

Stephen T Newman

List of Publications by Citations

Source: <https://exaly.com/author-pdf/8695244/stephen-t-newman-publications-by-citations.pdf>

Version: 2024-04-29

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

138
papers

8,264
citations

37
h-index

90
g-index

152
ext. papers

9,620
ext. citations

5.1
avg, IF

6.58
L-index

#	Paper	IF	Citations
138	State of the art electrical discharge machining (EDM). <i>International Journal of Machine Tools and Manufacture</i> , 2003 , 43, 1287-1300	9.4	1019
137	Intelligent Manufacturing in the Context of Industry 4.0: A Review. <i>Engineering</i> , 2017 , 3, 616-630	9.7	1017
136	Environmentally conscious machining of difficult-to-machine materials with regard to cutting fluids. <i>International Journal of Machine Tools and Manufacture</i> , 2012 , 57, 83-101	9.4	487
135	State of the art in wire electrical discharge machining (WEDM). <i>International Journal of Machine Tools and Manufacture</i> , 2004 , 44, 1247-1259	9.4	486
134	Big Data for supply chain management in the service and manufacturing sectors: Challenges, opportunities, and future perspectives. <i>Computers and Industrial Engineering</i> , 2016 , 101, 572-591	6.4	297
133	Computer-aided process planning – A critical review of recent developments and future trends. <i>International Journal of Computer Integrated Manufacturing</i> , 2011 , 24, 1-31	4.3	243
132	Development of design for remanufacturing guidelines to support sustainable manufacturing. <i>Robotics and Computer-Integrated Manufacturing</i> , 2007 , 23, 712-719	9.2	236
131	Hybrid additive and subtractive machine tools – Research and industrial developments. <i>International Journal of Machine Tools and Manufacture</i> , 2016 , 101, 79-101	9.4	225
130	Cryogenic manufacturing processes. <i>CIRP Annals - Manufacturing Technology</i> , 2016 , 65, 713-736	4.9	225
129	Invited review article: Strategies and processes for high quality wire arc additive manufacturing. <i>Additive Manufacturing</i> , 2018 , 22, 672-686	6.1	220
128	Making CNC machine tools more open, interoperable and intelligent – A review of the technologies. <i>Computers in Industry</i> , 2006 , 57, 141-152	11.6	203
127	Energy efficient process planning for CNC machining. <i>CIRP Journal of Manufacturing Science and Technology</i> , 2012 , 5, 127-136	3.4	193
126	SPECIES – Co-evolution of products, processes and production systems. <i>CIRP Annals - Manufacturing Technology</i> , 2010 , 59, 672-693	4.9	185
125	Investigation of the effects of cryogenic machining on surface integrity in CNC end milling of Ti-6Al-4V titanium alloy. <i>Journal of Manufacturing Processes</i> , 2016 , 21, 172-179	5	172
124	STEP-compliant NC research: the search for intelligent CAD/CAPP/CAM/CNC integration. <i>International Journal of Production Research</i> , 2005 , 43, 3703-3743	7.8	171
123	A review of hybrid manufacturing processes – State of the art and future perspectives. <i>International Journal of Computer Integrated Manufacturing</i> , 2013 , 26, 596-615	4.3	153
122	Development of robust design-for-remanufacturing guidelines to further the aims of sustainable development. <i>International Journal of Production Research</i> , 2007 , 45, 4513-4536	7.8	146

