

# John Andrews

## List of Publications by Year in descending order

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Version: 2024-02-01

72  
papers

1,115  
citations

516710

16  
h-index

434195

31  
g-index

72  
all docs

72  
docs citations

72  
times ranked

864  
citing authors

#	ARTICLE	IF	CITATIONS
1	Tracking control of small-scale helicopters using explicit nonlinear MPC augmented with disturbance observers. <i>Control Engineering Practice</i> , 2012, 20, 258-268.	5.5	183
2	Railway bridge structural health monitoring and fault detection: State-of-the-art methods and future challenges. <i>Structural Health Monitoring</i> , 2018, 17, 971-1007.	7.5	93
3	A modelling approach to railway track asset management. <i>Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit</i> , 2013, 227, 56-73.	2.0	82
4	Modelling wind turbine degradation and maintenance. <i>Wind Energy</i> , 2016, 19, 571-591.	4.2	75
5	A stochastic model for railway track asset management. <i>Reliability Engineering and System Safety</i> , 2014, 130, 76-84.	8.9	74
6	Optimal Scheduling of Track Maintenance on a Railway Network. <i>Quality and Reliability Engineering International</i> , 2013, 29, 285-297.	2.3	52
7	Application of the digraph method of fault tree construction to a complex control configuration. <i>Reliability Engineering and System Safety</i> , 1990, 28, 357-384.	8.9	37
8	Piecewise constant model predictive control for autonomous helicopters. <i>Robotics and Autonomous Systems</i> , 2011, 59, 571-579.	5.1	31
9	Functional product system availability: simulation-driven design and operation through coupled multi-objective optimisation. <i>International Journal of Product Development</i> , 2011, 13, 119.	0.2	30
10	Modelling maintenance in railway infrastructure management. , 2013, , .		23
11	Petri net modelling of bridge asset management using maintenance-related state conditions. <i>Structure and Infrastructure Engineering</i> , 2016, 12, 730-751.	3.7	23
12	Investigating railway track asset management using a Markov analysis. <i>Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit</i> , 2015, 229, 402-416.	2.0	22
13	Maintenance processes modelling and optimisation. <i>Reliability Engineering and System Safety</i> , 2017, 168, 150-160.	8.9	22
14	A knowledge-based prognostics framework for railway track geometry degradation. <i>Reliability Engineering and System Safety</i> , 2019, 181, 127-141.	8.9	21
15	Causeâ€“consequence analysis of non-repairable phased missions. <i>Reliability Engineering and System Safety</i> , 2006, 91, 398-406.	8.9	20
16	A Petri net approach for performance modelling of polymer electrolyte membrane fuel cell systems. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 12242-12260.	7.1	20
17	Multi-defect modelling of bridge deterioration using truncated inspection records. <i>Reliability Engineering and System Safety</i> , 2020, 200, 106962.	8.9	19
18	A track ballast maintenance and inspection model for a rail network. <i>Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability</i> , 2013, 227, 251-266.	0.7	18

#	ARTICLE	IF	CITATIONS
19	A new paradigm for uncertain knowledge representation by Plausible Petri nets. Information Sciences, 2018, 453, 323-345.	6.9	17
20	Modelling railway bridge asset management. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2013, 227, 644-656.	2.0	15
21	A modelling approach for railway overhead line equipment asset management. Reliability Engineering and System Safety, 2017, 168, 326-337.	8.9	15
22	A new algorithm for prognostics using Subset Simulation. Reliability Engineering and System Safety, 2017, 168, 189-199.	8.9	15
23	System design and maintenance modelling for safety in extended life operation. Reliability Engineering and System Safety, 2017, 163, 95-108.	8.9	14
24	An efficient algorithm for computing exact system and survival signatures of K-terminal network reliability. Reliability Engineering and System Safety, 2019, 185, 429-439.	8.9	12
25	Modelling the effect of hydrogen on crack growth in zirconium. Nuclear Instruments & Methods in Physics Research B, 2019, 455, 13-20.	1.4	11
26	Plausible Petri nets as self-adaptive expert systems: A tool for infrastructure asset monitoring. Computer-Aided Civil and Infrastructure Engineering, 2019, 34, 281-298.	9.8	10
27	Optimisation based control framework for autonomous vehicles: Algorithm and experiment. , 2010, , .		9
28	Modelling and simulation of functional product system availability and support costs. International Journal of Product Development, 2012, 16, 304.	0.2	9
29	Trajectory tracking of small helicopters using explicit nonlinear MPC and DOBC. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 1498-1503.	0.4	8
30	Fault detection and diagnostics of a three-phase separator. Journal of Loss Prevention in the Process Industries, 2016, 41, 215-230.	3.3	8
31	A Petri net model for railway bridge maintenance. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 2017, 231, 306-323.	0.7	8
32	A mathematical programming model to select maintenance strategies in railway networks. Reliability Engineering and System Safety, 2021, 216, 107940.	8.9	8
33	Reduction of Petri net maintenance modeling complexity via Approximate Bayesian Computation. Reliability Engineering and System Safety, 2022, 222, 108365.	8.9	8
34	Service Support System Modelling Language for Simulation-driven Development of Functional Products. Procedia CIRP, 2013, 11, 420-424.	1.9	7
35	Modelling Railway Bridge Degradation Based on Historical Maintenance Data. Safety and Reliability, 2015, 35, 32-55.	0.6	7
36	Modelling stochastic behaviour in simulation digital twins through neural nets. Journal of Simulation, 2022, 16, 512-525.	1.5	7

