

Katherine K Fu

List of Publications by Year in descending order

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Version: 2024-02-01

26
papers

910
citations

840776

11
h-index

677142

22
g-index

26
all docs

26
docs citations

26
times ranked

432
citing authors

#	ARTICLE	IF	CITATIONS
1	On the Benefits and Pitfalls of Analogies for Innovative Design: Ideation Performance Based on Analogical Distance, Commonness, and Modality of Examples. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2011, 133, .	2.9	201
2	The Meaning of "Near" and "Far": The Impact of Structuring Design Databases and the Effect of Distance of Analogy on Design Output. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2013, 135, .	2.9	177
3	Function Based Design-by-Analogy: A Functional Vector Approach to Analogical Search. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2014, 136, .	2.9	90
4	Design-by-analogy: experimental evaluation of a functional analogy search methodology for concept generation improvement. <i>Research in Engineering Design - Theory, Applications, and Concurrent Engineering</i> , 2015, 26, 77-95.	2.1	80
5	Design Principles: Literature Review, Analysis, and Future Directions. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2016, 138, .	2.9	79
6	Discovering Structure in Design Databases Through Functional and Surface Based Mapping. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2013, 135, .	2.9	76
7	Design Team Convergence: The Influence of Example Solution Quality. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2010, 132, .	2.9	62
8	Systematic Map of the Social Impact Assessment Field. <i>Sustainability</i> , 2019, 11, 4106.	3.2	23
9	Design-by-Analogy: Exploring for Analogical Inspiration With Behavior, Material, and Component-Based Structural Representation of Patent Databases. <i>Journal of Computing and Information Science in Engineering</i> , 2019, 19, .	2.7	18
10	Examining the effect of design for additive manufacturing rule presentation on part redesign quality. <i>Journal of Engineering Design</i> , 2020, 31, 427-460.	2.3	16
11	Using fMRI to deepen our understanding of design fixation. <i>Design Science</i> , 2019, 5, .	2.1	13
12	An exploration-based approach to computationally supported design-by-analogy using D3. <i>Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM</i> , 2020, 34, 444-457.	1.1	10
13	Social life-cycle assessment (S-LCA) of residential rooftop solar panels using challenge-derived framework. <i>Energy, Sustainability and Society</i> , 2022, 12, .	3.8	10
14	Characterizing the Effects of Multiple Analogs and Extraneous Information for Novice Designers in Design-by-Analogy. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2018, 140, .	2.9	9
15	Impact of Timing in the Design Process on Students'™ Application of Design for Additive Manufacturing Heuristics. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2022, 144, .	2.9	9
16	Design Heuristics: Extraction and Classification Methods With Jet Propulsion Laboratory's Architecture Team. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2020, 142, .	2.9	6
17	Design-by-Analogy: Effects of Exploration-Based Approach on Analogical Retrievals and Design Outcomes. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 0, , 1-44.	2.9	6
18	Examining the effects of mood on quality and feasibility of design outcomes. <i>International Journal of Design Creativity and Innovation</i> , 2021, 9, 79-102.	1.2	5

#	ARTICLE	IF	CITATIONS
19	Effect of physical activity through virtual reality on design creativity. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2021, 35, 99-115.	1.1	4
20	Facilitating Design-by-Analogy: Development of a Complete Functional Vocabulary and Functional Vector Approach to Analogical Search. , 2014, , .		3
21	Incorporating industrial design pedagogy into a mechanical engineering graphics course: a discipline-based education research (DBER) approach. International Journal of STEM Education, 2018, 5, 29.	5.0	3
22	Process Heuristics: Extraction, Analysis, and Repository Considerations. IEEE Systems Journal, 2020, 14, 5148-5159.	4.6	3
23	Speech2Mindmap: Testing the Accuracy of Unsupervised Automatic Mindmapping Technology With Speech Recognition. Journal of Mechanical Design, Transactions of the ASME, 2022, 144, .	2.9	3
24	Evaluation of a challenge-derived social life cycle assessment (S-LCA) framework. International Journal of Sustainable Engineering, 2021, 14, 1680-1697.	3.5	3
25	Design Heuristics: Analysis and Synthesis From Jet Propulsion Laboratory's Architecture Team. , 2018, , .		1
26	Comparing parallel and iterative prototyping strategies during engineering design. Research in Engineering Design - Theory, Applications, and Concurrent Engineering, 2022, 33, 173.	2.1	0