121	Process planning for additive and subtractive manufacturing technologies. <i>CIRP Annals - Manufacturing Technology</i> , 2015 , 64, 467-470	4.9	126
120	Strategic advantages of interoperability for global manufacturing using CNC technology. <i>Robotics and Computer-Integrated Manufacturing</i> , 2008 , 24, 699-708	9.2	125
119	State-of-the-art cryogenic machining and processing. <i>International Journal of Computer Integrated Manufacturing</i> , 2013 , 26, 616-648	4.3	123
118	RFID-enabled real-time wireless manufacturing for adaptive assembly planning and control. <i>Journal of Intelligent Manufacturing</i> , 2008 , 19, 701-713	6.7	115
117	A review of the modern approaches to multi-criteria cell design. <i>International Journal of Production Research</i> , 2000 , 38, 1201-1218	7.8	101
116	Hybrid cryogenic MQL for improving tool life in machining of Ti-6Al-4V titanium alloy. <i>Journal of Manufacturing Processes</i> , 2019 , 43, 229-243	5	85
115	Wireless manufacturing: a literature review, recent developments, and case studies. <i>International Journal of Computer Integrated Manufacturing</i> , 2009 , 22, 579-594	4.3	77
114	CAD/CAM solutions for STEP-compliant CNC manufacture. <i>International Journal of Computer Integrated Manufacturing</i> , 2003 , 16, 590-597	4.3	74
113	A Unified Manufacturing Resource Model for representing CNC machining systems. <i>Robotics and Computer-Integrated Manufacturing</i> , 2009 , 25, 999-1007	9.2	69
112	An Initial Study of the Effect of Using Liquid Nitrogen Coolant on the Surface Roughness of Inconel 718 Nickel-Based Alloy in CNC Milling. <i>Procedia CIRP</i> , 2012 , 3, 121-125	1.8	66
111	The application of multi-agent systems for STEP-NC computer aided process planning of prismatic components. <i>International Journal of Machine Tools and Manufacture</i> , 2006 , 46, 559-574	9.4	61
110	Cost Modelling and Sensitivity Analysis of Wire and Arc Additive Manufacturing. <i>Procedia Manufacturing</i> , 2017 , 11, 650-657	1.5	54
109	Coordinating pricing and inventory decisions in a multi-level supply chain: A game-theoretic approach. <i>Transportation Research, Part E: Logistics and Transportation Review</i> , 2011 , 47, 115-129	9	52
108	Energy conscious cryogenic machining of Ti-6Al-4V titanium alloy. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2018 , 232, 1690-1706	2.4	46
107	Feature recognition from CNC part programs for milling operations. <i>International Journal of Advanced Manufacturing Technology</i> , 2014 , 70, 397-412	3.2	41
106	Application of a hybrid process for high precision manufacture of difficult to machine prismatic parts. <i>International Journal of Advanced Manufacturing Technology</i> , 2014 , 74, 1115-1132	3.2	41
105	Universal Manufacturing Platform for CNC Machining. <i>CIRP Annals - Manufacturing Technology</i> , 2007 , 56, 459-462	4.9	40
104	Comparative investigation on using cryogenic machining in CNC milling of Ti-6Al-4V titanium alloy. <i>Machining Science and Technology</i> , 2016 , 20, 475-494	2	39

