Ian F C Smith

List of Publications by Year
in descending order

214 papers	5,029 citations	70961 41 h-index	128067 60 g-index
235 all docs	235 docs citations	235 times ranked	2312 citing authors

#	Article	IF	Citations
1	A direct stochastic algorithm for global search. Applied Mathematics and Computation, 2003, 146, 729-758.	1.4	152
2	Analysis of clustered tensegrity structures using a modified dynamic relaxation algorithm. International Journal of Solids and Structures, 2011, 48, 637-647.	1.3	145
3	Model-free data interpretation for continuous monitoring of complex structures. Advanced Engineering Informatics, 2008, 22, 135-144.	4.0	116
4	Structural identification with systematic errors and unknown uncertainty dependencies. Computers and Structures, 2013, 128, 251-258.	2.4	114
5	Dynamic behavior and vibration control of a tensegrity structure. International Journal of Solids and Structures, 2010, 47, 1285-1296.	1.3	107
6	Designing tensegrity modules for pedestrian bridges. Engineering Structures, 2010, 32, 1158-1167.	2.6	106
7	Active Tensegrity Structure. Journal of Structural Engineering, 2004, 130, 1454-1465.	1.7	103
8	Methodologies for model-free data interpretation of civil engineering structures. Computers and Structures, 2010, 88, 467-482.	2.4	103
9	Bond-behavior study of newly developed bamboo-composite reinforcement in concrete. Construction and Building Materials, 2016, 122, 110-117.	3.2	100
10	Model falsification diagnosis and sensor placement for leak detection in pressurized pipe networks. Advanced Engineering Informatics, 2013, 27, 261-269.	4.0	94
11	Design optimization and dynamic analysis of a tensegrity-based footbridge. Engineering Structures, 2010, 32, 3650-3659.	2.6	91
12	Active tensegrity: A control framework for an adaptive civil-engineering structure. Computers and Structures, 2008, 86, 2215-2223.	2.4	89
13	Multimodel Structural Performance Monitoring. Journal of Structural Engineering, 2010, 136, 1309-1318.	1.7	87
14	Adjustable Tensegrity Structures. Journal of Structural Engineering, 2003, 129, 515-526.	1.7	83
15	Damage detection using data-driven methods applied to moving-load responses. Mechanical Systems and Signal Processing, 2013, 39, 409-425.	4.4	80
16	Experimental Characterization of Monotonic and Cyclic Loading Responses of CLT Panel-To-Foundation Angle Bracket Connections. Journal of Materials in Civil Engineering, 2015, 27, .	1.3	71
17	System Identification through Model Composition and Stochastic Search. Journal of Computing in Civil Engineering, 2005, 19, 239-247.	2.5	68
18	Improving Full-Scale Transmission Tower Design through Topology and Shape Optimization. Journal of Structural Engineering, 2006, 132, 781-790.	1.7	67

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19	A Bounded Index for Cluster Validity. Lecture Notes in Computer Science, 2007, , 174-187.	1.0	66
20	Robust system identification and model predictions in the presence of systematic uncertainty. Advanced Engineering Informatics, 2015, 29, 1096-1109.	4.0	59
21	Developing intelligent tensegrity structures with stochastic search. Advanced Engineering Informatics, 2002, 16, 21-40.	4.0	58
22	Methodologies for predicting natural frequency variation of a suspension bridge. Engineering Structures, 2014, 80, 211-221.	2.6	57
23	Fatigue and Fracture of Riveted Bridge Members. Journal of Structural Engineering, 1990, 116, 198-214.	1.7	56
24	Constraint-based support for negotiation in collaborative design. Advanced Engineering Informatics, 2000, 14, 261-280.	0.5	55
25	Configuration of measurement systems using Shannon's entropy function. Computers and Structures, 2005, 83, 599-612.	2.4	55
26	Mechanical Properties of Bamboo Through Measurement of Culm Physical Properties for Composite Fabrication of Structural Concrete Reinforcement. Frontiers in Materials, 2019, 6, .	1.2	55
27	Data mining techniques for improving the reliability of system identification. Advanced Engineering Informatics, 2005, 19, 289-298.	4.0	53
28	An Active Structure that Learns. Journal of Computing in Civil Engineering, 2005, 19, 16-24.	2.5	53
29	Studies of Sensor Data Interpretation for Asset Management of the Built Environment. Frontiers in Built Environment, 2016, 2, .	1.2	52
30	Active control for mid-span connection of a deployable tensegrity footbridge. Engineering Structures, 2016, 112, 245-255.	2.6	51
31	Fatigue crack growth in a fillet welded joint. Engineering Fracture Mechanics, 1983, 18, 861-869.	2.0	50
32	Evaluating two model-free data interpretation methods for measurements that are influenced by temperature. Advanced Engineering Informatics, 2011, 25, 495-506.	4.0	50
33	Adaptive control of a deployable tensegrity structure. Engineering Structures, 2017, 152, 14-23.	2.6	49
34	CADRE: case-based geometric design. Advanced Engineering Informatics, 1996, 10, 171-183.	0.5	48
35	Hybrid probabilities and error-domain structural identification using ambient vibration monitoring. Mechanical Systems and Signal Processing, 2013, 37, 199-212.	4.4	46
36	Combined Model-Free Data-Interpretation Methodologies for Damage Detection during Continuous Monitoring of Structures. Journal of Computing in Civil Engineering, 2013, 27, 657-666.	2.5	45

