

# Joshua David Summers

## List of Publications by Year in descending order

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Version: 2024-02-01

263  
papers

2,816  
citations

279798

23  
h-index

289244

40  
g-index

263  
all docs

263  
docs citations

263  
times ranked

1390  
citing authors

#	ARTICLE	IF	CITATIONS
1	Collaborative Sketching (Câ€Sketch) â€” An Idea Generation Technique for Engineering Design. Journal of Creative Behavior, 2001, 35, 168-198.	2.9	181
2	Compliant hexagonal periodic lattice structures having both high shear strength and high shear strain. Materials & Design, 2011, 32, 512-524.	5.1	133
3	Mechanical Engineering Design Complexity Metrics: Size, Coupling, and Solvability. Journal of Mechanical Design, Transactions of the ASME, 2010, 132, .	2.9	120
4	Engineering design complexity: an investigation of methods and measures. Research in Engineering Design - Theory, Applications, and Concurrent Engineering, 2008, 19, 161-179.	2.1	118
5	Predicting requirement change propagation, using higher order design structure matrices: an industry case study. Journal of Engineering Design, 2012, 23, 905-926.	2.3	92
6	Reasons for change propagation: a case study in an automotive OEM. Research in Engineering Design - Theory, Applications, and Concurrent Engineering, 2012, 23, 291-303.	2.1	67
7	A user study of interpretability of engineering design representations. Journal of Engineering Design, 2012, 23, 443-468.	2.3	63
8	Design of Cellular Shear Bands of a Non-Pneumatic Tire -Investigation of Contact Pressure. SAE International Journal of Passenger Cars - Mechanical Systems, 0, 3, 598-606.	0.4	53
9	Development of a systematic classification and taxonomy of collaborative design activities. Journal of Engineering Design, 2009, 20, 57-81.	2.3	52
10	A review of computer-aided fixture design with respect to information support requirements. International Journal of Production Research, 2008, 46, 929-947.	7.5	50
11	Optimisation of geometry and material properties of a non-pneumatic tyre for reducing rolling resistance. International Journal of Vehicle Design, 2014, 66, 193.	0.3	50
12	Sampling in design research: Eight key considerations. Design Studies, 2022, 78, 101077.	3.1	48
13	Size effects in lattice structures and a comparison to micropolar elasticity. International Journal of Solids and Structures, 2018, 143, 245-261.	2.7	46
14	The Effect of Honeycomb Core Geometry on the Sound Transmission Performance of Sandwich Panels. Journal of Vibration, Acoustics, Stress, and Reliability in Design, 2015, 137, .	2.0	45
15	Case Study Method for Design Research: A Justification. , 2008, , .		43
16	Rolling Resistance of a Nonpneumatic Tire Having a Porous Elastomer Composite Shear Band. Tire Science and Technology, 2013, 41, 154-173.	0.4	43
17	Design of Honeycomb Mesostructures for Crushing Energy Absorption. Journal of Mechanical Design, Transactions of the ASME, 2012, 134, .	2.9	37
18	Design of Honeycombs for Modulus and Yield Strain in Shear. Journal of Engineering Materials and Technology, Transactions of the ASME, 2012, 134, .	1.4	35

