

Edwin Pb Reynders

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2894022/publications.pdf>

Version: 2024-02-01

95
papers

4,437
citations

147801

31
h-index

106344

65
g-index

100
all docs

100
docs citations

100
times ranked

2385
citing authors

#	ARTICLE	IF	CITATIONS
1	Vibration-based monitoring of an FRP footbridge with embedded fiber-Bragg gratings: Influence of temperature vs. damage. <i>Composite Structures</i> , 2022, 287, 115295.	5.8	8
2	Prediction of diffuse sound transmission through finite-sized periodic structures. <i>Journal of Sound and Vibration</i> , 2022, 528, 116851.	3.9	3
3	Coupling strength evaluation in vibro-acoustic systems. <i>Journal of Sound and Vibration</i> , 2022, 536, 117133.	3.9	1
4	Uncertainty quantification in data-driven stochastic subspace identification. <i>Mechanical Systems and Signal Processing</i> , 2021, 151, 107338.	8.0	38
5	On the measurement and prediction of rainfall noise. <i>Applied Acoustics</i> , 2021, 171, 107636.	3.3	11
6	Identification of modal strains in concrete beams at sub-microstrain amplitude excitation using fibre Bragg grating sensors mounted on a strain-amplifying transducer. <i>Structural Health Monitoring</i> , 2021, 20, 1221-1230.	7.5	1
7	Vibration Monitoring of a Railway Bridge Using Distributed Macro-strain Data Obtained with Fiber Bragg Gratings. <i>Lecture Notes in Civil Engineering</i> , 2021, , 289-309.	0.4	0
8	Gaussian orthogonal ensemble modeling of built-up systems containing general diffuse components and parametric uncertainty. <i>Journal of Sound and Vibration</i> , 2021, 501, 116045.	3.9	3
9	An optimization method for reverberation room design. <i>INTER-NOISE and NOISE-CON Congress and Conference Proceedings</i> , 2021, 263, 2360-2371.	0.1	0
10	Numerical study of the impact of reverberation room design and test parameters on sound absorption measurements. <i>INTER-NOISE and NOISE-CON Congress and Conference Proceedings</i> , 2021, 263, 2372-2383.	0.1	1
11	Predicting vibration transmission across junctions using diffuse field reciprocity. <i>INTER-NOISE and NOISE-CON Congress and Conference Proceedings</i> , 2021, 263, 722-733.	0.1	0
12	Diffuse sound absorption modelling of complex finite absorbers using a hybrid deterministic-statistical energy analysis approach. <i>INTER-NOISE and NOISE-CON Congress and Conference Proceedings</i> , 2021, 263, 355-366.	0.1	0
13	Impact sound prediction of finite floor structures with the modal transfer matrix method. <i>INTER-NOISE and NOISE-CON Congress and Conference Proceedings</i> , 2021, 263, 734-745.	0.1	0
14	One-year operational modal analysis of a steel bridge from high-resolution macrostrain monitoring: Influence of temperature vs. retrofitting. <i>Mechanical Systems and Signal Processing</i> , 2021, 161, 107951.	8.0	38
15	Shape optimization of studs in double-leaf plasterboard walls for maximal broadband sound insulation and minimal material use. <i>Applied Acoustics</i> , 2021, 183, 108307.	3.3	3
16	Vibration-based structural health monitoring from operational long-gauge fiber optic strain data. , 2021, , .		0
17	Numerical prediction and experimental validation of impact sound radiation by timber joist floors. <i>Applied Acoustics</i> , 2020, 162, 107182.	3.3	9
18	A study on the concurrent influence of liquid content and damage on the dynamic properties of a tank for the development of a modal-based SHM system. <i>Journal of Civil Structural Health Monitoring</i> , 2020, 10, 57-68.	3.9	5