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37	Iterative structural identification framework for evaluation of existing structures. Engineering Structures, 2016, 106, 179-194.	2.6	45
38	Design Aspects of a Deployable Tensegrity-Hollow-rope Footbridge. International Journal of Space Structures, 2012, 27, 81-95.	0.3	44
39	Deployment of a Tensegrity Footbridge. Journal of Structural Engineering, 2015, 141, .	1.7	44
40	Constraint-Based Support for Collaboration in Design and Construction. Journal of Computing in Civil Engineering, 1999, 13, 23-35.	2.5	43
41	A Study of Two Stochastic Search Methods for Structural Control. Journal of Computing in Civil Engineering, 2003, 17, 132-141.	2.5	43
42	Optimal Multi-Type Sensor Placement for Structural Identification by Static-Load Testing. Sensors, 2017, 17, 2904.	2.1	42
43	A comprehensive validity index for clustering. Intelligent Data Analysis, 2008, 12, 529-548.	0.4	41
44	Hierarchical Sensor Placement Using Joint Entropy and the Effect of Modeling Error. Entropy, 2014, 16, 5078-5101.	1.1	40
45	Reinforcement Learning for Structural Control. Journal of Computing in Civil Engineering, 2008, 22, 133-139.	2.5	39
46	Improving System Identification Using Clustering. Journal of Computing in Civil Engineering, 2008, 22, 292-302.	2.5	39
47	Configuration of control system for damage tolerance of a tensegrity bridge. Advanced Engineering Informatics, 2012, 26, 145-155.	4.0	37
48	Performance comparison of reduced models for leak detection in water distribution networks. Advanced Engineering Informatics, 2015, 29, 714-726.	4.0	37
49	Design of Structures That Adapt to Loads through Large Shape Changes. Journal of Structural Engineering, 2020, 146, .	1.7	36
50	Combining Dynamic Relaxation Method with Artificial Neural Networks to Enhance Simulation of Tensegrity Structures. Journal of Structural Engineering, 2003, 129, 672-681.	1.7	35
51	Improving Knowledge of Structural System Behavior through Multiple Models. Journal of Structural Engineering, 2008, 134, 553-561.	1.7	35
52	Mechanism-Based Approach for the Deployment of a Tensegrity-Ring Module. Journal of Structural Engineering, 2012, 138, 539-548.	1.7	35
53	Improving Fatigue Evaluations of Structures Using In-Service Behavior Measurement Data. Journal of Bridge Engineering, 2014, 19, .	1.4	35
54	Separation of thermal and autogenous deformation at varying temperatures using optical fiber sensors. Cement and Concrete Composites, 2007, 29, 435-447.	4.6	34

