

Dieter Krause

List of Publications by Year in descending order

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107
papers

1,078
citations

567144

15
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552653

26
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114
all docs

114
docs citations

114
times ranked

754
citing authors

#	ARTICLE	IF	CITATIONS
1	Reviewing the intellectual structure of product modularization: Toward a common view and future research agenda. <i>Journal of Product Innovation Management</i> , 2023, 40, 86-119.	5.2	9
2	Characteristic-Oriented Complexity Cost Analysis for Evaluating Individual Product Attributes. <i>Lecture Notes in Mechanical Engineering</i> , 2022, , 686-693.	0.3	1
3	Tools for the Variety-Oriented Product-Service System Design. <i>Lecture Notes in Mechanical Engineering</i> , 2022, , 798-806.	0.3	1
4	Influence of friction bearings on the frequency response of a variable stiffness mechanism. <i>Mechanism and Machine Theory</i> , 2022, 168, 104588.	2.7	4
5	Knowledge-Based Decision Support for Concept Evaluation Using the Extended Impact Model of Modular Product Families. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 547.	1.3	5
6	How to Use the Levers of Modularity Properlyâ€”Linking Modularization to Economic Targets. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2022, 144, .	1.7	4
7	Development of synthetic thrombus models to simulate stroke treatment in a physical neurointerventional training model. <i>International Journal of Transgender Health</i> , 2022, 15, 283-301.	1.1	2
8	Comparing Friction of Additively Manufactured Materials with Animal Blood Vessels. <i>Annals of 3D Printed Medicine</i> , 2022, , 100061.	1.6	0
9	Modeling of an Interface Between System Models and FEM Models for the Support of Model-Based Development in Modular Lightweight Design for Aircraft Cabins. <i>Proceedings of the Design Society</i> , 2022, 2, 1965-1974.	0.5	0
10	Designing PSS Fleets â€” Consideration of the Product Architecture. <i>Proceedings of the Design Society</i> , 2022, 2, 1109-1118.	0.5	0
11	Methodical Support for the New Development of Cyber-Physical Product Families. <i>Proceedings of the Design Society</i> , 2022, 2, 495-504.	0.5	2
12	Methodical Approach for the Model-Based Development of Aircraft Cabin Product Families Under Consideration of Lightweight and Cost-Based Design. <i>Proceedings of the Design Society</i> , 2022, 2, 435-444.	0.5	1
13	Coping Asynchronous Modular Product Design by Modelling a Systems-in-System. <i>Proceedings of the Design Society</i> , 2022, 2, 2553-2562.	0.5	3
14	Challenges in early phase of product family development processes. <i>Procedia CIRP</i> , 2021, 100, 840-845.	1.0	4
15	Cross-departmental and cross-disciplinary product development â€” An industry survey on the necessity and future development of cross-departmental and cross-disciplinary perspectives. <i>Procedia CIRP</i> , 2021, 100, 625-630.	1.0	2
16	Variety-driven design to reduce complexity costs of a tire curing press family. <i>Procedia CIRP</i> , 2021, 100, 696-701.	1.0	2
17	Model-based application of the methodical process for modular lightweight design of aircraft cabins. <i>Procedia CIRP</i> , 2021, 100, 637-642.	1.0	6
18	LIFE PHASES MODULARISATION OF PRODUCT-SERVICE SYSTEMS. <i>Proceedings of the Design Society</i> , 2021, 1, 1967-1976.	0.5	4