103	Process control in CNC manufacturing for discrete components: A STEP-NC compliant framework. <i>Robotics and Computer-Integrated Manufacturing</i> , 2007 , 23, 667-676	9.2	39
102	The application of STEP-NC using agent-based process planning. <i>International Journal of Production Research</i> , 2005 , 43, 655-670	7.8	39
101	Manufacturing methodology for personalised symptom-specific sports insoles. <i>Robotics and Computer-Integrated Manufacturing</i> , 2009 , 25, 972-979	9.2	37
100	The development of a novel process planning algorithm for an unconstrained hybrid manufacturing process. <i>Journal of Manufacturing Processes</i> , 2013 , 15, 404-413	5	36
99	Machine tool capability profile for intelligent process planning. <i>CIRP Annals - Manufacturing Technology</i> , 2009 , 58, 421-424	4.9	36
98	Investigation of part distortions as a result of hybrid manufacturing. <i>Robotics and Computer-Integrated Manufacturing</i> , 2016 , 37, 23-32	9.2	33
97	Surface roughness prediction model for CNC machining of polypropylene. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2008 , 222, 137-157	2.4	33
96	An intelligent approach for the prediction of surface roughness in ball-end machining of polypropylene. <i>Robotics and Computer-Integrated Manufacturing</i> , 2008 , 24, 835-842	9.2	33
95	A new software platform to support feature-based process planning for interoperable STEP-NC manufacture. <i>International Journal of Computer Integrated Manufacturing</i> , 2007 , 20, 669-683	4.3	33
94	Systematic modeling and reusing of process knowledge for rapid process configuration. <i>Robotics and Computer-Integrated Manufacturing</i> , 2008 , 24, 763-772	9.2	32
93	Hybrid Cooling and Lubricating Technology for CNC Milling of Inconel 718 Nickel Alloy. <i>Procedia Manufacturing</i> , 2017 , 11, 625-632	1.5	31
92	A review of multiple degrees of freedom for additive manufacturing machines. <i>International Journal of Computer Integrated Manufacturing</i> , 2021 , 34, 195-211	4.3	31
91	Realisation of a multi-sensor framework for process monitoring of the wire arc additive manufacturing in producing Ti-6Al-4V parts. <i>International Journal of Computer Integrated Manufacturing</i> , 2018 , 31, 785-798	4.3	30
90	Process comprehension for shopfloor manufacturing knowledge reuse. <i>International Journal of Production Research</i> , 2013 , 51, 7405-7419	7.8	29
89	Toward interoperable CNC manufacturing. <i>International Journal of Computer Integrated Manufacturing</i> , 2008 , 21, 222-230	4.3	26
88	STEP-NC compliant process planning as an enabler for adaptive global manufacturing. <i>Robotics and Computer-Integrated Manufacturing</i> , 2006 , 22, 456-467	9.2	26
87	A STEP-compliant process planning system for CNC turning operations. <i>Robotics and Computer-Integrated Manufacturing</i> , 2011 , 27, 349-356	9.2	25
86	A novel decision-making logic for hybrid manufacture of prismatic components based on existing parts. <i>Journal of Intelligent Manufacturing</i> , 2017 , 28, 131-148	6.7	24

85	Influence of cutting environments on surface integrity and power consumption of austenitic stainless steel. <i>Robotics and Computer-Integrated Manufacturing</i> , 2015 , 36, 60-69	9.2	24
84	A novel methodology for cross-technology interoperability in CNC machining. <i>Robotics and Computer-Integrated Manufacturing</i> , 2013 , 29, 79-87	9.2	22
83	Assessment of interoperability in cloud manufacturing. <i>Robotics and Computer-Integrated Manufacturing</i> , 2020 , 61, 101832	9.2	22
82	Extending analytical target cascading for optimal supply chain network configuration of a product family. <i>International Journal of Computer Integrated Manufacturing</i> , 2009 , 22, 1012-1023	4.3	21
81	A unified manufacturing resource model for representation of computerized numerically controlled machine tools. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2009 , 223, 463-483	2.4	20
80	A STEP compliant knowledge based schema to support shop-floor adaptive automation in dynamic manufacturing environments. <i>CIRP Annals - Manufacturing Technology</i> , 2010 , 59, 441-444	4.9	20
79	Interweaving genetic programming and genetic algorithm for structural and parametric optimization in adaptive platform product customization. <i>Robotics and Computer-Integrated Manufacturing</i> , 2007 , 23, 650-658	9.2	20
78	Distributed scheduling to support mass customization in the shoe industry. <i>International Journal of Computer Integrated Manufacturing</i> , 2004 , 17, 623-632	4.3	20
77	Integrating the CAx process chain for STEP-compliant NC manufacturing of asymmetric parts. <i>International Journal of Computer Integrated Manufacturing</i> , 2006 , 19, 533-545	4.3	18
76	Development of a STEP-compliant inspection framework for discrete components. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2005 , 219, 557-563	2.4	18
75	A mechanistic model of energy consumption in milling. <i>International Journal of Production Research</i> , 2018 , 56, 642-659	7.8	18
74	Manufacturing process analysis with support of workflow modelling and simulation. <i>International Journal of Production Research</i> , 2009 , 47, 1773-1790	7.8	17
73	Simultaneous scheduling of workpieces, fixtures and cutting tools within flexible machining cells. <i>International Journal of Production Research</i> , 1997 , 35, 2379-2396	7.8	17
72	Application of mobile agents in interoperable STEP-NC compliant manufacturing. <i>International Journal of Production Research</i> , 2006 , 44, 4159-4174	7.8	16
71	Strategies to realize decentralized manufacture through hybrid manufacturing platforms. <i>Robotics and Computer-Integrated Manufacturing</i> , 2017 , 43, 68-78	9.2	15
70	Deadlock-free scheduling of an automated manufacturing system using an enhanced colored time resource Petri-net model-based evolutionary endosymbiotic learning automata approach. <i>Flexible Services and Manufacturing Journal</i> , 2007 , 19, 486-515		15
69	Future research directions in the machining of Inconel 718. <i>Journal of Materials Processing Technology</i> , 2021 , 297, 117260	5.3	15
68	A New Cutting Tool Design for Cryogenic Machining of Ti6Al4V Titanium Alloy. <i>Materials</i> , 2019 , 12,	3.5	14

