete. Structural Control and Health Monitoring, 2019, 26, e2332.	1.9	30
57	Size Effect of the Post-Peak Cyclic Behavior of Plain Concrete in Uniaxial Tension with Acoustic Emission Technique. Journal of Testing and Evaluation, 2019, 47, 1427-1453.	0.4	1
58	Influence of Loading Sequence on Low Cycle Fatigue Behavior of Normal Weight Concrete under Direct Tension. Journal of Testing and Evaluation, 2019, 47, 4320-4337.	0.4	5
59	Experimental and Analytical Study on Fatigue Crack Propagation of Pervious Concrete. Journal of Testing and Evaluation, 2019, 47, 3496-3514.	0.4	2
60	Dynamic tensile test of fly ash concrete under alternating tensileâ€“compressive loading. Materials and Structures/Materiaux Et Constructions, 2018, 51, 1.	1.3	2
61	Impact behavior and microstructure of cement mortar incorporating waste carpet fibers after exposure to high temperatures. Journal of Cleaner Production, 2018, 187, 222-236.	4.6	31
62	Experimental study on cyclic tensile behaviour of concrete under various strain rates. Magazine of Concrete Research, 2018, 70, 55-70.	0.9	18
63	Dynamic compressive and splitting tensile properties of concrete containing recycled tyre rubber under high strain rates. Sadhana - Academy Proceedings in Engineering Sciences, 2018, 43, 1.	0.8	18
64	Effect of Water Head, Gradation of Clogging Agent, and Horizontal Flow Velocity on the Clogging Characteristics of Pervious Concrete. Journal of Materials in Civil Engineering, 2018, 30, .	1.3	14
65	Flexural Tensile Fracture Behavior of Pervious Concrete under Static Preloading. Journal of Materials in Civil Engineering, 2018, 30, .	1.3	18
66	Experimental study and analytical modeling on hysteresis behavior of plain concrete in uniaxial cyclic tension. International Journal of Fatigue, 2017, 96, 261-269.	2.8	46
67	Mechanical properties of concrete to cyclic uniaxial tensile loading using variable waveforms. Sadhana - Academy Proceedings in Engineering Sciences, 2017, 42, 111-117.	0.8	0
68	Effect of loading frequency and stress level on low cycle fatigue behavior of plain concrete in direct tension. Construction and Building Materials, 2017, 133, 367-375.	3.2	69
69	Influence of high temperature on post-peak cyclic response of fly ash concrete under direct tension. Construction and Building Materials, 2017, 154, 399-410.	3.2	10
70	Dynamic flexural strength of concrete under high strain rates. Magazine of Concrete Research, 2017, 69, 109-119.	0.9	14
71	Dynamic Brazilian test of concrete using split Hopkinson pressure bar. Materials and Structures/Materiaux Et Constructions, 2017, 50, 1.	1.3	91
72	Mechanical behavior and damage evolution for concrete subjected to multiple impact loading. KSCE Journal of Civil Engineering, 2017, 21, 2351-2359.	0.9	22

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73	Experimental study and constitutive model on complete stress-strain relations of plain concrete in uniaxial cyclic tension. KSCE Journal of Civil Engineering, 2017, 21, 1829-1835.	0.9	13
74	Experimental Study on Cyclic Tensile Behavior of Concrete under High Stress Level. ACI Materials Journal, 2017, 114, .	0.3	5
75	Influence of Initial Static Splitting Tensile Loading on Dynamic Compressive Strength of Concrete Cores under High Strain Rates. Journal of Performance of Constructed Facilities, 2016, 30, .	1.0	7
76	Statistical Analysis of Dynamic Splitting Tensile Strength of Concrete Using Different Types of Jaws. Journal of Materials in Civil Engineering, 2016, 28, .	1.3	5
77	Effect of Prestatic Loading on Dynamic Tensile Strength of Concrete under High Strain Rates. Journal of Materials in Civil Engineering, 2016, 28, 06016018.	1.3	13
78	Effect of strain rate on post-peak cyclic behavior of concrete in direct tension. Construction and Building Materials, 2016, 124, 746-754.	3.2	41
79	Influence of specimen size on compression behavior of cement paste and mortar under high strain rates. Journal Wuhan University of Technology, Materials Science Edition, 2016, 31, 300-306.	0.4	5
80	Experimental Study on Split Hopkinson Pressure Bar Pulse-Shaping Techniques for Concrete. Journal of Materials in Civil Engineering, 2016, 28, .	1.3	30
81	Pore size distribution of cement mortar prepared with crushed limestone sand. KSCE Journal of Civil Engineering, 2016, 20, 762-767.	0.9	7
82	Influence of Pore Structure on Mechanical Behavior of Concrete under High Strain Rates. Journal of Materials in Civil Engineering, 2016, 28, .	1.3	41
83	Experimental Study on Direct Tensile Behavior of Concrete under Various Loading Regimes. ACI Materials Journal, 2016, 113, .	0.3	5
84	Experimental study on tensile behavior of cement paste, mortar and concrete under high strain rates. Journal Wuhan University of Technology, Materials Science Edition, 2015, 30, 1268-1273.	0.4	11
85	Fractal characterization of pore system evolution in cementitious materials. KSCE Journal of Civil Engineering, 2015, 19, 719-724.	0.9	27
86	Large-Beam Tests on Mechanical Behavior of Dam Concrete under Dynamic Loading. Journal of Materials in Civil Engineering, 2015, 27, 06015001.	1.3	10
87	A note on the flexural behavior of concrete under different loading rates. KSCE Journal of Civil Engineering, 2015, 19, 664-666.	0.9	1
88	Compressive Strength of Concrete Cores under High Strain Rates. Journal of Performance of Constructed Facilities, 2015, 29, .	1.0	33
89	Stress-Strain Behavior of Cementitious Materials with Different Sizes. Scientific World Journal, The, 2014, 2014, 1-11.	0.8	1
90	Compressive Strength of Concrete Cores with Different Lengths. Journal of Materials in Civil Engineering, 2014, 26, .	1.3	11