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19	INTERDISCIPLINARY SYSTEM ARCHITECTURES IN AGILE MODULAR DEVELOPMENT IN THE PRODUCT GENERATION DEVELOPMENT MODEL USING THE EXAMPLE OF A MACHINE TOOL MANUFACTURER. Proceedings of the Design Society, 2021, 1, 1897-1906.	0.5	2
20	Design method validation – an investigation of the current practice in design research. Journal of Engineering Design, 2021, 32, 621-645.	1.1	11
21	SIMULATION-BASED PERFORMANCE ANALYSIS FOR FUTURE ROBUST MODULAR PRODUCT ARCHITECTURES. Proceedings of the Design Society, 2021, 1, 2671-2680.	0.5	2
22	CURRENT TRENDS AND DEVELOPMENTS OF PRODUCT MODULARISATION – A BIBLIOMETRIC ANALYSIS. Proceedings of the Design Society, 2021, 1, 801-810.	0.5	1
23	STUDENT PARTICIPANTS IN EMPIRICAL STUDIES IN ENGINEERING DESIGN - A COLLECTION OF REFLECTIONS TO IMPROVE YOUR STUDY QUALITY. Proceedings of the Design Society, 2021, 1, 2741-2750.	0.5	1
24	DESIGN FOR FUTURE VARIETY TO ENABLE LONG-TERM BENEFITS OF MODULAR PRODUCT FAMILIES. Proceedings of the Design Society, 2021, 1, 993-1002.	0.5	3
25	Using MBSE for the Enhancement of Consistency and Continuity in Modular Product-Service-System Architectures. Systems, 2021, 9, 63.	1.2	5
26	Approach for Calibrated Measurement of the Frequency Response for Characterization of Compliant Interface Elements on Vibration Test Benches. Applied Sciences (Switzerland), 2021, 11, 9604.	1.3	3
27	Produktarchitektur. , 2021, , 335-393.		7
28	Design of Personalized Devices – The Tradeoff between Individual Value and Personalization Workload. Applied Sciences (Switzerland), 2021, 11, 241.	1.3	7
29	Aortic Model in a Neurointerventional Training Model – Modular Design and Additive Manufacturing. , 2021, , 437-454.		1
30	Challenges of Modular Product Families and Product Personalization - An Interview Study. , 2021, , .		1
31	Business Models and Product-Service System Design - Introducing the Business Model Graph. , 2021, , .		4
32	Evaluation of a modular in vitro neurovascular procedure simulation for intracranial aneurysm embolization. Journal of NeuroInterventional Surgery, 2020, 12, 214-219.	2.0	20
33	Validation of the Design for Mass Adaptation Method – A Case for Higher Medical Treatment Quality. Proceedings of the International Symposium of Human Factors and Ergonomics in Healthcare, 2020, 9, 88-100.	0.2	2
34	Optimizing lightweight structures with particle damping using frequency based substructuring. Design Science, 2020, 6, .	1.1	4
35	Development of a Design Education Platform for an Interdisciplinary Teaching Concept. Procedia CIRP, 2020, 91, 553-558.	1.0	15
36	Harmonizing cross-departmental Perspectives on Modular Product Families. Procedia CIRP, 2020, 91, 452-457.	1.0	10

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37	TOWARDS A FRAMEWORK FOR THE DESIGN OF VARIETY-ORIENTED PRODUCT-SERVICE SYSTEMS. Proceedings of the Design Society DESIGN Conference, 2020, 1, 1345-1354.	0.8	10
38	VALIDATION CONCEPT FOR THE INVESTIGATION OF EFFECTS OF MODULAR PRODUCT FAMILIES. Proceedings of the Design Society DESIGN Conference, 2020, 1, 2395-2404.	0.8	6
39	CURRENT CHALLENGES AND SOLUTION APPROACHES IN EMPIRICAL ENGINEERING DESIGN RESEARCH – A WORKSHOP FOR EMPIRICAL RESEARCH. Proceedings of the Design Society DESIGN Conference, 2020, 1, 61-70.	0.8	5
40	A MULTI-DIMENSIONAL CONFIGURATION ALGORITHM FOR MODULAR PRODUCT ARCHITECTURES. Proceedings of the Design Society DESIGN Conference, 2020, 1, 2405-2414.	0.8	5
41	INCONSISTENCY MANAGEMENT FOR PRODUCT FAMILIES WITH MANY VARIANTS THROUGH A MODEL-BASED APPROACH IN MODULAR LIGHTWEIGHT DESIGN. Proceedings of the Design Society DESIGN Conference, 2020, 1, 917-926.	0.8	6
42	Optimization of load introduction points in sandwich structures with additively manufactured cores. Design Science, 2020, 6, .	1.1	5
43	INVESTIGATION ON METHODS AND CHARACTERISTICS IN MEDICAL DEVICE DEVELOPMENT. Proceedings of the Design Society DESIGN Conference, 2020, 1, 1969-1978.	0.8	6
44	Behavior of Rising Droplets and Bubbles: Impact on the Physics of Deep-Sea Blowouts and Oil Fate. , 2020, , 65-82.		6
45	MBSE zur Unterstützung der Produktentwicklung von modularen Produktarchitekturen. Produktentwicklung Und Konstruktionstechnik, 2020, , 111-134.	0.2	3
46	Investigating the Effects of Modular Product Structures to Support Design Decisions in Modularization Projects. , 2020, , .		3
47	Impact of Modularity Decisions on a Firm's Economic Objectives. Journal of Mechanical Design, Transactions of the ASME, 2020, 142, .	1.7	19
48	Lebensphasenübergreifende Nutzung Digitaler Zwillinge. ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb, 2020, 115, 101-104.	0.2	4
49	PKT – Kontinuierliche Weiterentwicklung in Forschung und Lehre. Produktentwicklung Und Konstruktionstechnik, 2020, , 1-30.	0.2	1
50	Planning & Tracking the Changes - Matrix Mapping of Modular Product Family Generations. , 2020, , .		3
51	Grundlagen technischer Systeme und des methodischen Vorgehens. , 2020, , 3-63.		0
52	Overcoming fuzzy design practice: revealing potentials of user-centered design research and methodological concepts related to user involvement. , 2019, , .		6
53	Consistent Modelling of the Impact Model of Modular Product Structures with Linking Boundary Conditions in SysML. Proceedings of the Design Society International Conference on Engineering Design, 2019, 1, 3601-3610.	0.6	5
54	Design for Mass Adaptation of the Neurointerventional Training Model HANNES with Patient-Specific Aneurysm Models. Proceedings of the Design Society International Conference on Engineering Design, 2019, 1, 897-906.	0.6	15

