Xun Xu

List of Publications by Year
in descending order

326	17,125	17405	17546
papers	citations	63 h-index	121 g-index

336	336	336	8969
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Intelligent Manufacturing in the Context of Industry 4.0: A Review. Engineering, 2017, 3, 616-630.	3.2	1,659
2	From cloud computing to cloud manufacturing. Robotics and Computer-Integrated Manufacturing, 2012, 28, 75-86.	6.1	1,487
3	Digital Twin-driven smart manufacturing: Connotation, reference model, applications and research issues. Robotics and Computer-Integrated Manufacturing, 2020, 61, 101837.	6.1	712
4	Industry 4.0 and Industry 5.0â€”Inception, conception and perception. Journal of Manufacturing Systems, 2021, 61, 530-535.	7.6	686
5	Smart manufacturing systems for Industry 4.0: Conceptual framework, scenarios, and future perspectives. Frontiers of Mechanical Engineering, 2018, 13, 137-150.	2.5	588
6	Computer-aided process planning â€“ A critical review of recent developments and future trends. International Journal of Computer Integrated Manufacturing, 2011, 24, 1-31.	2.9	287
7	A systematic design approach for service innovation of smart product-service systems. Journal of Cleaner Production, 2018, 201, 657-667.	4.6	287
8	Digital Twin as a Service (DTaaS) in Industry 4.0: An Architecture Reference Model. Advanced Engineering Informatics, 2021, 47, 101225.	4.0	283
9	An interoperable solution for Cloud manufacturing. Robotics and Computer-Integrated Manufacturing, 2013, 29, 232-247.	6.1	270
10	Support Structures for Additive Manufacturing: A Review. Journal of Manufacturing and Materials Processing, 2018, 2, 64.	1.0	264
11	Smart manufacturing process and system automation â€“ A critical review of the standards and envisioned scenarios. Journal of Manufacturing Systems, 2020, 56, 312-325.	7.6	259
12	Making CNC machine tools more open, interoperable and intelligentâ€”a review of the technologies. Computers in Industry, 2006, 57, 141-152.	5.7	235
13	Industry 4.0 and Cloud Manufacturing: A Comparative Analysis. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2017, 139, .	1.3	206
14	Cloud-based manufacturing equipment and big data analytics to enable on-demand manufacturing services. Robotics and Computer-Integrated Manufacturing, 2019, 57, 92-102.	6.1	202
15	STEP-compliant NC research: the search for intelligent CAD/CAPP/CAM/CNC integration. International Journal of Production Research, 2005, 43, 3703-3743.	4.9	194
16	Workload-based multi-task scheduling in cloud manufacturing. Robotics and Computer-Integrated Manufacturing, 2017, 45, 3-20.	6.1	185
17	Outlook on human-centric manufacturing towards Industry 5.0. Journal of Manufacturing Systems, 2022, 62, 612-627.	7.6	185
18	IoT-enabled smart appliances under industry 4.0: A case study. Advanced Engineering Informatics, 2020, 43, 101043.	4.0	183

#	Article	IF	Citations
19	Scheduling in cloud manufacturing: state-of-the-art and research challenges. International Journal of Production Research, 2019, 57, 4854-4879.	4.9	182
20	Striving for a total integration of CAD, CAPP, CAM and CNC. Robotics and Computer-Integrated Manufacturing, 2004, 20, 101-109.	6.1	177
21	Development of a Hybrid Manufacturing Cloud. Journal of Manufacturing Systems, 2014, 33, 551-566.	7.6	165
22	Manufacturing Service Management in Cloud Manufacturing: Overview and Future Research Directions. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2015, 137, .	1.3	163
23	A review of web-based product data management systems. Computers in Industry, 2001, 44, 251-262.	5.7	161
24	A Cyber-Physical Machine Tools Platform using OPC UA and MTConnect. Journal of Manufacturing Systems, 2019, 51, 61-74.	7.6	157
25	Machine Tool 4.0 for the new era of manufacturing. International Journal of Advanced Manufacturing Technology, 2017, 92, 1893-1900.	1.5	151
26	Digital twin modeling method based on biomimicry for machining aerospace components. Journal of Manufacturing Systems, 2021, 58, 180-195.	7.6	151
27	Strategic advantages of interoperability for global manufacturing using CNC technology. Robotics and Computer-Integrated Manufacturing, 2008, 24, 699-708.	6.1	146
28	Life cycle assessment of wood-fibre-reinforced polypropylene composites. Journal of Materials Processing Technology, 2008, 198, 168-177.	3.1	144
29	Resource virtualization: A core technology for developing cyber-physical production systems. Journal of Manufacturing Systems, 2018, 47, 128-140.	7.6	140
30	Visualisation of the Digital Twin data in manufacturing by using Augmented Reality. Procedia CIRP, 2019, 81, 898-903.	1.0	134
31	Energy-efficient machining systems: a critical review. International Journal of Advanced Manufacturing Technology, 2014, 72, 1389-1406.	1.5	124
32	Food supply chain management: systems, implementations, and future research. Industrial Management and Data Systems, 2017, 117, 2085-2114.	2.2	124
33	Realization of STEP-NC enabled machining. Robotics and Computer-Integrated Manufacturing, 2006, 22, 144-153.	6.1	123
34	Cyber-physical Machine Tool â€“ The Era of Machine Tool 4.0. Procedia CIRP, 2017, 63, 70-75.	1.0	117
35	Virtual machine tools and virtual machiningâ€”A technological review. Robotics and Computer-Integrated Manufacturing, 2011, 27, 494-508.	6.1	114
36	A semantic web-based framework for service composition in a cloud manufacturing environment. Journal of Manufacturing Systems, 2017, 42, 69-81.	7.6	114

