John H G Macdonald

List of Publications by Year
in descending order

71	2,155	236833	233338
papers	citations	25 h-index	45 g-index

72	72	72	1135
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Enhancing pantograph-catenary dynamic performance using an inertance-integrated damping system. Vehicle System Dynamics, 2022, 60, 1909-1932.	2.2	15
2	Damage detection of nonlinear structures using probability density ratio estimation. Computer-Aided Civil and Infrastructure Engineering, 2022, 37, 878-893.	6.3	9
3	Equivalent Static Wind Loads on Snow-accreted Overhead Wires. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 2022, 32, 78-91.	0.5	2
4	Scenario-based earthquake risk assessment for central-southern Malawi: The case of the Bilila-Mtakataka Fault. International Journal of Disaster Risk Reduction, 2022, 67, 102655.	1.8	10
5	Effects of reattachment and three-dimensionality on the aerodynamics of a circular cylinder in the critical Reynolds number range. Journal of Wind Engineering and Industrial Aerodynamics, 2022, 220, 104839.	1.7	7
6	Bending Fatigue Life Evaluation of Bridge Stay Cables. Journal of Engineering Mechanics - ASCE, 2022, 148, .	1.6	8
7	Unsteady aerodynamic force modelling for 3-DoF-galloping of four-bundled conductors. Journal of Fluids and Structures, 2022, 112, 103581.	1.5	6
8	Fragility curves for non-engineered masonry buildings in developing countries derived from real data based on structural surveys and laboratory tests. Soft Computing, 2021, 25, 6113-6138.	2.1	15
9	A nonlinear frequency-dependent spring-mass model for estimating loading caused by rhythmic human jumping. Engineering Structures, 2021, 241, 112229.	2.6	5
10	Seismic fragility models for typical non-engineered URM residential buildings in Malawi. Structures, 2021, 32, 2266-2278.	1.7	12
11	Nonlinear dynamics of deep water subsea lifting operations considering KC-dependent hydrodynamic coefficients. Ocean Engineering, 2021, 233, 109172.	1.9	7
12	Parametric exploration of a simple model of human jumping on an oscillating structure. Journal of Sound and Vibration, 2021, 509, 116227.	2.1	6
13	Effects of aerodynamic coupling and non-linear behaviour on galloping of ice-accreted conductors. Journal of Fluids and Structures, 2021, 106, 103366.	1.5	7
14	Emergence of the London Millennium Bridge instability without synchronisation. Nature Communications, 2021, 12, 7223.	5.8	12
15	A building classification scheme of housing stock in Malawi for earthquake risk assessment. Journal of Housing and the Built Environment, 2020, 35, 507-537.	0.9	11
16	Non-across-wind galloping of a square-section cylinder. Meccanica, 2020, 55, 1333-1345.	1.2	5
17	Characterisation of crowd lateral dynamic forcing from full-scale measurements on the Clifton Suspension Bridge. Structures, 2020, 24, 415-425.	1.7	11
18	A methodology for identifying optimum vibration absorbers with a reaction mass. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20190232.	1.0	1

