Seung Ki Moon

List of Publications by Year
in descending order

133 papers	2,833 citations	201575 27 h-index	206029 48 g-index
136 all docs	136 docs citations	136 times ranked	2699 citing authors

#	ARTICLE	IF	CITATIONS
1	Modelling the stiffness of plastic springs manufactured via additive manufacturing. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2022, 236, 486-497.	1.5	3
2	Guidelines for 3D printed springs using material extrusion. Rapid Prototyping Journal, 2022, 28, 409-427.	1.6	2
3	How to Use the Levers of Modularity Properly—Linking Modularization to Economic Targets. Journal of Mechanical Design, Transactions of the ASME, 2022, 144, .	1.7	4
4	In-process adaptive dimension correction strategy for laser aided additive manufacturing using laser line scanning. Journal of Materials Processing Technology, 2022, 303, 117544.	3.1	19
5	Laser powder bed fusion for AI assisted digital metal components. Virtual and Physical Prototyping, 2022, 17, 806-820.	5.3	2
6	A data-driven framework to predict fused filament fabrication part properties using surrogate models and multi-objective optimisation. International Journal of Advanced Manufacturing Technology, 2022, 120, 8275-8291.	1.5	1
7	Rapid surface defect identification for additive manufacturing with in-situ point cloud processing and machine learning. Virtual and Physical Prototyping, 2021, 16, 50-67.	5.3	78
8	Aerosol Jet Printed Temperature Sensor for Wireless Healthcare Monitoring. , 2021, , 663-674.		1
9	Data-driven design strategy in fused filament fabrication: status and opportunities. Journal of Computational Design and Engineering, 2021, 8, 489-509.	1.5	19
10	Reverse effect of hot isostatic pressing on high-speed selective laser melted Ti–6Al–4V alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 807, 140880.	2.6	3
11	A knowledge transfer framework to support rapid process modeling in aerosol jet printing. Advanced Engineering Informatics, 2021, 48, 101264.	4.0	15
12	Geometric influence of the laser-based powder bed fusion process in Ti6AL4V and AlSi10Mg. International Journal of Advanced Manufacturing Technology, 2021, 114, 3165-3176.	1.5	8
13	The Effect of Annealing on Additive Manufactured ULTEM™ 9085 Mechanical Properties. Materials, 2021, 14, 2907.	1.3	16
14	Reviews on Machine Learning Approaches for Process Optimization in Noncontact Direct Ink Writing. ACS Applied Materials & Interfaces, 2021, 13, 53323-53345.	4.0	27
15	Effect of geometry on the mechanical response of additively manufactured polymer. Polymer Testing, 2021, 100, 107245.	2.3	13
16	Hybrid Decision Support to Monitor Atrial Fibrillation for Stroke Prevention. International Journal of Environmental Research and Public Health, 2021, 18, 813.	1.2	8
17	3D Printed Electronics of Non-contact Ink Writing Techniques: Status and Promise. International Journal of Precision Engineering and Manufacturing - Green Technology, 2020, 7, 511-524.	2.7	53
18	Rapid Process Modeling of the Aerosol Jet Printing Based on Gaussian Process Regression with Latin Hypercube Sampling. International Journal of Precision Engineering and Manufacturing, 2020, 21, 127-136.	1.1	11

