

Andreas Kugi

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

334 papers	3,043 citations	26 h-index	43 g-index
356 ext. papers	3,775 ext. citations	2.6 avg, IF	5.75 L-index

#	Paper	IF	Citations
334	Iterative learning and feedback control for the curvature and contact force of a metal strip on a roll. <i>Control Engineering Practice</i> , 2022 , 121, 105071	3.9	
333	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	3.9	2
332	Cancellation of unknown multi-harmonic disturbances in multivariable flexible mechanical structures. <i>Automatica</i> , 2022 , 137, 110123	5.7	1
331	Reheating time optimization for metal products in batch-type furnaces. <i>International Journal of Heat and Mass Transfer</i> , 2022 , 186, 122474	4.9	
330	Efficient oscillation detection for verification of mechatronic closed-loop systems using search-based testing. <i>Mechanical Systems and Signal Processing</i> , 2022 , 163, 108112	7.8	2
329	Are edger rolls useful to control the plate motion and camber in a reversing rolling mill?. <i>Journal of Process Control</i> , 2022 , 114, 71-81	3.9	0
328	Optimization-based estimator for the lateral strip position in tandem hot rolling. <i>IFAC-PapersOnLine</i> , 2021 , 54, 7-12	0.7	1
327	Optimal Start Times for a Flow Shop with Blocking Constraints, No-Wait Constraints, and Stochastic Processing Times. <i>IFAC-PapersOnLine</i> , 2021 , 54, 659-664	0.7	
326	Optimal Thread-In and Thread-Out Strategies for Heavy Plate Levelers. <i>IFAC-PapersOnLine</i> , 2021 , 54, 1-6	0.7	
325	Automatic Yaw Rotation of Plates on Roller Tables. <i>IFAC-PapersOnLine</i> , 2021 , 54, 19-24	0.7	
324	Surface-Based Path Following Control: Application of Curved Tapes on 3-D Objects. <i>IEEE Transactions on Robotics</i> , 2021 , 37, 615-626	6.5	0
323	Modeling and control of a novel pneumatic two-stage piezoelectric-actuated valve. <i>Mechatronics</i> , 2021 , 75, 102529	3	1
322	Modeling of a permanent magnet linear synchronous motor using magnetic equivalent circuits. <i>Mechatronics</i> , 2021 , 76, 102558	3	1
321	Real-time optimal quantum control of mechanical motion at room temperature. <i>Nature</i> , 2021 , 595, 373-374	37.4	38
320	A two-stage observer for the compensation of actuator-induced disturbances in tool-force sensors. <i>Mechanical Systems and Signal Processing</i> , 2021 , 146, 106989	7.8	4
319	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	5.9	0
318	Nonlinear Model Predictive Control of a Variable-Speed Pumped-Storage Power Plant. <i>IEEE Transactions on Control Systems Technology</i> , 2021 , 29, 645-660	4.8	8

317	Fault-tolerant torque control of a three-phase permanent magnet synchronous motor with inter-turn winding short circuit. <i>Control Engineering Practice</i> , 2021 , 113, 104846	3.9	2
316	A novel mass flow controller for tandem hot rolling mills. <i>Journal of Process Control</i> , 2021 , 104, 168-177	3.9	1
315	Optimale Abstimmung eines mobilen Großraummanipulators. <i>Automatisierungstechnik</i> , 2021 , 69, 782-794	0.8	0
314	Frequency-adaptive cancellation of harmonic disturbances at non-measurable positions of steel strips. <i>Mechatronics</i> , 2020 , 71, 102423	3	4
313	Feedforward control of the transverse strip profile in hot-dip galvanizing lines. <i>Journal of Process Control</i> , 2020 , 92, 35-49	3.9	1
312	Model-based optimization of blade geometry in rolling-cut shearing to minimize common defects of the sheared edge. <i>Journal of Manufacturing Processes</i> , 2020 , 52, 213-219	5	1
311	Steady-state and dynamic simulation of a grinding mill using grind curves. <i>Minerals Engineering</i> , 2020 , 152, 106208	4.9	3
310	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	7.2	13
309	Model-Based Fault Identification of Inter-Turn Winding Short Circuits in PMSM 2020 ,		1
308	In-Line Estimation of the Magnetization Curve of Steel Strips in a Continuous Induction Furnace. <i>IFAC-PapersOnLine</i> , 2020 , 53, 12062-12067	0.7	1
307	Estimation of Quality Parameters of Trimmed Steel Plates using Laser Sensors. <i>IFAC-PapersOnLine</i> , 2020 , 53, 11848-11853	0.7	
306	Pfadfolgeregelung mit Konzepten für den Pfadfortschritt: Ein Assemblierungsszenario. <i>Automatisierungstechnik</i> , 2020 , 68, 44-57	0.8	
305	Part Mass Estimation Strategy for Injection Molding Machines. <i>IFAC-PapersOnLine</i> , 2020 , 53, 10366-10370	0.7	
304	Bifurcation suppression in regenerative amplifiers by active feedback methods. <i>Optics Express</i> , 2020 , 28, 1722-1737	3.3	4
303	Model-Based Dynamic Calibration of a Multi-Actuator Gap Leveler for Heavy Plates. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2020 , 142,	3.3	1
302	Discrete-Time Repetitive Control for Multi-Harmonic Reference Trajectories with Arbitrary Frequency. <i>IFAC-PapersOnLine</i> , 2020 , 53, 1646-1651	0.7	2
301	Optimal control of plate motion and camber in a reversing rolling mill. <i>IFAC-PapersOnLine</i> , 2020 , 53, 11962-11967	0.7	1
300	On the global feedback stabilization of regenerative optical amplifiers. <i>IFAC-PapersOnLine</i> , 2020 , 53, 5447-5452	0.7	0