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19	Concept Exploration Through Morphological Charts: An Experimental Study. Journal of Mechanical Design, Transactions of the ASME, 2012, 134, .	2.9	34
20	Hyperelastic Constitutive Modeling of Hexagonal Honeycombs Subjected to In-Plane Shear Loading. Journal of Engineering Materials and Technology, Transactions of the ASME, 2011, 133, .	1.4	30
21	Computer-aided design versus sketching: An exploratory case study. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2012, 26, 317-335.	1.1	29
22	Design of Honeycomb Meta-Materials for High Shear Flexure. , 2009, , .		28
23	Evaluation of the functional basis using an information theoretic approach. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2010, 24, 87-105.	1.1	27
24	A protocol to formalise function verbs to support conservation-based model checking. Journal of Engineering Design, 2011, 22, 765-788.	2.3	27
25	Experimental study of influence of group familiarity and information sharing on design review effectiveness. Journal of Engineering Design, 2010, 21, 111-126.	2.3	26
26	Assembly time modelling through connective complexity metrics. International Journal of Computer Integrated Manufacturing, 2013, 26, 955-967.	4.6	25
27	Mobile devices within manufacturing environments: a BMW applicability study. International Journal on Interactive Design and Manufacturing, 2012, 6, 101-111.	2.2	24
28	Application of the Modified Compaction Material Model to the Analysis of Landmine Detonation in Soil with Various Degrees of Water Saturation. Shock and Vibration, 2008, 15, 79-99.	0.6	23
29	Topological Information Content and Expressiveness of Function Models in Mechanical Design. Journal of Computing and Information Science in Engineering, 2010, 10, .	2.7	22
30	Complexity Metrics for Directional Node-Link System Representations: Theory and Applications. , 2010, , .		22
31	An empirical study of the expressiveness of the functional basis. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2011, 25, 273-287.	1.1	22
32	Developing Measures of Complexity for Engineering Design. , 2003, , 381.		21
33	The Design Exemplar: A New Data Structure for Embodiment Design Automation. Journal of Mechanical Design, Transactions of the ASME, 2004, 126, 775-787.	2.9	21
34	An experimental methodology for investigating communication in collaborative design review meetings. CoDesign, 2005, 1, 169-185.	2.0	21
35	An Ontology for Representation of Fixture Design Knowledge. Computer-Aided Design and Applications, 2008, 5, 601-611.	0.6	21
36	Assembly Time Estimation: Assembly Mate Based Structural Complexity Metric Predictive Modeling. Journal of Computing and Information Science in Engineering, 2014, 14, .	2.7	20

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37	A review of cost estimation models for determining assembly automation level. Computers and Industrial Engineering, 2016, 98, 246-259.	6.3	20
38	Comparative analysis of requirements change prediction models: manual, linguistic, and neural network. Research in Engineering Design - Theory, Applications, and Concurrent Engineering, 2014, 25, 139-156.	2.1	19
39	Method to Design Honeycombs for a Shear Flexible Structure. SAE International Journal of Passenger Cars - Mechanical Systems, 0, 3, 588-597.	0.4	18
40	The Effects of Language and Pruning on Function Structure Interpretability. Journal of Mechanical Design, Transactions of the ASME, 2012, 134, .	2.9	18
41	A Knowledge Based FMEA to Support Identification and Management of Vehicle Flexible Component Issues. Procedia CIRP, 2016, 44, 157-162.	1.9	18
42	A Formal Representation of Function Structure Graphs for Physics-Based Reasoning. Journal of Computing and Information Science in Engineering, 2013, 13, .	2.7	16
43	Physics-Based Reasoning in Conceptual Design Using a Formal Representation of Function Structure Graphs. Journal of Computing and Information Science in Engineering, 2013, 13, .	2.7	16
44	Dynamic Impact Simulation of Interaction between Non-Pneumatic Tire and Sand with Obstacle. , 0, , .		15
45	Comparative Study of Optimization Techniques in Sizing Mesostructures for Use in NonPneumatic Tires. Journal of Computing and Information Science in Engineering, 2015, 15, .	2.7	15
46	Design of Chiral Honeycomb Meso-Structures for High Shear Flexure. , 2010, , .		14
47	An experimental study: analyzing requirement type influence on novelty and variety of generated solutions. International Journal of Design Creativity and Innovation, 2015, 3, 61-77.	1.2	14
48	Conceptual Development of Automotive Forward Lighting System Using White Light Emitting Diodes. SAE International Journal of Passenger Cars - Electronic and Electrical Systems, 0, 2, 201-211.	0.3	13
49	Design of Sinusoidal Auxetic Structures for High Shear Flexure. , 2010, , .		13
50	Accuracy and Precision Analysis of the Graph Complexity Connectivity Method. Procedia CIRP, 2016, 44, 163-168.	1.9	13
51	Function in engineering: Benchmarking representations and models. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2017, 31, 401-412.	1.1	13
52	Can a Pre-sketching Activity Improve Idea Generation?. Lecture Notes in Production Engineering, 2013, , 583-592.	0.4	13
53	Comparative Study of Representation Structures for Modeling Function and Behavior of Mechanical Devices. , 2001, , .		13
54	Requirements Evolution: Relating Functional and Non-Functional Requirement Change on Student Project Success. , 2014, , .		12