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91	Closure to â€œEffect of Testing Method and Strain Rate on Stress-Strain Behavior of Concreteâ€•by Xudong Chen, Shengxing Wu, Jikai Zhou, Yuzhi Chen, and Aiping Qin. Journal of Materials in Civil Engineering, 2014, 26, 07014002.	1.3	1
92	Strength Values of Cementitious Materials in Bending and Tension Test Methods. Journal of Materials in Civil Engineering, 2014, 26, 484-490.	1.3	23
93	Quantification of dynamic tensile behavior of cement-based materials. Construction and Building Materials, 2014, 51, 15-23.	3.2	58
94	A new suction method for the measurement of pore size distribution of filter layer in permeable formwork. Construction and Building Materials, 2014, 60, 57-62.	3.2	2
95	Variability of Compressive Strength of Concrete Cores. Journal of Performance of Constructed Facilities, 2014, 28, .	1.0	29
96	Experimental Study on Dynamic Tensile Strength of Cement Mortar Using Split Hopkinson Pressure Bar Technique. Journal of Materials in Civil Engineering, 2014, 26, .	1.3	45
97	Hydration of ultrafine and ordinary Portland cement at early ages. KSCE Journal of Civil Engineering, 2014, 18, 1720-1725.	0.9	10
98	Dynamic elastic modulus of cement paste at early age based on nondestructive test and multiscale prediction model. Journal Wuhan University of Technology, Materials Science Edition, 2014, 29, 321-328.	0.4	10
99	Experimental study and analytical model for pore structure of hydrated cement paste. Applied Clay Science, 2014, 101, 159-167.	2.6	43
100	Closure to â€œA new suction method for the measurement of pore size distribution of filter layer in permeable formworkâ€•by Zhenghong Tian, Xiaodong Wang and Xudong Chen. Construction and Building Materials, 2014, 73, 790-791.	3.2	0
101	Experimental and modeling study of dynamic mechanical properties of cement paste, mortar and concrete. Construction and Building Materials, 2013, 47, 419-430.	3.2	215
102	Effect of Testing Method and Strain Rate on Stress-Strain Behavior of Concrete. Journal of Materials in Civil Engineering, 2013, 25, 1752-1761.	1.3	54
103	Experimental study and analytical formulation of mechanical behavior of concrete. Construction and Building Materials, 2013, 47, 662-670.	3.2	17
104	Stress-Strain Behavior and Statistical Continuous Damage Model of Cement Mortar under High Strain Rates. Journal of Materials in Civil Engineering, 2013, 25, 120-130.	1.3	62
105	Influence of porosity on compressive and tensile strength of cement mortar. Construction and Building Materials, 2013, 40, 869-874.	3.2	552
106	Influence of water-to-cement ratio and curing period on pore structure of cement mortar. Construction and Building Materials, 2013, 38, 804-812.	3.2	215
107	A multi-scale percolation-based approach for the prediction of elasticity of early-age cement paste. European Journal of Environmental and Civil Engineering, 2013, 17, s304-s320.	1.0	5
108	Analysis of mechanical properties of concrete cores using statistical approach. Magazine of Concrete Research, 2013, 65, 1463-1471.	0.9	16

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109	Early-Age Temperature and Strain in Basement Concrete Walls: Field Monitoring and Numerical Modeling. Journal of Performance of Constructed Facilities, 2012, 26, 754-765.	1.0	9
110	Tissue factor pathway inhibitor-2 may interact with nuclear protein RASSF1C. Acta Biochimica Et Biophysica Sinica, 2012, 44, 183-185.	0.9	1
111	Influence of strain rate and water content on mechanical behavior of dam concrete. Construction and Building Materials, 2012, 36, 448-457.	3.2	74
112	Tensile strength of concrete under static and intermediate strain rates: Correlated results from different testing methods. Nuclear Engineering and Design, 2012, 250, 173-183.	0.8	50
113	Effect of different environments on bond strength of glass fiber-reinforced polymer and steel reinforcing bars. KSCE Journal of Civil Engineering, 2012, 16, 994-1002.	0.9	29
114	Durability and service life prediction of GFRP bars embedded in concrete under acid environment. Nuclear Engineering and Design, 2011, 241, 4095-4102.	0.8	60
115	Influence of free water content on the compressive mechanical behaviour of cement mortar under high strain rate. Sadhana - Academy Proceedings in Engineering Sciences, 2011, 36, 357-369.	0.8	65
116	Experimental Study of Size Effect on Static/Dynamic Flexural-Tensile Strength of Three-Graded Concrete. Advanced Science Letters, 2011, 4, 958-962.	0.2	7
117	Experimental study on flexural fatigue behavior of self-compacting concrete with waste tire rubber. Mechanics of Advanced Materials and Structures, 0, , 1-12.	1.5	14