Xu-hui He

List of Publications by Year
in descending order

119 papers	1,961 citations	257101 24 h-index	344852 36 g-index
120 all docs	120 docs citations	120 times ranked	821 citing authors

#	Article	IF	Citations
1	Recent developments of high-speed railway bridges in China. Structure and Infrastructure Engineering, 2017, 13, 1584-1595.	2.0	152
2	Crack Detection and Comparison Study Based on Faster R-CNN and Mask R-CNN. Sensors, 2022, 22, 1215.	2.1	93
3	Evaluation of optimal ground motion intensity measures and seismic fragility analysis of a multi-pylon cable-stayed bridge with super-high piers in Mountainous Areas. Soil Dynamics and Earthquake Engineering, 2020, 129, 105945.	1.9	68
4	Effects of vertical ground motions on seismic vulnerabilities of a continuous track-bridge system of high-speed railway. Soil Dynamics and Earthquake Engineering, 2018, 115, 281-290.	1.9	61
5	LES study of turbulent flow fields over a smooth 3-D hill and a smooth 2-D ridge. Journal of Wind Engineering and Industrial Aerodynamics, 2016, 153, 1-12.	1.7	57
6	Effects of friction-based fixed bearings on the seismic vulnerability of a high-speed railway continuous bridge. Advances in Structural Engineering, 2018, 21, 643-657.	1.2	50
7	Effects of aerodynamic parameters on the dynamic responses of road vehicles and bridges under cross winds. Journal of Wind Engineering and Industrial Aerodynamics, 2014, 134, 78-95.	1.7	44
8	LES study on the turbulent flow fields over complex terrain covered by vegetation canopy. Journal of Wind Engineering and Industrial Aerodynamics, 2016, 155, 60-73.	1.7	42
9	Experimental verification of the effectiveness of elastic cross-ties in suppressing wake-induced vibrations of staggered stay cables. Engineering Structures, 2018, 167, 151-165.	2.6	41
10	Review of aerodynamics of high-speed train-bridge system in crosswinds. Journal of Central South University, 2020, 27, 1054-1073.	1.2	41
11	Aerodynamic response of high-speed trains under crosswind in a bridge-tunnel section with or without a wind barrier. Journal of Wind Engineering and Industrial Aerodynamics, 2021, 210, 104502.	1.7	41
12	Transient aerodynamic performance of high-speed trains when passing through an infrastructure consisting of tunnelâ€“bridgeâ€“tunnel under crosswind. Tunnelling and Underground Space Technology, 2020, 102, 103440.	3.0	40
13	Effects of uncertain characteristic periods of ground motions on seismic vulnerabilities of a continuous trackâ€“bridge system of high-speed railway. Bulletin of Earthquake Engineering, 2018, 16, 3739-3769.	2.3	39
14	Effects of geometrical parameters on the aerodynamic characteristics of a streamlined flat box girder. Journal of Wind Engineering and Industrial Aerodynamics, 2017, 170, 56-67.	1.7	38
15	An efficient analysis framework for high-speed train-bridge coupled vibration under non-stationary winds. Structure and Infrastructure Engineering, 2020, 16, 1326-1346.	2.0	37
16	Cyclic performance of bonded sleeve beam-column connections for FRP tubular sections. Composites Part B: Engineering, 2018, 142, 171-182.	5.9	32
17	Twisted-wind effect on the flow field of tall building. Journal of Wind Engineering and Industrial Aerodynamics, 2021, 218, 104778.	1.7	29
18	Effects of oncoming flow conditions on the aerodynamic forces on a cantilevered square cylinder. Journal of Fluids and Structures, 2017, 75, 140-157.	1.5	28