#	ARTICLE	IF	CITATIONS
19	Data-Driven Adaptive Control for Laser-Based Additive Manufacturing with Automatic Controller Tuning. Applied Sciences (Switzerland), 2020, 10, 7967.	1.3	12
20	A Post-Treatment Method to Enhance the Property of Aerosol Jet Printed Electric Circuit on 3D Printed Substrate. Materials, 2020, 13, 5602.	1.3	3
21	A multi-objective optimization framework for aerosol jet customized line width printing via small data set and prediction uncertainty. Journal of Materials Processing Technology, 2020, 285, 116779.	3.1	9
22	Artificial intelligence for the prediction of tensile properties by using microstructural parameters in high strength steels. Materialia, 2020, 11, 100699.	1.3	22
23	Surface Monitoring for Additive Manufacturing with in-situ Point Cloud Processing. , 2020, , .		9
24	Embedding sensors using selective laser melting for self-cognitive metal parts. Additive Manufacturing, 2020, 33, 101151.	1.7	11
25	A hybrid multi-objective optimization of aerosol jet printing process via response surface methodology. Additive Manufacturing, 2020, 33, 101096.	1.7	29
26	A Customized Smart Medical Mask For Healthcare Personnel. , 2020, , .		13
27	Impact of Modularity Decisions on a Firmâ€™s Economic Objectives. Journal of Mechanical Design, Transactions of the ASME, 2020, 142, .	1.7	19
28	A Part Consolidation Design Method for Additive Manufacturing based on Product Disassembly Complexity. Applied Sciences (Switzerland), 2020, 10, 1100.	1.3	28
29	Multi-Objective Implementation of Additive Manufacturing in Make-to-Stock Production. , 2020, , .		0
30	Advanced aircraft manufacturing and maintenance using three-dimensional printing. International Journal of Advanced Manufacturing Technology, 2019, 105, 4055-4057.	1.5	2
31	PhD Research Learning in Product Architecture Design. Proceedings of the Design Society International Conference on Engineering Design, 2019, 1, 549-558.	0.6	0
32	Decentralized determination of design variables among cooperative designers for product platform design in a product family. Computers and Industrial Engineering, 2019, 135, 601-614.	3.4	7
33	Comparison of carbon-based reinforcement on laser aided additive manufacturing Inconel 625 composites. Applied Surface Science, 2019, 490, 522-534.	3.1	35
34	Additive manufacturing for space: status and promises. International Journal of Advanced Manufacturing Technology, 2019, 105, 4123-4146.	1.5	79
35	Hybrid Machine Learning Method to Determine the Optimal Operating Process Window in Aerosol Jet 3D Printing. ACS Applied Materials & Interfaces, 2019, 11, 17994-18003.	4.0	45
36	Characterization of wear properties of the functionally graded material deposited on cast iron by laser-aided additive manufacturing. International Journal of Advanced Manufacturing Technology, 2019, 105, 4097-4105.	1.5	20

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37	An Integrated Two-Stage Optimization Method for Job-Shop Bottleneck Planning and Scheduling. , 2019, , .		1
38	A heterostructure of layered double hydroxide wrapped in few-layer carbon with iridium doping for efficient oxygen evolution. Electrochimica Acta, 2019, 296, 590-597.	2.6	16
39	Laser-Induced Graphene on Additive Manufacturing Parts. Nanomaterials, 2019, 9, 90.	1.9	24
40	Eco-modular product architecture identification and assessment for product recovery. Journal of Intelligent Manufacturing, 2019, 30, 383-403.	4.4	34
41	Design and Manufacture of a Plastic Drone Using Finite Element Analysis and Fused Deposition Modeling Process. Transactions of the Korean Society of Mechanical Engineers, A, 2019, 43, 787-795.	0.1	0
42	Comparison Study on Additive Manufacturing (AM) and Powder Metallurgy (PM) AlSi10Mg Alloys. Jom, 2018, 70, 644-649.	0.9	19
43	A multi-material part design framework in additive manufacturing. International Journal of Advanced Manufacturing Technology, 2018, 99, 2111-2119.	1.5	24
44	Hole design quality identification in laser aided additive manufacturing. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2018, 232, 909-917.	1.5	6
45	Numerical and experimental study of laser aided additive manufacturing for melt-pool profile and grain orientation analysis. Materials and Design, 2018, 137, 286-297.	3.3	95
46	Glasses-type wearable computer displays: usability considerations examined with a 3D glasses case study. Ergonomics, 2018, 61, 670-681.	1.1	10
47	A hybrid machine learning approach for the quality optimization of a 3D printed sensor. , 2018, , .		3
48	Finite Element Method and Parametric Study on Material Properties and Friction Coefficients for Design of Mechanical Components. , 2018, , .		0
49	Effects of the TiC Nanoparticle on Microstructures and Tensile Properties of Selective Laser Melted IN718/TiC Nanocomposites. IOP Conference Series: Materials Science and Engineering, 2018, 317, 012074.	0.3	4
50	Numerical study of temperature and cooling rate in selective laser melting with functionally graded support structures. Additive Manufacturing, 2018, 24, 543-551.	1.7	20
51	Femtosecond Laser Produced Hydrophobic Hierarchical Structures on Additive Manufacturing Parts. Nanomaterials, 2018, 8, 601.	1.9	48
52	Characteristic length of the solidified melt pool in selective laser melting process. Rapid Prototyping Journal, 2017, 23, 370-381.	1.6	15
53	Process monitoring and inspection systems in metal additive manufacturing: Status and applications. International Journal of Precision Engineering and Manufacturing - Green Technology, 2017, 4, 235-245.	2.7	145
54	Polymer-assisted formation of 3D Pd nanoassemblies: highly active catalysts for formic acid electrooxidation. Sustainable Energy and Fuels, 2017, 1, 450-457.	2.5	6

