Yong Zeng

List of Publications by Year
in descending order

83 papers	1,207 citations	430442 18 h-index	414034 32 g-index
86 all docs	86 docs citations	86 times ranked	711 citing authors

#	ARTICLE	IF	CITATIONS
1	Uncertainty Quantification in Gear Remaining Useful Life Prediction Through an Integrated Prognostics Method. IEEE Transactions on Reliability, 2013, 62, 146-159.	3.5	111
2	Recursive object model (ROM)â€"Modelling of linguistic information in engineering design. Computers in Industry, 2008, 59, 612-625.	5.7	61
3	A science-based approach to product design theory Part I: formulation and formalization of design process. Robotics and Computer-Integrated Manufacturing, 1999, 15, 331-339.	6.1	60
4	A physiological study of relationship between designerâ€™s mental effort and mental stress during conceptual design. CAD Computer Aided Design, 2014, 54, 3-18.	1.4	59
5	Secure collaboration in global design and supply chain environment: Problem analysis and literature review. Computers in Industry, 2012, 63, 545-556.	5.7	58
6	An Integrated Prognostics Method Under Time-Varying Operating Conditions. IEEE Transactions on Reliability, 2015, 64, 673-686.	3.5	57
7	A science-based approach to product design theory Part II: formulation of design requirements and products. Robotics and Computer-Integrated Manufacturing, 1999, 15, 341-352.	6.1	53
8	Asking the right questions to elicit product requirements. International Journal of Computer Integrated Manufacturing, 2009, 22, 283-298.	2.9	50
9	Modeling and evaluating information leakage caused by inferences in supply chains. Computers in Industry, 2011, 62, 351-363.	5.7	48
10	Mitigating the risk of information leakage in a two-level supply chain through optimal supplier selection. Journal of Intelligent Manufacturing, 2012, 23, 1351-1364.	4.4	42
11	Classification of Product Requirements Based on Product Environment. Concurrent Engineering Research and Applications, 2006, 14, 219-230.	2.0	40
12	A Theoretical Model of Design Creativity: Nonlinear Design Dynamics and Mental Stress-Creativity Relation. Journal of Integrated Design and Process Science, 2012, 16, 65-88.	0.2	37
13	Effects of stress and effort on self-rated reports in experimental study of design activities. Journal of Intelligent Manufacturing, 2017, 28, 1609-1622.	4.4	31
14	EEG signals respond differently to idea generation, idea evolution and evaluation in a loosely controlled creativity experiment. Scientific Reports, 2021, 11, 2119.	1.6	29
15	A stochastic collocation approach for efficient integrated gear health prognosis. Mechanical Systems and Signal Processing, 2013, 39, 372-387.	4.4	27
16	Formalisation of product requirements: from natural language descriptions to formal specifications. International Journal of Manufacturing Research, 2007, 2, 362.	0.1	25
17	Analysis of Design Activities Using EEG Signals. , 2010, , .		25
18	Environment-Based Design (EBD). , 2011, , .		24