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19	Effects of wind-barrier parameters on dynamic responses of wind-road vehicleâ€“bridge system. Journal of Wind Engineering and Industrial Aerodynamics, 2020, 206, 104367.	1.7	28
20	The Applicability of Different Earthquake Intensity Measures to the Seismic Vulnerability of a High-Speed Railway Continuous Bridge. International Journal of Civil Engineering, 2019, 17, 981-997.	0.9	27
21	Fiber-Reinforced Polymer Composite Members with Adhesive Bonded Sleeve Joints for Space Frame Structures. Journal of Materials in Civil Engineering, 2017, 29, .	1.3	26
22	Effect of wind barriers on the flow field and aerodynamic forces of a trainâ€“bridge system. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2019, 233, 283-297.	1.3	26
23	Aerodynamic performance of a novel wind barrier for train-bridge system. Wind and Structures, an International Journal, 2016, 23, 171-189.	0.8	26
24	In-plane modal frequencies and mode shapes of two stay cables interconnected by uniformly distributed cross-ties. Journal of Sound and Vibration, 2018, 417, 38-55.	2.1	25
25	System-based probabilistic evaluation of longitudinal seismic control for a cable-stayed bridge with three super-tall towers. Engineering Structures, 2021, 229, 111586.	2.6	24
26	Simulation of trainâ€“bridge interaction under wind loads: a rigid-flexible coupling approach. International Journal of Rail Transportation, 2018, 6, 163-182.	1.8	23
27	Deterioration of dynamic response during high-speed train travelling in tunnelâ€“bridgeâ€“tunnel scenario under crosswinds. Tunnelling and Underground Space Technology, 2020, 106, 103627.	3.0	23
28	Efficacy of Interpolation-Enhanced Schemes in Random Wind Field Simulation over Long-Span Bridges. Journal of Bridge Engineering, 2018, 23, .	1.4	22
29	Experimental study on aerodynamic characteristics of a high-speed train on viaducts in turbulent crosswinds. Journal of Central South University, 2020, 27, 2465-2478.	1.2	22
30	Control of the aerodynamic forces of a finite-length square cylinder with steady slot suction at its free end. Journal of Wind Engineering and Industrial Aerodynamics, 2018, 179, 438-448.	1.7	20
31	Parameter optimization for improved aerodynamic performance of louver-type wind barrier for train-bridge system. Journal of Central South University, 2019, 26, 229-240.	1.2	20
32	Wind tunnel tests on the aerodynamic characteristics of vehicles on highway bridges. Advances in Structural Engineering, 2020, 23, 2882-2897.	1.2	20
33	Continuous performance assessment of thin-film flexible photovoltaic cells under mechanical loading for building integration. Solar Energy, 2019, 183, 96-104.	2.9	19
34	Time-resolved aerodynamic loads on high-speed trains during running on a tunnelâ€“bridgeâ€“tunnel infrastructure under crosswind. Engineering Applications of Computational Fluid Mechanics, 2020, 14, 202-221.	1.5	19
35	Advances in wind tunnel experimental investigations of trainâ€“bridge systems. Tunnelling and Underground Space Technology, 2021, 118, 104157.	3.0	19
36	Interaction between continuous welded rail and long-span steel truss arch bridge of a high-speed railway under seismic action. Structure and Infrastructure Engineering, 2018, 14, 1051-1064.	2.0	18

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37	Aerodynamics of a scale model of a high-speed train on a streamlined deck in cross winds. Journal of Fluids and Structures, 2019, 91, 102717.	1.5	18
38	Parametric Sensitivity Analysis on the Buffeting Control of a Long-Span Triple-Tower Suspension Bridge with MTMD. Applied Sciences (Switzerland), 2017, 7, 395.	1.3	17
39	The Impact of the Convex Friction Distribution on the Seismic Response of a Spring-friction Isolation System. KSCE Journal of Civil Engineering, 2018, 22, 1203-1213.	0.9	17
40	Numerical investigation on scaling a pure friction isolation system for civil structures in shaking table model tests. International Journal of Non-Linear Mechanics, 2018, 98, 1-12.	1.4	16
41	Low-frequency dynamics of the flow around a finite-length square cylinder. Experimental Thermal and Fluid Science, 2019, 109, 109877.	1.5	16
42	An experimental study on dynamic ice accretion and its effects on the aerodynamic characteristics of stay cables with and without helical fillets. Journal of Wind Engineering and Industrial Aerodynamics, 2020, 205, 104326.	1.7	16
43	Crosswind aerodynamic characteristics of a stationary interior railway carriage through a long-span truss-girder bridge. Engineering Structures, 2020, 210, 110350.	2.6	16
44	Investigation of concrete box girder positive temperature gradient patterns considering different climatic regions. Structures, 2022, 35, 591-607.	1.7	16
45	Sensitive factors research for track-bridge interaction of Long-span X-style steel-box arch bridge on high-speed railway. Journal of Central South University, 2013, 20, 3314-3323.	1.2	15
46	Stress Analysis of a Long-Span Steel-Truss Suspension Bridge under Combined Action of Random Traffic and Wind Loads. Journal of Aerospace Engineering, 2018, 31, 04018021.	0.8	15
47	Aerodynamic Performance of an Adaptive GFRP Wind Barrier Structure for Railway Bridges. Materials, 2020, 13, 4214.	1.3	14
48	Seismic Isolation Characteristics of a Friction System. Journal of Testing and Evaluation, 2018, 46, 1411-1420.	0.4	14
49	Numerical modeling of the wind load of a two-dimensional cable model in rainâ€“wind-induced vibration. Journal of Fluids and Structures, 2018, 82, 121-133.	1.5	13
50	Wind-induced vibration and its suppression of photovoltaic modules supported by suspension cables. Journal of Wind Engineering and Industrial Aerodynamics, 2020, 206, 104275.	1.7	13
51	Numerical investigation of flow structures and aerodynamic interference around stationary parallel box girders. Journal of Wind Engineering and Industrial Aerodynamics, 2021, 215, 104610.	1.7	13
52	Reliability Evaluation of Vortex-Induced Vibration for a Long-Span Arch Bridge. Journal of Bridge Engineering, 2018, 23, .	1.4	12
53	Wind Load Characteristics of Wind Barriers Induced by High-Speed Trains Based on Field Measurements. Applied Sciences (Switzerland), 2019, 9, 4865.	1.3	12
54	Running Safety Assessment of a Train Traversing a Long-Span Bridge Under Sudden Changes in Wind Loads Owing to Damaged Wind Barriers. International Journal of Structural Stability and Dynamics, 2022, 22, .	1.5	12