#	Article	IF	Citations
37	Human Capital 4.0: a workforce competence typology for Industry 4.0. Journal of Manufacturing Technology Management, 2020, 31, 687-703.	3.3	114
38	Computer-Integrated Manufacturing, Cyber-Physical Systems and Cloud Manufacturing â€“ Concepts and relationships. Manufacturing Letters, 2015, 6, 5-9.	1.1	110
39	A web-enabled PDM system in a collaborative design environment. Robotics and Computer-Integrated Manufacturing, 2003, 19, 315-328.	6.1	108
40	A systematic development method for cyber-physical machine tools. Journal of Manufacturing Systems, 2018, 48, 13-24.	7.6	108
41	Computer-Aided Inspection Planningâ€”The state of the art. Computers in Industry, 2009, 60, 453-466.	5.7	107
42	Optimization of process planning for reducing material waste in extrusion based additive manufacturing. Robotics and Computer-Integrated Manufacturing, 2019, 59, 317-325.	6.1	102
43	Analysis and prediction of printable bridge length in fused deposition modelling based on back propagation neural network. Virtual and Physical Prototyping, 2019, 14, 253-266.	5.3	91
44	IoT-enabled cloud-based additive manufacturing platform to support rapid product development. International Journal of Production Research, 2019, 57, 3975-3991.	4.9	88
45	Relationship matrix based automatic assembly sequence generation from a CAD model. CAD Computer Aided Design, 2013, 45, 1053-1067.	1.4	86
46	Augmented Reality-assisted Intelligent Window for Cyber-Physical Machine Tools. Journal of Manufacturing Systems, 2017, 44, 280-286.	7.6	85
47	Personalized product configuration framework in an adaptable open architecture product platform. Journal of Manufacturing Systems, 2017, 43, 422-435.	7.6	81
48	Smart, connected open architecture product: an IT-driven co-creation paradigm with lifecycle personalization concerns. International Journal of Production Research, 2019, 57, 2571-2584.	4.9	81
49	Recent development of knowledge-based systems, methods and tools for One-of-a-Kind Production. Knowledge-Based Systems, 2011, 24, 1108-1119.	4.0	80
50	An IoT-enabled Real-time Machine Status Monitoring Approach for Cloud Manufacturing. Procedia CIRP, 2017, 63, 709-714.	1.0	79
51	A data-driven cyber-physical approach for personalised smart, connected product co-development in a cloud-based environment. Journal of Intelligent Manufacturing, 2020, 31, 3-18.	4.4	78
52	A novel open CNC architecture based on STEP-NC data model and IEC 61499 function blocks. Robotics and Computer-Integrated Manufacturing, 2009, 25, 560-569.	6.1	74
53	Recent developments in Dual Resource Constrained (DRC) system research. European Journal of Operational Research, 2011, 215, 309-318.	3.5	74
54	Investigation of printable threshold overhang angle in extrusion-based additive manufacturing for reducing support waste. International Journal of Computer Integrated Manufacturing, 2018, 31, 961-969.	2.9	74

#	Article	IF	Citations
55	A simplified life cycle assessment of re-usable and single-use bulk transit packaging. Packaging Technology and Science, 2004, 17, 67-83.	1.3	73
56	Selection of additive manufacturing processes. Rapid Prototyping Journal, 2017, 23, 434-447.	1.6	73
57	Digital Twin-driven online anomaly detection for an automation system based on edge intelligence. Journal of Manufacturing Systems, 2021, 59, 138-150.	7.6	73
58	ManuService ontology: a product data model for service-oriented business interactions in a cloud manufacturing environment. Journal of Intelligent Manufacturing, 2019, 30, 317-334.	4.4	72
59	Harakeke reinforcement of soilâ€“cement building materials: Manufacturability and properties. Building and Environment, 2007, 42, 3066-3079.	3.0	71
60	Cloud manufacturing: key issues and future perspectives. International Journal of Computer Integrated Manufacturing, 2019, 32, 858-874.	2.9	71
61	STEP-NC enabled on-line inspection in support of closed-loop machining. Robotics and Computer-Integrated Manufacturing, 2008, 24, 200-216.	6.1	68
62	DIMP: an interoperable solution for software integration and product data exchange. Enterprise Information Systems, 2012, 6, 291-314.	3.3	68
63	IoT-enabled Smart Factory Visibility and Traceability Using Laser-scanners. Procedia Manufacturing, 2017, 10, 1-14.	1.9	67
64	Advanced CNC system with in-process feed-rate optimisation. Robotics and Computer-Integrated Manufacturing, 2013, 29, 12-20.	6.1	65
65	Digital Twin-driven machining process for thin-walled part manufacturing. Journal of Manufacturing Systems, 2021, 59, 453-466.	7.6	64
66	An adaptable CNC system based on STEP-NC and function blocks. International Journal of Production Research, 2007, 45, 3809-3829.	4.9	63
67	A novel knowledge graph-based optimization approach for resource allocation in discrete manufacturing workshops. Robotics and Computer-Integrated Manufacturing, 2021, 71, 102160.	6.1	62
68	STEP-NC and function blocks for interoperable manufacturing. IEEE Transactions on Automation Science and Engineering, 2006, 3, 297-308.	3.4	61
69	An Extensible Model for Multitask-Oriented Service Composition and Scheduling in Cloud Manufacturing. Journal of Computing and Information Science in Engineering, 2016, 16, .	1.7	60
70	A weighted interval rough number based method to determine relative importance ratings of customer requirements in QFD product planning. Journal of Intelligent Manufacturing, 2019, 30, 3-16.	4.4	60
71	â€œTurning green into goldâ€• a framework for energy performance contracting (EPC) in China's real estate industry. Journal of Cleaner Production, 2015, 109, 166-173.	4.6	59
72	Mass Personalisation as a Service in Industry 4.0: A Resilient Response Case Study. Advanced Engineering Informatics, 2021, 50, 101438.	4.0	59

