Tegoeh Tjahjowidodo

List of Publications by Year
in descending order

99 papers	3,362 citations	136885 32 h-index	155592 55 g-index
99 all docs	99 docs citations	99 times ranked	2826 citing authors

#	Article	IF	Citations
1	Framework for measurement of battery state-of-health (resistance) integrating overpotential effects and entropy changes using energy equilibrium. Energy, 2022, 239, 121942.	4.5	5
2	DC-Distributed Power System Modeling and Hardware-in-the-Loop (HIL) Evaluation of Fuel Cell-Powered Marine Vessel. IEEE Journal of Emerging and Selected Topics in Industrial Electronics, 2022, 3, 797-808.	3.0	8
3	A New Image Grating Sensor for Linear Displacement Measurement and Its Error Analysis. Sensors, 2022, 22, 4361.	2.1	1
4	Haptic/virtual reality orthopedic surgical simulators: a literature review. Virtual Reality, 2022, 26, 1795-1825.	4.1	3
5	A CNN Prediction Method for Belt Grinding Tool Wear in a Polishing Process Utilizing 3-Axes Force and Vibration Data. Electronics (Switzerland), 2021, 10, 1429.	1.8	13
6	Machinability of wire and arc additive manufactured components. CIRP Journal of Manufacturing Science and Technology, 2021, 35, 379-389.	2.3	25
7	Variable-geometry nozzle for surface quality enhancement in 3D concrete printing. Additive Manufacturing, 2021, 37, 101638.	1.7	12
8	Online Tool Condition Monitoring Based on Parsimonious Ensemble+. IEEE Transactions on Cybernetics, 2020, 50, 664-677.	6.2	31
9	Surface Topography Measurement of Mirror-Finished Surfaces Using Fringe-Patterned Illumination. Metals, 2020, 10, 69.	1.0	9
10	Modelling and monitoring of abrasive finishing processes using artificial intelligence techniques: A review. Journal of Manufacturing Processes, 2020, 57, 114-135.	2.8	68
11	Improving surface finish quality in extrusion-based 3D concrete printing using machine learning-based extrudate geometry control. Virtual and Physical Prototyping, 2020, 15, 178-193.	5.3	46
12	Modelling of Material Removal in Abrasive Belt Grinding Process: A Regression Approach. Symmetry, 2020, 12, 99.	1.1	24
13	Surface Texture Evaluation on Mirror Finish Surface Using Patterned Area Illumination Method. Lecture Notes in Mechanical Engineering, 2020, , 155-162.	0.3	4
14	A Self-Evolving Mutually-Operative Recurrent Network-based Model for Online Tool Condition Monitoring in Delay Scenario. , 2020, , .		4
15	On the Modelling of Fuel Cell-Fed Power System in Electrified Vessels. , 2020, , .		5
16	Inspection-while-flying: An autonomous contact-based nondestructive test using UAV-tools. Automation in Construction, 2019, 106, 102895.	4.8	35
17	Use of Acoustic Emissions to detect change in contact mechanisms caused by tool wear in abrasive belt grinding process. Wear, 2019, 436-437, 203047.	1.5	20
18	Adaptation to Industry 4.0 Using Machine Learning and Cloud Computing to Improve the Conventional Method of Deburring in Aerospace Manufacturing Industry. , 2019, , .		12