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55	Sustainable platform identification for product family design. Journal of Cleaner Production, 2017, 143, 567-581.	4.6	60
56	A hybrid machine learning approach for additive manufacturing design feature recommendation. Rapid Prototyping Journal, 2017, 23, 983-997.	1.6	95
57	Strength and strain hardening of a selective laser melted AlSi10Mg alloy. Scripta Materialia, 2017, 141, 45-49.	2.6	312
58	Sustainable product family configuration based on a platform strategy. Journal of Engineering Design, 2017, 28, 731-764.	1.1	23
59	Contrasting Function With Affordance in Design for Additive Manufacturing. , 2017, , .		2
60	Multidisciplinary design optimization to identify additive manufacturing resources in customized product development. Journal of Computational Design and Engineering, 2017, 4, 131-142.	1.5	29
61	Effects of heat treatment on microstructures and tensile properties of IN718/TiC nanocomposite fabricated by selective laser melting. International Journal of Precision Engineering and Manufacturing, 2017, 18, 1693-1701.	1.1	51
62	Commonality and performance metrics to evaluate and optimise the design of additive manufactured product families. International Journal of Manufacturing Research, 2017, 12, 44.	0.1	3
63	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
64	An integration of function- and affordance-based methods for product-service system utilizing finite state automata. , 2016, , .		1
65	A disassmbly complexity assessment method for sustainable product design. , 2016, , .		3
66	An additive manufacturing process model for product family design. Journal of Engineering Design, 2016, 27, 751-767.	1.1	21
67	A productionâ€"inventory system with a Markovian service queue and lost sales. Journal of the Korean Statistical Society, 2016, 45, 14-24.	0.3	26
68	An efficient way of investigating the intrinsic size effect in machining. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2016, 230, 1622-1629.	1.5	3
69	A Cost-Driven Design Methodology for Additive Manufactured Variable Platforms in Product Families. Journal of Mechanical Design, Transactions of the ASME, 2016, 138, .	1.7	29
70	Grasp and index finger reach zone during one-handed smartphone rear interaction: effects of task type, phone width and hand length. Ergonomics, 2016, 59, 1462-1472.	1.1	29
71	Hybrid layering scanning-projection micro-stereolithography for fabrication of conical microlens array and hollow microneedle array. Microelectronic Engineering, 2016, 153, 15-19.	1.1	7
72	Voice Coil Navigation Sensor for Flexible Silicone Intubation. IEEE/ASME Transactions on Mechatronics, 2016, 21, 851-859.	3.7	11