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55	Configuring and enhancing measurement systems for damage identification. Advanced Engineering Informatics, 2009, 23, 424-432.	4.0	34
56	Case€Based Preliminary Building Design. Journal of Computing in Civil Engineering, 1994, 8, 454-468.	2.5	33
57	Tensegrity Active Control: Multiobjective Approach. Journal of Computing in Civil Engineering, 2007, 21, 3-10.	2.5	33
58	Predicting the Usefulness of Monitoring for Identifying the Behavior of Structures. Journal of Structural Engineering, 2013, 139, 1716-1727.	1.7	33
59	Optimal Sensor Placement for Time-Dependent Systems: Application to Wind Studies around Buildings. Journal of Computing in Civil Engineering, 2016, 30, .	2.5	33
60	Load and Resistance Factor Design of Timber Joints: International Practice and Future Direction. Journal of Structural Engineering, 2002, 128, 48-59.	1.7	32
61	Self-Diagnosis and Self-Repair of an Active Tensegrity Structure. Journal of Structural Engineering, 2007, 133, 1752-1761.	1.7	31
62	Leak Detection of Water Supply Networks Using Error-Domain Model Falsification. Journal of Computing in Civil Engineering, 2018, 32, .	2.5	31
63	Application of Sustainable Bamboo-Based Composite Reinforcement in Structural-Concrete Beams: Design and Evaluation. Materials, 2020, 13, 696.	1.3	31
64	Design of tensegrity structures using parametric analysis and stochastic search. Engineering With Computers, 2010, 26, 193-203.	3.5	30
65	Performance-Driven Measurement System Design for Structural Identification. Journal of Computing in Civil Engineering, 2013, 27, 427-436.	2.5	30
66	Dynamic response of CLT plate systems in the context of timber and hybrid construction. Composite Structures, 2016, 157, 412-423.	3.1	28
67	Use of Timber in Tall Multi-Storey Buildings. , 2014, , .		28
68	Measurement System Configuration for Damage Identification of Continuously Monitored Structures. Journal of Bridge Engineering, 2012, 17, 857-866.	1.4	26
69	Comparing Structural Identification Methodologies for Fatigue Life Prediction of a Highway Bridge. Frontiers in Built Environment, 2018, 3, .	1.2	26
70	Determining control strategies for damage tolerance of an active tensegrity structure. Engineering Structures, 2011, 33, 1930-1939.	2.6	24
71	A multi-criteria decision framework to support measurement-system design for bridge load testing. Advanced Engineering Informatics, 2019, 39, 186-202.	4.0	24
72	Overview of Design Issues for Tall Timber Buildings. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 2008, 18, 141-147.	0.5	23

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73	Enhancing static-load-test identification of bridges using dynamic data. Engineering Structures, 2019, 186, 410-420.	2.6	23
74	A new system for early chloride detection in concrete. Smart Materials and Structures, 2008, 17, 045017.	1.8	22
75	Measurement, Data Interpretation, and Uncertainty Propagation for Fatigue Assessments of Structures. Journal of Bridge Engineering, 2016, 21, .	1.4	22
76	A dynamic-relaxation formulation for analysis of cable structures with sliding-induced friction. International Journal of Solids and Structures, 2017, 126-127, 240-251.	1.3	22
77	Failure mechanisms in wood-based materials: A review of discrete, continuum, and hybrid finite-element representations. Holzforschung, 2007, 61, 352-359.	0.9	21
78	Incremental development of CBR strategies for computing project cost probabilities. Advanced Engineering Informatics, 2007, 21, 311-321.	4.0	21
79	Quantifying the Effects of Modeling Simplifications for Structural Identification of Bridges. Journal of Bridge Engineering, 2014, 19, 59-71.	1.4	21
80	Experimental Testing of a Small-Scale Truss Beam That Adapts to Loads Through Large Shape Changes. Frontiers in Built Environment, 2019, 5, .	1.2	21
81	Augmenting simulations of airflow around buildings using field measurements. Advanced Engineering Informatics, 2014, 28, 412-424.	4.0	20
82	Surveying the Evolution of Computing in Architecture, Engineering, and Construction Education. Journal of Computing in Civil Engineering, 2015, 29, .	2.5	20
83	Data-Interpretation Methodologies for Non-Linear Earthquake Response Predictions of Damaged Structures. Frontiers in Built Environment, 0, 3, .	1.2	20
84	Feature Selection Using Stochastic Search: An Application to System Identification. Journal of Computing in Civil Engineering, 2010, 24, 3-10.	2.5	19
85	Using dynamic measurements to detect and locate ruptured cables on a tensegrity structure. Engineering Structures, 2018, 173, 631-642.	2.6	19
86	Model-Based Occupant Tracking Using Slab-Vibration Measurements. Frontiers in Built Environment, 2019, 5, .	1.2	19
87	Measurement-based support for post-earthquake assessment of buildings. Structure and Infrastructure Engineering, 2019, 15, 647-662.	2.0	17
88	A model-based data-interpretation framework for post-earthquake building assessment with scarce measurement data. Soil Dynamics and Earthquake Engineering, 2019, 116, 253-263.	1.9	17
89	Equivalency points: Predicting concrete compressive strength evolution in three days. Cement and Concrete Research, 2008, 38, 1070-1078.	4.6	16
90	An efficient inverse analysis procedure for braced excavations considering three-dimensional effects. Computers and Geotechnics, 2019, 107, 150-162.	2.3	16