#	ARTICLE	IF	CITATIONS
19	The role of modal parameters uncertainty estimation in automated modal identification, modal tracking and data normalization. <i>Engineering Structures</i> , 2020, 224, 111208.	5.3	41
20	Broadband acoustic shape optimization of studs in double-leaf walls. <i>Journal of Sound and Vibration</i> , 2020, 485, 115562.	3.9	2
21	An efficient approach to model updating for a multispan railway bridge using orthogonal diagonalization combined with improved particle swarm optimization. <i>Journal of Sound and Vibration</i> , 2020, 476, 115315.	3.9	50
22	Wireless-Based Identification and Model Updating of a Skewed Highway Bridge for Structural Health Monitoring. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 2347.	2.5	11
23	Influence of damage versus temperature on modal strains and neutral axis positions of beam-like structures. <i>Mechanical Systems and Signal Processing</i> , 2019, 134, 106311.	8.0	22
24	Prediction and uncertainty quantification of structure-borne sound radiation into a diffuse field. <i>Journal of Sound and Vibration</i> , 2019, 463, 114984.	3.9	10
25	Model updating of periodic structures based on free wave characteristics. <i>Journal of Sound and Vibration</i> , 2019, 442, 281-307.	3.9	12
26	TRACKING THE MODAL PARAMETERS OF THE BAIXO SABOR CONCRETE ARCH DAM WITH UNCERTAINTY QUANTIFICATION. , 2019, , .		0
27	Damage identification using modal strains identified from operational fiber-optic Bragg grating data. <i>Structural Health Monitoring</i> , 2018, 17, 1441-1459.	7.5	52
28	Fast mean and variance computation of the diffuse sound transmission through finite-sized thick and layered wall and floor systems. <i>Journal of Sound and Vibration</i> , 2018, 422, 131-145.	3.9	16
29	The influence of environmental parameters on the dynamic behaviour of the San Frediano bell tower in Lucca. <i>Engineering Structures</i> , 2018, 156, 175-187.	5.3	73
30	Cross-frequency and band-averaged response variance prediction in the hybrid deterministic-statistical energy analysis method. <i>Journal of Sound and Vibration</i> , 2018, 428, 119-146.	3.9	17
31	Damage Identification Using Sub-Microstrain FBG Data from a Pre-Stressed Concrete Beam During Progressive Damage Testing. <i>Proceedings (mdpi)</i> , 2018, 2, .	0.2	1
32	Predicting the sound insulation of finite double-leaf walls with a flexible frame. <i>Applied Acoustics</i> , 2018, 141, 93-105.	3.3	22
33	A Comparison of Two Data Acquisition Techniques for Modal Strain Identification from Sub-microstrain FBG Data. <i>Lecture Notes in Civil Engineering</i> , 2018, , 432-444.	0.4	0
34	Assessment of Small Damage by Direct Modal Strain Measurements. <i>Lecture Notes in Civil Engineering</i> , 2018, , 3-16.	0.4	2
35	Optimal sensor placement for multi-setup modal analysis of structures. <i>Journal of Sound and Vibration</i> , 2017, 401, 214-232.	3.9	48
36	Mechanical strain-amplifying transducer for fiber Bragg grating sensors with applications in structural health monitoring. , 2017, , .		1