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73	Assessing and Generating Modules for Product Recovery. , 2015, , .		0
74	The Additive Manufacturing Process Setting Feasible Space Exploration and Association With Variable Product Platform Design. , 2015, , .		0
75	Flexible membrane wing warping using tendon-sheath mechanism. , 2015, , .		1
76	Modeling and observation of compressive behaviors of closed celullar structures using central Voronoi tessellation concepts. International Journal of Precision Engineering and Manufacturing, 2015, 16, 2459-2465.	1.1	3
77	Design knowledge representation to support personalised additive manufacturing. Virtual and Physical Prototyping, 2015, 10, 217-226.	5.3	18
78	A mechanistic cutting force model with consideration of the intrinsic and geometric size effects decoupled. International Journal of Advanced Manufacturing Technology, 2015, 81, 745-753.	1.5	7
79	Design for additive manufacturing in customized products. International Journal of Precision Engineering and Manufacturing, 2015, 16, 2369-2375.	1.1	86
80	A Decision Support System for market-driven product positioning and design. Decision Support Systems, 2015, 69, 82-91.	3.5	47
81	Halide‐Ion‐Assisted Synthesis of Different $\alpha\text{-}Fe_2O_3$ Hollow Structures and Their Lithium‐Ion Storage Properties. ChemPlusChem, 2015, 80, 522-528.	1.3	14
82	A New Approach for Product Design by Integrating Assembly and Disassembly Sequence Structure Planning. Proceedings in Adaptation, Learning and Optimization, 2015, , 247-257.	1.5	8
83	3D printing as an efficient way for comparative study of biomimetic structures â€" trabecular bone and honeycomb. Journal of Mechanical Science and Technology, 2014, 28, 4635-4640.	0.7	26
84	Orientation Measurement Based on Magnetic Inductance by the Extended Distributed Multi-Pole Model. Sensors, 2014, 14, 11504-11521.	2.1	13
85	A Formal Model of Human Interactions for Service Ecosystem Design. , 2014, , .		2
86	A framework to identify sustainability indicators for product design. , 2014, , .		2
87	Voice coil navigation sensor for endoscopic silicone intubation. , 2014, , .		0
88	Inflatable wing design for micro UAVs using indirect 3D printing. , 2014, , .		3
89	Effects of weight balance on a 3D TV shutter type glasses: Subjective discomfort and physical contact load on the nose. International Journal of Industrial Ergonomics, 2014, 44, 801-809.	1.5	14
90	Influence of substrate heating on hole geometry and spatter area in femtosecond laser drilling of silicon. Applied Physics Letters, 2014, 104, .	1.5	24

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91	A time-dependent busy period queue length formula for the queue. Statistics and Probability Letters, 2014, 87, 98-104.	0.4	6
92	Platform design variable identification for a product family using multi-objective particle swarm optimization. Research in Engineering Design - Theory, Applications, and Concurrent Engineering, 2014, 25, 95-108.	1.2	49
93	The M/M/1 queue with a production-inventory system and lost sales. Applied Mathematics and Computation, 2014, 233, 534-544.	1.4	37
94	Application of 3D printing technology for designing light-weight unmanned aerial vehicle wing structures. International Journal of Precision Engineering and Manufacturing - Green Technology, 2014, 1, 223-228.	2.7	199
95	Decision Support Systems Design for Data-Driven Management. , 2014, , .		3
96	Intentional and Unintentional Medication Nonadherence â€" Comparing Older and Younger Adults. Proceedings of the Human Factors and Ergonomics Society, 2014, 58, 160-164.	0.2	2
97	Customization Design Knowledge Representation to Support Additive Manufacturing. , 2014, , .		2
98	Indirect 3D Printing of an Inflatable Wing for Small UAVS Reinforced with 3D Hexagonal Diamond Structures. , 2014, , .		0
99	Working Principles of 3D Xerography. , 2014, , .		0
100	Estimation of Singaporeâ€™s hourly solar radiation using hybrid-Markov transition matrices method. International Journal of Precision Engineering and Manufacturing, 2013, 14, 323-327.	1.1	6
101	Service reliability improvement in manufacturing and operating systems. International Journal of Precision Engineering and Manufacturing, 2013, 14, 1401-1406.	1.1	14
102	A Product-Service System Model for Identifying Design Factors. , 2013, , .		1
103	Change propagation analysis for sustainability in product design. , 2013, , .		4
104	An Additive Manufacturing resource process model for product family design. , 2013, , .		1
105	An Efficient Branch-and-Bound Algorithm for Interface-Based Modular Product Design and Performance Evaluation. Journal of Computing and Information Science in Engineering, 2013, 13, .	1.7	2
106	Determination of Optimal Location of Circuit Board and Battery on 3D Glasses by Considering Nose Load and Subjective Discomfort. Proceedings of the Human Factors and Ergonomics Society, 2012, 56, 1877-1881.	0.2	2
107	Considering Context: The Role of Mental Workload and Operator Control in Users' Perceptions of Usability. International Journal of Human-Computer Interaction, 2012, 28, 543-559.	3.3	7
108	A Market-Based Design Strategy for a Universal Product Family. Journal of Mechanical Design, Transactions of the ASME, 2012, 134, .	1.7	25

