Jose Emmanuel Ramirez Marquez

List of Publications by Year
in descending order

147 papers	6,225 citations	94269 37 h-index	74018 75 g-index
149 all docs	149 docs citations	149 times ranked	3668 citing authors

#	Article	IF	Citations
1	A Quantitative and Content-Based Approach for Evaluating the Impact of Counter Narratives on Affective Polarization in Online Discussions. IEEE Transactions on Computational Social Systems, 2022, 9, 914-925.	3.2	2
2	Social Cohesion: Mitigating Societal Risk in Case Studies of Digital Media in Hurricanes Harvey, Irma, and Maria. Risk Analysis, 2022, 42, 1686-1703.	1.5	9
3	Using social media data for assessing children's exposure to violence during the COVID-19 pandemic. Child Abuse and Neglect, 2021, 116, 104747.	1.3	80
4	Content-Aware Galaxies: Digital Fingerprints of Discussions on Social Media. IEEE Transactions on Computational Social Systems, 2021, 8, 294-307.	3.2	4
5	A Video Game-Crowdsourcing Approach to Discover a Player's Strategy for Problem Solution to Housing Development. IEEE Access, 2021, 9, 114870-114883.	2.6	0
6	Understanding collective action through social media-based disaster data analytics. , 2021, , 297-318.		2
7	The Integration of Protection, Restoration, and Adaptive Flow Redistribution in Building Resilient Networked Critical Infrastructures Against Intentional Attacks. IEEE Systems Journal, 2021, 15, 2959-2970.	2.9	7
8	The adaptable Pareto set problem for facility location: A video game approach. Expert Systems With Applications, 2021, 186, 115682.	4.4	1
9	Combining Quality of Service and Quality of Experience to Visualize and Analyze City Services. Lecture Notes in Mechanical Engineering, 2021, , 46-54.	0.3	0
10	Content-based user classifier to uncover information exchange in disaster-motivated networks. PLoS ONE, 2021, 16, e0259342.	1.1	3
11	Scheduling multi-component maintenance with a greedy heuristic local search algorithm. Soft Computing, 2020, 24, 351-366.	2.1	17
12	Quantitative approaches for optimization of user experience based on network resilience for wireless service provider networks. Reliability Engineering and System Safety, 2020, 193, 106606.	5.1	25
13	A framework for probabilistic model-based engineering and data synthesis. Reliability Engineering and System Safety, 2020, 193, 106679.	5.1	6
14	A new resilience-based component importance measure for multi-state networks. Reliability Engineering and System Safety, 2020, 193, 106591.	5.1	39
15	Social media analytics to connect system performability and quality of experience, with an application to Citibike. Computers and Industrial Engineering, 2020, 139, 106146.	3.4	1
16	A systems perspective on contact centers and customer service reliability modeling. Systems Engineering, 2020, 23, 221-236.	1.6	7
17	Using Deductive Reasoning to Identify Unhappy Communities. Social Indicators Research, 2020, 152, 581-605.	1.4	3
18	Complementing Solutions to Optimization Problems via Crowdsourcing on Video Game Plays. Applied Sciences (Switzerland), 2020, 10, 8410.	1.3	4

