## Luca Bruno

## List of Publications by Year in descending order

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

Version: 2024-02-01

361413 345221 1,347 40 20 36 h-index citations g-index papers 40 40 40 740 citing authors docs citations times ranked all docs

| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | 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         |
| 2  | CWE study of wind flow around railways: Effects of embankment and track system on sand sedimentation. Journal of Wind Engineering and Industrial Aerodynamics, 2021, 208, 104476.   | 3.9 | 19        |
| 3  | Wind-sand tunnel testing of surface-mounted obstacles: Similarity requirements and a case study on a Sand Mitigation Measure. Journal of Wind Engineering and Industrial Aerodynamics, 2021, 214, 104653.                   | 3.9 | 12        |
| 4  | Aerodynamic shape optimization of barriers for windblown sand mitigation using CFD analysis. Journal of Wind Engineering and Industrial Aerodynamics, 2020, 197, 104058.  | 3.9 | 23        |
| 5  | Windblown Sand Mitigation Along Railway Megaprojects: A Comparative Study. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 2020, 30, 355-364. | 0.8 | 8         |
| 6  | Statistical characterization of sedimentation velocity of natural particles. Aeolian Research, 2020, 44, 100593.  | 2.7 | 8         |
| 7  | Windblown sand action on civil structures: Definition and probabilistic modelling. Engineering Structures, 2019, 178, 88-101.   | 5.3 | 22        |
| 8  | Solid barriers for windblown sand mitigation: Aerodynamic behavior and conceptual design guidelines. Journal of Wind Engineering and Industrial Aerodynamics, 2018, 173, 79-90.   | 3.9 | 35        |
| 9  | Uncertainty propagation in aeolian processes: From threshold shear velocity to sand transport rate.<br>Geomorphology, 2018, 301, 28-38.   | 2.6 | 14        |
| 10 | Shield for Sand: An Innovative Barrier for Windblown Sand Mitigation. Recent Patents on Engineering, 2018, 12, 237-246.   | 0.4 | 11        |
| 11 | Influence of in-plane and out-of-plane stiffness on the stability of free-edge gridshells: A parametric analysis. Thin-Walled Structures, 2018, 131, 755-768.   | 5.3 | 14        |
| 12 | Windblown sand along railway infrastructures: A review of challenges and mitigation measures. Journal of Wind Engineering and Industrial Aerodynamics, 2018, 177, 340-365.  | 3.9 | 97        |
| 13 | Railway Megaprojects: a Semi-probabilistic Approach to Windblown Sand Action. , 2018, , .   |     | O         |
| 14 | Incoming windblown sand drift to civil infrastructures: A probabilistic evaluation. Journal of Wind Engineering and Industrial Aerodynamics, 2017, 166, 37-47.  | 3.9 | 10        |
| 15 | Uncertainties in crowd dynamic loading of footbridges: A novel multi-scale model of pedestrian traffic. Engineering Structures, 2017, 147, 545-566.   | 5.3 | 14        |
| 16 | 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         |
| 17 | Windblown sand saltation: A statistical approach to fluid threshold shear velocity. Aeolian Research, 2016, 23, 79-91.  | 2.7 | 39        |
| 18 | Effects of the Equivalent Geometric Nodal Imperfections on the stability of single layer grid shells. Engineering Structures, 2016, 112, 184-199.   | 5.3 | 44        |