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55	Representation in Engineering Design: A Framework for Classification. , 2004, , .		12
56	Resistance Based Modeling of Collaborative Design. Concurrent Engineering Research and Applications, 2007, 15, 21-32.	3.2	11
57	Manufacturing Assembly Time Estimation Using Structural Complexity Metric Trained Artificial Neural Networks. Journal of Computing and Information Science in Engineering, 2014, 14, .	2.7	11
58	A taxonomy for the design and evaluation of Networked Virtual Environments: its application to collaborative design. International Journal on Interactive Design and Manufacturing, 2008, 2, 17-32.	2.2	10
59	Using Rule Based Design in Engineer to Order Industry: An SME Case Study. Computer-Aided Design and Applications, 2008, 5, 178-193.	0.6	10
60	Integrating Graduate Design Coaches in Undergraduate Design Project Teams. International Journal of Mechanical Engineering Education, 2009, 37, 3-20.	1.0	10
61	An Entropic Method for Sequencing Discrete Design Decisions. Journal of Mechanical Design, Transactions of the ASME, 2010, 132, .	2.9	10
62	Complexity as a Surrogate Mapping Between Function Models and Market Value. , 2011, , .		10
63	A modelling language for assembly sequences representation, scheduling and analyses. International Journal of Production Research, 2014, 52, 3986-4006.	7.5	10
64	Cost Estimation Model for Polyacrylonitrile-Based Carbon Fiber Manufacturing Process. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2017, 139, .	2.2	10
65	Evaluating the Use of Artificial Neural Networks and Graph Complexity to Predict Automotive Assembly Quality Defects. Journal of Computing and Information Science in Engineering, 2017, 17, .	2.7	10
66	Comparing function structures and pruned function structures for market price prediction: An approach to benchmarking representation inferencing value. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2017, 31, 550-566.	1.1	10
67	Towards the formalization of non-functional requirements in conceptual design. Research in Engineering Design - Theory, Applications, and Concurrent Engineering, 2020, 31, 449-469.	2.1	10
68	Empirical Examination of the Functional Basis and Design Repository. , 2008, , 261-280.		10
69	Case Study Research Using Senior Design Projects: An Example Application. Journal of Mechanical Design, Transactions of the ASME, 2010, 132, .	2.9	10
70	Representation: Extracting Mate Complexity From Assembly Models to Automatically Predict Assembly Times. , 2012, , .		10
71	Reasoning in Engineering Design. , 2005, , 329.		9
72	Designing a Lunar Wheel. , 2008, , .		9

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73	Requirement Change Propagation Prediction Approach: Results From an Industry Case Study. , 2010, , .		9
74	Evaluation and Comparison of Two Design for Assembly Methods: Subjectivity of Information Inputs. , 2011, , .		9
75	Evaluation of a customizable haptic feedback system for ground vehicle steer-by-wire interfaces. , 2012, , .		9
76	Investigating the use of design methods by capstone design students at Clemson University. International Journal of Technology and Design Education, 2013, 23, 1079-1091.	2.6	9
77	Evolution of Meso-Structures for Non-Pneumatic Tire Development: A Case Study. , 2014, , .		9
78	Comparison of Graph Generation Methods for Structural Complexity Based Assembly Time Estimation. Journal of Computing and Information Science in Engineering, 2014, 14, .	2.7	9
79	Investigating the impact of requirements elicitation and evolution on course performance in a pre-capstone design course. Journal of Engineering Design, 2019, 30, 155-179.	2.3	9
80	Size effects in lattice-structured cellular materials: edge softening effects. Journal of Materials Science, 2019, 54, 3942-3959.	3.7	9
81	Development of a Feature Based Design System Using Virtual Reality. , 1999, , .		9
82	Design of a Scaled Off-Vehicle Wheel Testing Device for Textile Tread Wear. , 0, , .		8
83	Numerical Simulation of New Generation Non-Pneumatic Tire (TWEELâ„¢) and Sand. , 2009, , .		8
84	Requirement Modeling Systems for Mechanical Design: A Systematic Method for Evaluating Requirement Management Tools and Languages. , 2010, , .		8
85	Limitations to Function Structures: A Case Study in Morphing Airfoil Design. , 2010, , .		8
86	A case study of the development of a design enabler tool to support frame analysis for Wright Metal Products, a US SME. International Journal of Computer Aided Engineering and Technology, 2012, 4, 321.	0.2	8
87	Identifying requirements for physics-based reasoning on function structure graphs. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2013, 27, 291-299.	1.1	8
88	A verification and validation planning method to address change propagation effects in engineering design and manufacturing. Concurrent Engineering Research and Applications, 2017, 25, 151-162.	3.2	8
89	Mapping problem and requirements to final solution: A document analysis of capstone design projects. International Journal of Mechanical Engineering Education, 2019, 47, 338-370.	1.0	8
90	Complexity Connectivity Metrics â€“ Predicting Assembly Times with Low Fidelity Assembly CAD Models. Lecture Notes in Production Engineering, 2013, , 777-786.	0.4	8