#	Article	IF	Citations
73	A framework for machining optimisation based on STEP-NC. Journal of Intelligent Manufacturing, 2012, 23, 423-441.	4.4	56
74	Design for the environment: life cycle assessment and sustainable packaging issues. International Journal of Environmental Technology and Management, 2005, 5, 14.	0.1	54
75	Self-organizing manufacturing network: A paradigm towards smart manufacturing in mass personalization. Journal of Manufacturing Systems, 2021, 60, 35-47.	7.6	54
76	A novel energy demand modelling approach for CNC machining based on function blocks. Journal of Manufacturing Systems, 2014, 33, 196-208.	7.6	53
77	Shared manufacturing in the sharing economy: Concept, definition and service operations. Computers and Industrial Engineering, 2020, 146, 106602.	3.4	53
78	Service-oriented industrial internet of things gateway for cloud manufacturing. Robotics and Computer-Integrated Manufacturing, 2022, 73, 102217.	6.1	53
79	Energy-efficient cyber-physical production network: Architecture and technologies. Computers and Industrial Engineering, 2019, 129, 56-66.	3.4	52
80	Semantic communications between distributed cyber-physical systems towards collaborative automation for smart manufacturing. Journal of Manufacturing Systems, 2020, 55, 348-359.	7.6	52
81	Optimisation of multi-part production in additive manufacturing for reducing support waste. Virtual and Physical Prototyping, 2019, 14, 219-228.	5.3	51
82	Recognition of rough machining features in 2D components. CAD Computer Aided Design, 1998, 30, 503-516.	1.4	48
83	Support Optimization for Flat Features via Path Planning in Additive Manufacturing. 3D Printing and Additive Manufacturing, 2019, 6, 171-179.	1.4	48
84	An Open CNC System Based on Component Technology. IEEE Transactions on Automation Science and Engineering, 2009, 6, 302-310.	3.4	47
85	A roadmap for STEP-NC-enabled interoperable manufacturing. International Journal of Advanced Manufacturing Technology, 2013, 68, 1023-1037.	1.5	46
86	Achieving better connections between deposited lines in additive manufacturing via machine learning. Mathematical Biosciences and Engineering, 2020, 17, 3382-3394.	1.0	46
87	Run-time interpretation of STEP-NC: implementation and performance. International Journal of Computer Integrated Manufacturing, 2006, 19, 495-507.	2.9	45
88	The Degree of Mass Personalisation under Industry 4.0. Procedia CIRP, 2019, 81, 1394-1399.	1.0	45
89	An automatic method for constructing machining process knowledge base from knowledge graph. Robotics and Computer-Integrated Manufacturing, 2022, 73, 102222.	6.1	45
90	Research into integrated design and manufacturing based on STEP. International Journal of Advanced Manufacturing Technology, 2009, 44, 606-624.	1.5	44

#	Article	IF	Citations
91	A Survey Study on Industry 4.0 for New Zealand Manufacturing. Procedia Manufacturing, 2018, 26, 49-57.	1.9	44
92	A Digital Twin Reference for Mass Personalization in Industry 4.0. Procedia CIRP, 2020, 93, 228-233.	1.0	44
93	Framework of a Product Lifecycle Costing System. Journal of Computing and Information Science in Engineering, 2006, 6, 69-77.	1.7	43
94	Advanced Design and Manufacturing Based on STEP. Springer Series in Advanced Manufacturing, 2009, , .	0.2	43
95	A decision support system for additive manufacturing process selection using a hybrid multiple criteria decision-making method. Rapid Prototyping Journal, 2018, 24, 1544-1553.	1.6	43
96	Production planning for cloud-based additive manufacturingâ€"A computer vision-based approach. Robotics and Computer-Integrated Manufacturing, 2019, 58, 145-157.	6.1	43
97	Adaptive reconstruction of digital twins for machining systems: A transfer learning approach. Robotics and Computer-Integrated Manufacturing, 2022, 78, 102390.	6.1	40
98	Modelling machine tool data in support of STEP-NC based manufacturing. International Journal of Computer Integrated Manufacturing, 2008, 21, 745-763.	2.9	39
99	Enabling cognitive manufacturing through automated on-machine measurement planning and feedback. Advanced Engineering Informatics, 2010, 24, 269-284.	4.0	39
100	Extended study of network capability for cloud based control systems. Robotics and Computer-Integrated Manufacturing, 2017, 43, 89-95.	6.1	39
101	An interoperable energy consumption analysis system for CNC machining. Journal of Cleaner Production, 2017, 140, 1828-1841.	4.6	39
102	An augmented Lagrangian coordination method for optimal allocation of cloud manufacturing services. Journal of Manufacturing Systems, 2018, 48, 122-133.	7.6	39
103	Machining process-oriented monitoring method based on digital twin via augmented reality. International Journal of Advanced Manufacturing Technology, 2021, 113, 3491-3508.	1.5	39
104	Multi-scale evolution mechanism and knowledge construction of a digital twin mimic model. Robotics and Computer-Integrated Manufacturing, 2021, 71, 102123.	6.1	39
105	A Knowledge Management System to Support Design for Additive Manufacturing Using Bayesian Networks. Journal of Mechanical Design, Transactions of the ASME, 2018, 140, .	1.7	38
106	Operator 4.0 or Maker 1.0? Exploring the implications of Industrie 4.0 for innovation, safety and quality of work in small economies and enterprises. Computers and Industrial Engineering, 2020, 139, 105486.	3.4	38
107	User-experience Based Product Development for Mass Personalization: A Case Study. Procedia CIRP, 2017, 63, 2-7.	1.0	36
108	Digitalisation and servitisation of machine tools in the era of Industry 4.0: a review. International Journal of Production Research, 2023, 61, 4069-4101.	4.9	36

