

# Andreas Kugi

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1434711/publications.pdf>

Version: 2024-02-01

342  
papers

4,506  
citations

147801

31  
h-index

168389

53  
g-index

356  
all docs

356  
docs citations

356  
times ranked

2888  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | On the Passivity-Based Impedance Control of Flexible Joint Robots. IEEE Transactions on Robotics, 2008, 24, 416-429.   | 10.3 | 351       |
| 2  | Unscented Kalman filter for vehicle state estimation. Vehicle System Dynamics, 2011, 49, 1497-1520.  | 3.7  | 200       |
| 3  | Real-time optimal quantum control of mechanical motion at room temperature. Nature, 2021, 595, 373-377.  | 27.8 | 185       |
| 4  | Tracking control for boundary controlled parabolic PDEs with varying parameters: Combining backstepping and differential flatness. Automatica, 2009, 45, 1182-1194.                      | 5.0  | 152       |
| 5  | Real-time Nonlinear Model Predictive Path-Following Control of a Laboratory Tower Crane. IEEE Transactions on Control Systems Technology, 2014, 22, 1461-1473.                           | 5.2  | 120       |
| 6  | Stability and Incremental Improvement of Suboptimal MPC Without Terminal Constraints. IEEE Transactions on Automatic Control, 2010, 55, 2576-2580.                                       | 5.7  | 111       |
| 7  | Nonlinear $H_{\infty}$ controller design for a DC-to-DC power converter. IEEE Transactions on Control Systems Technology, 1999, 7, 230-237.  | 5.2  | 69        |
| 8  | Nonlinear model predictive control of a continuous slab reheating furnace. Control Engineering Practice, 2013, 21, 495-508.  | 5.5  | 66        |
| 9  | A mathematical model of a slab reheating furnace with radiative heat transfer and non-participating gaseous media. International Journal of Heat and Mass Transfer, 2010, 53, 5933-5946. | 4.8  | 64        |
| 10 | Nonlinear pressure control of self-supplied variable displacement axial piston pumps. Control Engineering Practice, 2010, 18, 84-93.   | 5.5  | 63        |
| 11 | Handling constraints in optimal control with saturation functions and system extension. Systems and Control Letters, 2010, 59, 671-679.  | 2.3  | 61        |
| 12 | Swing-up control of a triple pendulum on a cart with experimental validation. Automatica, 2013, 49, 801-808.   | 5.0  | 61        |
| 13 | Trajectory Tracking of a 3DOF Laboratory Helicopter Under Input and State Constraints. IEEE Transactions on Control Systems Technology, 2010, 18, 944-952.                               | 5.2  | 57        |
| 14 | Modeling and simulation of a hydrostatic transmission with variable-displacement pump. Mathematics and Computers in Simulation, 2000, 53, 409-414.                                       | 4.4  | 56        |
| 15 | Mathematical Modeling and Nonlinear Controller Design for a Novel Electrohydraulic Power-Steering System. IEEE/ASME Transactions on Mechatronics, 2007, 12, 85-97.                       | 5.8  | 56        |
| 16 | A novel robust position estimator for self-sensing magnetic levitation systems based on least squares identification. Control Engineering Practice, 2011, 19, 146-157.                   | 5.5  | 53        |
| 17 | Digital Slew Rate and S-Shape Control for Smart Power Switches to Reduce EMI Generation. IEEE Transactions on Power Electronics, 2015, 30, 5170-5180.                                    | 7.9  | 53        |
| 18 | Optimisation based path planning for car parking in narrow environments. Robotics and Autonomous Systems, 2016, 79, 1-11.  | 5.1  | 53        |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 19 | Modeling and static optimization of a variable speed pumped storage power plant. <i>Renewable Energy</i> , 2017, 111, 38-51.  | 8.9  | 51        |
| 20 | Flatness-based tracking control of a piezoactuated Euler-Bernoulli beam with non-collocated output feedback: theory and experiments. <i>International Journal of Control</i> , 2008, 81, 475-493.       | 1.9  | 49        |
| 21 | Trajectory Planning for Boundary Controlled Parabolic PDEs With Varying Parameters on Higher-Dimensional Spatial Domains. <i>IEEE Transactions on Automatic Control</i> , 2009, 54, 1854-1868.          | 5.7  | 46        |
| 22 | An infinite-dimensional control concept for piezoelectric structures with complex hysteresis. <i>Structural Control and Health Monitoring</i> , 2006, 13, 1099-1119.                                    | 4.0  | 38        |
| 23 | Tracking control design for a wave equation with dynamic boundary conditions modeling a piezoelectric stack actuator. <i>International Journal of Robust and Nonlinear Control</i> , 2011, 21, 542-562. | 3.7  | 38        |
| 24 | Accurate low-order dynamic model of a compact plate heat exchanger. <i>International Journal of Heat and Mass Transfer</i> , 2013, 61, 323-331.   | 4.8  | 38        |
| 25 | Active compensation of roll eccentricity in rolling mills. <i>IEEE Transactions on Industry Applications</i> , 2000, 36, 625-632.   | 4.9  | 37        |
| 26 | Compensation of parasitic effects for a silicon tuning fork gyroscope. <i>IEEE Sensors Journal</i> , 2006, 6, 596-604.  | 4.7  | 36        |
| 27 | Impedance control for variable stiffness mechanisms with nonlinear joint coupling. , 2008, , .  |      | 35        |
| 28 | Resolving the problem of non-integrability of nullspace velocities for compliance control of redundant manipulators by using semi-definite Lyapunov functions. , 2008, , .                              |      | 35        |
| 29 | Infinite-dimensional decentralized damping control of large-scale manipulators with hydraulic actuation. <i>Automatica</i> , 2016, 63, 101-115.   | 5.0  | 34        |
| 30 | Digitally controlled electrorheological valves and their application in vehicle dampers. <i>Mechatronics</i> , 2012, 22, 629-638.   | 3.3  | 33        |
| 31 | Backstepping observers for linear PDEs on higher-dimensional spatial domains. <i>Automatica</i> , 2015, 51, 85-97.  | 5.0  | 33        |
| 32 | Modeling and optimal steady-state operating points of an ORC waste heat recovery system for diesel engines. <i>Applied Energy</i> , 2017, 206, 329-345.   | 10.1 | 33        |
| 33 | A mathematical model of a direct-fired continuous strip annealing furnace. <i>International Journal of Heat and Mass Transfer</i> , 2014, 69, 375-389.  | 4.8  | 32        |
| 34 | Dynamic Optimization of a Slab Reheating Furnace With Consistent Approximation of Control Variables. <i>IEEE Transactions on Control Systems Technology</i> , 2011, 19, 1444-1456.                      | 5.2  | 31        |
| 35 | Optimization-based feedforward control of the strip thickness profile in hot strip rolling. <i>Journal of Process Control</i> , 2018, 64, 100-111.  | 3.3  | 30        |
| 36 | Nonlinear control in rolling mills: a new perspective. <i>IEEE Transactions on Industry Applications</i> , 2001, 37, 1394-1402.   | 4.9  | 29        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 37 | Backstepping-based boundary observer for a class of time-varying linear hyperbolic PDEs. <i>Automatica</i> , 2016, 68, 369-377.  | 5.0 | 29        |
| 38 | Control of a flexible beam actuated by macro-fiber composite patches: II. Hysteresis and creep compensation, experimental results. <i>Smart Materials and Structures</i> , 2011, 20, 015016.     | 3.5 | 28        |
| 39 | A Magnetic Equivalent Circuit Based Modeling Framework for Electric Motors Applied to a PMSM With Winding Short Circuit. <i>IEEE Transactions on Power Electronics</i> , 2020, 35, 12285-12295.  | 7.9 | 27        |
| 40 | Motion Planning for Piezo-Actuated Flexible Structures: Modeling, Design, and Experiment. <i>IEEE Transactions on Control Systems Technology</i> , 2013, 21, 807-819.                            | 5.2 | 26        |