299	Fast motion planning for a laboratory 3D gantry crane in the presence of obstacles. <i>IFAC-PapersOnLine</i> , 2020 , 53, 9508-9514	0.7	0
298	Temperature Control for Induction Heating of Thin Strips. <i>IFAC-PapersOnLine</i> , 2020 , 53, 11968-11973	0.7	2
297	Magnetic Actuator Design for Strip Stabilizers in Hot-Dip Galvanizing Lines: Examining Rules and Basic Tradeoffs. <i>IEEE Industry Applications Magazine</i> , 2020 , 26, 54-63	0.6	3
296	High-Speed Nonlinear MPC with Long Prediction Horizon for Interleaved Switching AC/DC-Converters 2020 ,		1
295	Efficient scheduling of a stochastic no-wait job shop with controllable processing times. <i>Expert Systems With Applications</i> , 2020 , 162, 113879	7.8	8
294	High-speed nonlinear model predictive control of an interleaved switching DC/DC-converter. <i>Control Engineering Practice</i> , 2020 , 103, 104576	3.9	9
293	Adaptive feedforward thickness control in hot strip rolling with oil lubrication. <i>Control Engineering Practice</i> , 2020 , 103, 104584	3.9	2
292	A design technique for fast sampled-data nonlinear model predictive control with convergence and stability results. <i>International Journal of Control</i> , 2020 , 93, 81-97	1.5	2
291	Model-Predictive Control of Servo-Pump Driven Injection Molding Machines. <i>IEEE Transactions on Control Systems Technology</i> , 2020 , 28, 1665-1680	4.8	3
290	A dynamic model of power metal-oxide-semiconductor field-effect transistor half-bridges for the fast simulation of switching induced electromagnetic emissions. <i>Mathematical and Computer Modelling of Dynamical Systems</i> , 2019 , 25, 242-260	1	2
289	Nichtlineare modellprädiktive Regelung eines Abwärmegewinnungssystems für LKW-Dieselmotoren. <i>Automatisierungstechnik</i> , 2019 , 67, 129-144	0.8	
288	Online Parameter Estimation for Adaptive Feedforward Control of the Strip Thickness in a Hot Strip Rolling Mill. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2019 , 141, 071005	3.3	6
287	Nonlinear 3D path following control of a fixed-wing aircraft based on acceleration control. <i>Control Engineering Practice</i> , 2019 , 86, 56-69	3.9	11
286	Model-based estimation of the stress-strain curve of metal strips. <i>Mathematical and Computer Modelling of Dynamical Systems</i> , 2019 , 25, 224-241	1	1
285	Lateral Forces in Rolling-Cut Shearing and Their Consequences on Common Edge Defects. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2019 , 141,	3.3	3
284	Magnetic Equivalent Circuit Model of a Dual Three-Phase PMSM with Winding Short Circuit 2019 ,		3
283	Torque Control of a Hydrostatic Transmission Applied to a Wheel Loader 2019 ,		2
282	Optimal feedforward control of hydraulic drive systems with long pipelines. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2019 , 19, e201900195	0.2	

281	Slip Model Adaptation Based on Measurements of the Strip Velocity. <i>IFAC-PapersOnLine</i> , 2019 , 52, 42-47.	0.7	2
280	Swing-Up of a Spherical Pendulum on a 7-Axis Industrial Robot. <i>IFAC-PapersOnLine</i> , 2019 , 52, 346-351	0.7	0
279	Improved EMD-based Oscillation Detection for Mechatronic Closed-Loop Systems. <i>IFAC-PapersOnLine</i> , 2019 , 52, 370-375	0.7	2
278	Non-Collocated Position Control of Steel Strip With Electromagnetic Rejection of Unknown Multi-Harmonic Disturbances. <i>IFAC-PapersOnLine</i> , 2019 , 52, 430-435	0.7	1
277	Collaborative Synchronization of a 7-Axis Robot. <i>IFAC-PapersOnLine</i> , 2019 , 52, 507-512	0.7	2
276	Time-optimal fold out of large-scale manipulators with obstacle avoidance. <i>IFAC-PapersOnLine</i> , 2019 , 52, 114-119	0.7	1
275	Dynamic Virtual Fixtures Based on Path Following Control. <i>IFAC-PapersOnLine</i> , 2019 , 52, 424-429	0.7	
274	Optimal Current Slew Rate Control for a Three-Phase MOSFET Inverter Driving a PMSM. <i>IFAC-PapersOnLine</i> , 2019 , 52, 85-90	0.7	
273	Reduced-Order Modeling of a Radiative Heating Process with Movable Radiators. <i>IFAC-PapersOnLine</i> , 2019 , 52, 346-351	0.7	0
272	A Nonlinear MPC Strategy for AC/DC-Converters tailored to the Implementation on FPGAs. <i>IFAC-PapersOnLine</i> , 2019 , 52, 376-381	0.7	4
271	Vision-based inspection and segmentation of trimmed steel edges. <i>IFAC-PapersOnLine</i> , 2019 , 52, 165-170.	0.7	3
270	Cycle-based Adaption of a Model-Predictive Control Strategy for Injection Molding Machines. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2019 , 19, e201900317	0.2	
269	Asymmetric hydrodynamic roll gap model and its experimental validation. <i>International Journal of Advanced Manufacturing Technology</i> , 2019 , 100, 3101-3111	3.2	5
268	Hamilton's Principle for Material and Nonmaterial Control Volumes Using Lagrangian and Eulerian Description of Motion. <i>Applied Mechanics Reviews</i> , 2019 , 71,	8.6	5
267	Optimization-based feedforward control of the strip thickness profile in hot strip rolling. <i>Journal of Process Control</i> , 2018 , 64, 100-111	3.9	17
266	Early- and late-lumping observer designs for long hydraulic pipelines: Application to pumped-storage power plants. <i>International Journal of Robust and Nonlinear Control</i> , 2018 , 28, 2759-2779	3.6	5
265	Control and estimation strategies for pneumatic drives with partial position information. <i>Mechatronics</i> , 2018 , 50, 259-270	3	4
264	Identifikation und Simulation optischer Verstärker für ultra-kurze Laserpulse. <i>Automatisierungstechnik</i> , 2018 , 66, 66-78	0.8	