#	Article	IF	Citations
109	ICMS: A Cloud-Based Manufacturing System. Springer Series in Advanced Manufacturing, 2013, , 1-22.	0.2	35
110	A support interface method for easy part removal in directed energy deposition. Manufacturing Letters, 2019, 20, 30-33.	1.1	35
111	Humans Are Not Machinesâ€"Anthropocentric Humanâ€"Machine Symbiosis for Ultra-Flexible Smart Manufacturing. Engineering, 2021, 7, 734-737.	3.2	35
112	Industry 4.0 and Cloud Manufacturing: A Comparative Analysis. , 2016, , .		34
113	MTConnect-based Cyber-Physical Machine Tool: a case study. Procedia CIRP, 2018, 72, 492-497.	1.0	34
114	A system framework for OKP product planning in a cloud-based design environment. Robotics and Computer-Integrated Manufacturing, 2017, 45, 73-85.	6.1	33
115	The Framework of a Cloud-based CNC System. Procedia CIRP, 2017, 63, 82-88.	1.0	33
116	Technology selection methods and applications in manufacturing: A review from 1990 to 2017. Computers and Industrial Engineering, 2019, 138, 106123.	3.4	33
117	A comprehensive review on recent developments in quality function deployment. International Journal of Productivity and Quality Management, 2010, 6, 457.	0.1	32
118	A weighted rough set based fuzzy axiomatic design approach for the selection of AM processes. International Journal of Advanced Manufacturing Technology, 2017, 91, 1977-1990.	1.5	32
119	Development of an edge computing-based cyber-physical machine tool. Robotics and Computer-Integrated Manufacturing, 2021, 67, 102042.	6.1	32
120	A reconfigurable platform in support of one-of-a-kind product development. International Journal of Production Research, 2005, 43, 1889-1910.	4.9	31
121	Data cleansing for energy-saving: a case of Cyber-Physical Machine Tools health monitoring system. International Journal of Production Research, 2018, 56, 1000-1015.	4.9	31
122	Configuration Design of the Add-on Cyber-physical System with CNC Machine Tools and its Application Perspectives. Procedia CIRP, 2016, 56, 360-365.	1.0	30
123	Dimensional metrology interoperability and standardization in manufacturing systems. Computer Standards and Interfaces, 2011, 33, 541-555.	3.8	29
124	Numerical control machining simulation: a comprehensive survey. International Journal of Computer Integrated Manufacturing, 2011, 24, 593-609.	2.9	29
125	Smart AGV System for Manufacturing Shopfloor in the Context of Industry 4.0. , 2018, , .		29
126	Intelligent feature recognition for STEP-NC-compliant manufacturing based on artificial bee colony algorithm and back propagation neural network. Journal of Manufacturing Systems, 2022, 62, 792-799.	7.6	29

#	Article	IF	Citations
127	Machining precedence of 2Â½D interacting features in a feature-based data model. Journal of Intelligent Manufacturing, 2011, 22, 145-161.	4.4	28
128	An end-to-end tabular information-oriented causality event evolutionary knowledge graph for manufacturing documents. Advanced Engineering Informatics, 2021, 50, 101441.	4.0	28
129	Toward interoperable CNC manufacturing. International Journal of Computer Integrated Manufacturing, 2008, 21, 222-230.	2.9	27
130	Defining, recognizing and representing feature interactions in a feature-based data model. Robotics and Computer-Integrated Manufacturing, 2011, 27, 101-114.	6.1	26
131	Data mining based multi-level aggregate service planning for cloud manufacturing. Journal of Intelligent Manufacturing, 2018, 29, 1351-1361.	4.4	26
132	STEP in a Nutshell. Springer Series in Advanced Manufacturing, 2009, , 1-22.	0.2	25
133	Incorporating Quality Function Deployment with modularity for the end-of-life of a product family. Journal of Cleaner Production, 2015, 87, 423-430.	4.6	24
134	A STEP-compliant process planning system for sheet metal parts. International Journal of Computer Integrated Manufacturing, 2006, 19, 627-638.	2.9	23
135	Adaptive execution of an NC program with feed rate optimization. International Journal of Advanced Manufacturing Technology, 2012, 63, 1117-1130.	1.5	23
136	STEP-compliant process planning and manufacturing. International Journal of Computer Integrated Manufacturing, 2006, 19, 491-494.	2.9	22
137	Spectral resonance of nanoscale bowtie apertures in visible wavelength. Applied Physics A: Materials Science and Processing, 2007, 89, 293-297.	1.1	22
138	Ontology for manufacturing resources in a cloud environment. International Journal of Manufacturing Research, 2014, 9, 448.	0.1	22
139	A novel strategy for multi-part production in additive manufacturing. International Journal of Advanced Manufacturing Technology, 2020, 109, 1237-1248.	1.5	22
140	Industrial Internet-enabled Resilient Manufacturing Strategy in the Wake of COVID-19 Pandemic: A Conceptual Framework and Implementations in China. Chinese Journal of Mechanical Engineering (English Edition), 2021, 34, .	1.9	22
141	Semantic-aware event link reasoning over industrial knowledge graph embedding time series data. International Journal of Production Research, 2023, 61, 4117-4134.	4.9	22
142	Virtualise manufacturing capabilities in the cloud: requirements, architecture and implementation. International Journal of Manufacturing Research, 2014, 9, 348.	0.1	21
143	Dealing with feature interactions for prismatic parts in STEP-NC. Journal of Intelligent Manufacturing, 2009, 20, 431-445.	4.4	20
144	A CNC system based on real-time Ethernet and Windows NT. International Journal of Advanced Manufacturing Technology, 2013, 65, 1383-1395.	1.5	20