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55	Comparison of aerodynamic performance of high-speed train driving on tunnel-bridge section under fluctuating winds based on three turbulence models. Journal of Wind Engineering and Industrial Aerodynamics, 2022, 228, 105081.	1.7	12
56	Measurement of Non-Stationary Characteristics of a Landfall Typhoon at the Jiangyin Bridge Site. Sensors, 2017, 17, 2186.	2.1	11
57	An Analytical Framework for the Investigation of Tropical Cyclone Wind Characteristics over Different Measurement Conditions. Applied Sciences (Switzerland), 2019, 9, 5385.	1.3	11
58	Numerical investigation on the crosswind effects on a train running on a bridge. Engineering Applications of Computational Fluid Mechanics, 2020, 14, 1458-1471.	1.5	11
59	Lateral aerodynamic interference between an interior train and a flat box bridge-deck. Experimental Thermal and Fluid Science, 2020, 117, 110115.	1.5	11
60	Energy transmission at subcritical Reynolds numbers for the wake-induced vibration of cylinders in a tandem arrangement. Ocean Engineering, 2020, 211, 107572.	1.9	11
61	Simulation Study on Train-Induced Vibration Control of a Long-Span Steel Truss Girder Bridge by Tuned Mass Dampers. Mathematical Problems in Engineering, 2014, 2014, 1-12.	0.6	10
62	Seismic Vulnerability Evaluation of a Three-Span Continuous Beam Railway Bridge. Mathematical Problems in Engineering, 2017, 2017, 1-13.	0.6	10
63	Field Study of the Interior Noise and Vibration of a Metro Vehicle Running on a Viaduct: A Case Study in Guangzhou. International Journal of Environmental Research and Public Health, 2020, 17, 2807.	1.2	10
64	Track Irregularity Monitoring on High-Speed Railway Viaducts: A Novel Algorithm with Unknown Input Condensation. Journal of Engineering Mechanics - ASCE, 2021, 147, .	1.6	10
65	Crosswind effects on a train-bridge system: wind tunnel tests with a moving vehicle. Structure and Infrastructure Engineering, 2023, 19, 678-690.	2.0	10
66	Study on Mechanical Properties of Modified Polyurethane Concrete at Different Temperatures. Applied Sciences (Switzerland), 2022, 12, 3184.	1.3	10
67	Structural safety monitoring for Nanjing Yangtze River Bridge. Central South University, 2004, 11, 332-335.	0.5	9
68	Effects of Spatial Variation of Ground Motion (SVGM) on Seismic Vulnerability of Ultra-high Tower and Multi-tower Cable-stayed Bridges. Journal of Earthquake Engineering, 2022, 26, 8495-8524.	1.4	9
69	Design, Analysis and Construction of a Steel Truss Cable-Stayed Bridge for High-Speed Railway in China. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 2016, 26, 381-388.	0.5	8
70	Laser-based intelligent perception method for tunnel invasion. Mechanics of Advanced Materials and Structures, 2022, 29, 6451-6458.	1.5	8
71	NONSTATIONARITY ANALYSIS IN WIND-RAIN-INDUCED VIBRATION OF STAY CABLES. Journal of Civil Engineering and Management, 2012, 18, 821-827.	1.9	7
72	Truck Weight Limit for Simply Supported Steel Girder Bridges Based on Bridge Fatigue Reliability. Journal of Aerospace Engineering, 2018, 31, .	0.8	7