#	ARTICLE	IF	CITATIONS
19	Understanding design activities through computer simulation. Advanced Engineering Informatics, 2009, 23, 294-308.	4.0	20
20	Environment-Based Design (EBD): a Methodology for Transdisciplinary Design+. Journal of Integrated Design and Process Science, 2015, 19, 5-24.	0.2	20
21	Empirical approaches to quantifying effort, fatigue and concentration in the conceptual design process. Research in Engineering Design - Theory, Applications, and Concurrent Engineering, 2018, 29, 393-409.	1.2	19
22	A distance-based parameter free algorithm for curve reconstruction. CAD Computer Aided Design, 2008, 40, 210-222.	1.4	16
23	A theoretical model of design fixation. International Journal of Design Creativity and Innovation, 2017, 5, 185-204.	0.8	14
24	Segmentation of design protocol using EEG. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2019, 33, 11-23.	0.7	14
25	A tEEG framework for studying designer's cognitive and affective states. Design Science, 2020, 6, .	1.1	13
26	Formalization of design chain management using environment-based design (EBD) theory. Journal of Intelligent Manufacturing, 2013, 24, 597-612.	4.4	12
27	Automated transformation of design text ROM diagram into SysML models. Advanced Engineering Informatics, 2016, 30, 585-603.	4.0	12
28	Network oscillations imply the highest cognitive workload and lowest cognitive control during idea generation in open-ended creation tasks. Scientific Reports, 2021, 11, 24277.	1.6	12
29	Pen–tablet as a CAD interface alternative. Robotics and Computer-Integrated Manufacturing, 2005, 21, 465-474.	6.1	11
30	VICUR: A human-vision-based algorithm for curve reconstruction. Robotics and Computer-Integrated Manufacturing, 2008, 24, 824-834.	6.1	11
31	A Novel Approach to Quantifying Designer's Mental Stress in the Conceptual Design Process. , 2007, , 593.		8
32	Conceptual Modeling of Design Chain Management towards Product Lifecycle Management. Advanced Concurrent Engineering, 2009, , 137-148.	0.2	8
33	An algorithm for transforming design text ROM diagram into FBS model. Computers in Industry, 2013, 64, 499-513.	5.7	7
34	Identification of Relationships Between Electroencephalography (EEG) Bands and Design Activities. , 2016, , .		7
35	A self-learning finite element extraction system based on reinforcement learning. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2021, 35, 180-208.	0.7	7
36	A System Dynamics Approach to Comparative Analysis of Biomass Supply Chain Coordination Strategies. Energies, 2021, 14, 2808.	1.6	7

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37	Environment: The First Thing to Look at in Conceptual Design. Journal of Integrated Design and Process Science, 2021, 24, 45-66.	0.2	7
38	Effects of mind mapping-based instruction on student cognitive learning outcomes: a meta-analysis. Asia Pacific Education Review, 2023, 24, 303-317.	1.4	7
39	Automatic Generation of UML Diagrams From Product Requirements Described by Natural Language. , 2009, , .		6
40	Organizational Capability Model: Toward Improving Organizational Performance. Journal of Integrated Design and Process Science, 2017, 21, 5-24.	0.2	6
41	Implementation Barriers: A TASKS Framework. Journal of Integrated Design and Process Science, 2022, 25, 134-147.	0.2	6
42	Environment Based Design Approach to Integrating Enterprise Applications. Journal of Computing and Information Science in Engineering, 2012, 12, .	1.7	5
43	Modeling semantic information in engineering applications: a review. Artificial Intelligence Review, 2012, 37, 97-117.	9.7	5
44	A preliminary study of EEG spectrogram of a single subject performing a creativity test. , 2014, , .		5
45	Matching Service Providers and Customers in Two-Sided Dynamic Markets. IFAC-PapersOnLine, 2015, 48, 2208-2213.	0.5	5
46	A THEORETICAL AND EXPERIMENTAL STUDY ON DESIGN CREATIVITY. Proceedings of the Canadian Engineering Education Association (CEEA), 0, , .	0.2	5
47	Measuring the Evoked Hardness of Design Problems Using Transient Microstates. , 2015, , .		4
48	EBD Extended Analytic Hierarchy Process (AHP) Approach to Evaluating the Effectiveness of Engineering Projects. Journal of Integrated Design and Process Science, 2016, 19, 49-70.	0.2	4
49	Detecting Risk of Intellectual Property (IP) Leakage due to Reverse Design in Collaborative Product Development Environments. , 2011, , .		3
50	Humour and Creative Design: Twins or Partners?. Journal of Integrated Design and Process Science, 2013, 17, 81-92.	0.2	3
51	A Reference Model for Privacy Protection in Social Networking Service. Journal of Integrated Design and Process Science, 2014, 18, 23-44.	0.2	3
52	Influence of Information Collection Strategy on Designer's Mental Stress. Proceedings of the Design Society International Conference on Engineering Design, 2019, 1, 1783-1792.	0.6	3
53	Smart designing of smart systems. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2021, 35, 129-131.	0.7	3
54	Enterprise Applications Integration Using Environment Based Design (EBD). , 2011, , .		2