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91	A Pilot Protocol Study on How Designers Construct Function Structures in Novel Design. , 2014, , 247-264.		8
92	Requirements and Data Content Evaluation of Industry In-House Data Management System. , 2010, , .		8
93	Aluminum Taper Bristle-Shaped Shear Band for a Nonpneumatic Tire. Tire Science and Technology, 2012, 40, 152-170.	0.4	8
94	A Taxonomy for Collaborative Design. , 2003, , 755.		7
95	Automating morphological chart exploration: a multi-objective genetic algorithm to address compatibility and uncertainty. International Journal of Product Development, 2009, 9, 111.	0.2	7
96	A Hierarchical Modeling Scheme With Non Functional Requirements. , 2010, , .		7
97	Numerical Simulation of Tread Effects on the Interaction Between Cellular Shear Band Based Non-Pneumatic Tire and Sand. , 2011, , .		7
98	A study of designer familiarity with product and user during requirement elicitation. International Journal of Computer Aided Engineering and Technology, 2013, 5, 139.	0.2	7
99	Numerical Methods for the Design of Meso-Structures: A Comparative Review. , 2015, , .		7
100	Developing Design Guidelines for Meso-Scaled Periodic Cellular Material Structures Under Shear Loading. , 2016, , .		7
101	Cost Estimation Model for PAN Based Carbon Fiber Manufacturing Process. , 2016, , .		7
102	Evaluation of Empirical Design Studies and Metrics. , 2016, , 13-39.		7
103	Using Design Requirements for Environmental Assessment of Products: A Historical Based Method. Procedia CIRP, 2017, 61, 69-74.	1.9	7
104	Case-Based Design Facilitated by the Design Exemplar. , 2002, , 453-476.		7
105	Towards Establishing the Design Exemplar as a CAD Query Language. Computer-Aided Design and Applications, 2006, 3, 523-534.	0.6	6
106	Cyclic Energy Loss of Honeycombs Under In-Plane Shear Loading. , 2009, , .		6
107	Assembly Time Modeling through Connective Complexity Metrics. , 2010, , .		6
108	Experimental Damage Characterization of Hexagonal Honeycombs Subjected to In-Plane Shear Loading. , 2010, , .		6

#	ARTICLE	IF	CITATIONS
109	Compliant Hexagonal Meso-Structures Having Both High Shear Strength and High Shear Strain. , 2010, , .		6
110	Shear Compliant Hexagonal Cellular Solids With a Shape Memory Alloy. , 2011, , .		6
111	A Comparison of Design Approaches to Meso-Structure Development. , 2013, , .		6
112	Impact of Level of Detail and Information Content on Accuracy of Function Structure-Based Market Price Prediction Models. , 2016, , .		6
113	Configuration and options management processes and tools: an automotive OEM case study. Journal of Manufacturing Technology Management, 2017, 28, 146-168.	6.4	6
114	Manufacturing for Design: A sustaining approach to drive manufacturing process evolution, then innovation. Procedia Manufacturing, 2020, 48, 1136-1142.	1.9	6
115	Domain Independent Characterization of Parametric and Geometric Problems in Embodiment Design. , 2000, , .		6
116	A Methodology for the Study of the Effects of Communication Method on Design Review Effectiveness. , 2003, , 383.		5
117	Intrinsic Analysis of Decomposition and Coordination Strategies for Complex Design Problems. , 2004, , .		5
118	A Proposed Taxonomy for Physical Prototypes: Structure and Validation. , 2008, , .		5
119	Investigation of the Interpretability of Three Function Structure Representations: A User Study. , 2009, , .		5
120	Effects of Cellular Shear Bands on Interaction between a Non-pneumatic Tire and Sand. , 2010, , .		5
121	Direct Displacement Synthesis Method for Shape Morphing Skins Using Compliant Mechanisms. , 2010, , .		5
122	Optimization of a Non-Pneumatic Tire for Reduced Rolling Resistance. , 2011, , .		5
123	Reasoning: Source of Variability in the Boothroyd and Dewhurst Assembly Time Estimation Method. , 2012, , .		5
124	Representation: Structural Complexity of Assemblies to Create Neural Network Based Assembly Time Estimation Models. , 2012, , .		5
125	Automotive lightweight engineering: a method for identifying lazy parts. International Journal of Vehicle Design, 2013, 63, 364.	0.3	5
126	A Case Study of Configuration Management Methods in a Major Automotive OEM. , 2014, , .		5