#	ARTICLE	IF	CITATIONS
37	Development of a mechanical strain amplifying transducer with Bragg grating sensor for low-amplitude strain sensing. Smart Materials and Structures, 2017, 26, 075006.	3.5	11
38	Automated structural health monitoring based on adaptive kernel spectral clustering. Mechanical Systems and Signal Processing, 2017, 90, 64-78.	8.0	65
39	Experimental verification of optimal sensor placement for multi-setup modal testing. Procedia Engineering, 2017, 199, 1068-1073.	1.2	2
40	Modal strain identification using sub-microstrain FBG data from a pre-stressed concrete beam during progressive damage testing. Procedia Engineering, 2017, 199, 1846-1851.	1.2	3
41	Uncertainty quantification of modal characteristics identified from frequency-domain stochastic subspace identification. Procedia Engineering, 2017, 199, 996-1001.	1.2	4
42	Identification of modal strains using sub-microstrain FBG data and a novel wavelength-shift detection algorithm. Mechanical Systems and Signal Processing, 2017, 86, 58-74.	8.0	33
43	SYNCHRONIZATION OF DATA ACQUISITION SYSTEMS FOR THE PURPOSE OF STRUCTURAL HEALTH MONITORING. , 2017, , .		0
44	SENSITIVITY ANALYSIS OF THE FREE WAVE CHARACTERISTICS OF PERIODIC STRUCTURES. , 2017, , .		0
45	Synchronization of dynamic response measurements for the purpose of structural health monitoring. Journal of Physics: Conference Series, 2016, 744, 012093.	0.4	0
46	Offline synchronization of data acquisition systems using system identification. Journal of Sound and Vibration, 2016, 381, 264-272.	3.9	22
47	Sound transmission through finite rib-stiffened and orthotropic plates. Acta Acustica United With Acustica, 2016, 102, 999-1010.	0.8	20
48	Uncertainty quantification in operational modal analysis with stochastic subspace identification: Validation and applications. Mechanical Systems and Signal Processing, 2016, 66-67, 13-30.	8.0	132
49	SEMI-DISCRETE COINCIDENCE IN THE MID-FREQUENCY SOUND TRANSMISSION THROUGH RIB-STIFFENED PANELS. , 2016, , .		0
50	Advances and challenges in structural health monitoring. , 2016, , 32-37.		0
51	Design of sensor networks for instantaneous inversion of modally reduced order models in structural dynamics. Mechanical Systems and Signal Processing, 2015, 52-53, 628-644.	8.0	77
52	Operational Modal Analysis in Civil Engineering: An Overview. , 2015, , 1757-1764.		1
53	Vibration-Based Damage Identification: The Z24 Bridge Benchmark. , 2015, , 3871-3879.		3
54	Parametric uncertainty quantification of sound insulation values. Journal of the Acoustical Society of America, 2014, 135, 1907-1918.	1.1	8

#	ARTICLE	IF	CITATIONS
55	Operational Modal Analysis in Civil Engineering: An Overview. , 2014, , 1-9.		5
56	Output-only structural health monitoring in changing environmental conditions by means of nonlinear system identification. Structural Health Monitoring, 2014, 13, 82-93.	7.5	176
57	An efficient probabilistic approach to vibro-acoustic analysis based on the Gaussian orthogonal ensemble. Journal of the Acoustical Society of America, 2014, 136, 201-212.	1.1	6
58	A hybrid finite element “ statistical energy analysis approach to robust sound transmission modeling. Journal of Sound and Vibration, 2014, 333, 4621-4636.	3.9	38
59	Effects of initial conditions in operational modal analysis. Structural Control and Health Monitoring, 2014, 21, 557-573.	4.0	9
60	Bayesian parameter identification for vibro-acoustic models with nonparametric uncertainty. , 2014, , 4659-4666.		0
61	Vibration-Based Damage Identification: The Z24 Bridge Benchmark. , 2014, , 1-8.		10
62	Modal contribution and state space order selection in operational modal analysis. Mechanical Systems and Signal Processing, 2013, 38, 276-298.	8.0	48
63	On the applicability of the lognormal distribution in random dynamical systems. Journal of Sound and Vibration, 2013, 332, 3289-3302.	3.9	20
64	Vibration-based estimation of axial force for a beam member with uncertain boundary conditions. Journal of Sound and Vibration, 2013, 332, 795-806.	3.9	53
65	Identification of axial forces in beam members by local vibration measurements. Journal of Sound and Vibration, 2013, 332, 5417-5432.	3.9	54
66	Response probability distribution of built-up vibro-acoustic systems. Journal of the Acoustical Society of America, 2012, 131, 1138-1149.	1.1	11
67	System Identification Methods for (Operational) Modal Analysis: Review and Comparison. Archives of Computational Methods in Engineering, 2012, 19, 51-124.	10.2	456
68	An augmented Kalman filter for force identification in structural dynamics. Mechanical Systems and Signal Processing, 2012, 27, 446-460.	8.0	331
69	Fully automated (operational) modal analysis. Mechanical Systems and Signal Processing, 2012, 29, 228-250.	8.0	314
70	Joint input-response estimation for structural systems based on reduced-order models and vibration data from a limited number of sensors. Mechanical Systems and Signal Processing, 2012, 29, 310-327.	8.0	203
71	Low cost dynamic structural identification system for extensive bridge monitoring. Bridge Maintenance, Safety and Management, 2012, , 3082-3088.	0.1	0
72	Towards a more realistic modelling of the uncertainty on identified mode shapes due to measurement noise. Journal of Physics: Conference Series, 2011, 305, 012002.	0.4	4