| 41 | Modelling and experimental model validation for a pusher-type reheating furnace. <i>Mathematical and Computer Modelling of Dynamical Systems</i> , 2009, 15, 209-232.                            | 2.2 | 25        |
| 42 | Modeling of a Permanent Magnet Synchronous Machine With Internal Magnets Using Magnetic Equivalent Circuits. <i>IEEE Transactions on Magnetics</i> , 2014, 50, 1-14.                             | 2.1 | 25        |
| 43 | A new flatness-based control of lateral vehicle dynamics. <i>Vehicle System Dynamics</i> , 2008, 46, 789-801.  | 3.7 | 24        |
| 44 | Model-based trajectory planning, optimization, and open-loop control of a continuous slab reheating furnace. <i>Journal of Process Control</i> , 2011, 21, 279-292.                              | 3.3 | 24        |
| 45 | A simple control-oriented model of an indirect-fired strip annealing furnace. <i>International Journal of Heat and Mass Transfer</i> , 2014, 78, 557-570.  | 4.8 | 24        |
| 46 | High-speed nonlinear model predictive control of an interleaved switching DC/DC-converter. <i>Control Engineering Practice</i> , 2020, 103, 104576.  | 5.5 | 24        |
| 47 | Stability of an Euler-Bernoulli Beam With a Nonlinear Dynamic Feedback System. <i>IEEE Transactions on Automatic Control</i> , 2016, 61, 2782-2795.  | 5.7 | 23        |
| 48 | Mathematical modeling of the contour evolution of heavy plates in hot rolling. <i>Applied Mathematical Modelling</i> , 2015, 39, 4534-4547.  | 4.2 | 22        |
| 49 | Attitude Estimation Using Redundant Inertial Measurement Units for the Control of a Camera Stabilization Platform. <i>IEEE Transactions on Control Systems Technology</i> , 2016, 24, 1837-1844. | 5.2 | 22        |
| 50 | New Energy-based Nonlinear Controller for Hydraulic Piston Actuators. <i>European Journal of Control</i> , 2004, 10, 163-173.  | 2.6 | 21        |
| 51 | Automatic Gauge Control under Laterally Asymmetric Rolling Conditions Combined with Feedforward. <i>IEEE Transactions on Industry Applications</i> , 2017, 53, 2560-2568.                        | 4.9 | 21        |
| 52 | Hierarchical nonlinear optimization-based controller of a continuous strip annealing furnace. <i>Control Engineering Practice</i> , 2018, 73, 40-55.   | 5.5 | 21        |
| 53 | Model predictive control of an automotive waste heat recovery system. <i>Control Engineering Practice</i> , 2018, 81, 28-42.   | 5.5 | 21        |
| 54 | Nonlinear Model Predictive Control of a Variable-Speed Pumped-Storage Power Plant. <i>IEEE Transactions on Control Systems Technology</i> , 2021, 29, 645-660.                                   | 5.2 | 21        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 55 | Neural network for identification of roll eccentricity in rolling mills. Journal of Materials Processing Technology, 1996, 60, 387-392.  | 6.3 | 20        |
| 56 | Nonlinear model predictive control of the strip temperature in an annealing furnace. Journal of Process Control, 2016, 48, 1-13.   | 3.3 | 20        |
| 57 | An EKF observer to estimate semi-autogenous grinding mill hold-ups. Journal of Process Control, 2017, 51, 27-41.   | 3.3 | 20        |
| 58 | An analytical approach for modelling asymmetrical hot rolling of heavy plates. Mathematical and Computer Modelling of Dynamical Systems, 2008, 14, 249-267.  | 2.2 | 19        |
| 59 | Immersion and invariance-based impedance control for electrohydraulic systems. International Journal of Robust and Nonlinear Control, 2010, 20, 725-744.   | 3.7 | 19        |
| 60 | An Efficient Implementation of Backstepping Observers for Time-Varying Parabolic PDEs. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 798-803.   | 0.4 | 19        |
| 61 | Slew rate control strategies for smart power ICs based on iterative learning control. , 2014, , .  |     | 19        |
| 62 | Optimization-based estimator for the contour and movement of heavy plates in hot rolling. Journal of Process Control, 2015, 29, 23-32.   | 3.3 | 18        |
| 63 | Combined Path Following and Compliance Control for Fully Actuated Rigid Body Systems in 3-D Space. IEEE Transactions on Control Systems Technology, 2017, 25, 1750-1760.   | 5.2 | 18        |
| 64 | Infinite-Dimensional Decoupling Control of the Tip Position and the Tip Angle of a Composite Piezoelectric Beam with Tip Mass. , 0, , 351-368.   |     | 17        |
| 65 | Suboptimal model predictive control of a laboratory crane. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 397-402.   | 0.4 | 17        |
| 66 | Energy-consistent shear coefficients for beams with circular cross sections and radially inhomogeneous materials. International Journal of Solids and Structures, 2013, 50, 1859-1868.   | 2.7 | 17        |
| 67 | Model based control of compact heat exchangers independent of the heat transfer behavior. Journal of Process Control, 2014, 24, 286-298.   | 3.3 | 17        |
| 68 | Mathematical modelling of a hydraulic accumulator for hydraulic hybrid drives. Mathematical and Computer Modelling of Dynamical Systems, 2016, 22, 397-411.  | 2.2 | 16        |
| 69 | Force-based cooperative handling and lay-up of deformable materials: Mechatronic design, modeling, and control of a demonstrator. Mechatronics, 2017, 47, 246-261.   | 3.3 | 16        |
| 70 | Active rejection control for unknown harmonic disturbances of the transverse deflection of steel strips with control input, system output, sensor output, and disturbance input at different positions. Mechatronics, 2018, 56, 73-86. | 3.3 | 16        |
| 71 | Nonlinear 3D path following control of a fixed-wing aircraft based on acceleration control. Control Engineering Practice, 2019, 86, 56-69.   | 5.5 | 16        |
| 72 | Feedforward Control of Plate Thickness in Reversing Plate Mills. IEEE Transactions on Industry Applications, 2007, 43, 386-394.  | 4.9 | 15        |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 73 | Magnetic Equivalent Circuit Modeling of a Saturated Surface-Mounted Permanent Magnet Synchronous Machine. IFAC-PapersOnLine, 2015, 48, 360-365.                                     | 0.9  | 15        |
| 74 | Feedback Control of the Contour Shape in Heavy-Plate Hot Rolling. IEEE Transactions on Control Systems Technology, 2018, 26, 842-856.   | 5.2  | 15        |
| 75 | Trajectory planning for quasilinear parabolic distributed parameter systems based on finite-difference semi-discretisations. International Journal of Control, 2010, 83, 1093-1106. | 1.9  | 14        |
| 76 | A fast simulation method for 1D heat conduction. Mathematics and Computers in Simulation, 2011, 82, 392-403.  | 4.4  | 14        |
| 77 | Closed-loop stability analysis of a gantry crane with heavy chain and payload. International Journal of Control, 2018, 91, 1931-1943.   | 1.9  | 14        |
| 78 | Efficient scheduling of a stochastic no-wait job shop with controllable processing times. Expert Systems With Applications, 2020, 162, 113879.                                      | 7.6  | 14        |
| 79 | Modeling of a permanent magnet linear synchronous motor using magnetic equivalent circuits. Mechatronics, 2021, 76, 102558.   | 3.3  | 14        |
| 80 | Title is missing!. Nonlinear Dynamics, 1999, 19, 71-91.   | 5.2  | 13        |
| 81 | Infini-dimensional Control of a Gantry Crane with Heavy Chains (Infinite-dimensional Control) Tj ETQq1 1 0.784314 rgBT / 0.8 13   | 0.8  | 13        |
| 82 | Ein suboptimaler Ansatz zur schnellen modellprädiktiven Regelung nichtlinearer Systeme. Automatisierungstechnik, 2010, 58, 447-456.   | 0.8  | 13        |
| 83 | Control of a flexible beam actuated by macro-fiber composite patches: I. Modeling and feedforward trajectory control. Smart Materials and Structures, 2011, 20, 015015.             | 3.5  | 13        |
| 84 | Energy-Efficient Control of Continuous Reheating Furnaces. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 359-364.                          | 0.4  | 13        |