67	Cryogenic High Speed Machining of Cobalt Chromium Alloy. <i>Procedia CIRP</i> , 2016 , 46, 404-407	1.8	14
66	A new algorithm for build time estimation for fused filament fabrication technologies. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2016 , 230, 2214-2228	2.4	14
65	Adiabatic shear band formation as a result of cryogenic CNC machining of elastomers. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2011 , 225, 1482-1492	2.4	14
64	A Structured Approach to the Design of Shoe Lasts. <i>Journal of Engineering Design</i> , 1995 , 6, 149-166	1.8	14
63	Machine tool capability profiles for representing machine tool health. <i>Robotics and Computer-Integrated Manufacturing</i> , 2015 , 34, 70-78	9.2	12
62	A web-based information system to support end-of-life product recovery. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2004 , 218, 1047-1057	2.4	12
61	The adoption of STEP-NC for the manufacture of asymmetric rotational components. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2004 , 218, 1639-1644	2.4	12
60	An information systems architecture for small metal-working companies. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 1998 , 212, 87-103	2.4	12
59	A methodology for the determination of foamed polymer contraction rates as a result of cryogenic CNC machining. <i>Robotics and Computer-Integrated Manufacturing</i> , 2010 , 26, 665-670	9.2	11
58	A framework and data processing for interfacing CNC with AP238. <i>International Journal of Computer Integrated Manufacturing</i> , 2006 , 19, 516-522	4.3	11
57	Design of experiments for the qualification of EVA expansion characteristics. <i>Robotics and Computer-Integrated Manufacturing</i> , 2005 , 21, 412-420	9.2	11
56	A process control system for cryogenic CNC elastomer machining. <i>Robotics and Computer-Integrated Manufacturing</i> , 2011 , 27, 779-784	9.2	10
55	A cooperative coevolutionary algorithm for design of platform-based mass customized products. <i>Journal of Intelligent Manufacturing</i> , 2008 , 19, 507-519	6.7	10
54	Manufacturing data analysis of machine tool errors within a contemporary small manufacturing enterprise. <i>International Journal of Machine Tools and Manufacture</i> , 2002 , 42, 1065-1080	9.4	10
53	Feature-based systems for the design and manufacture of sculptured products. <i>International Journal of Production Research</i> , 1993 , 31, 1441-1452	7.8	10
52	Cryogenic drilling of carbon fibre reinforced plastic with tool consideration. <i>Procedia CIRP</i> , 2019 , 85, 55-60	1.8	9
51	Hybrid cooling and lubricating technology for CNC milling of Inconel 718 nickel alloy. <i>Procedia CIRP</i> , 2018 , 77, 215-218	1.8	8
50	Unified representation of fixtures: clamping, locating and supporting elements in CNC manufacture. <i>International Journal of Production Research</i> , 2011 , 49, 5017-5032	7.8	7

