## **Zbigniew Zembaty**

List of Publications by Year in descending order

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471509 552781 53 746 17 26 citations h-index g-index papers 57 57 57 414 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Dynamic identification of a reinforced concrete frame in progressive states of damage. Engineering Structures, 2006, 28, 668-681.	5.3	63
2	Rockburst induced ground motion—a comparative study. Soil Dynamics and Earthquake Engineering, 2004, 24, 11-23.	3.8	52
3	Review of the Usefulness of Various Rotational Seismometers with Laboratory Results of Fibre-Optic Ones Tested for Engineering Applications. Sensors, 2016, 16, 2161.	3.8	52
4	Tutorial on Surface Rotations from Wave Passage Effects: Stochastic Spectral Approach. Bulletin of the Seismological Society of America, 2009, 99, 1040-1049.	2.3	37
5	Time history response analysis of a slender tower under translational-rocking seismic excitations. Engineering Structures, 2018, 155, 387-393.	5.3	33
6	Rotational Seismic Load Definition in Eurocode 8, Part 6, for Slender Tower-Shaped Structures. Bulletin of the Seismological Society of America, 2009, 99, 1483-1485.	2.3	30
7	Rotational Groundâ€Motion Records from Induced Seismic Events. Seismological Research Letters, 2017, 88, 13-22.	1.9	29
8	Comparison between earthquake rotation spectra obtained by different experimental sources. Engineering Structures, 1996, 18, 597-603.	5.3	26
9	Spatial response spectra and site amplification effects. Engineering Structures, 2002, 24, 1485-1496.	5.3	25
10	A system to mitigate deep mine tremor effects in the design of civil infrastructure. International Journal of Rock Mechanics and Minings Sciences, 2015, 74, 81-90.	5.8	23
11	Engineering analysis of strong ground rocking and its effect on tall structures. Soil Dynamics and Earthquake Engineering, 2019, 116, 358-370.	3.8	23
12	Rotation, Strain, and Translation Sensors Performance Tests with Active Seismic Sources. Sensors, 2021, 21, 264.	3.8	23
13	Vibrations of Bridge Structure under Kinematic Wave Excitations. Journal of Structural Engineering, 1997, 123, 479-488.	3.4	20
14	Damage reconstruction of 3D frames using genetic algorithms with Levenberg–Marquardt local search. Soil Dynamics and Earthquake Engineering, 2009, 29, 311-323.	3.8	20
15	Prediction of rotational ground motion for mining-induced seismicity – Case study from Upper Silesian Coal Basin, Poland. Engineering Geology, 2020, 276, 105767.	6.3	19
16	Spectral analysis of the rotational component of seismic ground motion. Probabilistic Engineering Mechanics, 1993, 8, 5-14.	2.7	17
17	Application of Rotation Rate Sensors in Modal and Vibration Analyses of Reinforced Concrete Beams. Sensors, 2020, 20, 4711.	3.8	17
18	A note on non-stationary stochastic response and strong motion duration. Earthquake Engineering and Structural Dynamics, 1988, 16, 1189-1200.	4.4	16