#	ARTICLE	IF	CITATIONS
73	Automated interpretation of stabilization diagrams. Conference Proceedings of the Society for Experimental Mechanics, 2011, , 189-201.	0.5	9
74	Pre- and Post-identification Merging for Multi-Setup OMA with Covariance-Driven SSI. Conference Proceedings of the Society for Experimental Mechanics, 2011, , 57-70.	0.5	22
75	OMAX testing of a steel bowstring footbridge. Conference Proceedings of the Society for Experimental Mechanics, 2011, , 173-182.	0.5	1
76	Dynamic Testing of Constructed Facilities. , 2010, , .		1
77	A local flexibility method for vibration-based damage localization and quantification. Journal of Sound and Vibration, 2010, 329, 2367-2383.	3.9	86
78	Finite element model updating and structural damage identification using OMAX data. Mechanical Systems and Signal Processing, 2010, 24, 1306-1323.	8.0	87
79	Subspace identification for operational modal analysis. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2010, , 55-106.	0.6	3
80	Combined Experimental-Operational Modal Testing of Footbridges. Journal of Engineering Mechanics - ASCE, 2010, 136, 687-696.	2.9	55
81	Vibration-based structural health monitoring using large sensor networks. Smart Structures and Systems, 2010, 6, 335-347.	1.9	7
82	Experimental and numerical analysis of a composite bridge for high-speed trains. Journal of Sound and Vibration, 2009, 320, 201-220.	3.9	130
83	Subspace identification of (AR)ARMAX, Box-Jenkins, and generalized model structures. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 868-873.	0.4	0
84	Measurement and Prediction of the Pedestrian-Induced Vibrations of a Footbridge. Noise and Vibration Worldwide, 2009, 40, 10-19.	1.0	0
85	An improved finite element model updating method by the global optimization technique "Coupled Local Minimizers". Computers and Structures, 2008, 86, 1339-1352.	4.4	58
86	Reference-based combined deterministic"stochastic subspace identification for experimental and operational modal analysis. Mechanical Systems and Signal Processing, 2008, 22, 617-637.	8.0	304
87	Uncertainty bounds on modal parameters obtained from stochastic subspace identification. Mechanical Systems and Signal Processing, 2008, 22, 948-969.	8.0	320
88	Vibration-based structural health monitoring using output-only measurements under changing environment. Mechanical Systems and Signal Processing, 2008, 22, 34-56.	8.0	441
89	Consistent Impulse-Response Estimation and System Realization From Noisy Data. IEEE Transactions on Signal Processing, 2008, 56, 2696-2705.	5.3	10
90	Damage Identification on the Tilff Bridge by Vibration Monitoring Using Optical Fiber Strain Sensors. Journal of Engineering Mechanics - ASCE, 2007, 133, 185-193.	2.9	88

#	ARTICLE	IF	CITATIONS
91	Sensitivity-based finite element model updating using constrained optimization with a trust region algorithm. <i>Journal of Sound and Vibration</i> , 2007, 305, 211-225.	3.9	116
92	Seismic demands and analysis of site effects in the Marmara region during the 1999 Kocaeli earthquake. <i>Natural Hazards</i> , 2007, 42, 169-191.	3.4	4
93	Finite element modelling of a silo based on experimental modal analysis. <i>Engineering Structures</i> , 2006, 28, 532-542.	5.3	42
94	Reference-based combined deterministic-stochastic subspace identification for experimental and operational modal analysis. , 2006, , 757-757.		0
95	Measurement of modal curvatures using optical fiber strain sensors and application to damage identification using vibration monitoring. , 2005, 5855, 1076.		8