49	A novel process planning approach for hybrid manufacturing consisting of additive, subtractive and inspection processes 2012 ,		7
48	STEP-NC compliant information modelling for wire electrical discharge machining component manufacture. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2005 , 219, 777-784	2.4	7
47	Optimal supplier selection and order allocation for multi-product manufacturing featuring customer flexibility. <i>International Journal of Computer Integrated Manufacturing</i> , 2015 , 28, 729-744	4.3	6
46	A meta-model of computer numerical controlled part programming languages. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2015 , 229, 1243-1257	2.4	6
45	A reactive multi-flow approach to the planning and control of flexible machining facilities. <i>International Journal of Computer Integrated Manufacturing</i> , 2000 , 13, 311-323	4.3	6
44	A techno-health study of the use of cutting fluids and future alternatives 2014 ,		6
43	An Information Model for Process Control on Machine Tools. <i>Advances in Intelligent and Soft Computing</i> , 2010 , 1565-1582		6
42	A new methodology for identifying location errors in 5-axis machine tools using a single ballbar set-up. <i>International Journal of Advanced Manufacturing Technology</i> , 2018 , 99, 53-71	3.2	5
41	Machine loading algorithms for the elimination of tardy jobs in flexible batch machining applications. <i>Journal of Materials Processing Technology</i> , 2000 , 107, 450-458	5.3	5
40	Distributed autonomous real-time planning and control of small to medium enterprises. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 1999 , 213, 475-489	2.4	5
39	A methodology to develop EXPRESS data models. <i>International Journal of Computer Integrated Manufacturing</i> , 1996 , 9, 61-72	4.3	5
38	State-of-The-Art Cooling and Lubrication for Machining Inconel 718. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2021 , 143,	3.3	5
37	On-machine error compensation for right first time manufacture. <i>Procedia Manufacturing</i> , 2019 , 38, 1362-1371	5	5
36	Development of a data model and a prototype information sharing platform for DEMAT machine tools. <i>International Journal of Computer Integrated Manufacturing</i> , 2015 , 28, 364-378	4.3	4
35	Structured approach to the design of a production data analysis facility. Part 1: Conceptual design and information requirements. <i>International Journal of Production Research</i> , 2001 , 39, 2121-2141	7.8	4
34	IT tools to improve the performance of metalworking SMEs. <i>International Journal of Production Research</i> , 2002 , 40, 3589-3604	7.8	4
33	Initial investigation on Surface Integrity when Machining Inconel 718 with Conventional and Electrostatic Lubrication. <i>Procedia CIRP</i> , 2020 , 87, 65-70	1.8	3
32	Determination of Machinability Considering Degradation of Accuracy Over Machine Tool Life Cycle. <i>Procedia CIRP</i> , 2014 , 17, 760-765	1.8	3

