## Juan ChiachÃ-o

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7776357/publications.pdf

Version: 2024-02-01

471509 477307 39 916 17 29 citations h-index g-index papers 40 40 40 679 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Adaptive approximate Bayesian computation by subset simulation for structural model calibration. Computer-Aided Civil and Infrastructure Engineering, 2022, 37, 726-745.	9.8	8
2	Uncertainty quantification in Neural Networks by Approximate Bayesian Computation: Application to fatigue in composite materials. Engineering Applications of Artificial Intelligence, 2022, 107, 104511.	8.1	25
3	A deep learning based methodology for artefact identification and suppression with application to ultrasonic images. NDT and E International, 2022, 126, 102575.	3.7	19
4	A Bayesian approach for damage assessment in welded structures using Lamb-wave surrogate models and minimal sensing. NDT and E International, 2022, 128, 102626.	3.7	14
5	Reduction of Petri net maintenance modeling complexity via Approximate Bayesian Computation. Reliability Engineering and System Safety, 2022, 222, 108365.	8.9	8
6	Robust optimised design of 3D printed elastic metastructures: A trade-off between complexity and vibration attenuation. Journal of Sound and Vibration, 2022, 529, 116896.	3.9	4
7	Structural digital twin framework: Formulation and technology integration. Automation in Construction, 2022, 140, 104333.	9.8	27
8	A cross-sectoral review of the current and potential maintenance strategies for composite structures. SN Applied Sciences, 2022, 4, .	2.9	4
9	Deep learning in automated ultrasonic NDE – Developments, axioms and opportunities. NDT and E International, 2022, 131, 102703.	3.7	43
10	OptiSensâ€"Convex optimization of sensor and actuator placement for ultrasonic guided-wave based structural health monitoring. SoftwareX, 2021, 13, 100643.	2.6	1
11	Structural Health Monitoring Using Ultrasonic Guided-Waves and the Degree of Health Index. Sensors, 2021, 21, 993.	3.8	19
12	Probabilistic identification of surface recession patterns in heritage buildings based on digital photogrammetry. Journal of Building Engineering, 2021, 34, 101922.	3.4	16
13	Ordering Artificial Intelligence Based Recommendations to Tackle the SDGs with a Decision-Making Model Based on Surveys. Sustainability, 2021, 13, 6038.	3.2	9
14	Bayesian damage localization and identification based on a transient wave propagation model for composite beam structures. Composite Structures, 2021, 267, 113849.	5.8	19
15	A Markov chains prognostics framework for complex degradation processes. Reliability Engineering and System Safety, 2020, 195, 106621.	8.9	37
16	Optimal sensor configuration for ultrasonic guided-wave inspection based on value of information. Mechanical Systems and Signal Processing, 2020, 135, 106377.	8.0	31
17	Bayesian inference for damage identification based on analytical probabilistic model of scattering coefficient estimators and ultrafast wave scattering simulation scheme. Journal of Sound and Vibration, 2020, 468, 115083.	3.9	38
18	An Empirical Study on Transmission Beamforming for Ultrasonic Guided-Wave Based Structural Health Monitoring. Sensors, 2020, 20, 1445.	3.8	10

#	Article	IF	Citations
19	A fast Bayesian inference scheme for identification of local structural properties of layered composites based on wave and finite element-assisted metamodeling strategy and ultrasound measurements. Mechanical Systems and Signal Processing, 2020, 143, 106802.	8.0	21
20	Optimal sensor and actuator placement for structural health monitoring via an efficient convex cost-benefit optimization. Mechanical Systems and Signal Processing, 2020, 144, 106901.	8.0	30
21	Plausible Petri nets as selfâ€adaptive expert systems: A tool for infrastructure asset monitoring. Computer-Aided Civil and Infrastructure Engineering, 2019, 34, 281-298.	9.8	10
22	A Bayesian Assessment of an Approximate Model for Unconfined Water Flow in Sloping Layered Porous Media. Transport in Porous Media, 2019, 126, 177-197.	2.6	4
23	A robust Bayesian methodology for damage localization in plate-like structures using ultrasonic guided-waves. Mechanical Systems and Signal Processing, 2019, 122, 192-205.	8.0	64
24	A knowledge-based prognostics framework for railway track geometry degradation. Reliability Engineering and System Safety, 2019, 181, 127-141.	8.9	21
25	A new paradigm for uncertain knowledge representation by Plausible Petri nets. Information Sciences, 2018, 453, 323-345.	6.9	17
26	A new algorithm for prognostics using Subset Simulation. Reliability Engineering and System Safety, 2017, 168, 189-199.	8.9	15
27	A multilevel Bayesian method for ultrasound-based damage identification in composite laminates. Mechanical Systems and Signal Processing, 2017, 88, 462-477.	8.0	31
28	An energy-based prognostic framework to predict evolution of damage in composite materials. , 2016, , 447-477.		1
29	An information theoretic approach for knowledge representation using Petri nets. , 2016, , .		3
30	Logical inference for inverse problems. Inverse Problems in Science and Engineering, 2016, 24, 448-464.	1.2	17
31	Model-based damage evaluation of layered CFRP structures. , 2015, , .		3
32	Condition-based prediction of time-dependent reliability in composites. Reliability Engineering and System Safety, 2015, 142, 134-147.	8.9	57
33	Bayesian model selection and parameter estimation for fatigue damage progression models in composites. International Journal of Fatigue, 2015, 70, 361-373.	5 <b>.</b> 7	49
34	Prognostics Design for Structural Health Management. Advances in Civil and Industrial Engineering Book Series, 2015, , 234-273.	0.2	3
35	Approximate Bayesian Computation by Subset Simulation. SIAM Journal of Scientific Computing, 2014, 36, A1339-A1358.	2.8	71
36	Predicting fatigue damage in composites: A Bayesian framework. Structural Safety, 2014, 51, 57-68.	5.3	33

## Juan ChiachÃo

#	Article	IF	CITATIONS
37	Reliability-Based Design Optimization of a CFRP Bridge. IABSE Symposium Report, 2014, , .	0.0	0
38	Reliability in composites – A selective review and survey of current development. Composites Part B: Engineering, 2012, 43, 902-913.	12.0	133
39	An Inverse-Problem Based Stochastic Approach to Model the Cumulative Damage Evolution of Composites. Procedia Engineering, 2011, 14, 1557-1563.	1.2	1