Jitesh H Panchal

List of Publications by Year
in descending order

49 papers	661 citations	687363 13 h-index	642732 23 g-index
52 all docs	52 docs citations	52 times ranked	580 citing authors

#	Article	IF	Citations
1	Simulator-free solution of high-dimensional stochastic elliptic partial differential equations using deep neural networks. Journal of Computational Physics, 2020, 404, 109120.	3.8	84
2	Risk Mitigation for Dynamic State Estimation Against Cyber Attacks and Unknown Inputs. IEEE Transactions on Smart Grid, 2018, 9, 886-899.	9.0	78
3	Resource allocation in cloud-based design and manufacturing: A mechanism design approach. Journal of Manufacturing Systems, 2017, 43, 327-338.	13.9	44
4	Design Engineering in the Age of Industry 4.0. Journal of Mechanical Design, Transactions of the ASME, 2021, 143, .	2.9	43
5	Product Realization in the Age of Mass Collaboration. , 2008, , .		36
6	Behavioral Experimentation and Game Theory in Engineering Systems Design. Journal of Mechanical Design, Transactions of the ASME, 2015, 137, .	2.9	34
7	Understanding Design Decisions Under Competition Using Games With Information Acquisition and a Behavioral Experiment. Journal of Mechanical Design, Transactions of the ASME, 2017, 139, .	2.9	25
8	Quantifying the Impact of Domain Knowledge and Problem Framing on Sequential Decisions in Engineering Design. Journal of Mechanical Design, Transactions of the ASME, 2018, 140, .	2.9	23
9	Understanding Communication and Collaboration in Social Product Development Through Social Network Analysis. Journal of Computing and Information Science in Engineering, 2016, 16, .	2.7	20
10	Experiments in systems engineering and design research. Systems Engineering, 2017, 20, 529-541.	2.7	19
11	Ontology-Based Representation of Design Decision Hierarchies. Journal of Computing and Information Science in Engineering, 2018, 18, .	2.7	19
12	Security in Cyber-Enabled Design and Manufacturing: A Survey. Journal of Computing and Information Science in Engineering, 2018, 18, .	2.7	18
13	Challenges and Research Directions in Crowdsourcing for Engineering Design: An Interview Study With Industry Professionals. IEEE Transactions on Engineering Management, 2022, 69, 1592-1604.	3.5	18
14	Decentralized Control Framework and Stability Analysis for Networked Control Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2015, 137, .	1.6	15
15	Bayesian Optimal Design of Experiments for Inferring the Statistical Expectation of Expensive Black-Box Functions. Journal of Mechanical Design, Transactions of the ASME, 2019, 141, .	2.9	14
16	Decision-Making in Energy Systems With Multiple Technologies and Uncertain Preferences. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2014, 44, 894-907.	9.3	12
17	Extending Expected Improvement for High-Dimensional Stochastic Optimization of Expensive Black-Box Functions. Journal of Mechanical Design, Transactions of the ASME, 2016, 138, .	2.9	11
18	Descriptive Models of Sequential Decisions in Engineering Design: An Experimental Study. Journal of Mechanical Design, Transactions of the ASME, 2020, 142, .	2.9	11