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19	Machine learning approaches for network resiliency optimization for service provider networks. Computers and Industrial Engineering, 2020, 146, 106519.	3.4	3
20	Systems Engineers' Effectiveness in an Organization: Text and Visual Analytics Approach. IEEE Systems Journal, 2020, 14, 5049-5060.	2.9	1
21	WINS: Web Interface for Network Science via Natural Language Distributed Representations. Communications in Computer and Information Science, 2020, , 614-621.	0.4	1
22	Fusing pattern discovery and visual analytics approaches in tweet propagation. Information Fusion, 2019, 46, 91-101.	11.7	25
23	Characterizing negative sentiments in at-risk populations via crowd computing: a computational social science approach. International Journal of Data Science and Analytics, 2019, 7, 165-177.	2.4	2
24	Introduction to Resilience Analytics for Cyber–Physical–Social Networks. Risk Analysis, 2019, 39, 1867-1869.	1.5	3
25	Visual analytics for identifying product disruptions and effects via social media. International Journal of Production Economics, 2019, 208, 544-559.	5.1	24
26	Evaluating and Visualizing the Economic Impact of Commercial Districts Due to an Electric Power Network Disruption. Risk Analysis, 2019, 39, 2032-2053.	1.5	13
27	Pattern-Based and Visual Analytics for Visitor Analysis on Websites. Applied Sciences (Switzerland), 2019, 9, 3840.	1.3	12
28	Resilience of Smart Power Grids to False Pricing Attacks in the Social Network. IEEE Access, 2019, 7, 80491-80505.	2.6	8
29	DNS-ADVP: A Machine Learning Anomaly Detection and Visual Platform to Protect Top-Level Domain Name Servers Against DDoS Attacks. IEEE Access, 2019, 7, 116358-116369.	2.6	15
30	Detecting urban identity perception via newspaper topic modeling. Cities, 2019, 93, 72-83.	2.7	28
31	Nar-A-Viz: A methodology to visually extract the narrative structure of text. Computer Speech and Language, 2019, 57, 81-97.	2.9	0
32	Dissecting Twitter Discussion Threads with Topic-Aware Network Visualization. , 2019, , .		5
33	Quantitative metrics to analyze supply chain resilience and associated costs. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 2019, 233, 186-199.	0.6	14
34	Community detection and resilience in multi-source, multi-terminal networks. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 2018, 232, 616-626.	0.6	8
35	FiToViz: A Visualisation Approach for Real-Time Risk Situation Awareness. IEEE Transactions on Affective Computing, 2018, 9, 372-382.	5.7	11
36	Multiobjective Formulation for Protection Allocation in Interdependent Infrastructure Networks Using an Attack-Diffusion Model. Journal of Infrastructure Systems, 2018, 24, .	1.0	2

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37	A bi-objective formulation for robust defense strategies in multi-commodity networks. Reliability Engineering and System Safety, 2018, 176, 154-161.	5.1	18
38	Integrating uncertain user-generated demand data when locating facilities for disaster response commodity distribution. Socio-Economic Planning Sciences, 2018, 62, 84-103.	2.5	11
39	Quantifying the resilience of community structures in networks. Reliability Engineering and System Safety, 2018, 169, 466-474.	5.1	41
40	Locating and protecting facilities from intentional attacks using secrecy. Reliability Engineering and System Safety, 2018, 169, 51-62.	5.1	31
41	Some features speak loud, but together they all speak louder: A study on the correlation between classification error and feature usage in decision-tree classification ensembles. Engineering Applications of Artificial Intelligence, 2018, 67, 270-282.	4.3	13
42	Analysis of the Vulnerability of Smart Grids to Social Network-Based Attacks. , 2018, , .		1
43	Effects of multi-state links in network community detection. Reliability Engineering and System Safety, 2017, 163, 46-56.	5.1	8
44	Bi-objective evolutionary approach to the design of patrolling schemes for improved border security. Computers and Industrial Engineering, 2017, 107, 74-84.	3.4	6
45	Defining resilience analytics for interdependent cyber-physical-social networks. Sustainable and Resilient Infrastructure, 2017, 2, 59-67.	1.7	61
46	A Community Perspective on Resilience Analytics: A Visual Analysis of Community Mood. Risk Analysis, 2017, 37, 1566-1579.	1.5	25
47	Engineering Management Models for Urban Security. IEEE Transactions on Engineering Management, 2017, 64, 29-41.	2.4	8
48	A Serious Video Game To Support Decision Making On Refugee Aid Deployment Policy. Procedia Computer Science, 2017, 108, 205-214.	1.2	11
49	Bi-Objective Vulnerability-Reduction Formulation for a Network under Diverse Attacks. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2017, 3, .	1.1	5
50	Patient-provider geographic map: An interactive visualization tool of patients' selection of health care providers. , 2017, , .		2
51	Characterizing community resilience through mood novelty. , 2017, , .		0
52	On the Impacts of Power Outages during Hurricane Sandyâ€"A Resilienceâ€Based Analysis. Systems Engineering, 2016, 19, 59-75.	1.6	60
53	Robustness in network community detection under links weights uncertainties. Reliability Engineering and System Safety, 2016, 153, 88-95.	5.1	9
54	Countering improvised explosive devices with adaptive sensor networks. , 2016, , .		2