263	Hierarchical nonlinear optimization-based controller of a continuous strip annealing furnace. <i>Control Engineering Practice</i> , 2018 , 73, 40-55	3.9	9
262	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	4.8	8
261	Closed-loop stability analysis of a gantry crane with heavy chain and payload. <i>International Journal of Control</i> , 2018 , 91, 1931-1943	1.5	8
260	Feedback Control of the Contour Shape in Heavy-Plate Hot Rolling. <i>IEEE Transactions on Control Systems Technology</i> , 2018 , 26, 842-856	4.8	9
259	The spectral element method as an efficient tool for transient simulations of hydraulic systems. <i>Applied Mathematical Modelling</i> , 2018 , 54, 627-647	4.5	7
258	Control-oriented modeling of servo-pump driven injection molding machines in the filling and packing phase. <i>Mathematical and Computer Modelling of Dynamical Systems</i> , 2018 , 24, 451-474	1	7
257	A Path/Surface Following Control Approach to Generate Virtual Fixtures. <i>IEEE Transactions on Robotics</i> , 2018 , 34, 1577-1592	6.5	9
256	State estimation and advanced control of the 2D temperature field in an experimental oscillating annealing device. <i>Control Engineering Practice</i> , 2018 , 78, 116-128	3.9	2
255	Magnetic actuator design for strip stabilizers in hot dip galvanizing lines 2018 ,		3
254	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. <i>Mechatronics</i> , 2018 , 56, 73-86	3	10
253	A robust real-time model for plate leveling. <i>IFAC-PapersOnLine</i> , 2018 , 51, 61-66	0.7	5
252	Scheduling of a Flexible Job Shop with Multiple Constraints. <i>IFAC-PapersOnLine</i> , 2018 , 51, 1293-1298	0.7	3
251	Model Averaging and Feedforward Temperature Control in an Oscillating Annealing Furnace. <i>IFAC-PapersOnLine</i> , 2018 , 51, 163-168	0.7	1
250	Optimal Parameter Identification for a Hydrodynamic Roll Gap Model in Hot Strip Rolling. <i>IFAC-PapersOnLine</i> , 2018 , 51, 195-200	0.7	5
249	Flatness-based nonlinear control of a three-dimensional gantry crane. <i>IFAC-PapersOnLine</i> , 2018 , 51, 331-336	3.6	4
248	A Computationally Efficient 3D Mathematical Model of a Molybdenum Batch-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	0.7	1
247	Modeling and iterative pulse-shape control of optical chirped pulse amplifiers. <i>Automatica</i> , 2018 , 98, 150-158 (bmvit) between May 2016 and April. <i>IFAC-PapersOnLine</i> , 2018 , 51, 819-824	5.7	4
246	Model predictive control of an automotive waste heat recovery system. <i>Control Engineering Practice</i> , 2018 , 81, 28-42	3.9	17

