

Luca Bruno

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3858097/publications.pdf>

Version: 2024-02-01

40
papers

1,347
citations

361413

20
h-index

345221

36
g-index

40
all docs

40
docs citations

40
times ranked

740
citing authors

#	ARTICLE	IF	CITATIONS
1	3D flow around a rectangular cylinder: A computational study. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2010, 98, 263-276.	3.9	141
2	Benchmark on the Aerodynamics of a Rectangular 5:1 Cylinder: An overview after the first four years of activity. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2014, 126, 87-106.	3.9	136
3	Crowd-structure interaction in lively footbridges under synchronous lateral excitation: A literature review. <i>Physics of Life Reviews</i> , 2009, 6, 176-206.	2.8	116
4	Windblown sand along railway infrastructures: A review of challenges and mitigation measures. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2018, 177, 340-365.	3.9	97
5	Crowd dynamics on a moving platform: Mathematical modelling and application to lively footbridges. <i>Mathematical and Computer Modelling</i> , 2007, 45, 252-269.	2.0	81
6	Simulated flow around a rectangular 5:1 cylinder: Spanwise discretisation effects and emerging flow features. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2012, 104-106, 203-215.	3.9	64
7	Non-local first-order modelling of crowd dynamics: A multidimensional framework with applications. <i>Applied Mathematical Modelling</i> , 2011, 35, 426-445.	4.2	54
8	An interpretative model of the pedestrian fundamental relation. <i>Comptes Rendus - Mecanique</i> , 2007, 335, 194-200.	2.1	50
9	Crowd-structure interaction in footbridges: Modelling, application to a real case-study and sensitivity analyses. <i>Journal of Sound and Vibration</i> , 2009, 323, 475-493.	3.9	50
10	High Statistics Measurements of Pedestrian Dynamics. <i>Transportation Research Procedia</i> , 2014, 2, 96-104.	1.5	47
11	Effects of the Equivalent Geometric Nodal Imperfections on the stability of single layer grid shells. <i>Engineering Structures</i> , 2016, 112, 184-199.	5.3	44
12	Windblown sand saltation: A statistical approach to fluid threshold shear velocity. <i>Aeolian Research</i> , 2016, 23, 79-91.	2.7	39
13	Solid barriers for windblown sand mitigation: Aerodynamic behavior and conceptual design guidelines. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2018, 173, 79-90.	3.9	35
14	Stochastic aerodynamics and aeroelasticity of a flat plate via generalised Polynomial Chaos. <i>Journal of Fluids and Structures</i> , 2009, 25, 1158-1176.	3.4	30
15	Edge degree-of-sharpness and free-stream turbulence scale effects on the aerodynamics of a bridge deck. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2010, 98, 661-671.	3.9	27
16	Pedestrian-induced torsional vibrations of suspended footbridges: Proposal and evaluation of vibration countermeasures. <i>Engineering Structures</i> , 2012, 36, 228-238.	5.3	26
17	Determination of the aeroelastic transfer functions for streamlined bodies by means of a Navier-Stokes solver. <i>Mathematical and Computer Modelling</i> , 2006, 43, 506-529.	2.0	24
18	Aerodynamic shape optimization of barriers for windblown sand mitigation using CFD analysis. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2020, 197, 104058.	3.9	23

#	ARTICLE	IF	CITATIONS
19	Windblown sand action on civil structures: Definition and probabilistic modelling. <i>Engineering Structures</i> , 2019, 178, 88-101.	5.3	22
20	Evaluation of Reynolds number effects on flutter derivatives of a flat plate by means of a computational approach. <i>Journal of Fluids and Structures</i> , 2008, 24, 1058-1076.	3.4	21
21	Sand transverse dune aerodynamics: 3D coherent flow structures from a computational study. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2015, 147, 291-301.	3.9	19
22	CWE study of wind flow around railways: Effects of embankment and track system on sand sedimentation. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2021, 208, 104476.	3.9	19
23	Pedestrian Lateral Action on lively Footbridges: A New Load Model. <i>Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE)</i> , 2007, 17, 236-241.	0.8	17
24	Limit of hanger linearity in suspension footbridge dynamics: A new section model. <i>Journal of Sound and Vibration</i> , 2011, 330, 6387-6406.	3.9	14
25	Uncertainties in crowd dynamic loading of footbridges: A novel multi-scale model of pedestrian traffic. <i>Engineering Structures</i> , 2017, 147, 545-566.	5.3	14
26	Uncertainty propagation in aeolian processes: From threshold shear velocity to sand transport rate. <i>Geomorphology</i> , 2018, 301, 28-38.	2.6	14
27	Influence of in-plane and out-of-plane stiffness on the stability of free-edge gridshells: A parametric analysis. <i>Thin-Walled Structures</i> , 2018, 131, 755-768.	5.3	14
28	Mitigation of human-induced lateral vibrations on footbridges through walkway shaping. <i>Engineering Structures</i> , 2013, 56, 95-104.	5.3	12
29	A multiphase first order model for non-equilibrium sand erosion, transport and sedimentation. <i>Applied Mathematics Letters</i> , 2015, 45, 69-75.	2.7	12
30	Wind-sand tunnel testing of surface-mounted obstacles: Similarity requirements and a case study on a Sand Mitigation Measure. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2021, 214, 104653.	3.9	12
31	Shield for Sand: An Innovative Barrier for Windblown Sand Mitigation. <i>Recent Patents on Engineering</i> , 2018, 12, 237-246.	0.4	11
32	The synchronous lateral excitation phenomenon: modelling framework and an application. <i>Comptes Rendus - Mecanique</i> , 2007, 335, 739-745.	2.1	10
33	Incoming windblown sand drift to civil infrastructures: A probabilistic evaluation. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2017, 166, 37-47.	3.9	10
34	Probabilistic evaluation of the aerodynamic properties of a bridge deck. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2011, 99, 718-728.	3.9	9
35	Windblown Sand Mitigation Along Railway Megaprojects: A Comparative Study. <i>Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE)</i> , 2020, 30, 355-364.	0.8	8
36	Statistical characterization of sedimentation velocity of natural particles. <i>Aeolian Research</i> , 2020, 44, 100593.	2.7	8

#	ARTICLE	IF	CITATIONS
37	From individual behaviour to an evaluation of the collective evolution of crowds along footbridges. Journal of Engineering Mathematics, 2016, 101, 153-173.	1.2	7
38	Effects of cell quality in grid boundary layer on the simulated flow around a square cylinder. Computers and Fluids, 2022, 238, 105351.	2.5	6
39	A Simplified Serviceability Assessment of Footbridge Dynamic Behaviour Under Lateral Crowd Loading. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 2010, 20, 442-446.	0.8	4
40	Railway Megaprojects: a Semi-probabilistic Approach to Windblown Sand Action. , 2018, , .		0