


Davidson, P, Raunio, J-P & Piche, R 2017, 'Monocular vision-based range estimation supported by proprioceptive motion' Gyroscopy and Navigation, vol 8, no. 2, pp. 150-158. DOI: 10.1134/S2075108717020043


Tuisku, O, Rantanen, V & Surakka, V 2016, Longitudinal study on text entry by gazing and smiling. in Proceedings of the Ninth Biennial Symposium on Eye Tracking Research & Applications. ETRA '16, ACM, New York, NY, USA, pp. 253-256, ACM SYMPOSIUM ON EYE TRACKING RESEARCH & APPLICATIONS, 1 January. DOI: 10.1145/2857491.2857501


Koivumäki, J & Mattila, J 2015, 'Stability-Guaranteed Force-Sensorless Contact Force/Motion Control of Heavy-Duty Hydraulic Manipulators' IEEE Transactions on Robotics, vol 31, no. 4, pp. 918-935. DOI: 10.1109/TRO.2015.2441492


Saketi, P 2015, Microrobotic platform with integrated force sensing microgrippers for characterization of fibrous materials: Case study on individual paper fibers. Tampere University of Technology. Publication, vol. 1309, Tampere University of Technology, Tampere.

Carfora, D, Di Gironimo, G, Järvenpää, J, Huhtala, K, Määttä, T & Siuko, M 2015, 'Divertor remote handling for DEMO: Concept design and preliminary FMECA studies' Fusion engineering and design, vol 98-99, pp. 1437-1441. DOI: 10.1016/j.fusengdes.2015.06.056

Ferrera, BR, Ahmad, B, Lobov, A, Vera, D, Martinez Lastra, JLM & Harrison, R 2015, A knowledge-based solution for automatic mapping in component based automation systems. in IEEE 13th International Conference on Industrial Informatics (INDIN), 2015 . pp. 262-268, IEEE International Conference on Industrial Informatics, 1 January. DOI: 10.1109/INDIN.2015.7281745

Iarovyi, S, Martinez Lastra, JL, Haber, R & del Toro, R 2015, From artificial cognitive systems and open architectures to cognitive manufacturing systems. in IEEE 13th International Conference on Industrial Informatics (INDIN), 2015. pp. 1225-1232, IEEE International Conference on Industrial Informatics, 1 January. DOI: 10.1109/INDIN.2015.7281910


Alho, P & Mattila, J 2015, 'Service-oriented approach to fault tolerance in CPSs' *Journal of Systems and Software*, vol 105, pp. 1-17. DOI: 10.1016/j.jss.2015.03.041


Pyrhönen, V-P & Koivisto, H 2015, On improvement of transient stage of composite nonlinear feedback control using arbitrary order set point filters. in *2014 IEEE International Conference on Control System, Computing and Engineering (ICCSCE)*. Institute of Electrical and Electronics Engineers IEEE, pp. 147 - 152, IEEE international conference on control system, computing and engineering, 1 January. DOI: 10.1109/ICCSCE.2014.7072705


Yii-Fossi, T & Kuusisto, R 2015, A dynamic paper machine simulator for testing of model predictive control applications. in Proceedings of Automaatiosoitumisoikeusrari, no. 42, Suomen Automaatiosoitumisoikeusra ry, pp. 1-6, Automaatiosoitumisoikeusrari, Finland, 1 January.

Salpavaara, T & Lekkala, J 2015, A model based analysis of the measurement errors in inductively coupled passive resonance sensors. in J Holub (ed.), IMEKO XXI World Congress. Proceedings, August 30 - September 4, 2015, Prague, Czech Republic. IMEKO World Congress, 1 January.


Vepsäläinen, T & Kuikka, S 2015, 'Design Patterns for Model-Driven Development' Communications in Computer and Information Science, vol 555, pp. 21-38. DOI: 10.1007/978-3-319-25579-8_2


Raunio, J-P, Ritala, R & Välimäki, T 2015, Optimal operation of a three camera system on a four-wheel robot. in IMEKO XXI World Congress, Fundamental and Applied Metrology, Proceedings, August 31-September 4, 2015, Prague, Czech Republic. pp. 968-973, IMEKO World Congress, 1 January.

Mettänen, M, Melin, J & Ihalainen, H 2015, Photometric stereo system for detailed analysis of material surfaces. in IMEKO XXI World Congress, Measurement in Research and Industry, Proceedings, August 30 - September 4, 2015, Prague, Czech Republic. IMEKO World Congress, 1 January.


