Tianliang Hu

List of Publications by Year
in descending order

45 papers	1,789 citations	516710 16 h-index	315739 38 g-index
45 all docs	45 docs citations	45 times ranked	1042 citing authors

#	Article	IF	Citations
1	Implementation strategy of physical entity for manufacturing system digital twin. Robotics and Computer-Integrated Manufacturing, 2022, 73, 102259.	9.9	19
2	Posture optimization in robotic machining based on comprehensive deformation index considering spindle weight and cutting force. Robotics and Computer-Integrated Manufacturing, 2022, 74, 102290.	9.9	23
3	Simulation analysis of cutting coolant flow field in fixed and free abrasive combined wire sawing polysilicon. International Journal of Advanced Manufacturing Technology, 2022, 119, 7711.	3.0	1
4	A robotic grasp detection method based on auto-annotated dataset in disordered manufacturing scenarios. Robotics and Computer-Integrated Manufacturing, 2022, 76, 102329.	9.9	7
5	Consistency retention method for CNC machine tool digital twin model. Journal of Manufacturing Systems, 2021, 58, 313-322.	13.9	47
6	Data Construction Method for the Applications of Workshop Digital Twin System. Journal of Manufacturing Systems, 2021, 58, 323-328.	13.9	84
7	Enabling technologies and tools for digital twin. Journal of Manufacturing Systems, 2021, 58, 3-21.	13.9	611
8	Precision Assembly Simulation of Skin Model Shapes Accounting for Contact Deformation and Geometric Deviations for Statistical Tolerance Analysis Method. International Journal of Precision Engineering and Manufacturing, 2021, 22, 975-989.	2.2	8
9	A vision-based fusion method for defect detection of milling cutter spiral cutting edge. Measurement: Journal of the International Measurement Confederation, 2021, 177, 109248.	5.0	25
10	Online chatter detection in robotic machining based on adaptive variational mode decomposition. International Journal of Advanced Manufacturing Technology, 2021, 117, 555-577.	3.0	9
11	Secure sharing of big digital twin data for smart manufacturing based on blockchain. Journal of Manufacturing Systems, 2021, 61, 338-350.	13.9	40
12	An online visual measurement method for workpiece dimension based on deep learning. Measurement: Journal of the International Measurement Confederation, 2021, 185, 110032.	5.0	15
13	A knowledge based intelligent process planning method for controller of computer numerical control machine tools. Journal of Intelligent Manufacturing, 2020, 31, 1751-1767.	7.3	24
14	A NURBS curve interpolator with small feedrate fluctuation based on arc length prediction and correction. International Journal of Advanced Manufacturing Technology, 2020, 111, 2095-2104.	3.0	14
15	A welding task data model for intelligent process planning of robotic welding. Robotics and Computer-Integrated Manufacturing, 2020, 64, 101934.	9.9	28
16	A hybrid predictive maintenance approach for CNC machine tool driven by Digital Twin. Robotics and Computer-Integrated Manufacturing, 2020, 65, 101974.	9.9	251
17	Digital twin based computerized numerical control machine tool virtual prototype design. , 2020, , 237-263.		0
18	Digital twin for CNC machine tool: modeling and using strategy. Journal of Ambient Intelligence and Humanized Computing, 2019, 10, 1129-1140.	4.9	212

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19	A novel time-rounding-up-based feedrate scheduling method based on S-shaped ACC/DEC algorithm. International Journal of Advanced Manufacturing Technology, 2019, 104, 2073-2088.	3.0	13
20	Finite-time tracking control for uncertain robotic manipulators using backstepping method and novel extended state observer. International Journal of Advanced Robotic Systems, 2019, 16, 172988141984465.	2.1	17
21	A parametric interpolation method based on prediction and iterative compensation. International Journal of Advanced Robotic Systems, 2019, 16, 172988141982818.	2.1	9
22	A dynamic parameter identification method of industrial robots considering joint elasticity. International Journal of Advanced Robotic Systems, 2019, 16, 172988141882521.	2.1	15
23	An intelligent CNC controller using cloud knowledge base. International Journal of Advanced Manufacturing Technology, 2019, 102, 213-223.	3.0	12
24	A knowledge generation mechanism of machining process planning using cloud technology. Journal of Ambient Intelligence and Humanized Computing, 2019, 10, 1081-1092.	4.9	15
25	A STEP-based machining data model for autonomous process generation of intelligent CNC controller. International Journal of Advanced Manufacturing Technology, 2018, 96, 271-285.	3.0	15
26	Feedrate Scheduling of NURBS Interpolation Based on a Novel Jerk-Continuous ACC/DEC Algorithm. IEEE Access, 2018, 6, 66403-66417.	4.2	32
27	Design and development of a CNC machining process knowledge base using cloud technology. International Journal of Advanced Manufacturing Technology, 2018, 94, 3413-3425.	3.0	46
28	A hybrid approach to energy-efficient machining for milled components via STEP-NC. International Journal of Computer Integrated Manufacturing, 2018, 31, 442-456.	4.6	15
29	Trajectory planning method of robot sorting system based on S-shaped acceleration/deceleration algorithm. International Journal of Advanced Robotic Systems, 2018, 15, 172988141881380.	2.1	15
30	Model-assisted extended state observer-based computed torque control for trajectory tracking of uncertain robotic manipulator systems. International Journal of Advanced Robotic Systems, 2018, 15, 172988141880173.	2.1	9
31	A Bidirectional Adaptive Feedrate Scheduling Method of NURBS Interpolation Based on S-Shaped ACC/DEC Algorithm. IEEE Access, 2018, 6, 63794-63812.	4.2	25
32	An optimized feedrate scheduling method for CNC machining with round-off error compensation. International Journal of Advanced Manufacturing Technology, 2018, 97, 2369-2381.	3.0	15
33	Digital twin modeling method for CNC machine tool. , 2018, , .		35
34	Research and development of industrial real-time Ethernet performance testing system used for CNC system. International Journal of Advanced Manufacturing Technology, 2016, 83, 1199-1207.	3.0	3
35	A Hardware Independent Real-time Ethernet for Motion Control Systems. International Journal of Computers, Communications and Control, 2015, 11, 39.	1.8	3
36	Design and application of a real-time industrial Ethernet protocol under Linux using RTAI. International Journal of Computer Integrated Manufacturing, 2013, 26, 429-439.	4.6	22

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37	A parametric hardware fine acceleration/deceleration algorithm and its implementation. International Journal of Advanced Manufacturing Technology, 2012, 63, 1109-1115.	3.0	7
38	STEP-NC Compliant Intelligent Process Planning Module: Architecture and Knowledge Base. Procedia Engineering, 2011, 15, 834-839.	1.2	11
39	A Unified Communication Framework for Intelligent Integrated CNC on the Shop Floor. Procedia Engineering, 2011, 15, 840-847.	1.2	11
40	A new real-time Ethernet for numeric control. , 2010, , .		7
41	Design and Implementation of Engraving Machine Controller. , 2010, , .		6
42	Design and implementation of an open CNC core at the shop floor level. International Journal of Advanced Manufacturing Technology, 2009, 40, 541-552.	3.0	4
43	Engine Based Embedded Control System Design and Implementation. , 2008, , .		2
44	Study on the construction theory of digital twin mechanism model for mechatronics equipment. International Journal of Advanced Manufacturing Technology, 0, , 1.	3.0	7
45	Measurement of master node delay in networked control systems. Measurement and Control, 0, , 002029402210980.	1.8	0