Arto J Visala

List of Publications by Year
in descending order

35 papers	887 citations	758635 12 h-index	642321 23 g-index
35 all docs	35 docs citations	35 times ranked	1016 citing authors

#	Article	IF	Citations
1	Current state of digital signal processing in myoelectric interfaces and related applications. Biomedical Signal Processing and Control, 2015, 18, 334-359.	3.5	231
2	Coverage path planning algorithms for agricultural field machines. Journal of Field Robotics, 2009, 26, 651-668.	3.2	227
3	Robotics in Agriculture and Forestry. , 2008, , 1065-1077.		49
4	Nonlinear model predictive control of hydraulic forestry crane with automatic sway damping. Computers and Electronics in Agriculture, 2014, 109, 36-45.	3.7	47
5	Simultaneous Localization and Mapping for Forest Harvesters. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	34
6	A DCM Based Attitude Estimation Algorithm for Low-Cost MEMS IMUs. International Journal of Navigation and Observation, 2015, 2015, 1-18.	0.8	31
7	Functional state modelling approach for bioprocesses: local models for aerobic yeast growth processes. Journal of Process Control, 1994, 4, 127-134.	1.7	29
8	A toolkit for nonlinear model predictive control using gradient projection and code generation. Control Engineering Practice, 2015, 39, 56-66.	3.2	29
9	Functional state modeling and fuzzy control of fed-batch aerobic baker's yeast process. Journal of Biotechnology, 1994, 37, 1-10.	1.9	26
10	Applicability of the ISO 11783 network in a distributed combined guidance system for agricultural machines. Biosystems Engineering, 2013, 114, 306-317.	1.9	25
11	Tree Measurement in Forest by 2D Laser Scanning. , 2007, , .		24
12	Coordinated motion of a hydraulic forestry crane and a vehicle using nonlinear model predictive control. Computers and Electronics in Agriculture, 2017, 133, 119-127.	3.7	17
13	Tree Measurement and Simultaneous Localization and Mapping System for Forest Harvesters. Springer Tracts in Advanced Robotics, 2008, , 369-378.	0.3	17
14	New Measurement Concept for Forest Harvester Head. Springer Tracts in Advanced Robotics, 2010, , 35-44.	0.3	15
15	Augmented Reality in Forest Machine Cabin. IFAC-PapersOnLine, 2017, 50, 5410-5417.	0.5	13
16	Feature Based Modeling and Mapping of Tree Trunks and Natural Terrain Using 3D Laser Scanner Measurement System. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 248-255.	0.4	9
17	Small satellite attitude determination during plasma brake deorbiting experiment. Acta Astronautica, 2016, 129, 52-58.	1.7	8
18	Forestry crane posture estimation with a twoâ€dimensional laser scanner. Journal of Field Robotics, 2018, 35, 1025-1049.	3.2	7

#	Article	IF	Citations
19	Optical Flow in Deep Visual Tracking. Proceedings of the AAAI Conference on Artificial Intelligence, 2020, 34, 12112-12119.	3.6	7
20	A Complete Process For Shipborne Sea-Ice Field Analysis Using Machine Vision. IFAC-PapersOnLine, 2020, 53, 14539-14545.	0.5	7
21	Stereo vision based tree planting spot detection. , 2013, , .		5
22	Sway Estimation using Inertial Measurement Units for Cranes with a Rotating Tool. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 274-279.	0.4	5
23	ISO 11783 Compliant Forest Crane as a Platform for Automatic Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 164-169.	0.4	5
24	Drone based Mapping and Identification of Young Spruce Stand for Semiautonomous Cleaning. IFAC-PapersOnLine, 2020, 53, 15777-15783.	0.5	4
25	Semi-automatic Tuning of NMPC Based Trajectory Control System in Agricultural Machine. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 2912-2918.	0.4	3
26	Real-time detection of young spruce using color and texture features on an autonomous forest machine. , 2013, , .		3
27	<title>Underwater robot society doing internal inspection and leak monitoring of water systems</title>. , 1997, 3209, 190.		2
28	Detection and species classification of young trees using machine perception for a semi-autonomous forest machine. , 2015, , .		2
29	Electromechanical steering of an articulated vehicle. IFAC-PapersOnLine, 2016, 49, 45-49.	0.5	2
30	Internet of Things for Indoor Air Quality Measurements. , 2019, , .		1
31	Tree Log Identity Matching using Convolutional Correlation Networks. , 2019, , .		1
32	Design and Implementation of Machine Control Systems with Modern Software Development Tools. , 2006, , 377-388.		1
33	Shipborne sea-ice field mapping using a LiDAR. , 2021, , .		1
34	Innovation Form State-Space Neural Network Model for Bioprocesses - Practical Considerations. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2001, 34, 439-444.	0.4	0
35	Pseudo-linear approach to nanosatellite attitude estimation and magnetometer calibration. , 2017, , .		0