#	Article	IF	CITATIONS
19	Assessment of seismic resistance of masonry structures including boundary conditions. Soil Dynamics and Earthquake Engineering, 2002, 22, 1193-1197.	3.8	16
20	Vibration based stiffness reconstruction of beams and frames by observing their rotations under harmonic excitations — Numerical analysis. Engineering Structures, 2009, 31, 1581-1588.	5.3	16
21	Application of rotation rate sensors in an experiment of stiffness  reconstruction'. Smart Materials and Structures, 2013, 22, 077001.	3.5	16
22	Spatial Seismic Excitations and Response Spectra. Journal of Engineering Mechanics - ASCE, 1993, 119, 2449-2460.	2.9	15
23	Non-stationary random vibrations of a shear beam under high frequency seismic effects. Soil Dynamics and Earthquake Engineering, 2007, 27, 1000-1011.	3.8	15
24	On the sensitivity of bridge seismic response with local soil amplification. Earthquake Engineering and Structural Dynamics, 1998, 27, 1095-1099.	4.4	13
25	How to model rockburst seismic loads for civil engineering purposes?. Bulletin of Earthquake Engineering, 2011, 9, 1403-1416.	4.1	13
26	Strain sensing of beams in flexural vibrations using rotation rate sensors. Sensors and Actuators A: Physical, 2018, 269, 322-330.	4.1	12
27	On the reliability of tower-shaped structures under seismic excitations. Earthquake Engineering and Structural Dynamics, 1987, 15, 761-775.	4.4	11
28	Rotation Rate Sensors and Their Applications. Sensors, 2021, 21, 5344.	3.8	6
29	Estimation of Rotational Ground Motion Effects on the Bell Tower of Parma Cathedral. Geotechnical, Geological and Earthquake Engineering, 2016, , 35-48.	0.2	6
30	Seismic effects on leaning slender structures and tall buildings. Engineering Structures, 2019, 198, 109518.	<b>5.</b> 3	5
31	Stochastic modeling of seismic surface rotations. Natural Hazards, 1994, 10, 181-191.	3.4	4
32	On eigenvalue problem of bar structures with stochastic spatial stiffness variations. Structural Engineering and Mechanics, 2011, 39, 541-558.	1.0	4
33	Numerical analysis of monitoring of plastic hinge formation in frames under seismic excitations. Journal of Measurements in Engineering, 2018, 6, 190-195.	0.6	4
34	Spatial Seismic Coefficients, Some Sensitivity Results. Journal of Engineering Mechanics - ASCE, 1996, 122, 379-382.	2.9	3
35	High-Performance Composite-Reinforced Earthquake Resistant Buildings with Self-Aligning Capabilities. Geotechnical, Geological and Earthquake Engineering, 2015, , 359-372.	0.2	3
36	Quantifying local stiffness loss in beams using rotation rate sensors. Mechanical Systems and Signal Processing, 2021, 151, 107396.	8.0	3

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37	Seismic rocking effects on a mine tower under induced and natural earthquakes. Archives of Civil and Mechanical Engineering, $2021, 21, 1$ .	3.8	3
38	Deriving Seismic Surface Rotations for Engineering Purposes. , 2006, , 549-568.		3
39	Discussion on "A parametric study on the effect of rotational ground motions on building structural responses―by F. Vicencio and N.A. Alexander [Soil Dyn Earthq Eng 118 (2019) 191–206]. Soil Dynamics and Earthquake Engineering, 2019, 126, 105591.	3.8	2
40	Application of Rotation Rate Sensors in Measuring Beam Flexure and Structural Health Monitoring. Geotechnical, Geological and Earthquake Engineering, 2016, , 65-76.	0.2	2
41	Nonlinear interaction of initial leaning of r/c slender tower with its seismic response. , 2016, , 303-308.		2
42	An Analysis of the Effectiveness of Application of Rotation Rate Sensors in Non Destructive Damage Evaluation. Key Engineering Materials, 0, 569-570, 783-790.	0.4	1
43	Case Histories of Rockbursts at Metal Mines. , 2018, , 47-92.		1
44	Modal Analysis of a Reinforced Concrete Frame in Various States of Damage. Key Engineering Materials, 2005, 293-294, 735-742.	0.4	0
45	Reconstruction Problem of Reinforced Concrete Beams under Harmonic Excitations. Key Engineering Materials, 2007, 347, 691-696.	0.4	O
46	Application of Rotational Measurements in Stiffness Reconstruction of Beams and Frames. Key Engineering Materials, 0, 413-414, 189-194.	0.4	0
47	Discussion on: "Kalman filtering for neural prediction of response spectra from mining tremors― Computers and Structures, 2009, 87, 948-949.	4.4	0
48	Mitigating Rockburst Effects for Civil Engineering Infrastructure and Buildings. , 2018, , 541-548.		0
49	Analysing and Modelling Rockburst Induced Ground Motion for Civil Engineering Purposes., 2005,,.		0
50	On the First Excursion Probability with Random Threshold. Lecture Notes in Engineering, 1992, , 403-414.	0.1	0
51	Rock Mechanics and Engineering Volume 4. , 0, , .		O
52	Effect of Soil Compliance on Seismic Response of Slender Towers Under Rocking Excitations. Geotechnical, Geological and Earthquake Engineering, 2020, , 3-9.	0.2	0
53	Seismic Vulnerability of a Slender Stalagmite. Journal of Earthquake Engineering, 0, , 1-20.	2.5	O