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73	Strong Wind Characteristics and Buffeting Response of a Cable-Stayed Bridge under Construction. Sensors, 2020, 20, 1228.	2.1	7
74	Wake-induced vibrations of tandem flexible cable models in a wind tunnel. Ocean Engineering, 2021, 233, 109188.	1.9	7
75	Influences of Wind Barriers on the Train Running Safety on a Highway-Railway One-Story Bridge. International Journal of Structural Stability and Dynamics, 2021, 21, .	1.5	7
76	Earthquake Isolation of a Spring-Damper-Friction System with a Convex Friction Distribution. Journal of Testing and Evaluation, 2019, 47, 889-904.	0.4	7
77	An experimental study on mitigating dynamic ice accretion process on bridge cables with a superhydrophobic coating. Experimental Thermal and Fluid Science, 2022, 132, 110573.	1.5	7
78	Effects of Curved Wind Barrier on the Aerodynamic Characteristics of a Trainâ€“Bridge System and Its Static Wind Load. International Journal of Structural Stability and Dynamics, 2022, 22, .	1.5	7
79	Analysis of the effects of wind barrier on driving safety and comfort of vehicles on long-span bridges under crosswinds. Structures, 2022, 42, 367-385.	1.7	7
80	Moving model test on the aerodynamic pressure of bilateral inverted-L-shaped noise barriers caused by high-speed trains. Journal of Wind Engineering and Industrial Aerodynamics, 2022, 228, 105083.	1.7	7
81	Transition along a finite-length cylinder in the presence of a thin boundary layer. Experiments in Fluids, 2016, 57, 1.	1.1	6
82	Evolutionary power spectral density analysis on the wind-induced buffeting responses of Sutong Bridge during Typhoon Haikui. Advances in Structural Engineering, 2017, 20, 214-224.	1.2	6
83	Quantification of aerodynamic forces for truss bridge-girders based on wind tunnel test and kriging surrogate model. Advances in Structural Engineering, 2021, 24, 2161-2175.	1.2	6
84	Mechanical characteristics of a new type of cable-supported photovoltaic module system. Solar Energy, 2021, 226, 408-420.	2.9	6
85	Characteristics of the velocity field in slipstream induced by a CR 400 high-speed train lead-carriage. Measurement: Journal of the International Measurement Confederation, 2022, 196, 111205.	2.5	6
86	Experimental study on wind force coefficient of a truss arch tower with multiple skewbacks. Advances in Structural Engineering, 2020, 23, 2614-2625.	1.2	5
87	Influence of wind barrier on the transient aerodynamic performance of high-speed trains under crosswinds at tunnelâ€“bridge sections. Engineering Applications of Computational Fluid Mechanics, 2021, 15, 727-746.	1.5	5
88	Pressure distribution, aerodynamic forces and wake-vortex evolution of a sectional cable model controlled with steady windward-and-leeward jets. Journal of Visualization, 2021, 24, 1155-1172.	1.1	5
89	An Efficient Non-Iterative Hybrid Method for Analyzing Trainâ€“Railâ€“Bridge Interaction Problems. International Journal of Structural Stability and Dynamics, 2021, 21, 2150029.	1.5	5
90	Dynamic Characteristics of Unsteady Aerodynamic Pressure on an Enclosed Housing for Sound Emission Alleviation Caused by a Passing High-Speed Train. Applied Sciences (Switzerland), 2022, 12, 1545.	1.3	5