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55	Development of a Configure-to-Order-Based Process for the Implementation of Modular Product Architectures: A Case Study. Proceedings of the Design Society International Conference on Engineering Design, 2019, 1, 2971-2980.	0.6	5
56	PhD Research Learning in Product Architecture Design. Proceedings of the Design Society International Conference on Engineering Design, 2019, 1, 549-558.	0.6	0
57	The Impact of Modular Product Architectures in PSS Design: A systematic Literature Review. Procedia CIRP, 2019, 84, 290-295.	1.0	11
58	Long-term effects of modular product architectures: An empirical follow-up study. Procedia CIRP, 2019, 84, 731-736.	1.0	6
59	Strategies for Customer Satisfaction and Customer Requirement Fulfillment within the Trend of Individualization. Procedia CIRP, 2019, 84, 130-135.	1.0	14
60	Adapted Design for Variety: Consideration of the Software-Domain. , 2019, , .		4
61	Transferability of Boundary Conditions in Testing and Validation of Lightweight Structures. , 2019, , .		4
62	AnknÄ¼pfung von Modularisierungsmethoden an ein Wirkmodell modularer Produktstrukturen. , 2019, , .		1
63	Rise Velocity of Live-Oil Droplets in Deep-Sea Oil Spills. Environmental Engineering Science, 2018, 35, 289-299.	0.8	23
64	Towards a Decision-Making Framework for Multi-Criteria Product Modularization in Cooperative Environments. Procedia CIRP, 2018, 70, 380-385.	1.0	8
65	Oil Droplet Size Distributions in Deep-Sea Blowouts: Influence of Pressure and Dissolved Gases. Environmental Science & Technology, 2018, 52, 6326-6333.	4.6	37
66	Numerical modelling of partially potted inserts in honeycomb sandwich panels under pull-out loading. Composite Structures, 2018, 203, 101-109.	3.1	19
67	Methodische Entwicklung modularer Produktfamilien. , 2018, , .		60
68	Decision-Making in Additive Manufacturing â€“ Survey on AM Experience and Expertise of Designers. , 2018, , 347-360.		0
69	Methoden zur Entwicklung modularer Produktfamilien. , 2018, , 157-242.		1
70	Potenziale modularer Produktfamilien. , 2018, , 89-125.		0
71	ZusammenhÄ¼nge und Auswirkungen der Vielfalt. , 2018, , 19-65.		1
72	Grundlagen technischer Systeme und des methodischen Vorgehens. , 2018, , 372-411.		2