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91	Postelastic Behavior of Single- and Double-Bolt Timber Connections. Journal of Structural Engineering, 2005, 131, 188-196.	1.7	15
92	Joint Friction during Deployment of a Near-Full-Scale Tensegrity Footbridge. Journal of Structural Engineering, 2017, 143, .	1.7	14
93	A methodology for measurement-system design combining information from static and dynamic excitations for bridge load testing. Journal of Sound and Vibration, 2019, 463, 114953.	2.1	14
94	Model-Class Selection Using Clustering and Classification for Structural Identification and Prediction. Journal of Computing in Civil Engineering, 2021, 35, 04020051.	2.5	14
95	Structural Behavior of Wood Light-Frame Wall Segments Subjected to In-Plane and Out-of-Plane Forces. Journal of Structural Engineering, 2010, 136, 826-836.	1.7	13
96	A model-based data-interpretation framework for improving wind predictions around buildings. Journal of Wind Engineering and Industrial Aerodynamics, 2015, 145, 219-228.	1.7	13
97	Evaluating predictive performance of sensor configurations in wind studies around buildings. Advanced Engineering Informatics, 2016, 30, 127-142.	4.0	13
98	Measurement system design for civil infrastructure using expected utility. Advanced Engineering Informatics, 2017, 32, 40-51.	4.0	13
99	Adaptive Sampling Methodology for Structural Identification Using Radial-Basis Functions. Journal of Computing in Civil Engineering, 2018, 32, 04018008.	2.5	13
100	Population-based structural identification for reserve-capacity assessment of existing bridges. Journal of Civil Structural Health Monitoring, 2018, 8, 363-382.	2.0	13
101	Deployment and Shape Change of a Tensegrity Structure Using Path-Planning and Feedback Control. Frontiers in Built Environment, 2018, 4, .	1.2	13
102	Measuring fatigue cracks in fillet welded joints. International Journal of Fatigue, 1982, 4, 41-45.	2.8	12
103	Design and testing of a low-energy and -carbon prototype structure that adapts to loading through shape morphing. International Journal of Solids and Structures, 2022, 252, 111629.	1.3	12
104	Management of conflict for preliminary engineering design tasks. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 1995, 9, 313-323.	0.7	11
105	Constraint solving and preference activation for interactive design. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 1998, 12, 13-27.	0.7	10
106	Lowering Costs of Timber Shear-Wall Design using Global Search. Engineering With Computers, 2002, 18, 93-108.	3.5	10
107	Data-Interpretation Methodologies for Practical Asset-Management. Journal of Sensor and Actuator Networks, 2019, 8, 36.	2.3	10
108	Integrated case-based building design. Lecture Notes in Computer Science, 1994, , 436-445.	1.0	10

