Mitsuyoshi Akiyama

List of Publications by Year
in descending order

39 papers	1,314 citations	471061 17 h-index	344852 36 g-index
40 all docs	40 docs citations	40 times ranked	733 citing authors

#	Article	IF	Citations
1	Life‐cycle reliability of RC bridge piers under seismic and airborne chloride hazards. Earthquake Engineering and Structural Dynamics, 2011, 40, 1671-1687.	2.5	153
2	Toward life-cycle reliability-, risk- and resilience-based design and assessment of bridges and bridge networks under independent and interacting hazards: emphasis on earthquake, tsunami and corrosion. Structure and Infrastructure Engineering, 2020, 16, 26-50.	2.0	122
3	Time-dependent reliability analysis of existing RC structures in a marine environment using hazard associated with airborne chlorides. Engineering Structures, 2010, 32, 3768-3779.	2.6	119
4	Assessment of the structural performance of corrosion-affected RC members based on experimental study and probabilistic modeling. Engineering Structures, 2016, 127, 189-205.	2.6	93
5	Integration of the effects of airborne chlorides into reliability-based durability design of reinforced concrete structures in a marine environment. Structure and Infrastructure Engineering, 2012, 8, 125-134.	2.0	90
6	Reliability estimation of corroded RC structures based on spatial variability using experimental evidence, probabilistic analysis and finite element method. Engineering Structures, 2019, 192, 30-52.	2.6	66
7	Effects of concrete flow on the distribution and orientation of fibers and flexural behavior of steel fiber-reinforced self-compacting concrete beams. Construction and Building Materials, 2020, 262, 119963.	3.2	62
8	Experimental investigation of the spatial variability of the steel weight loss and corrosion cracking of reinforced concrete members: novel X-ray and digital image processing techniques. Structure and Infrastructure Engineering, 2017, 13, 118-134.	2.0	56
9	Long-term seismic performance of RC structures in an aggressive environment: emphasis on bridge piers. Structure and Infrastructure Engineering, 2014, 10, 865-879.	2.0	55
10	Flexural test of precast high-strength reinforced concrete pile prestressed with unbonded bars arranged at the center of the cross-section. Engineering Structures, 2012, 34, 259-270.	2.6	40
11	Probabilistic estimation of flexural loading capacity of existing RC structures based on observational corrosion-induced crack width distribution using machine learning. Structural Safety, 2021, 91, 102098.	2.8	39
12	Life-cycle reliability assessment of reinforced concrete bridges under multiple hazards. Structure and Infrastructure Engineering, 2018, 14, 1011-1024.	2.0	33
13	Framework for estimating the risk and resilience of road networks with bridges and embankments under both seismic and tsunami hazards. Structure and Infrastructure Engineering, 2021, 17, 494-514.	2.0	32
14	Ductility Evaluation of Concrete-Encased Steel Bridge Piers Subjected to Lateral Cyclic Loading. Journal of Bridge Engineering, 2011, 16, 72-81.	1.4	31
15	Reliability-based durability design and service life assessment of reinforced concrete deck slab of jetty structures. Structure and Infrastructure Engineering, 2017, 13, 468-477.	2.0	30
16	Effect of the interaction of corrosion pits among multiple tensile rebars on the reliability of RC structures: Experimental and numerical investigation. Structural Safety, 2021, 93, 102115.	2.8	23
17	Shaking table tests of a reinforced concrete bridge pier with a low‐cost sliding pendulum system. Earthquake Engineering and Structural Dynamics, 2019, 48, 366-386.	2.5	22
18	Stress‐strain behaviour of high-strength concrete columns confined by low-volumetric ratio rectangular ties. Magazine of Concrete Research, 2006, 58, 101-115.	0.9	19