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73	Modulare Produktstrukturierung. , 2018, , 717-741.		1
74	Reliability based calibration of safety factors for unstiffened cylindrical composite shells. Composite Structures, 2017, 168, 798-812.	3.1	18
75	Cost Effects of Modular Product Family Structures: Methods and Quantification of Impacts to Support Decision Making. Journal of Mechanical Design, Transactions of the ASME, 2017, 139, .	1.7	42
76	Continuing Education and Personalization of Design Methods to Improve their Acceptance in Practice â€“ An Explorative Study. Procedia CIRP, 2017, 60, 524-529.	1.0	8
77	Numerical modelling of Nomex honeycomb sandwich cores at meso-scale level. Composite Structures, 2017, 159, 702-718.	3.1	83
78	Decisive economies and opportunity cost of modular product structure alternatives: An empirical case study. , 2017, , .		2
79	Early Phase Estimation of Variety Induced Complexity Cost Effects: A Study on Industrial Cases in Germany. , 2017, , 271-303.		1
80	Global Views on Modular Design Research: Linking Alternative Methods to Support Modular Product Family Concept Development. Journal of Mechanical Design, Transactions of the ASME, 2016, 138, .	1.7	94
81	Process Types of Customisation and Personalisation in Design for Additive Manufacturing Applied to Vascular Models. Procedia CIRP, 2016, 50, 281-286.	1.0	26
82	Methane bubble rise velocities under deep-sea conditionsâ€™Influence of initial shape deformation. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 505, 106-117.	2.3	14
83	Prototyping and testing of composite riser joints for deepwater application. Journal of Reinforced Plastics and Composites, 2016, 35, 95-110.	1.6	11
84	3D Printing of Intracranial Aneurysms Using Fused Deposition Modeling Offers Highly Accurate Replications. American Journal of Neuroradiology, 2016, 37, 120-124.	1.2	53
85	Magnetic Particle Imaging for High Temporal Resolution Assessment of Aneurysm Hemodynamics. PLoS ONE, 2016, 11, e0160097.	1.1	51
86	Gleichteile-, Modul- und Plattformstrategie. , 2016, , 111-149.		12
87	Experimental and numerical study on the influence of imperfections on the buckling load of unstiffened CFRP shells. Composite Structures, 2015, 131, 128-138.	3.1	43
88	Methodische Entwicklung eines Modulbaukastens fÃ¼r kundenindividuelle AufzÃ¼ge. ZWF Zeitschrift Fuer Wirtschaftlichen Fabrikbetrieb, 2015, 110, 32-35.	0.2	0
89	An Example of Visually Supported Design of Modular Product Families. Procedia CIRP, 2014, 21, 75-80.	1.0	22
90	Platform of Design Method for Developing Mobility-preserving Products. Procedia CIRP, 2014, 21, 409-414.	1.0	0

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91	Methodical Approach for Consideration of Ramp-up Risks in the Product Development of Complex Products. <i>Procedia CIRP</i> , 2014, 20, 20-25.	1.0	17
92	Integrated Development of Modular Product Families: A Methods Toolkit. , 2014, , 245-269.		42
93	Towards Complexity Cost Management within Approaches for Developing Modular Product Families. , 2014, , .		1
94	System analysis and synthesis for the dimensioning of variant lightweight cabin interior. , 2013, , .		2
95	Product Life-Oriented Development of Component Commonality and Variety. , 2013, , .		1
96	Developing Modular Product Families with Perspectives for the Product Program. <i>Lecture Notes in Production Engineering</i> , 2013, , 543-552.	0.3	5
97	Design for Supply Chain Requirements: An Approach to Detect the Capabilities to Postpone. , 2011, , .		4
98	Definition and Evaluation of Modular Product Structures in the Context of Design for Assembly. , 2011, , .		2
99	Methodical Support for the Development of Modular Product Families. , 2011, , 35-45.		11
100	New Stirling Motor Design With Efficiency by Using Ceramic Components. , 2010, , .		0
101	Determination of the multiaxial failure criteria for alumina ceramics under tension-torsion test. <i>Journal of the European Ceramic Society</i> , 2010, 30, 3339-3349.	2.8	17
102	Assembly Concepts for Aircraft Cabin Installation. , 2010, , .		4
103	AN ASSESSMENT OF METHODS TO SUPPORT THE DESIGN OF FUTURE ROBUST MODULAR PRODUCT ARCHITECTURES. , 0, , .		14
104	MBSE als Datenbasis zur Unterstützung von Konfiguratoren und Digitalen Zwillingen modularer Produktfamilien. , 0, , .		4
105	A Simulation-Based Decision Support Method For Modular Product Architecture Alternatives. , 0, , .		5
106	Darstellung des Zusammenhangs von Produktarchitektur- und Produktionssystemgestaltung in SysML. , 0, , .		2
107	New Trends in Aviation and Medical Technology Enabled by Additive Manufacturing. , 0, 2, .		1