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109	Occupant-detection strategy using footstep-induced floor vibrations. , 2019, , .		10
110	Improving simulation predictions of wind around buildings using measurements through system identification techniques. Building and Environment, 2015, 94, 620-631.	3.0	9
111	Measurement system design for leak detection in hydraulic pressurized networks. Structure and Infrastructure Engineering, 2017, 13, 918-928.	2.0	9
112	Outlier-Detection Methodology for Structural Identification Using Sparse Static Measurements. Sensors, 2018, 18, 1702.	2.1	9
113	An engineering approach to model-class selection for measurement-supported post-earthquake assessment. Engineering Structures, 2019, 197, 109408.	2.6	9
114	Strategy to Validate Sensor-Placement Methodologies in the Context of Sparse Measurement in Complex Urban Systems. IEEE Sensors Journal, 2020, 20, 5501-5509.	2.4	9
115	Using footstep-induced vibrations for occupant detection and recognition in buildings. Advanced Engineering Informatics, 2021, 49, 101289.	4.0	9
116	System for monitoring the evolution of the thermal expansion coefficient and autogenous deformation of hardening materials. Smart Materials and Structures, 2006, 15, N137-N146.	1.8	8
117	Extended Uniform Distribution Accounting for Uncertainty of Uncertainty. , 2011, , .		8
118	Robust model updating methodology for estimating worst-case load capacity of existing bridges. Journal of Civil Structural Health Monitoring, 2018, 8, 773-790.	2.0	8
119	Time series data interpretation for 'wheel-flat' identification including uncertainties. Structural Health Monitoring, 2023, 22, 3-18.	4.3	8
120	Vibration-Based Occupant Detection Using a Multiple-Model Approach. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 49-56.	0.3	8
121	Is there a relationship between footstep-impact locations and measured signal characteristics?. , 2019, , .		8
122	A framework for occupancy detection and tracking using floor-vibration signals. Mechanical Systems and Signal Processing, 2022, 168, 108472.	4.4	8
123	Knowledge representation for preliminary stages of engineering tasks. Knowledge-Based Systems, 1994, 7, 161-168.	4.0	7
124	Increasing Knowledge of Structural Performance. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 2001, 11, 191-195.	0.5	7
125	Rational Design of Measurement Systems using Information Science. , 2006, , 37.		7
126	Framework to Approximate the Value of Information of Bridge Load Testing for Reserve Capacity Assessment. Frontiers in Built Environment, 2020, 6, .	1.2	7

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127	Model-Based Interpretation of Measurements for Fatigue Evaluation of Existing Reinforced Concrete Bridges. Journal of Bridge Engineering, 2021, 26, .	1.4	7
128	Sensors, Models and Videotape. , 2005, , 1.		6
129	Surveying the Evolution of Computing in Architecture, Engineering, and Construction Education since 2012. Journal of Computing in Civil Engineering, 2016, 30, .	2.5	6
130	An electrical network for evaluating monitoring strategies intended for hydraulic pressurized networks. Advanced Engineering Informatics, 2016, 30, 672-686.	4.0	6
131	Damage Mitigation of Near-Fullâ€"Scale Deployable Tensegrity Structure through Behavior Biomimetics. Journal of Structural Engineering, 2020, 146, .	1.7	6
132	Comparative study of the effects of three dataâ€"interpretation methodologies on the performance of geotechnical back analysis. International Journal for Numerical and Analytical Methods in Geomechanics, 2020, 44, 2093-2113.	1.7	6
133	Uncertainties in Structural Behavior for Model-Based Occupant Localization Using Floor Vibrations. Frontiers in Built Environment, 2021, 7, .	1.2	6
134	Grand Challenges of Structural Sensing. Frontiers in Built Environment, 2015, 1, .	1.2	5
135	Sensor Data Interpretation with Clustering for Interactive Asset-Management of Urban Systems. Journal of Computing in Civil Engineering, 2018, 32, .	2.5	5
136	Optimizing the operating profit of young highways using updated bridge structural capacity. Journal of Civil Structural Health Monitoring, 2020, 10, 219-234.	2.0	5
137	A methodology to design measurement systems when multiple model classes are plausible. Journal of Civil Structural Health Monitoring, 2021, 11, 315-336.	2.0	5
138	Actuator Layout Optimization for Adaptive Structures Performing Large Shape Changes. Lecture Notes in Computer Science, 2018, , 111-129.	1.0	5
139	Case-based spatial design reasoning. Lecture Notes in Computer Science, 1995, , 198-210.	1.0	5
140	Multi-strategy workspace navigation for design education. Design Studies, 2001, 22, 111-140.	1.9	4
141	Structural monitoring using engineerâ€"computer interaction. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2002, 16, 203-218.	0.7	4
142	Global Search through Sampling Using a PDF. Lecture Notes in Computer Science, 2003, , 71-82.	1.0	4
143	Measurement System Design Using Damage Scenarios. , 2007, , 615.		4
144	Optimal Sensor Placement for Damage Detection: Role of Global Search. , 2007, , .		4