#	Article	IF	Citations
145	Achieving Cognitive Mass Personalization via the Self-X Cognitive Manufacturing Network: An Industrial Knowledge Graph- and Graph Embedding-Enabled Pathway. Engineering, 2023, 22, 14-19.	3.2	20
146	A collaborative product data exchange environment based on STEP. International Journal of Computer Integrated Manufacturing, 2015, 28, 75-86.	2.9	19
147	Cloud manufacturing in China: a review. International Journal of Computer Integrated Manufacturing, 2020, 33, 229-251.	2.9	19
148	Function block-based closed-loop adaptive machining for assembly interfaces of large-scale aircraft components. Robotics and Computer-Integrated Manufacturing, 2020, 66, 101994.	6.1	19
149	Multi-Agent Reinforcement Learning for Real-Time Dynamic Production Scheduling in a Robot Assembly Cell. IEEE Robotics and Automation Letters, 2022, 7, 7684-7691.	3.3	19
150	Product traceability in manufacturing: A technical review. Procedia CIRP, 2020, 93, 700-705.	1.0	18
151	STEP-NC based high-level machining simulations integrated with CAD/CAPP/CAM. International Journal of Automation and Computing, 2012, 9, 506-517.	4.5	17
152	A delayed product differentiation model for cloud manufacturing. Computers and Industrial Engineering, 2018, 117, 60-70.	3.4	17
153	From Open CNC Systems to Cyber-Physical Machine Tools: A Case Study. Procedia CIRP, 2018, 72, 1270-1276.	1.0	17
154	Price forecasting using an ACO-based support vector regression ensemble in cloud manufacturing. Computers and Industrial Engineering, 2018, 125, 171-177.	3.4	17
155	Information Modeling for Interoperable Dimensional Metrology. , 2011, , .		16
156	A machining accuracy informed adaptive positioning method for finish machining of assembly interfaces of large-scale aircraft components. Robotics and Computer-Integrated Manufacturing, 2021, 67, 102021.	6.1	16
157	A hybrid 3D feature recognition method based on rule and graph. International Journal of Computer Integrated Manufacturing, 2021, 34, 257-281.	2.9	16
158	An Implementation of OPC UA for Machine-to-Machine Communications in a Smart Factory. Procedia Manufacturing, 2021, 53, 52-58.	1.9	16
159	Towards High-Fidelity Machining Simulation. Journal of Manufacturing Systems, 2011, 30, 175-186.	7.6	15
160	A holistic approach to achieving energy efficiency for interoperable machining systems. International Journal of Sustainable Engineering, 2014, 7, 111-129.	1.9	15
161	A hybrid approach to energy-efficient machining for milled components via STEP-NC. International Journal of Computer Integrated Manufacturing, 2018, 31, 442-456.	2.9	15
162	Manufacturing service reliability assessment in cloud manufacturing. Procedia CIRP, 2018, 72, 940-946.	1.0	15

#	Article	IF	Citations
163	Cloud-based approach for smart product personalization. Procedia CIRP, 2018, 72, 922-927.	1.0	15
164	Assembly validation in virtual realityâ€"a demonstrative case. International Journal of Advanced Manufacturing Technology, 2019, 105, 3579-3592.	1.5	15
165	Determination of finishing features in 2Â½ D components. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 1997, 211, 125-142.	1.5	14
166	VR-based Product Personalization Process for Smart Products. Procedia Manufacturing, 2017, 11, 1568-1576.	1.9	14
167	A Technology Selection Framework for Manufacturing Companies in the Context of Industry 4.0. , 2018, , .		14
168	Effect of Extrusion Temperature on Printable Threshold Overhang in Additive Manufacturing. Procedia CIRP, 2019, 81, 1376-1381.	1.0	14
169	An automatic machining process decision-making system based on knowledge graph. International Journal of Computer Integrated Manufacturing, 2021, 34, 1348-1369.	2.9	14
170	Development of a G-Code Free, STEP-Compliant CNC Lathe. , 2004, , 75.		12
171	Using behavioral modeling technology to capture designer's intent. Computers in Human Behavior, 2005, 21, 395-405.	5.1	12
172	Experimental Investigation of the Surface Roughness of Finish-Machined High-Volume-Fraction SiCp/Al Composites. Arabian Journal for Science and Engineering, 2020, 45, 5399-5406.	1.7	12
173	STEP-compliant process planning system for compound sheet metal machining. International Journal of Production Research, 2008, 46, 25-50.	4.9	11
174	A novel CNC system for turning operations based on a high-level data model. International Journal of Advanced Manufacturing Technology, 2009, 43, 323-336.	1.5	11
175	An image-processing system for the measurement of the dimensions of natural fibre cross-section. International Journal of Computer Applications in Technology, 2009, 34, 115.	0.3	11
176	STEPNCMillUoA: a CNC system based on STEP-NC and Function Block architecture. International Journal of Mechatronics and Manufacturing Systems, 2009, 2, 3.	0.1	11
177	Model-based manufacturing based on STEP AP242. , 2016, , .		11
178	A Sensor Based Monitoring System for Real-Time Quality Control: Semi-Automatic Arc Welding Case Study. Procedia Manufacturing, 2020, 51, 201-206.	1.9	11
179	Automatic Extraction of Engineering Rules From Unstructured Text: A Natural Language Processing Approach. Journal of Computing and Information Science in Engineering, 2020, 20, .	1.7	11
180	Object Boundary Encoding â€" a new vectorisation algorithm for engineering drawings. Computers in Industry, 2001, 46, 65-74.	5.7	10

