Douglas L Van Bossuyt

List of Publications by Year
in descending order

72	410	933264	996849
papers	citations	10	15
		h-index	g-index
72	72	72	147
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Insight into User Acceptance and Adoption of Autonomous Systems in Mission Critical Environments. International Journal of Human-Computer Interaction, 2023, 39, 1423-1437.	3.3	3
2	Resilience and Cost Trade Space for Microgrids on Islands. IEEE Systems Journal, 2022, 16, 3939-3949.	2.9	15
3	Defense Installation Energy Resilience for Changing Operational Requirements. Designs, 2022, 6, 28.	1.3	5
4	Energy Resilience Impact of Supply Chain Network Disruption to Military Microgrids. Infrastructures, 2022, 7, 4.	1.4	7
5	Preliminary Design and Testing of a Resetting Combination Anchor, Antenna, and Tether Mechanism for a Spherical Autonomous Underwater Vehicle. Applied Sciences (Switzerland), 2022, 12, 5072.	1.3	0
6	Feasibility Analysis of a Mobile Microgrid Design to Support DoD Energy Resilience Goals. Systems, 2022, 10, 74.	1.2	4
7	Use, Acceptance, and Adoption of Automated Systems with Intrinsic and Extrinsic Motivation Based Incentive Mechanisms. , 2022, , .		2
8	The Integration of Reliability, Availability, and Maintainability into Model-Based Systems Engineering. Systems, 2022, 10, 101.	1.2	13
9	Determinants that Are Believed to Influence the Acceptance and Adoption of Mission Critical Autonomous Systems. , 2021, , .		8
10	A graph theory approach to predicting functional failure propagation during conceptual systems design. Systems Engineering, 2021, 24, 100-121.	1.6	8
11	A Zero Trust Hybrid Security and Safety Risk Analysis Method. Journal of Computing and Information Science in Engineering, 2021, 21, .	1.7	18
12	Distributed Energy-Resource Design Method to Improve Energy Security in Critical Facilities. Energies, 2021, 14, 2773.	1.6	12
13	Investigation of Nanogrids for Improved Navy Installation Energy Resilience. Applied Sciences (Switzerland), 2021, 11, 4298.	1.3	9
14	Analyzing Mission Impact of Military Installations Microgrid for Resilience. Systems, 2021, 9, 69.	1.2	15
15	System Analysis of Counter-Unmanned Aerial Systems Kill Chain in an Operational Environment. Systems, 2021, 9, 79.	1.2	2
16	Digital Twin-Enabled Decision Support in Mission Engineering and Route Planning. Systems, 2021, 9, 82.	1.2	6
17	Design and Optimization Strategy to Size Resilient Stand-Alone Hybrid Microgrids in Various Climatic Conditions. , 2021, , .		4
18	How Do Systems Fail?. , 2020, , .		1

#	Article	IF	Citations
19	Toward a Probabilistic Risk Assessment (PRA) Method for Assessing Mishaps in Legacy Systems Using Mishap Reports. Incose International Symposium, 2020, 30, 1064-1078.	0.2	0
20	Operationalizing digital twins through model‑based systems engineering methods. Systems Engineering, 2020, 23, 724-750.	1.6	28
21	Early Combined Safety - Security Defense in Depth Assessment of Complex Systems. , 2020, , .		8
22	A Method to Account for Personnel Risk Attitudes in System Design and Maintenance Activity Development. Systems, 2020, 8, 26.	1.2	1
23	Systems Engineering Issues in Microgrids for Military Installations. Incose International Symposium, 2020, 30, 731-746.	0.2	12
24	A Functional Failure Analysis Method of Identifying and Mitigating Spurious System Emissions From a System of Interest in a System of Systems. Journal of Computing and Information Science in Engineering, 2020, 20, .	1.7	4
25	Towards a Zero Trust Hybrid Security and Safety Risk Analysis Method. , 2020, , .		5
26	Early Hybrid Safety and Security Risk Assessment Based on Interdisciplinary Dependency Models. , 2019, , .		4
27	Stored System Inherent Availability Optimization from a System of Systems Physics of Failure Perspective. , 2019, , .		1
28	The Naval Postgraduate School's Department of Systems Engineering Approach to Mission Engineering Education through Capstone Projects. Systems, 2019, 7, 38.	1.2	9
29	Early Assessment of Drone Fleet Defence in Depth Capabilities for Mission Success. , 2019, , .		2
30	A Method to Choose Between Automation and Human Operators for Recovery Actions During a Cyber Attack. Procedia Computer Science, 2019, 153, 352-360.	1.2	6
31	A Generative Human-in-the-Loop Approach for Conceptual Design Exploration Using Flow Failure Frequency in Functional Models1. Journal of Computing and Information Science in Engineering, 2019, 19, .	1.7	3
32	A method of identifying and analyzing irrational system behavior in a system of systems. Systems Engineering, 2019, 22, 519-537.	1.6	10
33	Toward a Functional Failure Analysis Method of Identifying and Mitigating Spurious System Emissions in a System of Systems. , 2019, , .		1
34	Active mission success estimation through functional modeling. Research in Engineering Design - Theory, Applications, and Concurrent Engineering, 2018, 29, 565-588.	1.2	2
35	Conceptual design of sacrificial sub-systems: failure flow decision functions. Research in Engineering Design - Theory, Applications, and Concurrent Engineering, 2018, 29, 23-38.	1.2	10
36	Toward a Generative Human-in-the-Loop Approach for Conceptual Design Exploration Using Flow Failure Frequency in Functional Models. , 2018, , .		1