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145	Overcoming the Limitations of Traditional Model-Updating Approaches. , 2011, , .		4
146	Integrating the Science of Computing into Undergraduate Engineering Curricula. , 2012, , .		4
147	Control of Building Sway and Force Flows Using Ultralightweight Slabs. Journal of Performance of Constructed Facilities, 2014, 28, .	1.0	4
148	Systematic selection of field response measurements for excavation back analysis. Advanced Engineering Informatics, 2021, 48, 101296.	4.0	4
149	Learning, Self-Diagnosis And Multi-Objective Control Of An Active Tensegrity Structure. , 2006, , 439-448.		4
150	Combining Two Data Mining Methods for System Identification. Lecture Notes in Computer Science, 2006, , 606-614.	1.0	4
151	Methodology Maps for Model-Based Sensor-Data Interpretation to Support Civil-Infrastructure Management. Frontiers in Built Environment, 2022, 8, .	1.2	4
152	Reuse of designs. Knowledge-Based Systems, 1996, 9, 79-81.	4.0	3
153	Creation of flexible graphical user interfaces through model composition. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2002, 16, 173-184.	0.7	3
154	Challenges, Opportunities and Risks of IT in Civil Engineering. , 2003, , 1.		3
155	Information Technology in Civil Engineeringâ€"Future Trends. Journal of Computing in Civil Engineering, 2004, 18, 185-186.	2.5	3
156	Performance of Two Model-Free Data Interpretation Methods for Continuous Monitoring of Structures under Environmental Variations. , 2011, , .		3
157	Validating model-based data interpretation methods for quantification of reserve capacity. Advanced Engineering Informatics, 2021, 47, 101231.	4.0	3
158	Increasing occupant localization precision through identification of footstep-contact dynamics. Advanced Engineering Informatics, 2021, 50, 101367.	4.0	3
159	Adaptive Approach for Sensor Placement Combining a Quantitative Strategy with Engineering Practice. Lecture Notes in Computer Science, 2018, , 210-231.	1.0	3
160	Fatigue Reliability: ECCS Safety Factors. Journal of Structural Engineering, 1987, 113, 623-628.	1.7	2
161	Fatigue-resistant steel bridges. Journal of Constructional Steel Research, 1989, 12, 197-214.	1.7	2
162	AI Applications in Structural/Construction Engineering. IEEE Intelligent Systems, 1996, 11, 20.	1.1	2

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163	A Course on the Fundamentals of CAE. , 2000, , 681.		2
164	Autonomous Architecture: Summit Station in Greenland Design Proposal as a Test-Bed for Future Planetary Exploration. , 2005, , .		2
165	Multiple-Model Updating to Improve Knowledge of Structural System Behavior. , 2006, , 1.		2
166	ASCE Global Center of Excellence in Computing. Journal of Computing in Civil Engineering, 2007, 21, 147-150.	2.5	2
167	Configuration of Control System for an Adaptive Tensegrity Structure. , 2010, , .		2
168	Evaluating seismic retrofitting efficiency through ambient vibration tests and analytical models. IABSE Symposium Report, 2015, , .	0.0	2
169	Integrated Information Technology for Structural Engineers. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 1999, 9, 54-56.	0.5	1
170	Computational Control for Active Structures. , 2000, , 1.		1
171	Large X-Lam Floor and Roof Plates For Composite Construction. , 2008, , .		1
172	Anomaly Detection without Structural Behavior Models. , 2011, , .		1
173	The Effects of Simplifications on Model Predictions and Consequences for Model- Based Data Interpretation. , 2012, , .		1
174	Data Processing and Direct Data Interpretation. , 2013, , 65-77.		1
175	Engineering Informatics. , 2014, , .		1
176	Traffic-Based Condition Assessment and Fatigue-Life Predictions for a Highway Bridge. , 2017, , .		1
177	Cyber civil infrastructure and IoT for cities. , 2017, , .		1
178	Editorial: Design and Control of Adaptive Civil Structures. Frontiers in Built Environment, 2021, 7, .	1.2	1
179	Model based reasoning for life-cycle structural engineering. , 2008, , 959-964.		1
180	Beyond Simulation. , 2002, , .		1