#	Article	IF	Citations
181	Digital Twin Technology â€" A bibliometric study of top research articles based on Local Citation Score. Journal of Manufacturing Systems, 2022, 64, 390-408.	7.6	9
182	Process and Production Planning in a Cloud Manufacturing Environment. , 2015, , .		8
183	Standards for Smart Manufacturing: A review. , 2019, , .		8
184	STEP-NC Enabled Machine Tool Digital Twin. Procedia CIRP, 2020, 93, 1460-1465.	1.0	8
185	A machined substrate hybrid additive manufacturing strategy for injection moulding inserts. International Journal of Advanced Manufacturing Technology, 2021, 112, 577-588.	1.5	8
186	Service-oriented, cross-platform and high-level machining simulation. International Journal of Computer Integrated Manufacturing, 2012, 25, 280-295.	2.9	7
187	A new high-performance open CNC system and its energy-aware scheduling algorithm. International Journal of Advanced Manufacturing Technology, 2017, 93, 1513-1525.	1.5	7
188	Human Cyber-Physical Systems: A skill-based correlation between humans and machines. , 2020, , .		7
189	A Data-Driven Machining Error Analysis Method for Finish Machining of Assembly Interfaces of Large-Scale Components. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2021, 143, .	1.3	7
190	Bonding integrity of hybrid 18Ni300-17-4 PH steel using the laser powder bed fusion process for the fabrication of plastic injection mould inserts. International Journal of Advanced Manufacturing Technology, 2022, 120, 4963-4976.	1.5	7
191	Contemporary technologies for 3D digitization of Maori and Pacific Island artifacts. International Journal of Imaging Systems and Technology, 2009, 19, 244-259.	2.7	6
192	Five-axis machining: technologies and challenges. International Journal of Manufacturing Research, 2010, 5, 327.	0.1	6
193	Hawkeye: Open source framework for field surveillance. , 2017, , .		6
194	Architecture of a Cloud-Based Control System Decentralised at Field Level. , 2018, , .		6
195	Decentralized coordination of autonomous AGVs for flexible factory automation in the context of Industry 4.0. , 2020, , .		6
196	A Reference Human-centric Architecture Model: a skill-based approach for education of future workforce. Procedia Manufacturing, 2020, 48, 1094-1101.	1.9	6
197	Variable structure control of high-speed parallel manipulator considering the mechatronics coupling model. International Journal of Advanced Manufacturing Technology, 2007, 34, 1037-1051.	1.5	5
198	The State of the Art in Energy Consumption Model â€" The Key to Sustainable Machining. Applied Mechanics and Materials, 0, 232, 592-599.	0.2	5

#	Article	IF	Citations
199	A STEP-compliant computer numerical control based on real-time Ethernet for circuit boardmilling. International Journal of Computer Integrated Manufacturing, 2012, 25, 1151-1164.	2.9	5
200	FuzEmotion as a backward kansei engineering tool. International Journal of Automation and Computing, 2012, 9, 16-23.	4.5	5
201	A New Paradigm Shift for Manufacturing Businesses. , 2013, , .		5
202	Cloud Manufacturing in Support of Sustainability. , 2014, , .		5
203	Evaluation and comparison of lubrication methods in finish machining of hardened steel mould inserts. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2017, 231, 2458-2467.	1.5	5
204	Enterprises in Cloud Manufacturing: A Preliminary Exploration. , 2017, , .		5
205	A framework for scheduling in cloud manufacturing with deep reinforcement learning. , 2019, , .		5
206	User-centered information provision of Cyber-Physical Machine Tools. Procedia CIRP, 2020, 93, 1546-1551.	1.0	5
207	Smart and resilient manufacturing in the wake of COVID-19. Journal of Manufacturing Systems, 2021, 60, 707-708.	7.6	5
208	Information Sharing in Digital Manufacturing Based on STEP and XML. , 2009, , 293-316.		5
209	Tool Selection: A Cloud-Based Approach. Lecture Notes in Electrical Engineering, 2014, , 237-245.	0.3	5
210	Intelligent STEP-NC-compliant setup planning method. Journal of Manufacturing Systems, 2022, 62, 62-75.	7.6	5
211	Greentelligence: Smart Manufacturing for a Greener Future. Chinese Journal of Mechanical Engineering (English Edition), 2021, 34, .	1.9	5
212	Environmental impact assessment of bathroom products. International Journal of Environmental Technology and Management, 2003, 3, 166.	0.1	4
213	Making a process plan adaptable to CNCs. International Journal of Computer Applications in Technology, 2006, 26, 49.	0.3	4
214	Development of an integrated reverse engineering system. International Journal of Computer Applications in Technology, 2006, 25, 9.	0.3	4
215	STEP-NC-compliant machine automation to support sawblade stone-cutting machining. International Journal of Manufacturing Research, 2010, 5, 58.	0.1	4
216	A new approach for integrating process planning with scheduling. International Journal of Computer Applications in Technology, 2011, 42, 253.	0.3	4