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37	Assessing the Consequence of Cyber and Physical Malicious Attacks in Complex, Cyber-Physical Systems During Early System Design. , 2018, , .		3
38	Irrational System Behavior in a System of Systems. , 2018, , .		4
39	The Function-Based Design for Sustainability Method. Journal of Mechanical Design, Transactions of the ASME, 2017, 139, .	1.7	21
40	Risk modeling of variable probability external initiating events. , 2017, , .		1
41	A Graph Theory Approach to Functional Failure Propagation in Early Complex Cyber–Physical Systems (CCPSs). Incose International Symposium, 2017, 27, 1734-1748.	0.2	6
42	A Model Driven Approach for Early Assessment of Defense in Depth Capabilities of Complex Sociotechnical Systems. , 2017, , .		3
43	Prognostic systems representation in a function-based Bayesian model during engineering design. International Journal of Prognostics and Health Management, 2017, 8, .	0.6	3
44	Feature Selection for Monitoring Erosive Cavitation on a Hydroturbine. International Journal of Prognostics and Health Management, 2017, 8, .	0.6	0
45	Toward Implementing Quantifiable Social Justice Metrics in the Design Process. , 2016, , .		2
46	Toward Risk-Informed Operation of Autonomous Vehicles to Increase Resilience in Unknown and Dangerous Environments. , 2016, , .		3
47	A model-driven approach for incorporating human reliability analysis in early emergency operating procedure development. , 2016, , .		1
48	A Functional Modelling Based Methodology for Testing the Predictions of Fault Detection and Identification Systems. , 2016, , .		1
49	Cable routing modeling in early system design to prevent cable failure propagation events. , 2016, , .		5
50	Autonomous System Design and Controls Design for Operations in High Risk Environments. , 2016, , .		2
51	The Application of Retrospective Customer Needs Cultural Risk Indicator Method to Soap Dispenser Design for Children in Ethiopia. , 2016, , .		0
52	Modeling of function failure propagation across uncoupled systems. , 2015, , .		16
53	Design for Fused Filament Fabrication Additive Manufacturing. , 2015, , .		11
54	Toward Customer Needs Cultural Risk Indicator Insights for Product Development. , 2015, , .		1

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55	Toward a Functional Failure Modeling Method of Representing Prognostic Systems During the Early Phases of Design. , 2015, , .		4
56	Risk Attitude Informed Route Planning in a Simulated Planetary Rover. , 2015, , .		1
57	Making a Difference and a Profit. Mechanical Engineering, 2015, 137, 38-43.	0.0	0
58	Toward a Dedicated Failure Flow Arrestor Function Methodology. , 2015, , .		3
59	Lean Design for the Developing World: Making Design Decisions Through the Use of Validated Learning Techniques in the Developing World. , 2014, , .		3
60	Breaking the Tyranny of the Semester: A Phase-Gate Sprint Approach to Teaching Colorado School of Mines Students Important Engineering Concepts, Delivering Useful Solutions to Communities, and Working on Long Time Scale Projects. International Journal for Service Learning in Engineering, 2014, , 222-239.	0.4	4
61	Toward a Market-Based Lean Startup Product Design Method for the Developing World. , 2014, , .		6
62	Toward an Automated Model-Based Geometric Method of Representing Function Failure Propagation Across Uncoupled Systems. , 2014, , .		6
63	A case for trading risk in complex conceptual design trade studies. Research in Engineering Design - Theory, Applications, and Concurrent Engineering, 2013, 24, 259-275.	1.2	10
64	Functional Impact Comparison of Common and Innovative Products. , 2013, , .		3
65	On Measuring Engineering Risk Attitudes1. Journal of Mechanical Design, Transactions of the ASME, 2013, 135, .	1.7	19
66	Risk attitudes in risk-based design: Considering risk attitude using utility theory in risk-based design. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2012, 26, 393-406.	0.7	19
67	Toward Considering Risk Attitudes in Engineering Organizations Using Utility Theory. , 2012, , .		1
68	Toward an Early-Phase Conceptual System Design Risk-Informed Decision Making Framework. , 2012, , .		0
69	On Measuring Engineering Risk Attitudes. , 2011, , .		2
70	Toward Understanding Collaborative Design Center Trade Study Software Upgrade and Migration Risks. , 2010, , .		3
71	Towards Risk as a Tradeable Parameter in Complex System Design Trades. , 2010, , .		4
72	The Integration of Affective Design Into QFD. , 2008, , .		0