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91	Parametric studies on the dynamic properties of stay cables interconnected with uniformly distributed cross-ties. Advances in Structural Engineering, 2019, 22, 882-892.	1.2	4
92	Full-scale measurements of wind structure and dynamic behaviour of a transmission tower during a typhoon. Structure and Infrastructure Engineering, 2020, 16, 820-830.	2.0	4
93	Aerodynamics of a two-dimensional bluff body with the cross-section of a train. Advances in Structural Engineering, 2020, 23, 2679-2693.	1.2	4
94	Experimental Study of Aerodynamic Interference Effects for a Suspended Monorail Vehicleâ€“Bridge System Using a Wireless Acquisition System. Sensors, 2021, 21, 5841.	2.1	4
95	Structural Damage Identification Based on Transmissibility in Time Domain. Sensors, 2022, 22, 393.	2.1	4
96	Influence of Wind Barriers with Different Curvatures on Crosswind Aerodynamic Characteristics of a Train-Bridge System. Applied Sciences (Switzerland), 2022, 12, 1747.	1.3	4
97	Effect of Topography Truncation on Experimental Simulation of Flow over Complex Terrain. Applied Sciences (Switzerland), 2022, 12, 2477.	1.3	4
98	Experimental Study of the Aerodynamic Characteristics of a Suspended Monorail Vehicle-Bridge System Under Crosswinds. International Journal of Structural Stability and Dynamics, 2022, 22, .	1.5	4
99	Optimal transverse position for overweight trucks to cross simply supported multi-girder bridges. Advances in Structural Engineering, 2018, 21, 1251-1261.	1.2	3
100	Dynamics of Double-Beam System with Various Symmetric Boundary Conditions Traversed by a Moving Force: Analytical Analyses. Applied Sciences (Switzerland), 2019, 9, 1218.	1.3	3
101	A Numerical Investigation on Scaling Rolling Friction Effects in Shaking Table Model Tests. Shock and Vibration, 2019, 2019, 1-14.	0.3	3
102	Dynamic Responses of a Metro Train-Bridge System under Train-Braking: Field Measurements and Data Analysis. Sensors, 2020, 20, 735.	2.1	3
103	Influence of site conditions on structural vulnerability of a super high three-tower cable-stayed bridge. Structures, 2021, 34, 3882-3893.	1.7	3
104	Wind Tunnel Study on Aerodynamic Characteristics of the Train on Viaducts with a New Type of Windâ€“Noise Barrier Under Cross Wind. International Journal of Structural Stability and Dynamics, 0, , .	1.5	3
105	Wind Field Characteristics of Complex Terrain Based on Experimental and Numerical Investigation. Applied Sciences (Switzerland), 2022, 12, 5124.	1.3	3
106	Investigation of Temperature Variations and Extreme Temperature Differences for the Corrugated Web Steel Beams under Solar Radiation. Sensors, 2022, 22, 4557.	2.1	3
107	Thickness Measurement of Water Film/Rivulets Based on Grayscale Index. Remote Sensing, 2019, 11, 2871.	1.8	2
108	Dynamic Responses of the Metro Trainâ€™s Bogie Frames: Field Tests and Data Analysis. Shock and Vibration, 2020, 2020, 1-10.	0.3	2

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109	Effect of Train-Induced Wind on the Transmission of COVID-19: A New Insight into Potential Infectious Risks. International Journal of Environmental Research and Public Health, 2021, 18, 8164.	1.2	2
110	Aerodynamic characteristics of trains on a viaduct with non-uniform cross-section under crosswinds by wind tunnel tests. Advances in Structural Engineering, 0, , 136943322098609.	1.2	2
111	Main Achievements and Technical challenges of High-speed Railway Bridges in China. , 2016, , .		2
112	Effects of High-Speed Trains on Trucks Running on a Roadâ€“Rail Dual-Use Bridge Under Crosswind. International Journal of Structural Stability and Dynamics, 2022, 22, .	1.5	2
113	Aerodynamic Characteristics of a High-Speed Train Travel on the Bridge. DEStech Transactions on Engineering and Technology Research, 2017, , .	0.0	1
114	Aerodynamics of a Train and Flat Closed-Box Bridge System with Train Model Mounted on the Upstream Track. Applied Sciences (Switzerland), 2022, 12, 276.	1.3	1
115	Case Study of Bus Rapid Transit Bridges in Xiamen, China. , 2010, , .		0
116	Measurement for the Thickness of Water Droplets/Film on a Curved Surface with Digital Image Projection (DIP) Technique. Sensors, 2020, 20, 2409.	2.1	0
117	Analysis of urban road traffic noise exposure of residential buildings in hong kong over the past decade. Noise and Health, 2019, 21, 142-154.	0.4	0
118	Numerical Study of Wind Loads on a High-Speed Train in the Center of Tornado. , 2022, , .		0
119	A new type of aerodynamic measurement technology for vehicle model running on bridge under crosswind in wind tunnel test. Advances in Structural Engineering, 0, , 136943322211012.	1.2	0