

# Peter Van den Broeck

## List of Publications by Year in descending order

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34  
papers

615  
citations

840776

11  
h-index

580821

25  
g-index

35  
all docs

35  
docs citations

35  
times ranked

384  
citing authors

#	ARTICLE	IF	CITATIONS
1	Vibration serviceability of footbridges: Evaluation of the current codes of practice. <i>Engineering Structures</i> , 2014, 59, 448-461.	5.3	129
2	Wave propagation in layered dry, saturated and unsaturated poroelastic media. <i>International Journal of Solids and Structures</i> , 1998, 35, 4753-4778.	2.7	93
3	The impact of vertical human-structure interaction on the response of footbridges to pedestrian excitation. <i>Journal of Sound and Vibration</i> , 2017, 402, 104-121.	3.9	74
4	Characterisation of walking loads by 3D inertial motion tracking. <i>Journal of Sound and Vibration</i> , 2014, 333, 5212-5226.	3.9	65
5	Robust design of a TMD for the vibration serviceability of a footbridge. <i>Engineering Structures</i> , 2016, 123, 408-418.	5.3	56
6	Numerical and Experimental Evaluation of the Dynamic Performance of a Footbridge with Tuned Mass Dampers. <i>Journal of Bridge Engineering</i> , 2016, 21, .	2.9	29
7	A spectral load model for pedestrian excitation including vertical human-structure interaction. <i>Engineering Structures</i> , 2018, 156, 537-547.	5.3	21
8	Identification and Modelling of Vertical Human-Structure Interaction. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2015, , 319-330.	0.5	17
9	A Robust Methodology for the Reconstruction of the Vertical Pedestrian-Induced Load from the Registered Body Motion. <i>Vibration</i> , 2018, 1, 250-268.	1.9	17
10	Robust vibration serviceability assessment of footbridges subjected to pedestrian excitation: strategy and applications. <i>Engineering Structures</i> , 2018, 171, 236-246.	5.3	15
11	Pedestrian-Induced Vibrations of Footbridges: An Extended Spectral Approach. <i>Journal of Bridge Engineering</i> , 2020, 25, .	2.9	13
12	Eeklo Footbridge: Benchmark Dataset on Pedestrian-Induced Vibrations. <i>Journal of Bridge Engineering</i> , 2021, 26, .	2.9	12
13	Numerical and experimental analysis of the vibration serviceability of the Bearsâ€™ Cage footbridge. <i>Structure and Infrastructure Engineering</i> , 2017, 13, 390-400.	3.7	11
14	Human-Induced Vibrations of Footbridges: The Effect of Vertical Human-Structure Interaction. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2016, , 299-307.	0.5	11
15	A simplified method to account for vertical human-structure interaction. <i>Structures</i> , 2021, 32, 2004-2019.	3.6	10
16	A simplified method to account for the effect of human-human interaction on the pedestrian-induced vibrations of footbridges. <i>Procedia Engineering</i> , 2017, 199, 2907-2912.	1.2	7
17	Twin Rotor Damper for Human-Induced Vibrations of Footbridges. <i>Journal of Structural Engineering</i> , 2020, 146, .	3.4	7
18	Reduced-order models for vertical human-structure interaction. <i>Journal of Physics: Conference Series</i> , 2016, 744, 012030.	0.4	5

#	ARTICLE	IF	CITATIONS
19	Application of a Direct Stiffness Method to Wave Propagation in Multiphase Poroelastic Media. <i>Meccanica</i> , 1997, 32, 205-214.	2.0	4
20	Data-Driven Synchronization Analysis of a Bouncing Crowd. <i>Shock and Vibration</i> , 2019, 2019, 1-23.	0.6	4
21	Vision-Based Methodology for Characterizing the Flow of a High-Density Crowd on Footbridges: Strategy and Application. <i>Infrastructures</i> , 2020, 5, 51.	2.8	3
22	THE IMPACT OF VERTICAL HUMAN-STRUCTURE INTERACTION FOR FOOTBRIDGES. , 2015, , .		3
23	Simulation of Human-induced Vibrations Based on the Characterized In-field Pedestrian Behavior. <i>Journal of Visualized Experiments</i> , 2016, , .	0.3	2
24	Inverse identification of the pedestrian characteristics governing human-structure interaction. <i>Procedia Engineering</i> , 2017, 199, 2889-2894.	1.2	2
25	Human-structure interaction effects on the maximum dynamic response based on an equivalent spectral model for pedestrian-induced loading. <i>Journal of Physics: Conference Series</i> , 2016, 744, 012031.	0.4	1
26	Comparison of TMD designs for a footbridge subjected to human-induced vibrations accounting for structural and load uncertainties. <i>Procedia Engineering</i> , 2017, 199, 1713-1718.	1.2	1
27	AN OPEN ACCESS BENCHMARK DATASET ON PEDESTRIAN-INDUCED VIBRATIONS COLLECTED ON THE EEKLO FOOTBRIDGE. , 2020, , .		1
28	IDENTIFICATION OF HUMAN-STRUCTURE INTERACTION BASED ON FULL-SCALE OBSERVATIONS. , 2020, , .		1
29	CONTACT FORCE RECONSTRUCTION ON VIBRATING SURFACES. , 2020, , .		1
30	Measurement and Prediction of the Pedestrian-Induced Vibrations of a Footbridge. <i>Noise and Vibration Worldwide</i> , 2009, 40, 10-19.	1.0	0
31	Prediction of peak response values of structures with and without TMD subjected to random pedestrian flows. <i>Journal of Physics: Conference Series</i> , 2016, 744, 012227.	0.4	0
32	Contact Force Reconstruction from the Lower-Back Accelerations during Walking on Vibrating Surfaces. <i>Vibration</i> , 2021, 4, 205-231.	1.9	0
33	Identification of Human-Induced Loading Using a Joint Input-State Estimation Algorithm. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2017, , 353-355.	0.5	0
34	Experimental Verification of the Dynamic Performance of a Footbridge Under High Pedestrian Densities. , 2017, , .		0