245	Mathematical Model and Stability Analysis of the Lateral Plate Motion in a Reversing Rolling Mill Stand. <i>IFAC-PapersOnLine</i> , 2018 , 51, 73-78	0.7	7
244	Patching process optimization in an agent-controlled timber mill. <i>Journal of Intelligent Manufacturing</i> , 2017 , 28, 69-84	6.7	1
243	. <i>IEEE Transactions on Industry Applications</i> , 2017 , 53, 2560-2568	4.3	16
242	An EKF observer to estimate semi-autogenous grinding mill hold-ups. <i>Journal of Process Control</i> , 2017 , 51, 27-41	3.9	13
241	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	9
240	. <i>IEEE Transactions on Industry Applications</i> , 2017 , 53, 2578-2586	4.3	6
239	Modeling and static optimization of a variable speed pumped storage power plant. <i>Renewable Energy</i> , 2017 , 111, 38-51	8.1	33
238	Force-based cooperative handling and lay-up of deformable materials: Mechatronic design, modeling, and control of a demonstrator. <i>Mechatronics</i> , 2017 , 47, 246-261	3	11
237	Combined Path Following and Compliance Control for Fully Actuated Rigid Body Systems in 3-D Space. <i>IEEE Transactions on Control Systems Technology</i> , 2017 , 25, 1750-1760	4.8	9
236	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	10.7	28
235	Attitude control strategy for a camera stabilization platform. <i>Mechatronics</i> , 2017 , 46, 60-69	3	11
234	Dynamical Models of the Camber and the Lateral Position in Flat Rolling. <i>Applied Mechanics Reviews</i> , 2017 , 69,	8.6	5
233	Nichtlineares Bewegungsmodell für ein Stahlband in einer Oberflächenbeschichtungsanlage. <i>Automatisierungstechnik</i> , 2017 , 65, 546-560	0.8	2
232	Modellordnungsreduktion, Beobachterentwurf und Sensorplatzierung für einen Infrarot-Glühofen. <i>Automatisierungstechnik</i> , 2017 , 65, 337-349	0.8	1
231	Elasto-plastic bending of steel strip in a hot-dip galvanizing line. <i>Acta Mechanica</i> , 2017 , 228, 2455-2470	2.1	5
230	Two-dimensional thermal modelling with specular reflections in an experimental annealing furnace. <i>Mathematical and Computer Modelling of Dynamical Systems</i> , 2017 , 23, 23-39	1	6
229	Efficient Generation of Fast Trajectories for Gantry Cranes with Constraints. <i>IFAC-PapersOnLine</i> , 2017 , 50, 1937-1943	0.7	2
228	Deflection Model of A Multi-Actuator Gap Leveler. <i>IFAC-PapersOnLine</i> , 2017 , 50, 11295-11300	0.7	4

227	Feedforward control of lateral asymmetries in heavy-plate hot rolling using vision-based position estimation. <i>IFAC-PapersOnLine</i> , 2017 , 50, 11307-11312	0.7	4
226	Control of Curvature and Contact Force of a Metal Strip at the Strip-Roll Contact Point. <i>IFAC-PapersOnLine</i> , 2017 , 50, 11325-11330	0.7	4
225	An Efficient Algorithm for Scheduling a Flexible Job Shop with Blocking and No-Wait Constraints * *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 (Sem40) 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 Inl. <i>IFAC-PapersOnLine</i> , 2017 , 50, 12440-12445	0.7	7
224	Feedforward Control of the Temperature Field in an Experimental Annealing Furnace 11The 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. <i>IFAC-PapersOnLine</i> , 2017 , 50, 13790-13795	0.7	2
223	Modeling and Control of the Oxygen Concentration in a Post Combustion Chamber of a Gas-Fired Furnace. <i>IFAC-PapersOnLine</i> , 2017 , 50, 13766-13771	0.7	
222	Model-Based Signal Processing for the Force Control of Biaxial Gantry Robots * *This work was supported by Festo AG & Co. KG. <i>IFAC-PapersOnLine</i> , 2017 , 50, 3208-3214	0.7	1
221	Energy-efficient Constrained Control of a Hydrostatic Power Split Drive. <i>IFAC-PapersOnLine</i> , 2017 , 50, 4775-4780	0.7	5
220	Path Following Control for Elastic Joint Robots * *This research was partially supported by the Austrian Research Promotion Agency (FFG), grant number: 850952. <i>IFAC-PapersOnLine</i> , 2017 , 50, 4806-4811	0.7	4
219	Nonlinear observer for temperatures and emissivities in a strip annealing furnace 2016 ,		3
218	Real-Time Nonlinear Model Predictive Control of a TransportReaction System. <i>Industrial & Engineering Chemistry Research</i> , 2016 , 55, 7730-7741	3.9	3
217	Experimental Parameterization of a Design Model for Flatness-based Torque Control of a Saturated Surface-Mounted PMSM. <i>IFAC-PapersOnLine</i> , 2016 , 49, 575-582	0.7	2
216	Nonlinear model predictive control of the strip temperature in an annealing furnace. <i>Journal of Process Control</i> , 2016 , 48, 1-13	3.9	14
215	Automatic gauge control under laterally asymmetric rolling conditions combined with feedforward 2016 ,		3
214	Infinite-dimensional decentralized damping control of large-scale manipulators with hydraulic actuation. <i>Automatica</i> , 2016 , 63, 101-115	5.7	28
213	Backstepping-based boundary observer for a class of time-varying linear hyperbolic PIDEs. <i>Automatica</i> , 2016 , 68, 369-377	5.7	18
212	Stability of an Euler-Bernoulli Beam With a Nonlinear Dynamic Feedback System. <i>IEEE Transactions on Automatic Control</i> , 2016 , 61, 2782-2795	5.9	18
211	Modeling of the Media Supply of Gas Burners of an Industrial Furnace. <i>IEEE Transactions on Industry Applications</i> , 2016 , 52, 2664-2672	4.3	3
210	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	4.8	13