#	ARTICLE	IF	CITATIONS
19	Unknown input observer design and analysis for networked control systems. International Journal of Control, 0, , 1-15.	1.9	10
20	A call for consensus on the use of representative model worlds in systems engineering and design. Systems Engineering, 2020, 23, 436-442.	2.7	10
21	Secure Collaboration in Engineering Systems Design. Journal of Computing and Information Science in Engineering, 2017, 17, .	2.7	10
22	Design Exploration for Determining the Set Points of Continuous Casting Operation: An Industrial Application. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2015, 137, .	2.2	9
23	Exploring the geometry and material space in gear design. Engineering Optimization, 2015, 47, 561-577.	2.6	9
24	Analyzing Participant Behaviors in Design Crowdsourcing Contests Using Causal Inference on Field Data. Journal of Mechanical Design, Transactions of the ASME, 2018, 140, .	2.9	9
25	Network-based Modeling and Analysis in Design. Design Science, 2018, 4, .	2.1	8
26	Design for Crashworthiness of Categorical Multimaterial Structures Using Cluster Analysis and Bayesian Optimization. Journal of Mechanical Design, Transactions of the ASME, 2019, 141, .	2.9	8
27	Modeling Participation Behaviors in Design Crowdsourcing Using a Bipartite Network-Based Approach. Journal of Computing and Information Science in Engineering, 2019, 19, .	2.7	7
28	Toward a Theory of Systems Engineering Processes: A Principalâ€"Agent Model of a One-Shot, Shallow Process. IEEE Systems Journal, 2020, 14, 3277-3288.	4.6	7
29	Bilevel formulation of a policy design problem considering multiple objectives and incomplete preferences. Engineering Optimization, 2014, 46, 964-986.	2.6	4
30	Design Exploration to Determine Process Parameters of Ladle Refining for an Industrial Application. Steel Research International, 2016, 87, 1333-1343.	1.8	4
31	A method for the preliminary design of gears using a reduced number of American Gear Manufacturers Association (AGMA) correction factors. Engineering Optimization, 2017, 49, 565-582.	2.6	4
32	Strategic information revelation in collaborative design. Advanced Engineering Informatics, 2018, 36, 242-253.	8.0	4
33	Secure Codesign: Achieving Optimality Without Revealing. Journal of Computing and Information Science in Engineering, 2018, 18, .	2.7	4
34	Understanding the Effect of Task Complexity and Problem-Solving Skills on the Design Performance of Agents in Systems Engineering. , 2018, , .		3
35	A Design Framework for Social Product Development. IEEE Transactions on Engineering Management, 2022, 69, 302-313.	3.5	3
36	Integrated Realization of Engineered Materials and Products: A Foundational Problem. , 0, , 277-284.		3

#	Article	IF	Citations
37	Understanding the Impact of Expertise on Design Outcome: An Approach Based on Concept Inventories and Item Response Theory. , 2016, , .		3
38	Designing Representative Model Worlds to Study Socio-Technical Phenomena: A Case Study of Communication Patterns in Engineering Systems Design. Journal of Mechanical Design, Transactions of the ASME, 2020, 142, .	2.9	3
39	Co-Evolution of Communication and System Performance in Engineering Systems Design: A Stochastic Network-Behavior Dynamics Model. Journal of Mechanical Design, Transactions of the ASME, 2022, 144, .	2.9	3
40	A system-of-systems (SoS) perspective on additive manufacturing decisions for space applications. , 2022, , .		3
41	Estimating linking preferences and behaviors of autonomous systems in the Internet using a discrete choice model. , 2014, , .		2
42	A Reusable and Executable Information Model of Experiments on Human Decision Making in Systems Engineering and Design. IEEE Access, 2020, 8, 27597-27617.	4.2	2
43	Stability analysis of networked control systems with unknown inputs. , 2014, , .		1
44	How Do Designers Choose Among Multiple Noisy Information Sources in Engineering Design Optimization? An Experimental Study. , 2018, , .		1
45	sFEA: A Secure Finite Element Analysis Technique. Journal of Computing and Information Science in Engineering, 2019, 19, .	2.7	1
46	Modeling the System Acquisition Using Deep Reinforcement Learning. IEEE Access, 2020, 8, 124894-124904.	4.2	1
47	How Does Past Performance of Competitors Influence Designers' Cognition, Behaviors, and Outcomes?. Journal of Mechanical Design, Transactions of the ASME, 2022, 144, .	2.9	1
48	Designing Market Thickness and Optimal Frequency of Multi-Period Stable Matching in Cloud-Based Design and Manufacturing. , 2018, , .		0
49	Extraction and Analysis of Spatial Correlation Micrograph Features for Traceability in Manufacturing. Journal of Computing and Information Science in Engineering, 2020, 20, .	2.7	0