| 85 | An integrated thermal model of hot rolling. Mathematical and Computer Modelling of Dynamical Systems, 2014, 20, 66-86.  | 2.2  | 13        |
| 86 | Analysis and design of an Extended Kalman Filter for the plate temperature in heavy plate rolling. Journal of Process Control, 2014, 24, 1371-1381.                                 | 3.3  | 13        |
| 87 | Optimal torque control of permanent magnet synchronous machines using magnetic equivalent circuits. Mechatronics, 2015, 32, 22-33.  | 3.3  | 13        |
| 88 | Optimization-based reduction of contour errors of heavy plates in hot rolling. Journal of Process Control, 2016, 47, 150-160.   | 3.3  | 13        |
| 89 | A Path/Surface Following Control Approach to Generate Virtual Fixtures. IEEE Transactions on Robotics, 2018, 34, 1577-1592.   | 10.3 | 13        |
| 90 | Adaptive feedforward thickness control in hot strip rolling with oil lubrication. Control Engineering Practice, 2020, 103, 104584.  | 5.5  | 13        |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 91  | Model-based control concepts for vibratory MEMS gyroscopes. <i>Mechatronics</i> , 2012, 22, 241-250.   | 3.3 | 12        |
| 92  | Modeling and Force Control for the Collaborative Manipulation of Deformable Strip-Like Materials. <i>IFAC-PapersOnLine</i> , 2016, 49, 95-102.   | 0.9 | 12        |
| 93  | Nonlinear Model Predictive Control of Axial Piston Pumps. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2017, 139, .  | 1.6 | 12        |
| 94  | Attitude control strategy for a camera stabilization platform. <i>Mechatronics</i> , 2017, 46, 60-69.  | 3.3 | 12        |
| 95  | Convex Constrained Iterative Learning Control Using Projection: Application to a Smart Power Switch. <i>IEEE Transactions on Control Systems Technology</i> , 2018, 26, 1818-1825.   | 5.2 | 12        |
| 96  | The spectral element method as an efficient tool for transient simulations of hydraulic systems. <i>Applied Mathematical Modelling</i> , 2018, 54, 627-647.  | 4.2 | 12        |
| 97  | Nonlinear control of earthquake excited high raised buildings by approximate disturbance decoupling. <i>Acta Mechanica</i> , 1997, 125, 49-62.   | 2.1 | 11        |
| 98  | Control of earthquake excited nonlinear structures using Liapunov's theory. <i>Computers and Structures</i> , 1998, 67, 83-90.   | 4.4 | 11        |
| 99  | Electrorheological Semiactive Shock Isolation Platform for Naval Applications. <i>IEEE/ASME Transactions on Mechatronics</i> , 2013, 18, 1437-1447.  | 5.8 | 11        |
| 100 | A fast motion planning algorithm for car parking based on static optimization. , 2013, , .   |     | 11        |
| 101 | Extended Kalman filter and adaptive backstepping for mean temperature control of a three-way catalytic converter. <i>International Journal of Robust and Nonlinear Control</i> , 2014, 24, 3437-3453.  | 3.7 | 11        |
| 102 | Modelling, simulation and identification of a mobile concrete pump. <i>Mathematical and Computer Modelling of Dynamical Systems</i> , 2015, 21, 180-201.   | 2.2 | 11        |
| 103 | <a href="#">An Efficient Algorithm for Scheduling a Flexible Job Shop with Blocking and No-Wait Constraints *</a><br>*Great thanks are addressed to the industrial research partner Plansee SE supporting this work. Moreover, financial support from the EU project Power Semiconductor and Electronics Manufacturing 4.0 (Semi40), under grant agreement No 692466, is gratefully acknowledged. The project is co-funded by grants from Austria, Germany, Italy, France, Portugal, and - Electronic Component Systems for European Leadership Jol. <i>IFAC-PapersOnLine</i> , 2017, 50, 12490-12495. | 0.9 | 11        |
| 104 | Model-Predictive Control of Servo-Pump Driven Injection Molding Machines. <i>IEEE Transactions on Control Systems Technology</i> , 2020, 28, 1665-1680.  | 5.2 | 11        |
| 105 | Impedance Control of hydraulic piston actuators. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2004, 37, 961-966.   | 0.4 | 10        |
| 106 | Feedforward control design for a semilinear wave equation. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2009, 9, 7-10.  | 0.2 | 10        |
| 107 | A dynamical envelope model for vibratory gyroscopes. <i>Microsystem Technologies</i> , 2010, 16, 777-786.  | 2.0 | 10        |
| 108 | Model-Based Condition Monitoring of an Electro-Hydraulic Valve. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2013, 135, .  | 1.6 | 10        |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 109 | Control of Strip Tension in a Rolling Mill Based on Loopers and Impedance Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 10646-10651.                          | 0.4  | 10        |
| 110 | Flatness-Based Torque Control of Saturated Surface-Mounted Permanent Magnet Synchronous Machines. IEEE Transactions on Control Systems Technology, 2016, 24, 1201-1213.   | 5.2  | 10        |
| 111 | Control-oriented modeling of servo-pump driven injection molding machines in the filling and packing phase. Mathematical and Computer Modelling of Dynamical Systems, 2018, 24, 451-474.                        | 2.2  | 10        |
| 112 | Hamilton's Principle for Material and Nonmaterial Control Volumes Using Lagrangian and Eulerian Description of Motion. Applied Mechanics Reviews, 2019, 71, .   | 10.1 | 10        |
| 113 | Fault-tolerant torque control of a three-phase permanent magnet synchronous motor with inter-turn winding short circuit. Control Engineering Practice, 2021, 113, 104846.                                       | 5.5  | 10        |
| 114 | Fast trajectory planning and control of a lab-scale 3D gantry crane for a moving target in an environment with obstacles. Control Engineering Practice, 2022, 126, 105255.                                      | 5.5  | 10        |
| 115 | Transformation of optimal control problems with a state constraint avoiding interior boundary conditions. , 2008, , .   |      | 9         |
| 116 | Flatness-Based Feedforward Control of a Diesel Engine Air System with EGR. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 598-603.                                      | 0.4  | 9         |
| 117 | Trajectory optimization for soft landing of fast-switching electromagnetic valves. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 11532-11537.                          | 0.4  | 9         |
| 118 | Modeling and control of gas supply for burners in gas-fired industrial furnaces. , 2014, , .  |      | 9         |
| 119 | Dynamical Models of Axially Moving Rods with Tensile and Bending Stiffness. IFAC-PapersOnLine, 2015, 48, 598-603.   | 0.9  | 9         |
| 120 | Mathematical modelling of a diesel common-rail system. Mathematical and Computer Modelling of Dynamical Systems, 2015, 21, 311-335.   | 2.2  | 9         |
| 121 | Nonlinear Observer for Temperatures and Emissivities in a Strip Annealing Furnace. IEEE Transactions on Industry Applications, 2017, 53, 2578-2586.   | 4.9  | 9         |
| 122 | Mathematical Model and Stability Analysis of the Lateral Plate Motion in a Reversing Rolling Mill Stand. IFAC-PapersOnLine, 2018, 51, 73-78.  | 0.9  | 9         |
| 123 | Online Parameter Estimation for Adaptive Feedforward Control of the Strip Thickness in a Hot Strip Rolling Mill. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2019, 141, 071005. | 2.2  | 9         |
| 124 | Asymmetric hydrodynamic roll gap model and its experimental validation. International Journal of Advanced Manufacturing Technology, 2019, 100, 3101-3111.   | 3.0  | 9         |
| 125 | Steady-state and dynamic simulation of a grinding mill using grind curves. Minerals Engineering, 2020, 152, 106208.   | 4.3  | 9         |
| 126 | Passivitätsbasierte Regelung piezoelektrischer Strukturen (Passivity-based Control of Piezoelectric) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50,8   | 0.8  | 9         |



| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 127 | Motion planning for a damped euler-bernoulli beam. , 2010, , .  |     | 8         |
| 128 | Fast Optimization Based Motion Planning and Path-Tracking Control for Car Parking. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 86-91.                  | 0.4 | 8         |
| 129 | Combined path following and compliance control with application to a biaxial gantry robot. , 2014, , .  |     | 8         |
| 130 | Mathematical Modeling and Analysis of a Very Low Frequency HV Test System. IEEE Transactions on Power Electronics, 2014, 29, 5784-5794.   | 7.9 | 8         |
| 131 | Modelling and experimental validation of the deflection of a leveller for hot heavy plates. Mathematical and Computer Modelling of Dynamical Systems, 2015, 21, 202-227.                          | 2.2 | 8         |
| 132 | Constrained model predictive manifold stabilization based on transverse normal forms. Automatica, 2016, 74, 315-326.  | 5.0 | 8         |
| 133 | Elasto-plastic bending of steel strip in a hot-dip galvanizing line. Acta Mechanica, 2017, 228, 2455-2470.  | 2.1 | 8         |
| 134 | Control and estimation strategies for pneumatic drives with partial position information. Mechatronics, 2018, 50, 259-270.  | 3.3 | 8         |
| 135 | Flatness-based nonlinear control of a three-dimensional gantry crane. IFAC-PapersOnLine, 2018, 51, 331-336.   | 0.9 | 8         |
| 136 | Bifurcation suppression in regenerative amplifiers by active feedback methods. Optics Express, 2020, 28, 1722.  | 3.4 | 8         |
| 137 | Tensor analysis based symbolic computation for mechatronic systems. Mathematics and Computers in Simulation, 1998, 46, 517-525.   | 4.4 | 7         |
| 138 | Application of a combined flatness- and passivity-based control concept to a crane with heavy chains and payload. , 2006, , .   |     | 7         |
| 139 | Flatness-based feedforward control of a two-stage turbocharged diesel air system with EGR. , 2010, , .  |     | 7         |
| 140 | State Estimation for Parabolic PDEs with Varying Parameters on 3-Dimensional Spatial Domains. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 13338-13343. | 0.4 | 7         |
| 141 | Non-collocated feedback stabilization of a non-uniform Euler-Bernoulli beam with in-domain actuation. , 2011, , .   |     | 7         |
| 142 | An optimisation-based path planner for truck-trailer systems with driving direction changes. , 2015, , .  |     | 7         |
| 143 | Two-dimensional thermal modelling with specular reflections in an experimental annealing furnace. Mathematical and Computer Modelling of Dynamical Systems, 2017, 23, 23-39.                      | 2.2 | 7         |
| 144 | Vision-based inspection and segmentation of trimmed steel edges. IFAC-PapersOnLine, 2019, 52, 165-170.  | 0.9 | 7         |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 145 | Frequency-adaptive cancellation of harmonic disturbances at non-measurable positions of steel strips. <i>Mechatronics</i> , 2020, 71, 102423.   | 3.3  | 7         |
| 146 | Feedforward control of the transverse strip profile in hot-dip galvanizing lines. <i>Journal of Process Control</i> , 2020, 92, 35-49.  | 3.3  | 7         |
| 147 | Stochastic Iterative Learning Control for Lumped- and Distributed-Parameter Systems: A Wiener-Filtering Approach. <i>IEEE Transactions on Automatic Control</i> , 2021, 66, 3856-3862.  | 5.7  | 7         |
| 148 | Continuous-time least-squares forgetting algorithms for indirect adaptive control. <i>European Journal of Control</i> , 2021, 62, 105-112.  | 2.6  | 7         |
| 149 | Optimal force control of a permanent magnet linear synchronous motor based on a magnetic equivalent circuit model. <i>Control Engineering Practice</i> , 2022, 122, 105076.   | 5.5  | 7         |
| 150 | Position Control and Active Eccentricity Compensation in Rolling Mills. <i>Automatisierungstechnik</i> , 1999, 47, .  | 0.8  | 6         |
| 151 | Analyse und Synthese nichtlinearer dissipativer Systeme: Ein Ãœberblick (Teil 2) (Analysis and Synthesis) Tj ETQq1 1 0.784314 rgBT /Qverlock 10   | 0.8  | 6         |
| 152 | Analyse und Synthese nichtlinearer dissipativer Systeme: Ein Ãœberblick (Teil 1) (Analysis and Synthesis) Tj ETQq0 0 0 rgBT /Qverlock 10  | 0.8  | 6         |
| 153 | Modelling and Optimization of a Silicon Tuning Fork Gyroscope. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2004, 4, 59-62.  | 0.2  | 6         |
| 154 | Trajectory planning for a two-dimensional quasi-linear parabolic PDE based on finite difference semi-discretizations. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2011, 44, 12632-12637. | 0.4  | 6         |
| 155 | Modeling and Control of a Mobile Concrete Pump. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2013, 46, 91-98.   | 0.4  | 6         |
| 156 | Backstepping Observers for Periodic Quasi-Linear Parabolic PDEs. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2014, 47, 7761-7766.  | 0.4  | 6         |
| 157 | State of Charge Estimator Design for a Gas Charged Hydraulic Accumulator. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2015, 137, .   | 1.6  | 6         |
| 158 | Mathematical Modeling and Analysis of a Hydrostatic Drive Train. <i>IFAC-PapersOnLine</i> , 2015, 48, 508-513.  | 0.9  | 6         |
| 159 | Nonlinear observer for temperatures and emissivities in a strip annealing furnace. , 2016, , .  |      | 6         |
| 160 | Real-Time Nonlinear Model Predictive Control of a Transportâ€“Reaction System. <i>Industrial &amp; Engineering Chemistry Research</i> , 2016, 55, 7730-7741.  | 3.7  | 6         |
| 161 | Dynamical Models of the Camber and the Lateral Position in Flat Rolling. <i>Applied Mechanics Reviews</i> , 2017, 69, .   | 10.1 | 6         |
| 162 | Earlyâ€“and lateâ€“lumping observer designs for long hydraulic pipelines: Application to pumpedâ€“storage power plants. <i>International Journal of Robust and Nonlinear Control</i> , 2018, 28, 2759-2779.                       | 3.7  | 6         |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 163 | Optimal Parameter Identification for a Hydrodynamic Roll Gap Model in Hot Strip Rolling. IFAC-PapersOnLine, 2018, 51, 195-200.  | 0.9 | 6         |
| 164 | Modeling and iterative pulse-shape control of optical chirped pulse amplifiers. Automatica, 2018, 98, 150-158.  | 5.0 | 6         |
| 165 | A Nonlinear MPC Strategy for AC/DC-Converters tailored to the Implementation on FPGAs. IFAC-PapersOnLine, 2019, 52, 376-381.  | 0.9 | 6         |
| 166 | A novel mass flow controller for tandem hot rolling mills. Journal of Process Control, 2021, 104, 168-177.  | 3.3 | 6         |
| 167 | Cancellation of unknown multi-harmonic disturbances in multivariable flexible mechanical structures. Automatica, 2022, 137, 110123.   | 5.0 | 6         |
| 168 | H $\infty$ -control of random structural vibrations with piezoelectric actuators. Computers and Structures, 1998, 67, 137-145.  | 4.4 | 5         |
| 169 | Modeling and flatness-based control of a 3d of helicopter laboratory experiment. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 207-212.  | 0.4 | 5         |
| 170 | Modeling and Nonlinear Control of an Electrohydraulic Closed-Center Power-Steering System. , 0, , .   |     | 5         |
| 171 | DESIGN, MATHEMATICAL MODELING AND CONTROL OF AN ASYMMETRICAL ELECTORRHEOLOGICAL DAMPER. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 372-377.   | 0.4 | 5         |
| 172 | Feedforward Control Design for the Inviscid Burger Equation using Formal Power Series and Summation Methods. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 8743-8748.  | 0.4 | 5         |
| 173 | Modeling and control of an off-road truck using electrorheological dampers. Journal of Physics: Conference Series, 2009, 149, 012011.   | 0.4 | 5         |
| 174 | Modeling and Simulation of Large-Scale Manipulators with Hydraulic Actuation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 780-785.   | 0.4 | 5         |
| 175 | Influence of Air Cooling Jets on the Steady-State Shape of Strips in Hot Dip Galvanizing Lines <sup>3</sup> — <sup>3</sup> —The financial support by the Austrian Federal Ministry of Science, Research and Economy and the National Foundation for Research, Technology and Development is gratefully acknowledged. The second author gratefully acknowledges financial support provided by the Austrian Academy of Sciences in the form of an APART-fellowship at the Automation and Control Institute of Vienna University of Technology.. IFAC-PapersOnLine, 2015, 48, 143-148. | 0.9 | 5         |
| 176 | Soft Landing and Disturbance Rejection for Pneumatic Drives with Partial Position Information**The authors thank Festo AG & Co. KG for funding this project.. IFAC-PapersOnLine, 2016, 49, 559-566.   | 0.9 | 5         |
| 177 | Estimation and control of the tool center point of a mobile concrete pump. Automation in Construction, 2016, 61, 112-123.   | 9.8 | 5         |
| 178 | Energy-efficient Constrained Control of a Hydrostatic Power Split Drive. IFAC-PapersOnLine, 2017, 50, 4775-4780.  | 0.9 | 5         |
| 179 | A robust real-time model for plate leveling. IFAC-PapersOnLine, 2018, 51, 61-66.  | 0.9 | 5         |
| 180 | State estimation and advanced control of the 2D temperature field in an experimental oscillating annealing device. Control Engineering Practice, 2018, 78, 116-128.   | 5.5 | 5         |

| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 181 | Slip Model Adaptation Based on Measurements of the Strip Velocity. IFAC-PapersOnLine, 2019, 52, 42-47.   | 0.9  | 5         |
| 182 | Improved EMD-based Oscillation Detection for Mechatronic Closed-Loop Systems. IFAC-PapersOnLine, 2019, 52, 370-375.  | 0.9  | 5         |
| 183 | A design technique for fast sampled-data nonlinear model predictive control with convergence and stability results. International Journal of Control, 2020, 93, 81-97.   | 1.9  | 5         |
| 184 | Magnetic Actuator Design for Strip Stabilizers in Hot-Dip Galvanizing Lines: Examining Rules and Basic Tradeoffs. IEEE Industry Applications Magazine, 2020, 26, 54-63.  | 0.4  | 5         |
| 185 | Surface-Based Path Following Control: Application of Curved Tapes on 3-D Objects. IEEE Transactions on Robotics, 2021, 37, 615-626.  | 10.3 | 5         |
| 186 | Control of mechanical structures by piezoelectric actuators and sensors. Lecture Notes in Control and Information Sciences, 1999, , 275-292.   | 1.0  | 5         |
| 187 | Flatness-Based MPC and Global Path Planning Towards Cognition-Supported Pick-and-Place Tasks of Tower Cranes. , 2012, , 63-71.   |      | 5         |
| 188 | Application of a Combined Flatness- and Passivity-Based Control Concept to a Crane With Heavy Chains and Payload. , 2006, , .  |      | 5         |
| 189 | Cooperative Model Predictive Control Concepts for Coupled AC/DC- and DC/DC-Power Converters. IEEE Transactions on Control Systems Technology, 2023, 31, 359-369.   | 5.2  | 5         |
| 190 | Control of nonlinear descriptor systems, a computer algebra based approach. , 2001, , 379-395.   |      | 4         |
| 191 | Modeling and Control of an Electrorheological Actuator. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 265-270.  | 0.4  | 4         |
| 192 | INVERSION-BASED TRANSIENT SHAPING OF A PIEZO-ACTUATED PLATE: MOTION PLANNING AND FEEDFORWARD CONTROL. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 169-174.            | 0.4  | 4         |
| 193 | Nichtlineare Regelung von verstellbaren eigenversorgten Axialkolbenpumpen (Nonlinear Control of) Tj ETQq1 1 0.784314 rgBT /Overl<br>0,8  |      | 4         |
| 194 | MODELING AND CONTROL OF FRONT END BENDING IN HEAVY PLATE MILLS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 231-236.  | 0.4  | 4         |
| 195 | Real-time trajectory optimization under input constraints for a flatness-controlled laboratory helicopter. , 2009, , .   |      | 4         |
| 196 | Motion planning for an adaptive wing structure with macro-fiber composite actuators. Proceedings of SPIE, 2009, , .  | 0.8  | 4         |
| 197 | Trajectory planning and receding horizon tracking control of a quasilinear diffusion-convection-reaction system. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 587-592. | 0.4  | 4         |
| 198 | Estimation of plate temperatures in hot rolling based on an extended Kalman filter. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 409-414.                              | 0.4  | 4         |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 199 | Control of radiant tubes in an indirect-fired strip annealing furnace for improved efficiency. , 2013, , .  |     | 4         |
| 200 | Manifold stabilization and path-following control for flat systems with application to a laboratory tower crane. , 2014, , .  |     | 4         |
| 201 | Vision-Based Material Tracking in Heavy-Plate Rolling. IFAC-PapersOnLine, 2016, 49, 108-113.  | 0.9 | 4         |
| 202 | Dynamical Model of Axially Moving Steel Strips**Financial support by the Austrian Federal Ministry of Science, Research and Economy and the National Foundation for Research, Technology and Development, and voestalpine Stahl GmbH is gratefully acknowledged.. IFAC-PapersOnLine, 2016, 49, 190-195. | 0.9 | 4         |
| 203 | Combustion processes inside a direct-fired continuous strip annealing furnace. IFAC-PapersOnLine, 2016, 49, 208-213.  | 0.9 | 4         |
| 204 | Simulation von Welleneffekten in Pumpspeicherkraftwerken mit Hilfe der Spektral-Element-Methode. Automatisierungstechnik, 2016, 64, 681-695.  | 0.8 | 4         |
| 205 | Modeling of the Media Supply of Gas Burners of an Industrial Furnace. IEEE Transactions on Industry Applications, 2016, 52, 2664-2672.  | 4.9 | 4         |
| 206 | Efficient Generation of Fast Trajectories for Gantry Cranes with Constraints. IFAC-PapersOnLine, 2017, 50, 1937-1943.   | 0.9 | 4         |
| 207 | Deflection Model of A Multi-Actuator Gap Leveler. IFAC-PapersOnLine, 2017, 50, 11295-11300.   | 0.9 | 4         |
| 208 | Feedforward control of lateral asymmetries in heavy-plate hot rolling using vision-based position estimation. IFAC-PapersOnLine, 2017, 50, 11307-11312.   | 0.9 | 4         |
| 209 | Control of Curvature and Contact Force of a Metal Strip at the Strip-Roll Contact Point. IFAC-PapersOnLine, 2017, 50, 11325-11330.  | 0.9 | 4         |
| 210 | Path Following Control for Elastic Joint Robots * **This research was partially supported by the Austrian Research Promotion Agency (FFG), grant number: 850952. IFAC-PapersOnLine, 2017, 50, 4806-4811.  | 0.9 | 4         |
| 211 | Scheduling of a Flexible Job Shop with Multiple Constraints. IFAC-PapersOnLine, 2018, 51, 1293-1298.  | 0.9 | 4         |
| 212 | Torque Control of a Hydrostatic Transmission Applied to a Wheel Loader. , 2019, , .   |     | 4         |
| 213 | High-Speed Nonlinear MPC with Long Prediction Horizon for Interleaved Switching AC/DC-Converters. , 2020, , .   |     | 4         |
| 214 | A two-stage observer for the compensation of actuator-induced disturbances in tool-force sensors. Mechanical Systems and Signal Processing, 2021, 146, 106989.  | 8.0 | 4         |
| 215 | Control of Vibratory MEMS Gyroscopes based on Envelope Models. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 441-446.  | 0.4 | 3         |
| 216 | Flatness-based feedforward control design of a system of parabolic PDEs based on finite difference semi-discretization. Proceedings in Applied Mathematics and Mechanics, 2012, 12, 731-732.  | 0.2 | 3         |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 217 | Infinet-dimensionaler Reglerentwurf für Euler-Bernoulli Balken mit Macro-Fibre Composite Aktoren. Automatisierungstechnik, 2012, 60, 10-19.   | 0.8 | 3         |
| 218 | Analysis of Radiative Heat Transfer in an Indirect-Fired Strip Annealing Furnace based on Integral Equations. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 403-408.                       | 0.4 | 3         |
| 219 | State estimation for parabolic PDEs with reactive-convective non-linearities. , 2013, , .   |     | 3         |
| 220 | Quasi optimal feedforward control of a very low frequency high-voltage test system. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 11623-11628.   | 0.4 | 3         |
| 221 | Field weakening in flatness-based torque control of saturated surface-mounted permanent magnet synchronous machines. , 2015, , .  |     | 3         |
| 222 | Optimal Steady-State Temperature Field in an Experimental Annealing Furnace. IFAC-PapersOnLine, 2016, 49, 214-219.  | 0.9 | 3         |
| 223 | Model Predictive Speed Control of Axial Piston Motors**The authors from Vienna University of Technology highly appreciate the technical and financial support provided by Robert Bosch GmbH.. IFAC-PapersOnLine, 2016, 49, 772-777. | 0.9 | 3         |
| 224 | Automatic gauge control under laterally asymmetric rolling conditions combined with feedforward. , 2016, , .  |     | 3         |
| 225 | Magnetic actuator design for strip stabilizers in hot dip galvanizing lines. , 2018, , .  |     | 3         |
| 226 | Model Averaging and Feedforward Temperature Control in an Oscillating Annealing Furnace. IFAC-PapersOnLine, 2018, 51, 163-168.  | 0.9 | 3         |
| 227 | Lateral Forces in Rolling-Cut Shearing and Their Consequences on Common Edge Defects. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2019, 141, .  | 2.2 | 3         |
