Katrina M Groth

List of Publications by Year
in descending order

34 papers	2,542 citations	430874 18 h-index	434195 31 g-index
36 all docs	36 docs citations	36 times ranked	2101 citing authors

#	Article	IF	Citations
1	Toward a hybrid causal framework for autonomous vehicle safety analysis. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 2023, 237, 367-388.	0.7	8
2	Exploiting the Capabilities of Bayesian Networks for Engineering Risk Assessment: Causal Reasoning through Interventions. Risk Analysis, 2022, 42, 1306-1324.	2.7	10
3	Data requirements for improving the Quantitative Risk Assessment of liquid hydrogen storage systems. International Journal of Hydrogen Energy, 2022, 47, 4222-4235.	7.1	40
4	Dependency definitions for quantitative human reliability analysis. Reliability Engineering and System Safety, 2022, 220, 108274.	8.9	18
5	Integration of deep learning and Bayesian networks for condition and operation risk monitoring of complex engineering systems. Reliability Engineering and System Safety, 2022, 222, 108433.	8.9	33
6	Metrics for evaluating the performance of complex engineering system health monitoring models. Reliability Engineering and System Safety, 2022, 223, 108473.	8.9	10
7	Critical review and analysis of hydrogen safety data collection tools. International Journal of Hydrogen Energy, 2022, 47, 17845-17858.	7.1	31
8	Opportunities and data requirements for data-driven prognostics and health management in liquid hydrogen storage systems. International Journal of Hydrogen Energy, 2022, 47, 18748-18762.	7.1	9
9	A hybrid population-based degradation model for pipeline pitting corrosion. Reliability Engineering and System Safety, 2021, 214, 107740.	8.9	14
10	Building and using dynamic risk-informed diagnosis procedures for complex system accidents. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 2020, 234, 193-207.	0.7	5
11	A hybrid model of internal pitting corrosion degradation under changing operational conditions for pipeline integrity management. Structural Health Monitoring, 2020, 19, 1075-1091.	7.5	6
12	Modernizing risk assessment: A systematic integration of PRA and PHM techniques. Reliability Engineering and System Safety, 2020, 204, 107194.	8.9	30
13	On the value of data fusion and model integration for generating real-time risk insights for nuclear power reactors. Progress in Nuclear Energy, 2020, 129, 103497.	2.9	4
14	A Dynamic Bayesian Network Structure for Joint Diagnostics and Prognostics of Complex Engineering Systems. Algorithms, 2020, 13, 64.	2.1	14
15	A hybrid algorithm for developing third generation HRA methods using simulator data, causal models, and cognitive science. Reliability Engineering and System Safety, 2019, 191, 106507.	8.9	36
16	Hydrogen storage and delivery: Review of the state of the art technologies and risk and reliability analysis. International Journal of Hydrogen Energy, 2019, 44, 12254-12269.	7.1	684
17	A Review of Methods for Discretizing Continuous-Time Accident Sequences. , 2019, , .		2
18	Intelligent Modeling for Nuclear Power Plant Accident Management. International Journal on Artificial Intelligence Tools, 2018, 27, 1850003.	1.0	16

#	ARTICLE	IF	CITATIONS
19	Failure Analysis of LNG Rail Locomotives. , 2017, , .		1
20	Capturing cognitive causal paths in human reliability analysis with Bayesian network models. Reliability Engineering and System Safety, 2017, 158, 117-129.	8.9	49
21	Application of quantitative risk assessment for performance-based permitting of hydrogen fueling stations. International Journal of Hydrogen Energy, 2017, 42, 7529-7535.	7.1	30
22	3D risk management for hydrogen installations. International Journal of Hydrogen Energy, 2017, 42, 7721-7730.	7.1	37
23	Overview of the DOE hydrogen safety, codes and standards program, part 3: Advances in research and development to enhance the scientific basis for hydrogen regulations, codes and standards. International Journal of Hydrogen Energy, 2017, 42, 7263-7274.	7.1	61
24	HyRAM: A methodology and toolkit for quantitative risk assessment of hydrogen systems. International Journal of Hydrogen Energy, 2017, 42, 7485-7493.	7.1	66
25	Challenges in leveraging existing human performance data for quantifying the IDHEAS HRA method. Reliability Engineering and System Safety, 2015, 144, 159-169.	8.9	18
26	A Bayesian method for using simulator data to enhance human error probabilities assigned by existing HRA methods. Reliability Engineering and System Safety, 2014, 128, 32-40.	8.9	48
27	Bridging the gap between HRA research and HRA practice: A Bayesian network version of SPAR-H. Reliability Engineering and System Safety, 2013, 115, 33-42.	8.9	93
28	Deriving causal Bayesian networks from human reliability analysis data: A methodology and example model. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 2012, 226, 361-379.	0.7	28
29	A data-informed PIF hierarchy for model-based Human Reliability Analysis. Reliability Engineering and System Safety, 2012, 108, 154-174.	8.9	110
30	Comparison of NFPA and ISO approaches for evaluating separation distances. International Journal of Hydrogen Energy, 2012, 37, 17488-17496.	7.1	15
31	Hybrid causal methodology and software platform for probabilistic risk assessment and safety monitoring of socio-technical systems. Reliability Engineering and System Safety, 2010, 95, 1276-1285.	8.9	58
32	Flammability properties of polymer nanocomposites with single-walled carbon nanotubes: effects of nanotube dispersion and concentration. Polymer, 2005, 46, 471-481.	3.8	376
33	Thermal and flammability properties of polypropylene/carbon nanotube nanocomposites. Polymer, 2004, 45, 4227-4239.	3.8	581
34	Toward a framework for risk monitoring of complex engineering systems with online operational data: A deep learning-based solution. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 0, , 1748006X2210799.	0.7	1