#	Article	IF	Citations
217	Energy consumption evaluation for sustainable manufacturing: A feature-based approach. , 2014, , .		4
218	A weighted preference graph approach to analyze incomplete customer preference information in QFD product planning. , 2016, , .		4
219	Special issue on â€˜Cyber-physical product creation for Industry 4.0â€™. International Journal of Computer Integrated Manufacturing, 2018, 31, 611-611.	2.9	4
220	Sustainable cybernetic manufacturing. International Journal of Production Research, 2019, 57, 3799-3801.	4.9	4
221	Evaluation of bonding integrity of hybrid-built AlSi10Mg-aluminium alloys parts using the powder bed fusion process. Materials Today: Proceedings, 2021, 46, 1277-1282.	0.9	4
222	Smart manufacturing based on Digital Twin technologies. , 2020, , 77-122.		4
223	Study of surface and bulk instabilities in MHD duct flow with imitation of insulator coating imperfections. Fusion Engineering and Design, 2006, 81, 491-497.	1.0	3
224	An Integrated Process Planning System Architecture for Machining and On-Machine Inspection. , 2008, , .		3
225	Reactive Process Planning: Incorporating Machining, Inspection, and Feedback. , 2009, , .		3
226	Machining simulation – a technical review and a proposed concept model. International Journal of Internet Manufacturing and Services, 2011, 3, 59.	0.2	3
227	Integration of machining and inspection. International Journal of Computer Aided Engineering and Technology, 2012, 4, 1.	0.1	3
228	Virtualize Manufacturing Capabilities in the Cloud: Requirements and Architecture. , 2013, , .		3
229	A concerted endeavour toward intelligent machining solutions. International Journal of Materials and Product Technology, 2014, 48, 95.	0.1	3
230	Special Section: Advances and Challenges in Cloud Manufacturing. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2015, 137, .	1.3	3
231	A Personalized Attribute Determination Process in a Cloud-Based Adaptable Product Configurator. , 2017, , .		3
232	Design for Additive Manufacturing in the Cloud Platform. , 2017, , .		3
233	Requirements for a cloud-based control system interacting with soft bodies. , 2017, , .		3
234	Factor reduction of quotation with rough set on incomplete data. Procedia Manufacturing, 2020, 48, 18-23.	1.9	3

#	Article	IF	Citations
235	Editorial Notes: Design innovation of Smart PSS. Advanced Engineering Informatics, 2020, 44, 101069.	4.0	3
236	Development of STEP-NC Compliant Machine Tool Data Model. , 2007, , 35-40.		3
237	Study of network capability for cloud based control systems. , 2014, , .		3
238	Digital Twin Enabled Mass Personalization: A Case Study of a Smart Wetland Maintenance System. , 2020, , .		3
239	A Smart Manufacturing Cell with Distributed Intelligence. Procedia CIRP, 2021, 104, 1912-1917.	1.0	3
240	Computerising scanned engineering documents. Computers in Industry, 2000, 42, 59-71.	5.7	2
241	Digital Product Information Sharing Based on STEP and XML. , 2008, , .		2
242	Feature-based machining using function block technology. , 2009, , .		2
243	STEP-Compliant NC Simulation System Modeling. Applied Mechanics and Materials, 0, 16-19, 683-687.	0.2	2
244	Life cycle assessment of products made of composite materials. International Journal of Product Lifecycle Management, 2009, 4, 11.	0.1	2
245	Notice of Retraction: Understanding the STEP-NC data model for computer numerical control. , 2010, , .		2
246	Realization CNC Controller Enable Machine Condition Monitoring Architecture Based on STEP-NC Data Model. Advanced Materials Research, 0, 383-390, 990-994.	0.3	2
247	Development of a surface roughness predictive model for STEP-compliant machining optimisation. International Journal of Computer Aided Engineering and Technology, 2012, 4, 206.	0.1	2
248	Virtual Function Block Mechanism in the Cloud Manufacturing Environment. Advanced Materials Research, 2013, 694-697, 2438-2441.	0.3	2
249	Cloud manufacturing for a service-oriented paradigm shift. , 2014, , .		2
250	Protecting Intellectual Property in a Cloud Manufacturing Environment: Requirements and Strategies. IFIP Advances in Information and Communication Technology, 2015, , 404-411.	0.5	2
251	Integrate Product Planning Process of OKP Companies in the Cloud Manufacturing Environment. IFIP Advances in Information and Communication Technology, 2015, , 420-426.	0.5	2
252	Cloud Manufacturing: An Industry Survey. , 2016, , .		2

#	Article	IF	Citations
253	Product-Service Family Enabled Product Configuration System for Cloud Manufacturing. , 2017, , .		2
254	A novel AHP-TOPSIS integrated method for case-based retrieval in mechanical product design. International Journal of Product Development, 2017, 22, 212.	0.2	2
255	Special issue on sustainability with innovation for manufacturing and supply chain management. International Journal of Production Research, 2020, 58, 7311-7313.	4.9	2
256	STEPNC++ â€“ An Effective Tool for Feature-based CAM/CNC. Springer Series in Advanced Manufacturing, 2009, , 79-104.	0.2	2
257	Development of a Product Configuration System for Cloud Manufacturing. IFIP Advances in Information and Communication Technology, 2015, , 436-443.	0.5	2
258	An interoperable knowledge base for manufacturing resource and service capability. International Journal of Manufacturing Research, 2017, 12, 20.	0.1	2
259	LMPF: A novel method for bill of standard manufacturing services construction in cloud manufacturing. Journal of Manufacturing Systems, 2022, 62, 402-416.	7.6	2
260	ProEmotion: A Tool to Tell Mobile Phoneâ€™s Gender. , 2010, , .		1
261	An integrated dual resource management and production planning system. , 2010, , .		1
262	A Statistic Review of Computer-Aided Process Planning Research. , 2010, , .		1
263	Development of a web-based quality function deployment system. International Journal of Internet Manufacturing and Services, 2011, 3, 16.	0.2	1
264	Interoperable STEP-NC Enabled Process Planning for Intelligent Machining. Advanced Materials Research, 2011, 211-212, 850-855.	0.3	1
265	An Experimental Study on Multiple Acoustic Venting for Hearing Aid Applications. Acta Acustica United With Acustica, 2013, 99, 598-606.	0.8	1
266	Spatial Design of Hearing Aids Incorporating Multiple Vents. Trends in Hearing, 2014, 18, 233121651452918.	0.7	1
267	Machine Learning to Empower a Cyber-Physical Machine Tool. , 2020, , .		1
268	Solving scheduling problems for a non-permutation assembly flow shop. , 2020, , .		1
269	Edge Computing Enhanced Digital Twins for Smart Manufacturing. , 2021, , .		1
270	Product Definition and Dimensional Metrology Systems. , 2011, , 53-118.		1