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181	Self-aware and Learning Structure. Lecture Notes in Computer Science, 2006, , 7-14.	1.0	1
182	Structural Identification to Improve Bridge Management. IABSE Symposium Report, 2009, , .	0.0	1
183	Considering Sensor Characteristics during Measurement-System Design for Structural System Identification. , 2009, , .		1
184	mparison of model-based identification methods for reserve-capacity assessment of existing bridges. IABSE Symposium Report, 2018, , .	0.0	1
185	Multi-fidelity modelling for structural identification. IABSE Symposium Report, 2019, , .	0.0	1
186	Design and control of a prototype structure that adapts to loading through large shape changes. IFAC-PapersOnLine, 2020, 53, 8377-8382.	0.5	1
187	A smart sensor-data-driven optimization framework for improving the safety of excavation operations. Expert Systems With Applications, 2022, 193, 116413.	4.4	1
188	Discussion: Qualitative Geometric Reasoner for Integrated Design. Journal of Computing in Civil Engineering, 1997, 11, 146-146.	2.5	0
189	News from the Working Commissions. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 1997, 7, 313-313.	0.5	0
190	News from the Working Commissions. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 1999, 9, 236-237.	0.5	0
191	Enabling Performance Based Structural Engineering. , 2000, , 1618.		0
192	Computing Probabilities of Costs Using Cases. , 2002, , 103.		0
193	Double Dare Structural Engineering. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 2002, 12, 225-225.	0.5	0
194	Construction et caractérisation d'une structure active de type tenségrité. Revue Européenne De Génie Civil, 2003, 7, 275-290.	0.0	0
195	Analytical Modeling and Parameter Identification. , 2008, , .		0
196	Nouveau système de détection précoce des ions chlorure libres dans la solution interstitielle du béton. European Journal of Environmental and Civil Engineering, 2009, 13, 283-303.	1.0	0
197	CMS4SI Structural Identification Approach for Interpreting Measurements. , 2010, , .		0
198	Don Grierson. Advanced Engineering Informatics, 2011, 25, 797.	4.0	0

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199	A Hybrid Model-Free Data-Interpretation Approach for Damage Detection during Continuous Civil Infrastructure Monitoring. , 2012, , .		0
200	Augmenting simulations with measurements. , 2013, , .		0
201	Structural Identification Methods for Full-Scale Bridges. , 2013, , .		0
202	Using measurement to reduce model uncertainty for better predictions. IABSE Symposium Report, 2015, , .	0.0	0
203	Structures in Challenging Environments: Dynamics, Controls, Smart Structures, Health Monitoring, and Sensors. , 2016, , .		0
204	A Practical Engineering Approach to Interpreting Measurement Data in Uncertain Contexts. , 2017, , .		0
205	Application of a Sequence-Free Iterative Structural Identification Framework for Reserve Capacity Estimation of a Steel-Concrete Composite Bridge. , 2018, , .		0
206	Using Regularized Linear-Regression Surrogate Models for Accurate Probabilistic Structural Identification. , 2019, , .		0
207	Simulating Tensegrity Systems with Dynamic Relaxation and Neural Networks. , 2002, , .		0
208	Autonomous Architecture Proposal for Summit Science Station in Greenland. , 2006, , .		0
209	Static Testing of Civil Structures: Data Quality and Post-Processing. , 2010, , .		0
210	Probabilistic model falsification for structural identification. , 2014, , 2489-2496.		0
211	Error Assessment of Machine Vision Techniques for Object Detection and Evaluation. , 2015, , .		0
212	Using data interpretation to enhance post-seismic decision making at urban scale. , 2019, , .		0
213	Identification of Train Wheel Flat Accounting for Measurement and Modeling Uncertainties. , 0, , .		0
214	Optimal Sensor Placement for Damage Detection: Role of Global Search. Database and Expert Systems Applications (DEXA), Proceedings of the International Workshop on, 2007, , .	0.0	0