31	A STEP-compliant Method for Manufacturing Knowledge Capture. <i>Procedia CIRP</i> , 2014 , 20, 103-108	1.8	3
30	Modeling of machine tools using smart interlocking software blocks. <i>CIRP Annals - Manufacturing Technology</i> , 2012 , 61, 435-438	4.9	3
29	A multi-level modelling system for the design of flexible machining installations. <i>International Journal of Production Research</i> , 1998 , 36, 2355-2376	7.8	3
28	The application of information systems for the design and operation of flexible machining cells. <i>Journal of Intelligent Manufacturing</i> , 1999 , 10, 21-27	6.7	3
27	The future role of DNC in metalworking SMEs. <i>International Journal of Production Research</i> , 1996 , 34, 863-877	7.8	3
26	A Methodology for the Estimation of Build Time for Operation Sequencing in Process Planning for a Hybrid Process. <i>Lecture Notes in Mechanical Engineering</i> , 2013 , 159-171	0.4	3
25	Modelling and Verification of Energy Consumption in CNC Milling. <i>Smart Innovation, Systems and Technologies</i> , 2016 , 123-133	0.5	3
24	Next Generation Safety Footwear. <i>Procedia Manufacturing</i> , 2019 , 38, 1668-1677	1.5	3
23	Through Life Machine Tool Capability Modelling. <i>Procedia Manufacturing</i> , 2018 , 16, 171-178	1.5	3
22	. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2020 , 1-10	7.3	2
21	Optimal cutting conditions towards sustainable machining when slot milling aluminium alloy. <i>Advances in Materials and Processing Technologies</i> , 2016 , 2, 480-489	0.8	2
20	Formal Modelling of Process Planning in Combined Additive and Subtractive Manufacturing 2014 , 171-176		2
19	FEATURE-BASED PROCESS PLANNING FOR INTEROPERABLE STEP-NC MANUFACTURE. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2006 , 39, 825-830		2
18	Bridging the gap between volume and variety oriented production systems for the automotive industry. <i>International Journal of Computer Integrated Manufacturing</i> , 2005 , 18, 408-417	4.3	2
17	The planning and control of manufacturing SMEs. <i>International Journal of Manufacturing Technology and Management</i> , 2001 , 3, 496	0.4	2
16	Structured approach to the design of a production data analysis facility Part 2: Implementation and evaluation. <i>International Journal of Production Research</i> , 2001 , 39, 2407-2429	7.8	2
15	Application of multivariate statistical analysis for CNC milling of large Ti-6Al-4V components. <i>Procedia Manufacturing</i> , 2019 , 38, 800-807	1.5	2
14	Improving Error Models of Machine Tools with Metrology Data. <i>Procedia CIRP</i> , 2016 , 52, 204-209	1.8	1

13	A Novel Product Representation to Highlight Cross-assembly Dependencies and Product Robustness. <i>Procedia CIRP</i> , 2014 , 25, 46-52	1.8	1
12	A Statistic Review of Computer-Aided Process Planning Research 2010 ,		1
11	A NEW SOFTWARE PLATFORM FOR STEP-NC MANUFACTURING APPLICATION DEVELOPMENT. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2006 , 39, 831-836		1
10	Design and Manufacture of Customised Orthotics for Sporting Applications (P62)309-317		1
9	A Surface Roughness and Power Consumption Analysis When Slot Milling Austenitic Stainless Steel in a Dry Cutting Environment. <i>Lecture Notes in Mechanical Engineering</i> , 2013 , 637-649	0.4	1
8	A STEP Compliant Knowledge Based Schema for the Manufacture of Composites in the Aerospace Industry. <i>Advances in Intelligent and Soft Computing</i> , 2010 , 1509-1525		1
7	Computational and experimental investigation of cutting tool geometry in machining titanium Ti-6Al-4V. <i>Procedia CIRP</i> , 2019 , 86, 139-144	1.8	1
6	High-speed milling Inconel 718 using Electrostatic Minimum Quantity Lubrication (EMQL). <i>Procedia CIRP</i> , 2021 , 101, 354-357	1.8	1
5	ConvLSTM deep learning signal prediction for forecasting bending moment for tool condition monitoring. <i>Procedia CIRP</i> , 2022 , 107, 1071-1076	1.8	0
4	The Formation of Adiabatic Shear Bands as a result of Cryogenic CNC Machining of Elastomers 2010 , 235-238		
3	Standardised Process Control System for CNC Manufacturing. <i>Springer Series in Advanced Manufacturing</i> , 2009 , 233-259	0.9	
2	A Novel Information Modelling Approach for Representing Parallel Kinematic Machine Tools. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2009 , 42, 1796-1801		
1	Quality information feedback within a contemporary metalworking smaller manufacturing enterprise. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 1999 , 213, 533-538	2.4	