209	Optimisation based path planning for car parking in narrow environments. <i>Robotics and Autonomous Systems</i> , 2016 , 79, 1-11	3.5	37
208	Flatness-Based Torque Control of Saturated Surface-Mounted Permanent Magnet Synchronous Machines. <i>IEEE Transactions on Control Systems Technology</i> , 2016 , 24, 1201-1213	4.8	5
207	Modeling and Force Control for the Collaborative Manipulation of Deformable Strip-Like Materials. <i>IFAC-PapersOnLine</i> , 2016 , 49, 95-102	0.7	10
206	Nonlinear observability of grinding mill conditions. <i>IFAC-PapersOnLine</i> , 2016 , 49, 13-18	0.7	
205	Vision-Based Material Tracking in Heavy-Plate Rolling. <i>IFAC-PapersOnLine</i> , 2016 , 49, 108-113	0.7	3
204	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.. <i>IFAC-PapersOnLine</i> , 2016 , 49, 100-105	0.7	4
203	A Mathematical Model of a Horizontal Direct-Fired Strip Annealing Furnace. <i>IFAC-PapersOnLine</i> , 2016 , 49, 202-207	0.7	
202	Combustion processes inside a direct-fired continuous strip annealing furnace. <i>IFAC-PapersOnLine</i> , 2016 , 49, 208-213	0.7	4
201	Optimal Steady-State Temperature Field in an Experimental Annealing Furnace. <i>IFAC-PapersOnLine</i> , 2016 , 49, 214-219	0.7	3
200	Surface Following Control for Fully Actuated Rigid Body Systems in Three-Dimensional Euclidean Space. <i>IFAC-PapersOnLine</i> , 2016 , 49, 594-599	0.7	1
199	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.. <i>IFAC-PapersOnLine</i> , 2016 , 49, 772-777	0.7	2
198	Analysis and system optimization of a very low frequency high-voltage test system. <i>IFAC-PapersOnLine</i> , 2016 , 49, 294-300	0.7	
197	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.. <i>IFAC-PapersOnLine</i> , 2016 , 49, 395-402	0.7	
196	Soft Landing and Disturbance Rejection for Pneumatic Drives with Partial Position Information. <i>IFAC-PapersOnLine</i> , 2016 , 49, 559-566	0.7	2
195	Estimation and control of the tool center point of a mobile concrete pump. <i>Automation in Construction</i> , 2016 , 61, 112-123	9.6	4
194	Mathematical modelling of a hydraulic accumulator for hydraulic hybrid drives. <i>Mathematical and Computer Modelling of Dynamical Systems</i> , 2016 , 22, 397-411	1	9
193	Simulation von Welleneffekten in Pumpspeicherkraftwerken mit Hilfe der Spektral-Element-Methode. <i>Automatisierungstechnik</i> , 2016 , 64, 681-695	0.8	2
192	Constrained model predictive manifold stabilization based on transverse normal forms. <i>Automatica</i> , 2016 , 74, 315-326	5.7	7

191	Optimization-based reduction of contour errors of heavy plates in hot rolling. <i>Journal of Process Control</i> , 2016 , 47, 150-160	3.9	11
190	A Numerical Implementation of an Extended Luenberger Observer for a Class of Semilinear Hyperbolic PIDEs. <i>IFAC-PapersOnLine</i> , 2016 , 49, 216-221	0.7	
189	Mathematical modeling of the contour evolution of heavy plates in hot rolling. <i>Applied Mathematical Modelling</i> , 2015 , 39, 4534-4547	4.5	16
188	Magnetic Equivalent Circuit Modeling of a Saturated Surface-Mounted Permanent Magnet Synchronous Machine. <i>IFAC-PapersOnLine</i> , 2015 , 48, 360-365	0.7	10
187	Mathematical Modeling and Analysis of a Hydrostatic Drive Train. <i>IFAC-PapersOnLine</i> , 2015 , 48, 508-513	0.7	6
186	Optimization-based estimator for the contour and movement of heavy plates in hot rolling. <i>Journal of Process Control</i> , 2015 , 29, 23-32	3.9	15
185	Modelling and experimental validation of the deflection of a leveller for hot heavy plates. <i>Mathematical and Computer Modelling of Dynamical Systems</i> , 2015 , 21, 202-227	1	7
184	Mathematical modelling of a diesel common-rail system. <i>Mathematical and Computer Modelling of Dynamical Systems</i> , 2015 , 21, 311-335	1	5
183	Modellbasierte Optimierung und Regelung der Produktkontur beim Warmwalzen. <i>Elektrotechnik Und Informationstechnik</i> , 2015 , 132, 221-229	0.4	
182	An optimisation-based path planner for truck-trailer systems with driving direction changes 2015 ,		3
181	Optimale nichtlineare Regelung von permanenterregten Synchronmaschinen. <i>Automatisierungstechnik</i> , 2015 , 63, 739-750	0.8	
180	Optimal torque control of permanent magnet synchronous machines using magnetic equivalent circuits. <i>Mechatronics</i> , 2015 , 32, 22-33	3	12
179	Backstepping observers for linear PDEs on higher-dimensional spatial domains. <i>Automatica</i> , 2015 , 51, 85-97	5.7	25
178	Dynamical Models of Axially Moving Rods with Tensile and Bending Stiffness. <i>IFAC-PapersOnLine</i> , 2015 , 48, 598-603	0.7	7
177	Heat Transfer with Specular Reflections in an Experimental Annealing Device?. <i>IFAC-PapersOnLine</i> , 2015 , 48, 494-499	0.7	1
176	Two Illustrative Examples to Show the Potential of Thermography for Process Monitoring and Control in Hot Rolling. <i>IFAC-PapersOnLine</i> , 2015 , 48, 48-53	0.7	2
175	Influence of Air Cooling Jets on the Steady-State Shape of Strips in Hot Dip Galvanizing Lines**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..	0.7	2
174	Steering Control of Metal Strips Using a Pivoted Guide Roller. <i>IFAC-PapersOnLine</i> , 2015 , 48, 143-148	0.7	