#	Article	IF	Citations
19	UAV Control in Close Proximities - Ceiling Effect on Battery Lifetime. , 2019, , .		5
20	Model predictive UAV-tool interaction control enhanced by external forces. Mechatronics, 2019, 58, 47-57.	2.0	25
21	In-process virtual verification of weld seam removal in robotic abrasive belt grinding process using deep learning. Robotics and Computer-Integrated Manufacturing, 2019, 57, 477-487.	6.1	61
22	Aerial Robot Control in Close Proximity to Ceiling: A Force Estimation-based Nonlinear MPC. , 2019, , .		14
23	Development of an Image Grating Sensor for Position Measurement. Sensors, 2019, 19, 4986.	2.1	8
24	Image grating: a novel technology for position measurement. , 2019, , .		0
25	Centralized predictive ceiling interaction control of quadrotor VTOL UAV. Aerospace Science and Technology, 2018, 76, 455-465.	2.5	40
26	Adaptive neuro-fuzzy inference system for deburring stage classification and prediction for indirect quality monitoring. Applied Soft Computing Journal, 2018, 72, 565-578.	4.1	30
27	Design and experiment of controlled bistable vortex induced vibration energy harvesting systems operating in chaotic regions. Mechanical Systems and Signal Processing, 2018, 98, 1097-1115.	4.4	38
28	In-process tool condition monitoring in compliant abrasive belt grinding process using support vector machine and genetic algorithm. Journal of Manufacturing Processes, 2018, 31, 199-213.	2.8	136
29	Systematic investigation and modeling of piezoelectric interaction with loading structures. Mechanics of Advanced Materials and Structures, 2018, 25, 714-721.	1.5	0
30	UAV Push Recovery Operation by Symmetrical Control and Estimation in Receding Horizon. , 2018, , .		1
31	Analysis of Contact Conditions Based on Process Parameters in Robotic Abrasive Belt Grinding Using Dynamic Pressure Sensor. , 2018, , .		4
32	Parsimonious Network Based on a Fuzzy Inference System (PANFIS) for Time Series Feature Prediction of Low Speed Slew Bearing Prognosis. Applied Sciences (Switzerland), 2018, 8, 2656.	1.3	48
33	A Non-Contact Measuring System for In-Situ Surface Characterization Based on Laser Confocal Microscopy. Sensors, 2018, 18, 2657.	2.1	38
34	Parameters Identification and Adaptation for Condition Monitoring of a Reciprocating Pump via Torque Analysis. , 2018, , .		1
35	Modal Analysis on Laboratory Scale Vibratory Bowl. , 2018, , .		0
36	Implementation of Optimization-Based Power Management for All-Electric Hybrid Vessels. IEEE Access, 2018, 6, 74339-74354.	2.6	37

#	Article	IF	Citations
37	An AWS Machine Learning-Based Indirect Monitoring Method for Deburring in Aerospace Industries Towards Industry 4.0. Applied Sciences (Switzerland), 2018, 8, 2165.	1.3	16
38	An online condition monitoring system implemented an internet connectivity and FTP for low speed slew bearing. Journal of Physics: Conference Series, 2018, 1007, 012002.	0.3	1
39	Flex Sensor Based Biofeedback Monitoring for Post-Stroke Fingers Myopathy Patients. Journal of Physics: Conference Series, 2018, 1007, 012069.	0.3	5
40	Constrained Estimation-based Nonlinear Model Predictive Control for UAV-Elastic Tool Interaction. , 2018, , .		4
41	Nonlinear Predictive UAV-Elastic Tool Interaction Control in Real-time. , 2018, , .		6
42	A Novel Frequency Estimation Method for Accurate Bearing Fault Frequencies Identification. , 2018, , .		0
43	EMG finger movement classification based on ANFIS. Journal of Physics: Conference Series, 2018, 1007, 012005.	0.3	20
44	Position Control of Asymmetric Nonlinearities for a Cable-Conduit Mechanism. IEEE Transactions on Automation Science and Engineering, 2017, 14, 1515-1523.	3.4	39
45	A hysteresis model for a stacked-type piezoelectric actuator. Mechanics of Advanced Materials and Structures, 2017, 24, 73-87.	1.5	18
46	Numerical and experimental investigation of nonlinear vortex induced vibration energy converters. Journal of Mechanical Science and Technology, 2017, 31, 3715-3726.	0.7	13
47	In-process endpoint detection of weld seam removal in robotic abrasive belt grinding process. International Journal of Advanced Manufacturing Technology, 2017, 93, 1699-1714.	1.5	20
48	Experimental chaotic quantification in bistable vortex induced vibration systems. Mechanical Systems and Signal Processing, 2017, 85, 1005-1019.	4.4	33
49	Investigation of a robust tendon-sheath mechanism for flexible membrane wing application in mini-UAV. Mechanical Systems and Signal Processing, 2017, 85, 252-266.	4.4	11
50	EMG based classification of hand gestures using PCA and ANFIS. , 2017, , .		7
51	Optimizing fuel savings and power system reliability for all-electric hybrid vessels using Model Predictive Control. , 2017, , .		5
52	Development of a low cost underwater manipulator robot integrated with SimMechanics 3D animation. , 2017, , .		2
53	Integrated Condition Monitoring and Prognosis Method for Incipient Defect Detection and Remaining Life Prediction of Low Speed Slew Bearings. Machines, 2017, 5, 11.	1.2	17
54	A Review of Feature Extraction Methods in Vibration-Based Condition Monitoring and Its Application for Degradation Trend Estimation of Low-Speed Slew Bearing. Machines, 2017, 5, 21.	1.2	285