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127	Development of a Design for Manufacturing Rules Database for Use in Instruction of DFM Practices. , 2014, , .		5
128	Effects of Metal Foam Porosity, Pore Size, and Ligament Geometry on Fluid Flow. Journal of Thermal Science and Engineering Applications, 2018, 10, .	1.5	5
129	Function Modeling: An Analysis of Pause Patterns in Modeling Activities. , 2018, , .		5
130	A cost estimation model to support automation decision in assembly systems design. International Journal of Production Research, 2018, 56, 7426-7443.	7.5	5
131	A Systematic Approach to Evaluating Design Prompts in Supporting Experimental Design Research. Proceedings of the Design Society International Conference on Engineering Design, 2019, 1, 2755-2764.	0.6	5
132	Size effects in lattice-structured cellular materials: material distribution. Journal of Materials Science, 2019, 54, 11858-11877.	3.7	5
133	A Unit Cell Design Guideline Development Method for Meso-Scaled Periodic Cellular Material Structures. Journal of Engineering Materials and Technology, Transactions of the ASME, 2019, 141, .	1.4	5
134	A Coding Scheme for Analyzing Capstone Design Reports: Problem and Solution Descriptions. , 2011, , .		5
135	Issues of Similarity in Engineering Design. , 2006, , .		5
136	Function Modeling: A Modeling Behavior Analysis of Pause Patterns. Journal of Mechanical Design, Transactions of the ASME, 2020, 142, .	2.9	5
137	Elicitation and Development of Requirements Through Integrated Methods. , 2009, , .		4
138	An agent-based system approach to fixture design. International Journal of Computer Applications in Technology, 2009, 36, 284.	0.5	4
139	A Customizable Steer-By-Wire Interface for Ground Vehicles. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 656-661.	0.4	4
140	Development of Endurance Testing Apparatus Simulating Wheel Dynamics and Environment on Lunar Terrain. , 2010, , .		4
141	Development and Qualitative Testing of Traction Concepts as an Undergraduate Experience. , 0, , .		4
142	Exploration of Discrete Element Method to Dynamically Model Sandy Terrain. , 2010, , .		4
143	Optimization of Honeycomb Cellular Meso-Structures for High Speed Impact Energy Absorption. , 2011, , .		4
144	An Energy-Based Design Approach for a Meso-Structure With High Shear Flexure. , 2013, , .		4

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145	Analyzing Requirement Type Influence on Concept Quality and Quantity During Ideation: An Experimental Study. , 2014, , .		4
146	Thoughts on benchmarking of function modeling: Why and how. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2017, 31, 393-400.	1.1	4
147	Using Graph Complexity Connectivity Method to Predict Information from Design Representations: A Comparative Study. , 2017, , 667-683.		4
148	Requirements Evolution: Understanding the Type of Changes in the Requirement Document of Novice Designers. Smart Innovation, Systems and Technologies, 2015, , 471-481.	0.6	4
149	Empirical Studies for Evaluation and Investigation of a New Knowledge Representation Structure in Design Automation. , 2002, , .		4
150	Expressiveness of the Design Exemplar. , 2005, , .		4
151	Tracking Project Health Using Completeness and Specificity of Requirements: A Case Study. , 2014, , .		4
152	Three-Dimensional Packing by a Heuristic-based Sequential Genetic Algorithm. , 2006, , .		3
153	A driver for selection of functionally inequivalent concepts at varying levels of abstraction. Journal of Design Research, 2007, 6, 239.	0.1	3
154	Topological Information Content and Expressiveness of Function Models in Mechanical Design. , 2009, , .		3
155	Nonlinear Elastic Constitutive Relations of Auxetic Honeycombs. , 2009, , .		3
156	Investigation of Design Tools as Complexity Management Techniques. , 2010, , .		3
157	Dynamic Simulation of Interaction between Non-Pneumatic Tire and Sand. , 0, , .		3
158	Simulation Studies on the Influence of Obstacle on Rolling Lunar Wheel. , 2010, , .		3
159	Application of a Lightweight Engineering Tool: Lazy Parts Analysis and Redesign of a Remote Controlled Car. , 2011, , .		3
160	Reasoning: Installation Process Step Instructions as an Automated Assembly Time Estimation Tool. , 2012, , .		3
161	Development of a geometric model retrieval system: a design exemplar case study. International Journal of Computer Aided Engineering and Technology, 2014, 6, 113.	0.2	3
162	Function Modeling: A Study of Sequential Model Completion Based on Count and Chaining of Functions. , 2016, , .		3