173	Modeling of the media-supply of gas burners of an industrial furnace 2015 ,		1
172	Modellierung des Umschlingungswinkels eines auf Rollen geführten Metallbandes. <i>Automatisierungstechnik</i> , 2015 , 63, 646-655	0.8	2
171	Field weakening in flatness-based torque control of saturated surface-mounted permanent magnet synchronous machines 2015 ,		1
170	Modelling, simulation and identification of a mobile concrete pump. <i>Mathematical and Computer Modelling of Dynamical Systems</i> , 2015 , 21, 180-201	1	9
169	Digital Slew Rate and S-Shape Control for Smart Power Switches to Reduce EMI Generation. <i>IEEE Transactions on Power Electronics</i> , 2015 , 30, 5170-5180	7.2	33
168	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	3
167	Controller design and experimental validation of a very low frequency high-voltage test system. <i>Control Engineering Practice</i> , 2015 , 37, 32-42	3.9	1
166	Univ.-Prof. Dr. Kurt Schlacher zum 60. Geburtstag. <i>Automatisierungstechnik</i> , 2015 , 63, 669-671	0.8	
165	Model based control of compact heat exchangers independent of the heat transfer behavior. <i>Journal of Process Control</i> , 2014 , 24, 286-298	3.9	14
164	Analysis and design of an Extended Kalman Filter for the plate temperature in heavy plate rolling. <i>Journal of Process Control</i> , 2014 , 24, 1371-1381	3.9	12
163	Slew rate control strategies for smart power ICs based on iterative learning control 2014 ,		16
162	Mathematical Modeling and Analysis of a Very Low Frequency HV Test System. <i>IEEE Transactions on Power Electronics</i> , 2014 , 29, 5784-5794	7.2	5
161	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	4.9	17
160	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	12
159	Real-time Nonlinear Model Predictive Path-Following Control of a Laboratory Tower Crane. <i>IEEE Transactions on Control Systems Technology</i> , 2014 , 22, 1461-1473	4.8	86
158	A mathematical model of a direct-fired continuous strip annealing furnace. <i>International Journal of Heat and Mass Transfer</i> , 2014 , 69, 375-389	4.9	23
157	Power optimal gate current profiles for the slew rate control of Smart Power ICs. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2014 , 47, 7190-7195		
156	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	3.6	9

155	Quasi optimal feedforward control of a very low frequency high-voltage test system. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2014 , 47, 11623-11628		3
154	Control of Strip Tension in a Rolling Mill Based on Loopers and Impedance Control. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2014 , 47, 10646-10651		8
153	Backstepping Observers for Periodic Quasi-Linear Parabolic PDEs. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2014 , 47, 7761-7766		6
152	Modeling and control of gas supply for burners in gas-fired industrial furnaces 2014 ,		5
151	Combined path following and compliance control with application to a biaxial gantry robot 2014 ,		6
150	Manifold stabilization and path-following control for flat systems with application to a laboratory tower crane 2014 ,		4
149	An integrated thermal model of hot rolling. <i>Mathematical and Computer Modelling of Dynamical Systems</i> , 2014 , 20, 66-86	1	8
148	Electrorheological Semiactive Shock Isolation Platform for Naval Applications. <i>IEEE/ASME Transactions on Mechatronics</i> , 2013 , 18, 1437-1447	5.5	11
147	Swing-up control of a triple pendulum on a cart with experimental validation. <i>Automatica</i> , 2013 , 49, 801-808	3.7	42
146	Extension and optimization of the load range of DRT test systems for testing extra-long HV and UHV cables. <i>Elektrotechnik Und Informationstechnik</i> , 2013 , 1	0.4	
145	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	6
144	A fast motion planning algorithm for car parking based on static optimization 2013 ,		10
143	Accurate low-order dynamic model of a compact plate heat exchanger. <i>International Journal of Heat and Mass Transfer</i> , 2013 , 61, 323-331	4.9	26
142	Nonlinear model predictive control of a continuous slab reheating furnace. <i>Control Engineering Practice</i> , 2013 , 21, 495-508	3.9	48
141	State estimation for parabolic PDEs with reactive-convective non-linearities 2013 ,		3
140	Motion Planning for Piezo-Actuated Flexible Structures: Modeling, Design, and Experiment. <i>IEEE Transactions on Control Systems Technology</i> , 2013 , 21, 807-819	4.8	17
139	Energy-consistent shear coefficients for beams with circular cross sections and radially inhomogeneous materials. <i>International Journal of Solids and Structures</i> , 2013 , 50, 1859-1868	3.1	11
138	Modellierung eines Smart High-Side Power ICs. <i>Automatisierungstechnik</i> , 2013 , 61, 849-858	0.8	1