#	Article	IF	Citations
55	Frequency Domain Analysis of Sensor Data for Event Classification in Real-Time Robot Assisted Deburring. Sensors, 2017, 17, 1247.	2.1	15
56	Predictive Modelling and Analysis of Process Parameters on Material Removal Characteristics in Abrasive Belt Grinding Process. Applied Sciences (Switzerland), 2017, 7, 363.	1.3	57
57	Tendon-Sheath Mechanisms in Flexible Membrane Wing Mini-UAVs: Control and Performance. International Journal of Aerospace Engineering, 2017, 2017, 1-18.	0.5	4
58	A direct method to solve optimal knots of B-spline curves: An application for non-uniform B-spline curves fitting. PLoS ONE, 2017, 12, e0173857.	1.1	42
59	Event Classification from Sensor Data using Spectral Analysis in Robotic Finishing Processes. , 2017, , .		1
60	Equivalent Consumption Minimization Strategy for hybrid all-electric tugboats to optimize fuel savings. , 2016, , .		6
61	Enabling technologies for sustainable all â€" Electric hybrid vessels (Invited paper). , 2016, , .		2
62	Multi-source micro-friction identification for a class of cable-driven robots with passive backbone. Mechanical Systems and Signal Processing, 2016, 80, 152-165.	4.4	12
63	In-Process Surface Roughness Estimation Model for Compliant Abrasive Belt Machining Process. Procedia CIRP, 2016, 46, 254-257.	1.0	17
64	Adaptive Tracking Approach of Flexible Cable Conduit-Actuated NOTES Systems for Early Gastric Cancer Treatments. Lecture Notes in Electrical Engineering, 2016, , 79-97.	0.3	1
65	Acoustic emission-based condition monitoring methods: Review and application for low speed slew bearing. Mechanical Systems and Signal Processing, 2016, 72-73, 134-159.	4.4	125
66	Real-time enhancement of tracking performances for cable-conduit mechanisms-driven flexible robots. Robotics and Computer-Integrated Manufacturing, 2016, 37, 197-207.	6.1	48
67	Fuzzy inference system based intelligent sensor fusion for estimation of surface roughness in machining process. , 2015, , .		3
68	Automatic defect detection and the estimation of nominal profiles based on spline for free-form surface parts. , 2015, , .		2
69	Nonlinear friction modelling and compensation control of hysteresis phenomena for a pair of tendon-sheath actuated surgical robots. Mechanical Systems and Signal Processing, 2015, 60-61, 770-784.	4.4	77
70	Flexible membrane wing warping using tendon-sheath mechanism. , 2015, , .		1
71	Adaptive control for enhancing tracking performances of flexible tendonâ€"sheath mechanism in natural orifice transluminal endoscopic surgery (NOTES). Mechatronics, 2015, 28, 67-78.	2.0	58
72	Enhanced performances for cable-driven flexible robotic systems with asymmetric backlash profile. , 2015, , .		4