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55	Node ranking for network topology-based cascade models â€" An Ordered Weighted Averaging operators' approach. Reliability Engineering and System Safety, 2016, 155, 115-123.	5.1	8
56	Towards computational discourse analysis: A methodology for mining Twitter backchanneling conversations. Computers in Human Behavior, 2016, 64, 782-792.	5.1	22
57	Combining structure, content and meaning in online social networks: The analysis of public's early reaction in social media to newly launched movies. Technological Forecasting and Social Change, 2016, 109, 35-49.	6.2	31
58	Multidimensional approach to complex system resilience analysis. Reliability Engineering and System Safety, 2016, 149, 34-43.	5.1	104
59	Flow-based vulnerability measures for network component importance: Experimentation with preparedness planning. Reliability Engineering and System Safety, 2016, 145, 62-73.	5.1	79
60	A review of definitions and measures of system resilience. Reliability Engineering and System Safety, 2016, 145, 47-61.	5.1	1,127
61	Interval-valued availability framework for supplier selection based on component importance. International Journal of Production Research, 2015, 53, 6083-6096.	4.9	16
62	Extracting and evaluating conversational patterns in social media: A socio-semantic analysis of customersâ€™ reactions to the launch of new products using Twitter streams. International Journal of Information Management, 2015, 35, 490-503.	10.5	70
63	Assessment of the transition-rates importance of Markovian systems at steady state using the unscented transformation. Reliability Engineering and System Safety, 2015, 142, 212-220.	5.1	13
64	Optimal staffing strategies for points of dispensing. Computers and Industrial Engineering, 2015, 83, 172-183.	3.4	9
65	Quantifying the risk of project delays with a genetic algorithm. International Journal of Production Economics, 2015, 170, 34-44.	5.1	30
66	Optimal placement of public-access AEDs in urban environments. Computers and Industrial Engineering, 2015, 90, 269-280.	3.4	21
67	Critical infrastructure protection using secrecy â€" A discrete simultaneous game. European Journal of Operational Research, 2015, 242, 212-221.	3.5	51
68	Inherent Costs and Interdependent Impacts of Infrastructure Network Resilience. Risk Analysis, 2015, 35, 642-662.	1.5	61
69	Interactive visualization for optimal placement of public-access AEDs. , 2014, , .		0
70	Stochastic Measures of Network Resilience: Applications to Waterway Commodity Flows. Risk Analysis, 2014, 34, 1317-1335.	1.5	117
71	Stochastic measures of resilience and their application to container terminals. Computers and Industrial Engineering, 2014, 70, 183-194.	3.4	150
72	Robust facility location: Hedging against failures. Reliability Engineering and System Safety, 2014, 123, 73-80.	5.1	30

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73	Importance measures for inland waterway network resilience. Transportation Research, Part E: Logistics and Transportation Review, 2014, 62, 55-67.	3.7	118
74	Uncertainty propagation and sensitivity analysis in system reliability assessment via unscented transformation. Reliability Engineering and System Safety, 2014, 132, 176-185.	5.1	24
75	A Non-Parametric Aggregation Technique for Identifying Critical Nodes in a Network, Using Three Topology-Based Cascade Models. , 2014, , .		2
76	Resilience-based network component importance measures. Reliability Engineering and System Safety, 2013, 117, 89-97.	5.1	300
77	Identification of top contributors to system vulnerability via an ordinal optimization based method. Reliability Engineering and System Safety, 2013, 114, 92-98.	5.1	10
78	Social network analysis via multi-state reliability and conditional influence models. Reliability Engineering and System Safety, 2013, 109, 99-109.	5.1	31
79	Network vulnerability assessment via bi-objective optimization with a fragmentation approach as proxy. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 2013, 227, 576-585.	0.6	0
80	Protecting critical infrastructures against intentional attacks: a two-stage game with incomplete information. IIE Transactions, 2013, 45, 244-258.	2.1	60
81	Multiobjective Optimization in Multifunction Multicapability System Development Planning. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2013, 43, 785-800.	5.9	12
82	Measures of Inland Waterway Network Resilience. Incose International Symposium, 2013, 23, 1354-1367.	0.2	1
83	Optimization of inspection for dual contraband using a genetic algorithm. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 2012, 226, 508-525.	0.6	2
84	5.2.1 The Facility Location for Emergency Response â€"A Multiâ€objective Approach. Incose International Symposium, 2012, 22, 678-692.	0.2	0
85	1.1.1 Development of Patrolling Schemes for Improved Border Security Performance through an Evolutionary Approach. Incose International Symposium, 2012, 22, 1-12.	0.2	1
86	System Element Obsolescence Replacement Optimization via Life Cycle Cost Forecasting. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2012, 2, 1394-1401.	1.4	3
87	Innovative approaches for addressing old challenges in component importance measures. Reliability Engineering and System Safety, 2012, 108, 123-130.	5.1	17
88	Optimal design of container inspection strategies considering multiple objectives via an evolutionary approach. Annals of Operations Research, 2012, 196, 167-187.	2.6	8
89	A mathematical framework for passenger screening optimization via a multi-objective evolutionary approach. Computers and Industrial Engineering, 2012, 62, 839-850.	3.4	4
90	Vulnerability based robust protection strategy selection in service networks. Computers and Industrial Engineering, 2012, 63, 235-242.	3.4	22