137	Analysis of Radiative Heat Transfer in an Indirect-Fired Strip Annealing Furnace based on Integral Equations. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2013 , 46, 403-408		3
136	Modeling and Control of a Mobile Concrete Pump*. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2013 , 46, 91-98		4
135	Estimation of plate temperatures in hot rolling based on an extended Kalman filter. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2013 , 46, 409-414		3
134	Energy-Efficient Control of Continuous Reheating Furnaces. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2013 , 46, 359-364		8
133	Fast Optimization Based Motion Planning and Path-Tracking Control for Car Parking. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2013 , 46, 86-91		5
132	Dreistufiger Kolbenkompressor mit vorgeschaltetem Drehkolbenkompressor: Teil 2, Regelung. <i>Automatisierungstechnik</i> , 2013 , 61, 48-59	0.8	
131	Control of radiant tubes in an indirect-fired strip annealing furnace for improved efficiency 2013 ,		2
130	Combined Feedforward/Model Predictive Tracking Control Design for Nonlinear Diffusion-Convection-Reaction-Systems. <i>International Federation for Information Processing</i> , 2013 , 296-305		
129	Model-based control concepts for vibratory MEMS gyroscopes. <i>Mechatronics</i> , 2012 , 22, 241-250	3	8
128	Flatness-based feedforward control design of a system of parabolic PDEs based on finite difference semi-discretization. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2012 , 12, 731-732	0.2	3
127	Digitally controlled electrorheological valves and their application in vehicle dampers. <i>Mechatronics</i> , 2012 , 22, 629-638	3	25
126	Infini-dimensional Reglerentwurf für Euler-Bernoulli Balken mit Macro-Fibre Composite Aktoren. <i>Automatisierungstechnik</i> , 2012 , 60, 10-19	0.8	3
125	Modellierung und Regelung eines aktiven Wellenkompensationssystems für Tiefseekräfte. <i>Automatisierungstechnik</i> , 2012 , 60, 39-52	0.8	
124	Nichtlineare modellprädiktive Regelung eines Brammenwärmofens basierend auf einem zeitkontinuierlichen Zustandsraummodell. <i>Elektrotechnik Und Informationstechnik</i> , 2012 , 129, 3-10	0.4	
123	Trajektorienplanung für eine piezo-aktuierte elastische Kirchhoff-Platte. <i>Elektrotechnik Und Informationstechnik</i> , 2012 , 129, 11-17	0.4	1
122	Mathematische Modellierung und Analyse eines DRT-VLF-Hochspannungsprüfgenerators. <i>Elektrotechnik Und Informationstechnik</i> , 2012 , 129, 18-27	0.4	1
121	Automatisierungs- und Regelungstechnik. <i>Elektrotechnik Und Informationstechnik</i> , 2012 , 129, 1-2	0.4	
120	Hardware implementation of an electrostatic MEMS-actuator linearization. <i>Microsystem Technologies</i> , 2012 , 18, 955-963	1.7	

119	Modeling and Simulation of Large-Scale Manipulators with Hydraulic Actuation. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2012 , 45, 780-785		3
118	An Efficient Implementation of Backstepping Observers for Time-Varying Parabolic PDEs. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2012 , 45, 798-803		10
117	Optimal Active Deflection Compensation of a Hot Leveler. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2012 , 45, 30-35		2
116	Dreistufiger Kolbenkompressor mit vorgeschaltetem Drehkolbenkompressor: Teil 1, Modellierung. <i>Automatisierungstechnik</i> , 2012 , 60, 766-776	0.8	2
115	Flatness-Based MPC and Global Path Planning Towards Cognition-Supported Pick-and-Place Tasks of Tower Cranes 2012 , 63-71		3
114	Feedback Tracking Control of Continuous Reheating Furnaces. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2011 , 44, 11744-11749		2
113	State Estimation for Parabolic PDEs with Varying Parameters on 3-Dimensional Spatial Domains. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2011 , 44, 13338-13343		6
112	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		3
111	Trajectory optimization for soft landing of fast-switching electromagnetic valves. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2011 , 44, 11532-11537		5
110	Decoupled Quadrature and Force Feedback Control of Capacitive MEMS Gyroscopes*. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2011 , 44, 13534-13539		2
109	A fast simulation method for 1D heat conduction. <i>Mathematics and Computers in Simulation</i> , 2011 , 82, 392-403	3.3	9
108	State Reconstruction in Higher Dimensional PDEs with Spatially Varying Parameters. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2011 , 11, 813-814	0.2	
107	Feedforward Control for a Non-Uniform Euler-Bernoulli Beam. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2011 , 11, 829-830	0.2	
106	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	3.6	23
105	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	4.8	16
104	A novel robust position estimator for self-sensing magnetic levitation systems based on least squares identification. <i>Control Engineering Practice</i> , 2011 , 19, 146-157	3.9	40
103	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	3.9	13
102	Unscented Kalman filter for vehicle state estimation. <i>Vehicle System Dynamics</i> , 2011 , 49, 1497-1520	2.8	142