#	ARTICLE	IF	CITATIONS
37	Failure Analysis of Polymer Electrolyte Fuel Cells. , 2008, , .		6
38	Modelling Service Support System Reliability. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 56-61.	0.4	6
39	Modelling interactions between multiple bridge deterioration mechanisms. Engineering Structures, 2020, 221, 111059.	5.3	6
40	Modelling the Use of Maintenance to Minimise Aircraft Service Disruption. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 44-49.	0.4	5
41	Experimental tests of autonomous ground vehicles with preview. International Journal of Automation and Computing, 2010, 7, 342-348.	4.5	5
42	Simulation driven design of functional products: a tool for evaluation of hardware reliability and maintenance. International Journal of Product Development, 2013, 18, 48.	0.2	5
43	A network traffic flow model for motorway and urban highways. Journal of the Operational Research Society, 2014, 65, 1278-1291.	3.4	5
44	Road maintenance planning using network flow modelling. IMA Journal of Management Mathematics, 2017, 28, 387-402.	1.6	5
45	Rapid prototyping flight test environment for autonomous unmanned aerial vehicles. International Journal of Modelling, Identification and Control, 2011, 12, 200.	0.2	4
46	A Petri net approach to assess the effects of railway maintenance on track availability. Infrastructure Asset Management, 2020, 7, 201-220.	1.6	4
47	Incorporating defect specific condition indicators in a bridge life cycle analysis. Engineering Structures, 2021, 246, 113003.	5.3	4
48	Calculating the Failure Intensity of a Non-coherent Fault Tree Using the BDD Technique. Quality and Reliability Engineering International, 2004, 20, 225-235.	2.3	3
49	An information theoretic approach for knowledge representation using Petri nets. , 2016, , .		3
50	Optimising rail-replacement bus services during infrastructure possessions. Infrastructure Asset Management, 2020, 7, 221-238.	1.6	3
51	An alternative approach to railway asset management value analysis: application to a UK railway corridor. Infrastructure Asset Management, 2021, 8, 85-97.	1.6	3
52	Application of network traffic flow model to road maintenance. Proceedings of the Institution of Civil Engineers: Transport, 2015, 168, 256-266.	0.6	2
53	Delayed maintenance modelling considering speed restriction for a railway section. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 2017, 231, 411-428.	0.7	2
54	The impact of summer heatwaves on railway track geometry maintenance. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 0, , 095440972098429.	2.0	2

#	ARTICLE	IF	CITATIONS
55	A reliability study of railway switch and crossing components. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2023, 237, 205-217.	2.0	2
56	A Petri net asset management framework for railway switches and crossings. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 0, , 095440972211109.	2.0	2
57	Monte carlo simulation modelling of aircraft dispatch with known faults. , 2009, , .		1
58	A reliability-based approach to mission planning in multi-platform phased missions. , 2009, , .		1
59	A Petri Net-based life cycle cost analysis approach. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 2019, 233, 90-102.	2.0	1
60	A Bayesian Belief Network method for bridge deterioration detection. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 2021, 235, 338-355.	0.7	1
61	A fuzzy-based Bayesian belief network approach for railway bridge condition monitoring and fault detection. , 2017, , .		1
62	Editorial: 14th advances in reliability technology symposium (ARTS). Quality and Reliability Engineering International, 2001, 17, iii-iii.	2.3	0
63	15th ARTS Advances in Reliability Technology Symposium. Quality and Reliability Engineering International, 2004, 20, iii-iii.	2.3	0
64	Introducing dynamics in a fault diagnostic application using Bayesian Belief Networks. , 2009, , .		0
65	ESReDA/ESRA maintenance modelling and applications project group. , 2009, , .		0
66	Analysis of the Contributions to the Performance of a Functional Product Design Using Simulation. Safety and Reliability, 2014, 34, 41-61.	0.6	0
67	Performance modelling of fuel cell systems through Petri nets. , 2016, , .		0
68	Resilience in the Context of Nuclear Safety Engineering. , 2020, , .		0
69	An Alternative Approach to Railway RAMS: Development of an Extended RAMS Framework. Infrastructure Asset Management, 0, , 1-10.	1.6	0
70	Railway track availability modelling with opportunistic maintenance practice. Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit, 0, , 095440972110476.	2.0	0
71	Railway Infrastructure Asset Management Modelling. Advances in Logistics, Operations, and Management Science Book Series, 2022, , 209-240.	0.4	0
72	Short-Turning Management During Railway Network Disruptions. Lecture Notes in Mobility, 2021, , 233-243.	0.2	0