| 228 | Magnetic Equivalent Circuit Model of a Dual Three-Phase PMSM with Winding Short Circuit. , 2019, , .  |     | 3         |
| 229 | Dynamic Virtual Fixtures Based on Path Following Control. IFAC-PapersOnLine, 2019, 52, 424-429.   | 0.9 | 3         |
| 230 | Efficient oscillation detection for verification of mechatronic closed-loop systems using search-based testing. Mechanical Systems and Signal Processing, 2022, 163, 108112.  | 8.0 | 3         |
| 231 | Active and Semi-Active Control of Electrorheological Fluid Devices. , 2005, , 203-212.  |     | 3         |
| 232 | On the global feedback stabilization of regenerative optical amplifiers. IFAC-PapersOnLine, 2020, 53, 5447-5452.  | 0.9 | 3         |
| 233 | Fast motion planning for a laboratory 3D gantry crane in the presence of obstacles. IFAC-PapersOnLine, 2020, 53, 9508-9514.   | 0.9 | 3         |
| 234 | Temperature Control for Induction Heating of Thin Strips. IFAC-PapersOnLine, 2020, 53, 11968-11973.   | 0.9 | 3         |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 235 | Kartesische Impedanzregelung von Robotern mit elastischen Gelenken: Ein passivitätsbasierter Ansatz (Cartesian Impedance Control of Flexible Joint Robots: A Passivity Based Approach). Automatisierungstechnik, 2005, 53, 378-388.      | 0.8 | 2         |
| 236 | Regelung adaptronischer Systeme, Teil I: Piezoelektrische Strukturen (Control of Adaptronic Systems,) Tj ETQq0 0 0,8 BT /Overlock 10 T   | 0.8 | 2         |
| 237 | Ein neuartiger Ansatz zur Querdynamikregelung von Personenkraftwagen (A New Approach to Lateral) Tj ETQq1 1 0,784314 BT /O   | 0.8 | 2         |
| 238 | Stress measurement in a cantilevered silicon beam undergoing coupled motion of torsion and bending. Smart Materials and Structures, 2007, 16, 296-304.   | 3.5 | 2         |
| 239 | Resistance estimation algorithm for self-sensing magnetic levitation systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 32-37.  | 0.4 | 2         |
| 240 | Idle Stroke Detection for a Fuel Injection Control Valve. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 499-504.  | 0.4 | 2         |
| 241 | Trajektorienfolgeregelung für parabolische partielle Differenzialgleichungen mit variablen Parametern Tracking Control for Parabolic PDEs with Varying Parameters. Automatisierungstechnik, 2010, 58, 128-138.                           | 0.8 | 2         |
| 242 | Modelling and identification of a piezoelectrically driven fuel injection control valve. Mathematical and Computer Modelling of Dynamical Systems, 2010, 16, 285-305.  | 2.2 | 2         |
| 243 | Feedback Tracking Control of Continuous Reheating Furnaces. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 11744-11749.  | 0.4 | 2         |
| 244 | Decoupled Quadrature and Force Feedback Control of Capacitive MEMS Gyroscopes*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 13534-13539.  | 0.4 | 2         |
| 245 | Optimal Active Deflection Compensation of a Hot Leveler. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 30-35.   | 0.4 | 2         |
| 246 | Dreistufiger Kolbenkompressor mit vorgeschaltetem Drehkolbenkompressor: Teil 1, Modellierung. Automatisierungstechnik, 2012, 60, 766-776.  | 0.8 | 2         |
| 247 | Two Illustrative Examples to Show the Potential of Thermography for Process Monitoring and Control in Hot Rolling. IFAC-PapersOnLine, 2015, 48, 48-53.   | 0.9 | 2         |
| 248 | Modellierung des Umschlingungswinkels eines auf Rollen geführten Metallbandes. Automatisierungstechnik, 2015, 63, 646-655.   | 0.8 | 2         |
| 249 | Controller design and experimental validation of a very low frequency high-voltage test system. Control Engineering Practice, 2015, 37, 32-42.   | 5.5 | 2         |
| 250 | Experimental Parameterization of a Design Model for Flatness-based Torque Control of a Saturated Surface-Mounted PMSM**This work was supported by Bernecker and Rainer Industrie Elektronik GmbH.. IFAC-PapersOnLine, 2016, 49, 575-582. | 0.9 | 2         |
| 251 | Patching process optimization in an agent-controlled timber mill. Journal of Intelligent Manufacturing, 2017, 28, 69-84.   | 7.3 | 2         |
| 252 | Nichtlineares Bewegungsmodell für ein Stahlband in einer Oberflächenbeschichtungsanlage. Automatisierungstechnik, 2017, 65, 546-560.   | 0.8 | 2         |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 253 | Feedforward Control of the Temperature Field in an Experimental Annealing Furnace 1 1The financial support by the Austrian Federal Ministry of Science, Research and Economy, the National Foundation for Research, Technology and Development, and voestalpine Stahl GmbH is gratefully acknowledged.. IFAC-PapersOnLine, 2017, 50, 13790-13795.   | 0.9 | 2         |
| 254 | Model-Based Signal Processing for the Force Control of Biaxial Gantry Robots * *This work was supported by Festo AG & Co. KG. IFAC-PapersOnLine, 2017, 50, 3208-3214.   | 0.9 | 2         |
| 255 | A Computationally Efficient 3D Mathematical Model of a Molybdenum Baton Reheating Furnace * *This research work has been performed in the EU project Power Semiconductor and Electronics Manufacturing 4.0 (Semi40), which is funded by the programme Electronic Component Systems for European Leadership (ECSEL) Joint Undertaking (grant agreement no. 692466) and the programme "Köln der Zukunft" (project no. 853343) of the Austrian Ministry for Transport, Innovation and Technology (bmvit) between May 2016 and April. IFAC-PapersOnLine, 2018, 51, 819-824. | 0.9 | 2         |
| 256 | Model-based estimation of the stress-strain curve of metal strips. Mathematical and Computer Modelling of Dynamical Systems, 2019, 25, 224-241.   | 2.2 | 2         |
| 257 | A dynamic model of power metal-oxide-semiconductor field-effect transistor half-bridges for the fast simulation of switching induced electromagnetic emissions. Mathematical and Computer Modelling of Dynamical Systems, 2019, 25, 242-260.  | 2.2 | 2         |
| 258 | Non-Collocated Position Control of Steel Strip With Electromagnetic Rejection of Unknown Multi-Harmonic Disturbances. IFAC-PapersOnLine, 2019, 52, 430-435.   | 0.9 | 2         |
| 259 | Collaborative Synchronization of a 7-Axis Robot. IFAC-PapersOnLine, 2019, 52, 507-512.  | 0.9 | 2         |
| 260 | Time-optimal fold out of large-scale manipulators with obstacle avoidance. IFAC-PapersOnLine, 2019, 52, 114-119.  | 0.9 | 2         |
| 261 | Reduced-Order Modeling of a Radiative Heating Process with Movable Radiators. IFAC-PapersOnLine, 2019, 52, 346-351.   | 0.9 | 2         |
| 262 | Model-based optimization of blade geometry in rolling-cut shearing to minimize common defects of the sheared edge. Journal of Manufacturing Processes, 2020, 52, 213-219.   | 5.9 | 2         |
| 263 | Optimale Abstimmung eines mobilen Großraummanipulators. Automatisierungstechnik, 2021, 69, 782-794.   | 0.8 | 2         |
| 264 | Model-Based Fault Identification of Inter-Turn Winding Short Circuits in PMSM. , 2020, , .  |     | 2         |
| 265 | Model-Based Dynamic Calibration of a Multi-Actuator Gap Leveler for Heavy Plates. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2020, 142, .  | 2.2 | 2         |
| 266 | Optimal Thread-In and Thread-Out Strategies for Heavy Plate Levelers. IFAC-PapersOnLine, 2021, 54, 1-6.   | 0.9 | 2         |
| 267 | Discrete-Time Repetitive Control for Multi-Harmonic Reference Trajectories with Arbitrary Frequency. IFAC-PapersOnLine, 2020, 53, 1646-1651.  | 0.9 | 2         |
| 268 | Optimal control of plate motion and camber in a reversing rolling mill. IFAC-PapersOnLine, 2020, 53, 11962-11967.   | 0.9 | 2         |
| 269 | In-Line Estimation of the Magnetization Curve of Steel Strips in a Continuous Induction Furnace. IFAC-PapersOnLine, 2020, 53, 12062-12067.  | 0.9 | 2         |
| 270 | Are edger rolls useful to control the plate motion and camber in a reversing rolling mill?. Journal of Process Control, 2022, 114, 71-81.   | 3.3 | 2         |



| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 271 | Regelung eines Cuk-Konverters (Control of a Cuk-Converter). Automatisierungstechnik, 2000, 48, 116.   | 0.8 | 1         |
| 272 | CONTROL OF PLATE THICKNESS IN HEAVY PLATE MILLS: A NEW PERSPECTIVE. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 107-112.               | 0.4 | 1         |
| 273 | Modelling of distributed-parameter systems for control purposes. Mathematical and Computer Modelling of Dynamical Systems, 2008, 14, 177-178.                                     | 2.2 | 1         |
| 274 | Feedforward control design for the wave equation with nonlinear boundary conditions modelling a torsional rod. , 2008, , .  |     | 1         |
| 275 | Model-based control of front-end bending in hot rolling processes. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 1645-1650.              | 0.4 | 1         |
| 276 | An envelope model to describe the sensor dynamics of vibratory gyroscopes. , 2009, , .  |     | 1         |
| 277 | Digital Control of Electrorheological Valves. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 640-645.                                     | 0.4 | 1         |
| 278 | Trajectory planning for semilinear PDEs modeling a countercurrent heat exchanger. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 593-598. | 0.4 | 1         |
| 279 | Extension and optimization of the load range of DRT test systems for testing extra-long HV and UHV cables. Elektrotechnik Und Informationstechnik, 2013, , 1.                     | 1.1 | 1         |
| 280 | Modellierung eines Smart High-Side Power ICs. Automatisierungstechnik, 2013, 61, 849-858.   | 0.8 | 1         |
| 281 | Heat Transfer with Specular Reflections in an Experimental Annealing Device. IFAC-PapersOnLine, 2015, 48, 494-499.  | 0.9 | 1         |
| 282 | Modeling of the media-supply of gas burners of an industrial furnace. , 2015, , .   |     | 1         |
| 283 | Surface Following Control for Fully Actuated Rigid Body Systems in Three-Dimensional Euclidean Space. IFAC-PapersOnLine, 2016, 49, 594-599.                                       | 0.9 | 1         |
| 284 | Modellordnungsreduktion, Beobachterentwurf und Sensorplatzierung für einen Infrarot-Glühofen. Automatisierungstechnik, 2017, 65, 337-349.   | 0.8 | 1         |
| 285 | Swing-Up of a Spherical Pendulum on a 7-Axis Industrial Robot. IFAC-PapersOnLine, 2019, 52, 346-351.  | 0.9 | 1         |
| 286 | Cycle-based Adaption of a Model-Predictive Control Strategy for Injection Molding Machines. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900317.               | 0.2 | 1         |
| 287 | Modeling and control of a novel pneumatic two-stage piezoelectric-actuated valve. Mechatronics, 2021, 75, 102529.   | 3.3 | 1         |
| 288 | A software package for the analysis of DAE control systems. , 1999, , .   |     | 1         |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 289 | Part Mass Estimation Strategy for Injection Molding Machines. IFAC-PapersOnLine, 2020, 53, 10366-10371.   | 0.9 | 1         |
| 290 | Optimization-based estimator for the lateral strip position in tandem hot rolling. IFAC-PapersOnLine, 2021, 54, 7-12.   | 0.9 | 1         |
| 291 | Optimal Start Times for a Flow Shop with Blocking Constraints, No-Wait Constraints, and Stochastic Processing Times. IFAC-PapersOnLine, 2021, 54, 659-664.  | 0.9 | 1         |
| 292 | Increasing the Capacity for Automated Valet Parking Using Variable Spot Width. , 2020, , .  |     | 1         |
| 293 | Robust Mass Flow Control in Hot Rolling Mills. , 2021, , .  |     | 1         |
| 294 | Iterative learning and feedback control for the curvature and contact force of a metal strip on a roll. Control Engineering Practice, 2022, 121, 105071.  | 5.5 | 1         |
| 295 | Mathematical modeling and computational principles for the analysis and simulation of long-distance energy systems. Mathematics and Computers in Simulation, 1995, 39, 565-572.                             | 4.4 | 0         |
| 296 | Rotational Hydraulic Piston Actuators and DC-DC-Power Converters: A Unifying Modeling and Control Approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 359-364. | 0.4 | 0         |
| 297 | Descriptor-Systems and Optimal Control. Mathematical and Computer Modelling of Dynamical Systems, 2001, 7, 159-172.   | 2.2 | 0         |
| 298 | SYMBOLIC METHODS FOR SYSTEMS OF IMPLICIT ORDINARY DIFFERENTIAL EQUATIONS*. Mechanics Based Design of Structures and Machines, 2002, 30, 103-121.  | 0.6 | 0         |
| 299 | Passivitäts- und Lyapunovbasierte Reglerentwurfsmethoden (Passivity- and Lyapunov-based Control) Tj ETQq1 1 0.784314 rgBT /Overlock 10  | 0.8 | 0         |
| 300 | Feedforward control of plate thickness in reversing plate mills. , 0, , .   |     | 0         |
| 301 | Regelung adaptronischer Systeme, Teil II: Elektrorheologische Aktoren (Control of Adaptronic) Tj ETQq1 1 0.784314 rgBT /Overlock 10   | 0.8 | 0         |
| 302 | Erratum to "Feedforward control of plate thickness in reversing plate mills". IEEE Transactions on Industry Applications, 2007, 43, 1652-1652.  | 4.9 | 0         |
| 303 | Experimental results on motion planning and tracking control for a piezoactuated flexible trimorph bender. , 2007, , .  |     | 0         |
| 304 | Inversion-Based Feedforward Control for the Transient Shaping of a Piezo-Actuated Cantilevered Kirchhoff Plate. Proceedings in Applied Mathematics and Mechanics, 2008, 8, 10913-10914.                     | 0.2 | 0         |
| 305 | Modellbasierte Dicken- und Ebenheitsregelung in Grobblechwalzwerken (Model-based Control of) Tj ETQq1 1 0.784314 rgBT /Overlock 10  | 0.8 | 0         |