#	Article	IF	Citations
19	Performance analysis of Tohoku-Shinkansen viaducts affected by the 2011 Great East Japan earthquake. Structure and Infrastructure Engineering, 2014, 10, 1228-1247.	2.0	19
20	Life-cycle reliability-based design and reliability updating of reinforced concrete shield tunnels in coastal regions. Structure and Infrastructure Engineering, 2020, 16, 726-737.	2.0	18
21	Reliability-based life-cycle cost design of asphalt pavement using artificial neural networks. Structure and Infrastructure Engineering, 2021, 17, 872-886.	2.0	18
22	Life-cycle reliability analysis of shield tunnels in coastal regions: emphasis on flexural performance of deteriorating segmental linings. Structure and Infrastructure Engineering, 2019, 15, 851-871.	2.0	17
23	Random field-based reliability updating framework for existing RC structures incorporating the effect of spatial steel corrosion distribution. Structure and Infrastructure Engineering, 2022, 18, 967-982.	2.0	17
24	Multi-objective optimisation of in-service asphalt pavement maintenance schedule considering system reliability estimated via LSTM neural networks. Structure and Infrastructure Engineering, 2022, 18, 1002-1019.	2.0	17
25	Bidirectional shaking table tests of a low‐cost friction sliding system with flat‐inclined surfaces. Earthquake Engineering and Structural Dynamics, 2020, 49, 817-837.	2.5	16
26	Modelling method of fibre distribution in steel fibre reinforced concrete based on X-ray image recognition. Composites Part B: Engineering, 2021, 223, 109124.	5.9	14
27	LCC-based identification of geographical locations suitable for using stainless steel rebars in reinforced concrete girder bridges. Structure and Infrastructure Engineering, 2020, 16, 1201-1227.	2.0	12
28	Flexural behaviour of reinforced concrete beams repaired using a hybrid scheme with stainless steel rebars and CFRP sheets. Construction and Building Materials, 2020, 265, 120296.	3.2	12
29	Life-cycle of structural systems: design, assessment, maintenance and management. Structure and Infrastructure Engineering, 2017, 13, 1-1.	2.0	10
30	Effect of Recycled Aggregate Quality on the Bond Behavior and Shear Strength of RC Members. Applied Sciences (Switzerland), 2018, 8, 2054.	1.3	10
31	A Study on the Design Method for the Material Composition of Small Particle-Size Asphalt Mixture for Controlling Cracks in Asphalt Pavement. Applied Sciences (Switzerland), 2019, 9, 1988.	1.3	10
32	Risk estimation of the disaster waste generated by both ground motion and tsunami due to the anticipated Nankai Trough earthquake. Earthquake Engineering and Structural Dynamics, 2021, 50, 2134-2155.	2.5	10
33	Structural behavior prediction of SFRC beams by a novel integrated approach of X-ray imaging and finite element method. Construction and Building Materials, 2018, 170, 347-365.	3.2	8
34	A novel casting procedure for SFRC piles without shear reinforcement using the centrifugal forming technique to manipulate the fiber orientation and distribution. Construction and Building Materials, 2021, 303, 124232.	3.2	8
35	Effects of galvanostatic and artificial chloride environment methods on the steel corrosion spatial variability and probabilistic flexural capacity of RC beams. Structure and Infrastructure Engineering, 2022, 18, 1506-1525.	2.0	5
36	Shaking Table Test of a Friction Sliding System on a Concrete Member with Variable Curvature Fabricated by a Three-dimensional Printer. Journal of Earthquake Engineering, 2022, 26, 8332-8358.	1.4	4

#	Article	IF	Citations
37	Analytical Study on Seismic Performance of Hollow Spiral Steel Pipes under Cyclic Loading. Procedia Engineering, 2011, 14, 898-905.	1.2	2
38	Particle filter for model updating and reliability estimation of existing structures. Smart Structures and Systems, 2013, 11, 103-122.	1.9	2
39	Precast RC Blocks with Connections Composed of Steel Shear Keys and CFRP Sheets for the Superstructure of Temporary Bridges in a Postdisaster Situation. Journal of Bridge Engineering, 2022, 27, .	1.4	0