Ziaeiz, Z, Oftadeh, R & Mattila, J 2015, Vision-based trajectories planning for four wheels independently steered mobile robots with maximum allowable velocities. in Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics). vol. 9287, Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), vol. 9287, Springer Verlag, pp. 303-309, Towards Autonomous Robotic Systems, 1 January. DOI: 10.1007/978-3-319-22416-9_34


Intelligent Mechatronics, 1 January. DOI: 10.1109/AIM.2014.6878207


Korpela, T, Björkqvist, T, Majanne, Y & Lautala, P 2014, Online monitoring of flue gas emissions in power plants having multiple fuels. in E Boje & X Xia (eds), Proceedings of 19th IFAC World Congress, Cape Town, South Africa, August 24-29, 2014. IFAC proceedings volumes, no. 1, vol. 19, pp. 1355-1360, IFAC World Congress, 1 January. DOI: 10.3182/20140824-6-ZA-1003.01913


Carfora, D, Di Gironimo, G, Järvenpää, J, Huhtala, K, Määttä, T & Siuko, M 2014, 'Preliminary concept design of the divertor remote handling system for DEMO power plant' Fusion engineering and design, vol 89, no. 11, pp. 2743-2747. DOI: 10.1016/j.fusengdes.2014.07.016


Sibois, R, Määttä, T, Siuko, M & Mattila, J 2014, 'Simulation-based design process for the verification of ITER remote handling systems' Fusion engineering and design, pp. 2341-2346. DOI: 10.1016/j.fusengdes.2014.02.049


Nybond, S, Karp, M & Tammela, P 2013, 'Antimicrobial assay optimization and validation for HTS in 384-well format using a bioluminescent E. coli K-12 strain' European Journal of Pharmaceutical Sciences, vol 49, no. 4, pp. 782-789. DOI: 10.1016/j.ejps.2013.05.024


Alho, P & Mattila, J 2013, 'Breaking down the requirements: Reliability in remote handling software' *Fusion engineering and design*, vol 88, no. 9-10, pp. 1912-1915. DOI: 10.1016/j.fusengdes.2012.11.008

Roinila, T, Vilkko, M & Sun, J 2013, Broadband Methods for Online Grid Impedance Measurement. in *2013 IEEE Energy Conversion Congress & Exposition ECCE, Denver Colorado, USA; September 15-19, 2913*. IEEE Energy Conversion Congress and Exposition, Institute of Electrical and Electronics Engineers IEEE, Piscataway, pp. 3003-3010. DOI: 10.1109/ECCE.2013.6647093


Vehkaoja, A, Rajala, S, Kumpulainen, P & Lekkala, J 2013, 'Correlation approach for the detection of the heartbeat intervals using force sensors placed under the bed posts' *Journal of Medical Engineering & Technology*, vol 37, no. 5, pp. 327-333. DOI: 10.3109/03091902.2013.807523


Nurmi, J & Mattila, J 2013, Detection and isolation of faults in mobile hydraulic valves based on a reduced-order model and adaptive thresholds. in *Proceedings of ASME/BATH 2013 Symposium on Fluid Power and Motion Control, FPMC2013, October 6-9, 2013, Sarasota, Florida*. Symposium on Fluid Power and Motion Control, ASME, Sarasota, Florida, USA, pp. 1-10, Symposium on Fluid Power and Motion Control, 1 January. DOI: 10.1115/FPMC2013-4435
Linjama, M 2013, 'Digitaalihydrauliikan seminaarin satoo Tampereella' Fluid Finland, vol 12, no. 1, pp. 8-8.

Heikkilä, M & Linjama, M 2013, 'Displacement control of a mobile crane using a digital hydraulic power management system' Mechatronics, vol 23, no. 4, pp. 452-461. DOI: 10.1016/j.mechatronics.2013.03.009


Kivelä, T & Mattila, J 2013, Internal leakage fault detection for variable displacement axial piston pump. in Proceedings of ASME/BATH 2013 Symposium on Fluid Power and Motion Control, FPMC2013, October 6-9, 2013, Sarasota, Florida. Symposium on Fluid Power and Motion Control, pp. 1-9, Symposium on Fluid Power and Motion Control, 1 January.


Huhtala, K 2013, 'Pääkirjoitus: Tehokkuutta sitähän se kaikki on' Fluid Finland, vol 12, no. 1, pp. 5-5.


Ihalainen, H, Ritala, R & Saarela, O 2013, 'Reliability of operating window identified from process data' Computer Aided Chemical Engineering, vol 32, pp. 625-630. DOI: 10.1016/B978-0-444-63234-0.50105-6


Koivumäki, J & Mattila, J 2013, Stable and high performance energy-efficient motion control of electric load sensing controlled hydraulic manipulators. in Proceedings of ASME/BATH 2013 Symposium on Fluid Power and Motion Control, FPMC2013, October 6-9, 2013, Sarasota, Florida. Symposium on Fluid Power and Motion Control, ASME, Sarasota, Florida, USA, pp. 1-10, Symposium on Fluid Power and Motion Control, 1 January.


Siuko, M, Järvenpää, J & Mattila, J 2012, Divertor RH design updates and DTP2 Phase 2 testing. VTT Science, vol. 7, VALTION TEKNILLINEN TUTKIMUSKESKUS.

Mattila, J, Alho, P, Väyrynen, J, Sibois, R & Salminen, K 2012, EFDA goal oriented training in remote handling - GOTRH. VTT Science, vol. 7, VALTION TEKNILLINEN TUTKIMUSKESKUS.