#	Article	IF	Citations
271	High-Level Dimensional Metrology Process Planning. , 2011, , 119-164.		1
272	STEP into Distributed Manufacturing with STEP-NC. , 2007, , 393-421.		1
273	STEP-NC to Complete Product Development Chain. , 2006, , 148-184.		1
274	Internet-Based Integration. , 2009, , 311-325.		1
275	CNC Machine Tools. , 2009, , 165-187.		1
276	Integration Based on STEP Standards. , 2009, , 246-265.		1
277	Integrating CAD/CAPP/CAM/CNC with Inspections. , 2009, , 297-310.		1
278	From CAD/CAPP/CAM/CNC to PDM, PLM and Beyond. , 2009, , 326-353.		1
279	Integration of CAD/CAPP/CAM/CNC. , 2009, , 231-245.		1
280	Dimensional Metrology for Manufacturing Quality Control. , 2011, , 275-307.		1
281	ProEmotionâ€"A Tool to Tell Mobile Phoneâ€™s Gender. , 2013, , 95-106.		1
282	A Modeling Framework for Resource Service Sharing in a Cloud Manufacturing System. IFIP Advances in Information and Communication Technology, 2015, , 412-419.	0.5	1
283	Factor selection of product quotation with incomplete covering rough set. International Journal of Production Research, 2023, 61, 1298-1312.	4.9	1
284	Smart Machining Simulation Based on High-Level Data. , 2010, , .		0
285	A Roadmap for STEP-NC Enabled Interoperable Manufacturing. , 2011, , .		0
286	A New System for Resource Capability Evaluation. , 2011, , .		0
287	A STEP-based product knowledge model for One-of-a-Kind Production. , 2012, , .		0
288	Development of a Smart Computer Numerical Control System. , 2013, , .		0

#	Article	IF	Citations
289	Interactive virtual machining system using informative data structure and on-site machine tool status. , 2014, , .		0
290	Plasmon excitation on a thin metal-film grating: Profile effect and applications. , 2016, , .		0
291	Pricing Method for Service-Oriented Manufacturing With Support Vector Machine. , 2017, , .		0
292	Editorial for the Special Issue on Intelligent Manufacturing Technologies and Systems. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2017, 231, 2445-2446.	1.5	0
293	An Approach to Complete Product Definition Using STEP in Cloud Manufacturing. , 2018, , .		0
294	Dimension Set Recognition Methodologies. , 2003, , .		0
295	Program CNCs. , 2009, , 188-229.		0
296	Feature Interactions. , 2009, , 109-125.		0
297	Geometric Modelling and Computer-Aided Design. , 2009, , 1-31.		0
298	CAD Data Exhange and CAD Standards. , 2009, , 32-53.		0
299	Computer-Aided Process Planning and Manufacturing. , 2009, , 54-74.		0
300	Feature Recognition. , 2009, , 90-108.		0
301	Feature Technology. , 2009, , 75-89.		0
302	Development of an Integrated, Adaptable CNC System. , 2009, , 283-296.		0
303	Key Enabling Technologies. , 2009, , 354-393.		0
304	Function Block-Enabled Integration. , 2009, , 266-282.		0
305	Integrated Feature Technolog. , 2009, , 126-164.		0
306	Merging Machining and Measurement for Cognitive Manufacturing. , 2010, , .		0

#	Article	IF	Citations
307	Low-Level Dimensional Metrology Process Planning and Execution. , 2011, , 165-207.		0
308	Quality Data Analysis and Reporting. , 2011, , 209-252.		0
309	Practices of Information Modeling. , 2011, , 21-52.		0
310	Dimensional Metrology Interoperability Issues. , 2011, , 253-273.		0
311	Outlook for the Future of Dimensional Metrology Systems Interoperability. , 2011, , 309-324.		0
312	Energy-Efficient Machining via Energy Data Integration. IFIP Advances in Information and Communication Technology, 2013, , 17-24.	0.5	0
313	FuzEmotion-A Backward Kansei Engineering Based Tool for Assessing and Confirming Gender Inclination of Modern Cellular Phones. , 2013, , 73-93.		0
314	Toward a Cognitive Assembly System. , 2013, , 140-161.		0
315	Auto-recovery from machining stoppages based on STEP-NC. , 2014, , .		0
316	Manufacturing Systems. , 2019, , 609-708.		0
317	A Stochastic Optimization Model for a Joint Pricing and Resource Allocation Problem. , 2020, , .		0
318	STEP-NC to Complete Product Development Chain. , 0, , .		0
319	Integrated Feature Technolog. , 0, , .		0
320	CNC Machine Tools. , 0, , .		0
321	Function Block-Enabled Integration. , 0, , .		0
322	Development of an Integrated, Adaptable CNC System. , 0, , .		0
323	Integrating CAD/CAPP/CAM/CNC with Inspections. , 0, , .		0
324	Internet-Based Integration. , 0, , .		0

#	Article	IF	Citations
325	From CAD/CAPP/CAM/CNC to PDM, PLM and Beyond. , 0, , .		0
326	Key Enabling Technologies. , 0, , .		0