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163	An Experimental Study on the Influence That Failure Number, Specialization, and Controls Have on Confidence in Predicting System Failures <sup>1</sup> . Journal of Mechanical Design, Transactions of the ASME, 2017, 139, .	2.9	3
164	Part Change Management: A Case Study on Automotive OEM Development and Production Perspectives. , 2017, , .		3
165	A User Study on Exploring the Sequencing of Unit Cell Design Guidelines. , 2017, , .		3
166	Smart designing of smart systems. Artificial Intelligence for Engineering Design, Analysis and Manufacturing: AIEDAM, 2021, 35, 129-131.	1.1	3
167	Analysis of the Impact of Requirement-Sketch Sequencing on Requirement Generation in Conceptual Design. Journal of Mechanical Design, Transactions of the ASME, 2021, 143, .	2.9	3
168	Functional Thinking: A Protocol Study to Map Modeling Behavior of Designers. , 2017, , 339-357.		3
169	Comparative Study of CAD Interrogation Capabilities: Commercial CAD vs. Design Exemplar. , 2005, , .		3
170	Cross Analysis of Metal Foam Design Parameters for Achieving Desired Fluid Flow. , 2011, , .		3
171	Interface Design and Display Modalities to Improve the Vehicle Inspection Process. , 2010, , .		3
172	Applying Lean Manufacturing Principles to Revolutionize Cubside Equipment and Collection Processes. , 2007, , .		3
173	Entropic Method for Sequencing Discrete Design Decisions. , 2009, , .		3
174	Requirements Culture: A Case Study on Product Development and Requirement Perspectives. , 2019, , .		3
175	Augmenting Tools for Reverse Engineering Methods. , 2006, , 371.		2
176	Information Generation in the Design Process. , 2009, , .		2
177	Experimental Comparison of CAD Input Devices in Synthesis, Analysis, and Interrogation Tasks. Computer-Aided Design and Applications, 2009, 6, 595-612.	0.6	2
178	Numerical Investigation of Effect of Membrane Thickness on the Performance of Cellular Shear Band Based Non-Pneumatic Tire. , 2011, , .		2
179	Evaluating and Comparing Functional and Geometric Complexity of Products. , 2012, , .		2
180	Automated Navigation of Method Time Measurement Tables for Automotive Assembly Line Planning. , 2013, , .		2