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19	Identification of optimum cable vibration absorbers using fixed-sized-inerter layouts. Mechanism and Machine Theory, 2019, 140, 292-304.	2.7	18
20	Seismic Mitigation Framework for Non-engineered Masonry Buildings in Developing Countries: Application to Malawi in the East African Rift. , 2019, , 195-223.		6
21	Design of buildings through Linear Time-History Analysis optimising ground motion selection: A case study for RC-MRFs. Engineering Structures, 2019, 192, 279-295.	2.6	20
22	The effect of surface roughness on aerodynamic forces and vibrations for a circular cylinder in the critical Reynolds number range. Journal of Wind Engineering and Industrial Aerodynamics, 2019, 187, 61-72.	1.7	27
23	Cable Vibration Suppression with Inerter-Based Absorbers. Journal of Engineering Mechanics - ASCE, 2019, 145, .	1.6	39
24	Aerodynamics of a stay cable with helical fillets - Part I: Stability and load characteristics. Journal of Wind Engineering and Industrial Aerodynamics, 2018, 177, 376-391.	1.7	13
25	Galloping Analysis of a Stay Cable with an Attached Viscous Damper Considering Complex Modes. Journal of Engineering Mechanics - ASCE, 2018, 144, .	1.6	10
26	Aerodynamics of a stay cable with helical fillets - Part II: Fluctuating load and wake characteristics. Journal of Wind Engineering and Industrial Aerodynamics, 2018, 177, 392-404.	1.7	4
27	From phase drift to synchronisation â€“ pedestrian stepping behaviour on laterally oscillating structures and consequences for dynamic stability. Journal of Sound and Vibration, 2017, 392, 382-399.	2.1	18
28	Galloping of an elliptical cylinder at the critical Reynolds number and its quasi-steady prediction. Journal of Wind Engineering and Industrial Aerodynamics, 2017, 168, 110-122.	1.7	15
29	Aerodynamic characteristics and excitation mechanisms of the galloping of an elliptical cylinder in the critical Reynolds number range. Journal of Wind Engineering and Industrial Aerodynamics, 2017, 171, 342-352.	1.7	8
30	Aeroelastic stability of a 3DOF system based on quasi-steady theory with reference to inertial coupling. Journal of Wind Engineering and Industrial Aerodynamics, 2017, 171, 319-329.	1.7	9
31	Identification of modal parameters based on moving load excitation. Procedia Engineering, 2017, 199, 960-965.	1.2	8
32	Use of Inerter-based Vibration Absorbers for Suppressing Multiple Cable Modes. Procedia Engineering, 2017, 199, 1695-1700.	1.2	7
33	Influence of visual information on pedestrian actions on laterally oscillating structures â€“ experimental study using virtual reality environments. Procedia Engineering, 2017, 199, 2778-2783.	1.2	1
34	Numerical investigation of a simple model of human jumping on an oscillating structure. Procedia Engineering, 2017, 199, 2844-2849.	1.2	6
35	Design of monopiles for offshore wind turbines in 10 steps. Soil Dynamics and Earthquake Engineering, 2017, 92, 126-152.	1.9	248
36	Rapid deployment of a WSN on the Clifton Suspension Bridge, UK. Proceedings of the Institution of Civil Engineers - Smart Infrastructure and Construction, 2017, 170, 59-71.	1.1	5

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37	Damping Performance of Taut Cables with Passive Absorbers Incorporating Inerters. Journal of Physics: Conference Series, 2016, 744, 012046.	0.3	7
38	Closed form solution of Eigen frequency of monopile supported offshore wind turbines in deeper waters incorporating stiffness of substructure and SSI. Soil Dynamics and Earthquake Engineering, 2016, 83, 18-32.	1.9	164
39	An analytical solution for the galloping stability of a 3 degree-of-freedom system based on quasi-steady theory. Journal of Fluids and Structures, 2016, 60, 23-36.	1.5	29
40	Multi-modal vibration amplitudes of taut inclined cables due to direct and/or parametric excitation. Journal of Sound and Vibration, 2016, 363, 473-494.	2.1	41
41	Aerodynamic forcing characteristics of dry cable galloping at critical Reynolds numbers. European Journal of Mechanics, B/Fluids, 2015, 49, 243-249.	1.2	41
42	An analytical model to predict the natural frequency of offshore wind turbines on three-spring flexible foundations using two different beam models. Soil Dynamics and Earthquake Engineering, 2015, 74, 40-45.	1.9	73
43	Experimental identification of the behaviour of and lateral forces from freely-walking pedestrians on laterally oscillating structures in a virtual reality environment. Engineering Structures, 2015, 105, 62-76.	2.6	24
44	Simplified critical mudline bending moment spectra of offshore wind turbine support structures. Wind Energy, 2015, 18, 2171-2197.	1.9	83
45	Accuracy of Frequency Domain Fatigue Damage Estimation Methods for Offshore Wind Turbine Support Structures. , 2014, , .		3
46	Identification of aeroelastic forces and static drag coefficients of a twin cable bridge stay from full-scale ambient vibration measurements. Journal of Wind Engineering and Industrial Aerodynamics, 2014, 124, 90-98.	1.7	31
47	Probabilistic criteria for lateral dynamic stability of bridges under crowd loading. Computers and Structures, 2014, 136, 108-119.	2.4	21
48	Biomechanically Inspired Modeling of Pedestrian-Induced Vertical Self-Excited Forces. Journal of Bridge Engineering, 2013, 18, 1336-1346.	1.4	77
49	Kinetic analysis and rehabilitation of old bascule bridge in Tianjin, China. Proceedings of the Institution of Civil Engineers: Bridge Engineering, 2013, 166, 36-50.	0.3	2
50	Briefing: Current trends in engineering mechanics: structural dynamics. Proceedings of the Institution of Civil Engineers: Engineering and Computational Mechanics, 2012, 165, 81-82.	0.4	1
51	Wind-induced response and excitation characteristics of an inclined cable model in the critical Reynolds number range. Journal of Wind Engineering and Industrial Aerodynamics, 2012, 110, 100-112.	1.7	45
52	Critical Reynolds number and galloping instabilities: experiments on circular cylinders. Experiments in Fluids, 2012, 52, 1295-1306.	1.1	30
53	Biomechanically inspired modelling of pedestrian-induced forces on laterally oscillating structures. Journal of Sound and Vibration, 2012, 331, 3914-3929.	2.1	67
54	Earthquake and Large Structures Testing at the Bristol Laboratory for Advanced Dynamics Engineering. Geotechnical, Geological and Earthquake Engineering, 2012, , 21-41.	0.1	0