| 306 | Tracking control of a distributed-parameter piezoelectric stack actuator. , 2009, , .   |     | 0         |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 307 | Motion Planning for a Flexible Link Manipulator with Macro-fiber Composite Actuators. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 486-491. | 0.4 | 0         |
| 308 | Ein Programmpaket zur Modellierung kapazitiver MEMS-Drehratensensoren. Automatisierungstechnik, 2010, 58, 307-315.  | 0.8 | 0         |
| 309 | Ausgewählte Beiträge der GMA-Fachausschüsse 1.30 und 1.40. Automatisierungstechnik, 2010, 58, 423-424.  | 0.8 | 0         |
| 310 | Steuerungs- und Regelungsansätze für Systeme mit verteilten Parametern. Automatisierungstechnik, 2010, 58, 115-116.   | 0.8 | 0         |
| 311 | State Reconstruction in Higher Dimensional PDEs with Spatially Varying Parameters. Proceedings in Applied Mathematics and Mechanics, 2011, 11, 813-814.                               | 0.2 | 0         |
| 312 | Feedforward Control for a Non-Uniform Euler-Bernoulli Beam. Proceedings in Applied Mathematics and Mechanics, 2011, 11, 829-830.  | 0.2 | 0         |
| 313 | Motion planning for an elastic Kirchhoff plate. , 2012, , .   |     | 0         |
| 314 | Modellierung und Regelung eines aktiven Wellenkompensationssystems für Tiefsee Kräne. Automatisierungstechnik, 2012, 60, 39-52.   | 0.8 | 0         |
| 315 | Hardware implementation of an electrostatic MEMS-actuator linearization. Microsystem Technologies, 2012, 18, 955-963.   | 2.0 | 0         |
| 316 | Dreistufiger Kolbenkompressor mit vorgeschaltetem Drehkolbenkompressor: Teil 2, Regelung. Automatisierungstechnik, 2013, 61, 48-59.   | 0.8 | 0         |
| 317 | A queue-based dynamic power control approach for wireless communication networks. , 2014, , .   |     | 0         |
| 318 | Power optimal gate current profiles for the slew rate control of Smart Power ICs. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 7190-7195.   | 0.4 | 0         |
| 319 | Steering Control of Metal Strips Using a Pivoted Guide Roller. IFAC-PapersOnLine, 2015, 48, 137-142.  | 0.9 | 0         |
| 320 | Time-optimal trajectory generation, path planning and control for a wood patching robot. , 2015, , .  |     | 0         |
| 321 | Optimale nichtlineare Regelung von permanenterregten Synchronmaschinen. Automatisierungstechnik, 2015, 63, 739-750.   | 0.8 | 0         |
| 322 | Nonlinear observability of grinding mill conditions. IFAC-PapersOnLine, 2016, 49, 13-18.  | 0.9 | 0         |
| 323 | A Mathematical Model of a Horizontal Direct-Fired Strip Annealing Furnace. IFAC-PapersOnLine, 2016, 49, 202-207.  | 0.9 | 0         |
| 324 | Analysis and system optimization of a very low frequency high-voltage test system. IFAC-PapersOnLine, 2016, 49, 294-300.  | 0.9 | 0         |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 325 | Evaluation of Efficiently Generating Fast Robot Trajectories Under Geometric and System Constraints**The authors are grateful to STIWA Automation GmbH for financial and technical support.. IFAC-PapersOnLine, 2016, 49, 395-402.                       | 0.9 | 0         |
| 326 | A Numerical Implementation of an Extended Luenberger Observer for a Class of Semilinear Hyperbolic PIDEs. IFAC-PapersOnLine, 2016, 49, 216-221.  | 0.9 | 0         |
| 327 | Notice of Removal Optimization of a very low frequency (VLF) high-voltage cable test system. , 2016, , .   |     | 0         |
| 328 | Modeling and Control of the Oxygen Concentration in a Post Combustion Chamber of a Gas-Fired Furnace * *The authors kindly express their gratitude to the industrial research partner voestalpine Stahl GmbH.. IFAC-PapersOnLine, 2017, 50, 13766-13771. | 0.9 | 0         |
| 329 | Optimal torque control of PMSMs with redundant stator coils in case of open circuit faults. , 2017, , .  |     | 0         |
| 330 | Identifikation und Simulation optischer Verstärker für ultra-kurze Laserpulse. Automatisierungstechnik, 2018, 66, 66-78.   | 0.8 | 0         |
| 331 | Nichtlineare modellprädiktive Regelung eines Abwärmerückgewinnungssystems für LKW-Dieselmotoren. Automatisierungstechnik, 2019, 67, 129-144.   | 0.8 | 0         |
| 332 | Optimal feedforward control of hydraulic drive systems with long pipelines. Proceedings in Applied Mathematics and Mechanics, 2019, 19, e201900195.  | 0.2 | 0         |
| 333 | Optimal Current Slew Rate Control for a Three-Phase MOSFET Inverter Driving a PMSM. IFAC-PapersOnLine, 2019, 52, 85-90.  | 0.9 | 0         |
| 334 | Fast Swing-Up Trajectory Optimization for a Spherical Pendulum on a 7-DoF Collaborative Robot. , 2021, , .   |     | 0         |
| 335 | Hardware implementation of an electrostatic MEMS-actuator linearization. Proceedings of SPIE, 2011, , .  | 0.8 | 0         |
| 336 | Combined Feedforward/Model Predictive Tracking Control Design for Nonlinear Diffusion-Convection-Reaction-Systems. International Federation for Information Processing, 2013, , 296-305.   | 0.4 | 0         |
| 337 | Univ.-Prof. Dr. Kurt Schlacher zum 60. Geburtstag. Automatisierungstechnik, 2015, 63, 669-671.   | 0.8 | 0         |
| 338 | Pfadfolgeregelung mit Konzepten für den Pfadfortschritt: Ein Assemblierungsszenario. Automatisierungstechnik, 2020, 68, 44-57.   | 0.8 | 0         |
| 339 | Automatic Yaw Rotation of Plates on Roller Tables. IFAC-PapersOnLine, 2021, 54, 19-24.   | 0.9 | 0         |
| 340 | Estimation of Quality Parameters of Trimmed Steel Plates using Laser Sensors. IFAC-PapersOnLine, 2020, 53, 11848-11853.  | 0.9 | 0         |
| 341 | Reheating time optimization for metal products in batch-type furnaces. International Journal of Heat and Mass Transfer, 2022, 186, 122474.   | 4.8 | 0         |
| 342 | Multi-Dimensional Control Performance Assessment for Mechatronic Closed-Loop Systems. , 2021, , .  |     | 0         |