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181	Design Enabler to Recognize Duplicate Geometries in CAD Assemblies. Computer-Aided Design and Applications, 2013, 10, 889-904.	0.6	2
182	Evaluation of System-Directed Multimodal Systems for Vehicle Inspection. Journal of Computing and Information Science in Engineering, 2013, 13, .	2.7	2
183	Impact of Requirements Elicitation Activity on Idea Generation: A Designer Study. , 2014, , .		2
184	Assembly Modelling and Time estimating during the early phase of Assembly Systems Design. IFAC-PapersOnLine, 2015, 48, 81-87.	0.9	2
185	A Taxonomy for Representing Prismatic Cellular Materials. , 2016, , .		2
186	Configuration Management Through Satisfiability. Procedia CIRP, 2016, 44, 204-209.	1.9	2
187	Evaluating the Use of Artificial Neural Networks, Graph Theory, and Complexity Theory to Predict Automotive Assembly Defects. , 2016, , .		2
188	A protocol for modeling and tracking engineering design process through structural complexity metrics applied against communication networks. Concurrent Engineering Research and Applications, 2017, 25, 108-122.	3.2	2
189	Design guidelines as ideation tools â€” a user study on exploring the subjectivity of unit-cell design guidelines. International Journal of Design Creativity and Innovation, 2019, 7, 50-69.	1.2	2
190	Comparison of motivations and perceptions of capstone benefits for industry sponsors: An interview-based study of faculty and industry. International Journal of Mechanical Engineering Education, 0, , 030641902110054.	1.0	2
191	WHEN WORLDS COLLIDE â€” A COMPARATIVE ANALYSIS OF ISSUES IMPEDING ADOPTION OF AGILE FOR HARDWARE. Proceedings of the Design Society, 2021, 1, 3451-3460.	0.8	2
192	Introduction of Design Enabling Tools. , 2009, , 195-215.		2
193	Mapping Problem and Requirements to Final Solution: A Document Analysis of Capstone Design Projects. , 2011, , .		2
194	Representations: Reconciling Design for Disassembly Rules With Design for Manufacturing Rules. , 2012, , .		2
195	Graph Visualization Styles for Use in Configuration Management: A User Study. , 2015, , .		2
196	Representation: Metrics for Analyzing Sketches â€” A Critical Survey. , 2012, , .		2
197	How Function Ordering Within Morphological Charts Influence Exploration1. Journal of Mechanical Design, Transactions of the ASME, 2019, 141, .	2.9	2
198	Impact of Chaining Method and Level of Completion on Accuracy of Function Structure-Based Market Price Prediction Models. Journal of Computing and Information Science in Engineering, 2019, 19, .	2.7	2

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199	A Physics-Based Formal Vocabulary of Energy Verbs for Function Modeling. , 2019, , .		2
200	Requirement Generation: Lecture Intervention Impact on Variety and Novelty. , 2019, , .		2
201	Repurposing metal additive manufacturing support structures for reduction of residual stress deformation. International Journal of Advanced Manufacturing Technology, 2022, 119, 3963-3973.	3.0	2
202	<title>Representation requirements for supporting intelligent fixture design retrieval and reuse</title>. , 2004, , .		1
203	Logical Connectives for a CAD Query Language: Algorithms and Verification. , 2004, , 1019.		1
204	Dynamic Networks: Towards a Mechanical Design Visual Programming Language. , 2006, , 353.		1
205	Similarity Metrics Applied to Graph Based Design Model Authoring. Computer-Aided Design and Applications, 2006, 3, 297-306.	0.6	1
206	A Case Study of Design Process and Development of a Design Enabling Tool for Wright Metal Products. , 2007, , 581.		1
207	A Genetic Algorithm Based Procedure for Extracting Optimal Solutions From a Morphological Chart. , 2007, , 29.		1
208	Wear Resistance of Lunar Wheel Treads Made of Polymeric Fabrics. , 0, , .		1
209	Application of Meshless Integral Method to Metal Forming. , 2010, , .		1
210	Lazy Parts Indication Method: Application to Automotive Components. , 0, , .		1
211	Representation: Formal Development and Computational Recognition of Localized Requirement Change Types. , 2012, , .		1
212	FE-Simulation of Tread Profile Effects on the Performance of the Cellular Shear Band Based Non-Pneumatic Tire. , 0, , .		1
213	Experimental Studies on Traction Concepts: Endurance and Obstacle Testing. , 2013, , .		1
214	User Study: Influence of Number of Design Errors on Ability to Predict Performance With and Without Controls. , 2013, , .		1
215	Off-Vehicle Tire Traction and Endurance Testing System: System Upgrade Design. , 2014, , .		1
216	Protocol Analysis: Studying Physical Manipulatives During Conceptual Design. , 2014, , .		1

#	ARTICLE	IF	CITATIONS
217	Camels and Fennec Foxes: A Case Study on Biologically Inspired Design of Sand Traction Systems. , 2015, , .		1
218	Standardized Vocabularies for Assembly Systems Modelling and Automation Alternatives Description. , 2016, , .		1
219	Function Modeling: Comparison of Chaining Methods Using Protocol Study and Designer Study. , 2017, , .		1
220	Establishing a Protocol to Observe Leadership Behaviors Within Engineering Design Teams. , 2018, , .		1
221	Understanding Team Personality Evolution in Student Engineering Design Teams Using the Five Factor Model. , 2018, , .		1
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