#	Article	IF	Citations
55	A Novel Framework for Product/Service Systems Using Environment-Based Design Methodology. , 2014, , .		2
56	Quantitative Analysis of the Effort-Fatigue Tradeoff in the Conceptual Design Process: A Multistate EEG Approach. , 2016, , .		2
57	Integrated Equipment Health Prognosis Considering Crack Initiation Time Uncertainty and Random Shock. Chinese Journal of Mechanical Engineering (English Edition), 2017, 30, 1383-1395.	1.9	2
58	One Thing is Certain in Design: Design is Uncertain. Journal of Integrated Design and Process Science, 2017, 20, 1-2.	0.2	2
59	Mental Stress-Performance Model in Emotional Engineering. , 2018, , 119-139.		2
60	Grammatical and Semantic Disambiguation of Requirements at Elicitation and Representation Stages. , 2011, , .		1
61	Aims and Scope of JIDPS: Understanding, Improving, and Practicing of Design. Journal of Integrated Design and Process Science, 2014, 18, 1-2.	0.2	1
62	Aims and Scope of JIDPS: Coping with the Challenges in Transdisciplinary Design. Journal of Integrated Design and Process Science, 2015, 19, 1-3.	0.2	1
63	Overview on Gear Health Prognostics. , 2017, , 49-65.		1
64	Organizational Capability: Skills Related to Organizational Knowledge. Journal of Integrated Design and Process Science, 2017, 21, 1-3.	0.2	1
65	Application of Design Methodologies to Web System Design: A Case Study of JIDPS Editorial System. Journal of Integrated Design and Process Science, 2018, 21, 79-112.	0.2	1
66	A Formal Representation of Technical Systems. Advanced Concurrent Engineering, 2009, , 465-476.	0.2	1
67	Sustainability: Design, Making, and Technologies. Journal of Integrated Design and Process Science, 2022, 24, 1-3.	0.2	1
68	Trustworthy AI for Digital Engineering Transformation. Journal of Integrated Design and Process Science, 2022, 25, 1-7.	0.2	1
69	Working Memory Models and Measures in Language and Bilingualism Research: Integrating Cognitive and Affective Perspectives. Brain Sciences, 2022, 12, 729.	1.1	1
70	Barriers and enablers of TRIZ: a literature analysis using the TASKS framework. Journal of Engineering, Design and Technology, 2022, ahead-of-print, .	1.1	1
71	Statistical Process Control of Olfactometer Temperature. , 2007, , .		0
72	A New Concept for Requirements Driven Project Planning in an Integrated PLM Environment. , 2008, , .		0

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73	Environment Based Design of Services. Journal of Integrated Design and Process Science, 2014, 18, 1-2.	0.2	0
74	Curriculum design using EBD methodology: Preliminary study of English education in Mid-west University of China. , 2014, , .		0
75	Conflict identification in conceptual design: Algorithm and case study. , 2014, , .		0
76	Cross-Disciplinary Design Methodology. Journal of Integrated Design and Process Science, 2017, 20, 1-2.	0.2	0
77	DEFINING THE APPROPRIATE COURSE PROJECT FOR FOSTERING THE EXPECTED COGNITIVE COMPETENCIES: EBD APPROACH TO AN ENGINEERING DESIGN COURSE. Proceedings of the Canadian Engineering Education Association (CEEA), 2018, , .	0.2	0
78	Performance Based Design. Journal of Integrated Design and Process Science, 2019, 22, 1-2.	0.2	0
79	How Is Innovation Influenced by Logic, Emotion and Representation?. Journal of Integrated Design and Process Science, 2020, 23, 1-3.	0.2	0
80	Augmenting Mechanical CAD With Pen and Tablet. , 2003, , .		0
81	A NEW APPROACH FOR PROTOCOL ANALYSIS ON DESIGN ACTIVITIES USING AXIOMATIC THEORY OF DESIGN MODELING. Proceedings of the Canadian Engineering Education Association (CEEA), 0, , .	0.2	0
82	Educating Aerospace Design Engineers: Perspectives from Design Creativity Theory. Proceedings of the Canadian Engineering Education Association (CEEA), 0, , .	0.2	0
83	A Proposed Multi-Criteria Optimization Approach to Enhance Clinical Outcomes Evaluation for Diabetes Care: A Commentary. Health Services Research and Managerial Epidemiology, 2022, 9, 233339282210891.	0.5	0