#	Article	IF	Citations
73	A new approach of friction model for tendon-sheath actuated surgical systems: Nonlinear modelling and parameter identification. Mechanism and Machine Theory, 2015, 85, 14-24.	2.7	60
74	Application of the largest Lyapunov exponent algorithm for feature extraction in low speed slew bearing condition monitoring. Mechanical Systems and Signal Processing, 2015, 50-51, 116-138.	4.4	55
75	Hysteresis modeling and position control of tendon-sheath mechanism in flexible endoscopic systems. Mechatronics, 2014, 24, 12-22.	2.0	129
76	Circular domain features based condition monitoring for low speed slewing bearing. Mechanical Systems and Signal Processing, 2014, 45, 114-138.	4.4	38
77	A survey on hysteresis modeling, identification and control. Mechanical Systems and Signal Processing, 2014, 49, 209-233.	4.4	380
78	An investigation of friction-based tendon sheath model appropriate for control purposes. Mechanical Systems and Signal Processing, 2014, 42, 97-114.	4.4	71
79	Strain Rate Dependent Flow Stress Characterization Using Piezo-actuated Micropress. Procedia Engineering, 2014, 81, 1451-1456.	1.2	2
80	Theoretical modelling and experimental identification of nonlinear torsional behaviour in harmonic drives. Mechatronics, 2013, 23, 497-504.	2.0	79
81	Dynamic modeling of 3-DOF pyramidal-shaped piezo-driven mechanism. Mechanism and Machine Theory, 2013, 70, 225-245.	2.7	17
82	Condition monitoring of naturally damaged slow speed slewing bearing based on ensemble empirical mode decomposition. Journal of Mechanical Science and Technology, 2013, 27, 2253-2262.	0.7	58
83	Structural response investigation of a triangular-based piezoelectric drive mechanism to hysteresis effect of the piezoelectric actuator. Mechanical Systems and Signal Processing, 2013, 36, 210-223.	4.4	35
84	Modeling Hysteresis with Inertial-Dependent Prandtl-Ishlinskii Model in Wide-Band Frequency-Operated Piezoelectric Actuator. Smart Materials Research, 2012, 2012, 1-15.	0.5	3
85	Theoretical analysis of the dynamic behavior of presliding rolling friction via skeleton technique. Mechanical Systems and Signal Processing, 2012, 29, 296-309.	4.4	18
86	A New Approach to Modeling Hysteresis in a Pneumatic Artificial Muscle Using The Maxwell-Slip Model. IEEE/ASME Transactions on Mechatronics, 2011, 16, 177-186.	3.7	200
87	Cascade position control of a single pneumatic artificial muscleâ€“mass system with hysteresis compensation. Mechatronics, 2010, 20, 402-414.	2.0	85
88	Modeling torque-angle hysteresis in a pneumatic muscle manipulator. , 2010, , .		12
89	Non-local memory hysteresis in a pneumatic artificial muscle (PAM). , 2009, , .		19
90	Control of a pneumatic artificial muscle (PAM) with model-based hysteresis compensation. , 2009, , .		12

#	Article	IF	Citations
91	Positioning Controller for Mechanical Systems with a Mini Harmonic Drive Servo Actuator. , 2007, , .		6
92	Identification of pre-sliding and sliding friction dynamics: Grey box and black-box models. Mechanical Systems and Signal Processing, 2007, 21, 514-534.	4.4	112
93	Experimental dynamic identification of backlash using skeleton methods. Mechanical Systems and Signal Processing, 2007, 21, 959-972.	4.4	28
94	Quantifying chaotic responses of mechanical systems with backlash component. Mechanical Systems and Signal Processing, 2007, 21, 973-993.	4.4	23
95	Friction characterization and compensation in electro-mechanical systems. Journal of Sound and Vibration, 2007, 308, 632-646.	2.1	73
96	A Case Study in Backlash Characterization in Mechanical Systems. , 2005, , .		0
97	Identification of pre-sliding friction dynamics. Chaos, 2004, 14, 420-430.	1.0	59
98	A Generalized Inertial-Dependent Prandtl-Ishlinskii Model for Wide-Band Frequency Piezoelectric Actuator. Advanced Materials Research, 0, 622-623, 1357-1361.	0.3	0
99	Multi-Material Composition Optimization vs Software-Based Single-Material Topology Optimization of a Rectangular Sample under Flexural Load for Fused Deposition Modeling Process. Materials Science Forum, 0, 1042, 23-44.	0.3	0