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|----|--|-------------|-----------|
| 19 | Sand transverse dune aerodynamics: 3D coherent flow structures from a computational study. Journal of Wind Engineering and Industrial Aerodynamics, 2015, 147, 291-301.  | 3.9         | 19        |
| 20 | A multiphase first order model for non-equilibrium sand erosion, transport and sedimentation. Applied Mathematics Letters, 2015, 45, 69-75.  | 2.7         | 12        |
| 21 | High Statistics Measurements of Pedestrian Dynamics. Transportation Research Procedia, 2014, 2, 96-104.  | 1.5         | 47        |
| 22 | Benchmark on the Aerodynamics of a Rectangular 5:1 Cylinder: An overview after the first four years of activity. Journal of Wind Engineering and Industrial Aerodynamics, 2014, 126, 87-106.   | 3.9         | 136       |
| 23 | Mitigation of human-induced lateral vibrations on footbridges through walkway shaping.<br>Engineering Structures, 2013, 56, 95-104.  | <b>5.</b> 3 | 12        |
| 24 | Simulated flow around a rectangular 5:1 cylinder: Spanwise discretisation effects and emerging flow features. Journal of Wind Engineering and Industrial Aerodynamics, 2012, 104-106, 203-215.   | 3.9         | 64        |
| 25 | Pedestrian-induced torsional vibrations of suspended footbridges: Proposal and evaluation of vibration countermeasures. Engineering Structures, 2012, 36, 228-238.   | <b>5.</b> 3 | 26        |
| 26 | Limit of hanger linearity in suspension footbridge dynamics: A new section model. Journal of Sound and Vibration, 2011, 330, 6387-6406.  | 3.9         | 14        |
| 27 | Probabilistic evaluation of the aerodynamic properties of a bridge deck. Journal of Wind Engineering and Industrial Aerodynamics, 2011, 99, 718-728.   | 3.9         | 9         |
| 28 | Non-local first-order modelling of crowd dynamics: A multidimensional framework with applications. Applied Mathematical Modelling, 2011, 35, 426-445.  | 4.2         | 54        |
| 29 | A Simplified Serviceability Assessment of Footbridge Dynamic Behaviour Under Lateral Crowd Loading.<br>Structural Engineering International: Journal of the International Association for Bridge and<br>Structural Engineering (IABSE), 2010, 20, 442-446. | 0.8         | 4         |
| 30 | 3D flow around a rectangular cylinder: A computational study. Journal of Wind Engineering and Industrial Aerodynamics, 2010, 98, 263-276.  | 3.9         | 141       |
| 31 | Edge degree-of-sharpness and free-stream turbulence scale effects on the aerodynamics of a bridge deck. Journal of Wind Engineering and Industrial Aerodynamics, 2010, 98, 661-671.  | 3.9         | 27        |
| 32 | Stochastic aerodynamics and aeroelasticity of a flat plate via generalised Polynomial Chaos. Journal of Fluids and Structures, 2009, 25, 1158-1176.  | 3.4         | 30        |
| 33 | Crowd-structure interaction in lively footbridges under synchronous lateral excitation: A literature review. Physics of Life Reviews, 2009, 6, 176-206.  | 2.8         | 116       |
| 34 | Crowd–structure interaction in footbridges: Modelling, application to a real case-study and sensitivity analyses. Journal of Sound and Vibration, 2009, 323, 475-493.  | 3.9         | 50        |
| 35 | Evaluation of Reynolds number effects on flutter derivatives of a flat plate by means of a computational approach. Journal of Fluids and Structures, 2008, 24, 1058-1076.  | 3.4         | 21        |
| 36 | Pedestrian Lateral Action on lively Footbridges: A New Load Model. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 2007, 17, 236-241.  | 0.8         | 17        |

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|----|--|-----|----------|
| 37 | An interpretative model of the pedestrian fundamental relation. Comptes Rendus - Mecanique, 2007, 335, 194-200.  | 2.1 | 50       |
| 38 | The synchronous lateral excitation phenomenon: modelling framework and an application. Comptes Rendus - Mecanique, 2007, 335, 739-745.                                 | 2.1 | 10       |
| 39 | Crowd dynamics on a moving platform: Mathematical modelling and application to lively footbridges. Mathematical and Computer Modelling, 2007, 45, 252-269.             | 2.0 | 81       |
| 40 | Determination of the aeroelastic transfer functions for streamlined bodies by means of a Navier–Stokes solver. Mathematical and Computer Modelling, 2006, 43, 506-529. | 2.0 | 24       |