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91	Improving the computational efficiency of metric-based spares algorithms. European Journal of Operational Research, 2012, 219, 324-334.	3.5	19
92	Generic metrics and quantitative approaches for system resilience as a function of time. Reliability Engineering and System Safety, 2012, 99, 114-122.	5.1	635
93	An automated method for estimating reliability of grid systems using Bayesian networks. Reliability Engineering and System Safety, 2012, 104, 96-105.	5.1	28
94	Analyzing the influence of Zeroth Responders on resilience of the Maritime Port Enterprise. , 2011, , .		5
95	Optimal component substitution within system evolution planning considering multiple-vendor, functionally equivalent commercial products. Technology Analysis and Strategic Management, 2011, 23, 509-526.	2.0	6
96	A holistic method for reliability performance assessment and critical components detection in complex networks. IIE Transactions, 2011, 43, 661-675.	2.1	36
97	Assessing the Vulnerability of a Power System Through a Multiple Objective Contingency Screening Approach. IEEE Transactions on Reliability, 2011, 60, 394-403.	3.5	49
98	Analyzing Component Importance in Multifunction Multicapability Systems Developmental Maturity Assessment. IEEE Transactions on Engineering Management, 2011, 58, 275-294.	2.4	15
99	Optimization of container inspection strategy viaÂaÂgenetic algorithm. Annals of Operations Research, 2011, 187, 229-247.	2.6	10
100	A probabilistic approach to system maturity assessment. Systems Engineering, 2011, 14, 279-293.	1.6	29
101	Optimal network protection against diverse interdictor strategies. Reliability Engineering and System Safety, 2011, 96, 374-382.	5.1	31
102	Vulnerability metrics and analysis for communities in complex networks. Reliability Engineering and System Safety, 2011, 96, 1360-1366.	5.1	45
103	Systemigram Modeling of the Small Vessel Security Strategy for Developing Enterprise Resilience. Marine Technology Society Journal, 2011, 45, 88-102.	0.3	13
104	System development planning using readiness levels in a cost of development minimization model. Systems Engineering, 2010, 13, 311-323.	1.6	13
105	An evolutionary algorithm for port-of-entry security optimization considering sensor thresholds. Reliability Engineering and System Safety, 2010, 95, 255-266.	5.1	16
106	Bi and tri-objective optimization in the deterministic network interdiction problem. Reliability Engineering and System Safety, 2010, 95, 887-896.	5.1	29
107	A bi-objective approach for shortest-path network interdiction. Computers and Industrial Engineering, 2010, 59, 232-240.	3.4	52
108	Evolutionary optimization technique for multi-state two-terminal reliability allocation in multi-objective problems. IIE Transactions, 2010, 42, 539-552.	2.1	23

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109	System Development Planning via System Maturity Optimization. IEEE Transactions on Engineering Management, 2009, 56, 533-548.	2.4	49
110	Optimal design of cluster-based ad-hoc networks using probabilistic solution discovery. Reliability Engineering and System Safety, 2009, 94, 218-228.	5.1	19
111	Deterministic network interdiction optimization via an evolutionary approach. Reliability Engineering and System Safety, 2009, 94, 568-576.	5.1	37
112	A generic method for estimating system reliability using Bayesian networks. Reliability Engineering and System Safety, 2009, 94, 542-550.	5.1	115
113	Stochastic network interdiction optimization via capacitated network reliability modeling and probabilistic solution discovery. Reliability Engineering and System Safety, 2009, 94, 913-921.	5.1	67
114	Resiliency as a component importance measure in network reliability. Reliability Engineering and System Safety, 2009, 94, 1685-1693.	5.1	96
115	Optimal protection of general source–sink networks via evolutionary techniques. Reliability Engineering and System Safety, 2009, 94, 1676-1684.	5.1	37
116	Multi-objective network interdiction using evolutionary algorithms. Reliability and Maintainability Symposium (RAMS), Annual, 2009, , .	0.0	3
117	7.3.2 Monte–Carlo Simulation Approach for System Readiness Level Estimation. Incose International Symposium, 2009, 19, 1154-1166.	0.2	2
118	Decision-Making Approach for Catastrophic Scenario Selection in Disaster Recovery Planning. International Journal of Decision Support System Technology, 2009, 1, 36-51.	0.4	4
119	Algorithm for estimating reliability confidence bounds of multi-state systems. Reliability Engineering and System Safety, 2008, 93, 1231-1243.	5.1	27
120	Reliability analysis of cluster-based ad-hoc networks. Reliability Engineering and System Safety, 2008, 93, 1512-1522.	5.1	33
121	All-terminal network reliability optimization via probabilistic solution discovery. Reliability Engineering and System Safety, 2008, 93, 1689-1697.	5.1	65
122	Port-of-entry safety via the reliability optimization of container inspection strategy through an evolutionary approach. Reliability Engineering and System Safety, 2008, 93, 1698-1709.	5.1	48
123	On the optimal selection of process alternatives in a Six Sigma implementation. International Journal of Production Economics, 2008, 111, 456-467.	5.1	106
124	Mobility and reliability modeling for a mobile *ad hoc* network. IIE Transactions, 2008, 41, 23-31.	2.1	36
125	Reliability for cluster-based Ad-hoc Networks. , 2008, , .		1
126	New Approaches for Reliability Design in Multistate Systems. , 2008, , 465-476.		2