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55	JWEIA foreword to WES-2010 special issue. Journal of Wind Engineering and Industrial Aerodynamics, 2011, 99, 897-898.	1.7	0
56	Identification of flutter derivatives from full-scale ambient vibration measurements of the Clifton Suspension Bridge. Wind and Structures, an International Journal, 2011, 14, 221-238.	0.8	26
57	Generalised modal stability of inclined cables subjected to support excitations. Journal of Sound and Vibration, 2010, 329, 4515-4533.	2.1	47
58	Dynamic excitation of cables by deck and/or tower motion. Proceedings of the Institution of Civil Engineers: Bridge Engineering, 2010, 163, 101-112.	0.3	3
59	Lateral excitation of bridges by balancing pedestrians. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2009, 465, 1055-1073.	1.0	133
60	Two-degree-of-freedom inclined cable gallopingâ€"Part 1: General formulation and solution for perfectly tuned system. Journal of Wind Engineering and Industrial Aerodynamics, 2008, 96, 291-307.	1.7	67
61	Modal stability of inclined cables subjected to vertical support excitation. Journal of Sound and Vibration, 2008, 318, 565-579.	2.1	55
62	Two-degree-of-freedom inclined cable gallopingâ€"Part 2: Analysis and prevention for arbitrary frequency ratio. Journal of Wind Engineering and Industrial Aerodynamics, 2008, 96, 308-326.	1.7	48
63	Galloping analysis of stranded electricity conductors in skew winds. Wind and Structures, an International Journal, 2008, 11, 303-321.	0.8	9
64	Improved finite element modelling of a cable-stayed bridge through systematic manual tuning. Engineering Structures, 2007, 29, 358-371.	2.6	45
65	A unified approach to aerodynamic damping and drag/lift instabilities, and its application to dry inclined cable galloping. Journal of Fluids and Structures, 2006, 22, 229-252.	1.5	101
66	Nonlinear Models of Cable-Stayed Bridges. Applied Mechanics and Materials, 2006, 5-6, 425-432.	0.2	1
67	Variation of modal parameters of a cable-stayed bridge identified from ambient vibration measurements and FE modelling. Engineering Structures, 2005, 27, 1916-1930.	2.6	86
68	One-to-two global-local interaction in a cable-stayed beam observed through analytical, finite element and experimental models. International Journal of Non-Linear Mechanics, 2005, 40, 571-588.	1.4	100
69	Evaluation of buffeting predictions of a cable-stayed bridge from full-scale measurements. Journal of Wind Engineering and Industrial Aerodynamics, 2003, 91, 1465-1483.	1.7	48
70	Separation of the contributions of aerodynamic and structural damping in vibrations of inclined cables. Journal of Wind Engineering and Industrial Aerodynamics, 2002, 90, 19-39.	1.7	31
71	Non-Linear Analysis of Wind-Induced Cable-Deck Interaction. , 2001, , 74.		3