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109	A Product-Service System Design Framework Based on a Business Ecosystem. , 2012, , .		1
110	Design and Assessment of Ergonomics of Hand-Powered Pruning Shears Based On Gender-Specific Operating Strategy. Proceedings of the Human Factors and Ergonomics Society, 2011, 55, 1671-1675.	0.2	2
111	Effects of Mental Workload and Operator Control on Perceived Usability. Proceedings of the Human Factors and Ergonomics Society, 2011, 55, 1200-1204.	0.2	2
112	Determination of Optimal Grip Span between a Bicycle Handlebar and a Brake Lever by Using a Two-Dimensional Biomechanical Hand Model. Proceedings of the Human Factors and Ergonomics Society, 2011, 55, 1635-1639.	0.2	5
113	Platform Strategy for Product Family Design Using Particle Swarm Optimization. , 2011, , .		4
114	A platform-based strategic design approach for universal products. International Journal of Mass Customisation, 2010, 3, 227.	1.2	6
115	A methodology for knowledge discovery to support product family design. Annals of Operations Research, 2010, 174, 201-218.	2.6	30
116	Universal Product Family Design Valuation in an Uncertain Market Environment. , 2010, , .		5
117	Platform Valuation for Product Family Design in an Uncertain Market Environment. , 2010, , .		0
118	A module-based service model for mass customization: service family design. IIE Transactions, 2010, 43, 153-163.	2.1	70
119	A Multi-Agent System for Recommending Customized Families of Products. , 2010, , 35-48.		0
120	A Design Method for Developing a Universal Product Family in a Dynamic Market Environment. , 2009, , .		5
121	An agent-based recommender system for developing customized families of products. Journal of Intelligent Manufacturing, 2009, 20, 649-659.	4.4	35
122	Service representation for capturing and reusing design knowledge in product and service families using object-oriented concepts and an ontology. Journal of Engineering Design, 2009, 20, 413-431.	1.1	38
123	A Strategic Platform Design Method for Developing Customized Families of Services. , 2009, , .		0
124	Representing User Activity and Product Function for Universal Design. , 2009, , .		8
125	A Dynamic Multiagent System Based on a Negotiation Mechanism for Product Family Design. IEEE Transactions on Automation Science and Engineering, 2008, 5, 234-244.	3.4	31
126	A method for platform identification to support service family design. International Journal of Services Operations and Informatics, 2008, 3, 294.	0.2	4

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127	A Strategic Module-Based Platform Design Method for Developing Customized Products in Dynamic and Uncertain Market Environments. , 2008, , .		4
128	Strategic Module Sharing for Customized Service Family Design using a Bayesian Game. , 2007, , .		2
129	Three Dimensional Design Structure Matrix With Cross-Module and Cross-Interface Analyses. , 2007, , 941.		9
130	A Process Model and Data Mining to Support Designing Families of Services. , 2007, , .		1
131	Data Mining and Fuzzy Clustering to Support Product Family Design. , 2006, , 317.		29
132	A Multi-Agent System for Modular Platform Design in a Dynamic Electronic Market Environment. , 2006, , .		10
133	Knowledge representation for product design using techspecs concept ontology. , 0, , .		7