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127	Recent Research on the Reliability Analysis Methods for Mobile Ad-hoc Networks. Systems Research Forum, 2007, 02, 35-41.	0.1	8
128	A GOAL PROGRAMMING MODEL FOR OPTIMIZING RELIABILITY, MAINTAINABILITY AND SUPPORTABILITY UNDER PERFORMANCE BASED LOGISTICS. International Journal of Reliability, Quality and Safety Engineering, 2007, 14, 251-261.	0.4	23
129	Holistic reliability analysis of weighted voting systems from a multi-state perspective. IIE Transactions, 2007, 40, 122-132.	2.1	3
130	Element substitution algorithm for general two-terminal network reliability analyses. IIE Transactions, 2007, 39, 265-275.	2.1	46
131	Capacitated Reliability for Ad-hoc Networks. , 2007, , .		2
132	Two-terminal reliability analyses for a mobile ad hoc wireless network. Reliability Engineering and System Safety, 2007, 92, 821-829.	5.1	68
133	Evaluation of full and degraded mission reliability and mission dependability for intermittently operated, multi-functional systems. Reliability Engineering and System Safety, 2007, 92, 1274-1280.	5.1	3
134	Optimization of system reliability in the presence of common cause failures. Reliability Engineering and System Safety, 2007, 92, 1421-1434.	5.1	60
135	Multi-state component criticality analysis for reliability improvement in multi-state systems. Reliability Engineering and System Safety, 2007, 92, 1608-1619.	5.1	91
136	A Classification Tree Based Approach for the Development of Minimal Cut and Path Vectors of a Capacitated Network. IEEE Transactions on Reliability, 2007, 56, 474-487.	3.5	30
137	A generalized multistate-based path vector approach to multistate two-terminal reliability. IIE Transactions, 2006, 38, 477-488.	2.1	71
138	New insights on multi-state component criticality and importance. Reliability Engineering and System Safety, 2006, 91, 894-904.	5.1	46
139	Confidence bounds for the reliability of binary capacitated two-terminal networks. Reliability Engineering and System Safety, 2006, 91, 905-914.	5.1	22
140	On Improved Confidence Bounds for System Reliability. IEEE Transactions on Reliability, 2006, 55, 26-36.	3.5	25
141	A Monte-Carlo simulation approach for approximating multi-state two-terminal reliability. Reliability Engineering and System Safety, 2005, 87, 253-264.	5.1	260
142	Composite Importance Measures for Multi-State Systems with Multi-State Components. IEEE Transactions on Reliability, 2005, 54, 517-529.	3.5	158
143	TEST PLAN ALLOCATION TO MINIMIZE SYSTEM RELIABILITY ESTIMATION VARIABILITY. International Journal of Reliability, Quality and Safety Engineering, 2004, 11, 257-272.	0.4	8
144	A heuristic for solving the redundancy allocation problem for multi-state series-parallel systems. Reliability Engineering and System Safety, 2004, 83, 341-349.	5.1	151

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145	Redundancy allocation for series-parallel systems using a max-min approach. IIE Transactions, 2004, 36, 891-898.	2.1	96
146	Contact Center Operations Management Systems Architecture and Reliability. SSRN Electronic Journal, 0, , .	0.4	1
147	Impacts of work−at−home policies on systems engineers and the general population. Systems Engineering, 0, , .	1.6	0