101	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	3.4	20
100	Control of a flexible beam actuated by macro-fiber composite patches: I. Modeling and feedforward trajectory control. <i>Smart Materials and Structures</i> , 2011 , 20, 015015	3.4	11
99	Non-collocated feedback stabilization of a non-uniform Euler-Bernoulli beam with in-domain actuation 2011 ,		7
98	Motion planning for a damped euler-bernoulli beam 2010 ,		5
97	Ausgewählte Beiträge der GMA-Fachausschüsse 1.30 und 1.40. <i>Automatisierungstechnik</i> , 2010 , 58, 423-424	0.8	
96	Trajectory planning for quasilinear parabolic distributed parameter systems based on finite-difference semi-discretisations. <i>International Journal of Control</i> , 2010 , 83, 1093-1106	1.5	12
95	Steuerungs- und Regelungsansätze für Systeme mit verteilten Parametern. <i>Automatisierungstechnik</i> , 2010 , 58, 115-116	0.8	
94	Trajektorienfolge- und Tracking Control for Parabolic PDEs with Varying Parameters. <i>Automatisierungstechnik</i> , 2010 , 58, 128-138	0.8	2
93	Stability and Incremental Improvement of Suboptimal MPC Without Terminal Constraints. <i>IEEE Transactions on Automatic Control</i> , 2010 , 55, 2576-2580	5.9	85
92	Flatness-based feedforward control of a two-stage turbocharged diesel air system with EGR 2010 ,		4
91	Trajectory Tracking of a 3DOF Laboratory Helicopter Under Input and State Constraints. <i>IEEE Transactions on Control Systems Technology</i> , 2010 , 18, 944-952	4.8	42
90	Modelling and identification of a piezoelectrically driven fuel injection control valve. <i>Mathematical and Computer Modelling of Dynamical Systems</i> , 2010 , 16, 285-305	1	2
89	Flatness-Based Feedforward Control of a Diesel Engine Air System with EGR. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2010 , 43, 598-603		5
88	Resistance estimation algorithm for self-sensing magnetic levitation systems. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2010 , 43, 32-37		1
87	Motion Planning for a Flexible Link Manipulator with Macro-fiber Composite Actuators. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2010 , 43, 486-491		
86	Digital Control of Electrorheological Valves. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2010 , 43, 640-645		1
85	Control of Vibratory MEMS Gyroscopes based on Envelope Models. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2010 , 43, 441-446		2
84	Suboptimal model predictive control of a laboratory crane. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2010 , 43, 397-402		10

83	Trajectory planning and receding horizon tracking control of a quasilinear diffusion-convection-reaction system. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2010 , 43, 587-592		3
82	Trajectory planning for semilinear PDEs modeling a countercurrent heat exchanger. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2010 , 43, 593-598		1
81	Idle Stroke Detection for a Fuel Injection Control Valve. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2010 , 43, 499-504		2
80	Ein suboptimaler Ansatz zur schnellen modellprädiktiven Regelung nichtlinearer Systeme. <i>Automatisierungstechnik</i> , 2010 , 58, 447-456	0.8	12
79	A dynamical envelope model for vibratory gyroscopes. <i>Microsystem Technologies</i> , 2010 , 16, 777-786	1.7	9
78	A mathematical model of a slab reheating furnace with radiative heat transfer and non-participating gaseous media. <i>International Journal of Heat and Mass Transfer</i> , 2010 , 53, 5933-5946	4.9	51
77	Handling constraints in optimal control with saturation functions and system extension. <i>Systems and Control Letters</i> , 2010 , 59, 671-679	2.4	46
76	Nonlinear pressure control of self-supplied variable displacement axial piston pumps. <i>Control Engineering Practice</i> , 2010 , 18, 84-93	3.9	45
75	Immersion and invariance-based impedance control for electrohydraulic systems. <i>International Journal of Robust and Nonlinear Control</i> , 2010 , 20, 725-744	3.6	15
74	Real-time trajectory optimization under input constraints for a flatness-controlled laboratory helicopter 2009 ,		2
73	Modelling and experimental model validation for a pusher-type reheating furnace. <i>Mathematical and Computer Modelling of Dynamical Systems</i> , 2009 , 15, 209-232	1	22
72	Motion planning for an adaptive wing structure with macro-fiber composite actuators 2009 ,		3
71	An envelope model to describe the sensor dynamics of vibratory gyroscopes 2009 ,		1
70	Feedforward control design for a semilinear wave equation. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2009 , 9, 7-10	0.2	10
69	Tracking control for boundary controlled parabolic PDEs with varying parameters: Combining backstepping and differential flatness. <i>Automatica</i> , 2009 , 45, 1182-1194	5.7	115
68	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	5.9	37
67	Modeling and control of an off-road truck using electrorheological dampers. <i>Journal of Physics: Conference Series</i> , 2009 , 149, 012011	0.3	3
66	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	1.5	30

65	An analytical approach for modelling asymmetrical hot rolling of heavy plates. <i>Mathematical and Computer Modelling of Dynamical Systems</i> , 2008 , 14, 249-267	1	16
64	Impedance control for variable stiffness mechanisms with nonlinear joint coupling 2008 ,		30
63	On the Passivity-Based Impedance Control of Flexible Joint Robots. <i>IEEE Transactions on Robotics</i> , 2008 , 24, 416-429	6.5	267
62	Feedforward control design for the wave equation with nonlinear boundary conditions modelling a torsional rod 2008 ,		1
61	Modellbasierte Dicken- und Ebenheitsregelung in Grobblechwalzwerken (Model-based Control of Thickness and Flatness in Heavy Plate Mills). <i>Automatisierungstechnik</i> , 2008 , 56, 416-426	0.8	
60	Resolving the problem of non-integrability of nullspace velocities for compliance control of redundant manipulators by using semi-definite Lyapunov functions 2008 ,		24
59	A new flatness-based control of lateral vehicle dynamics. <i>Vehicle System Dynamics</i> , 2008 , 46, 789-801	2.8	18
58	Transformation of optimal control problems with a state constraint avoiding interior boundary conditions 2008 ,		6
57	ModelBased control of frontEnd bending in hot rolling processes. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2008 , 41, 1645-1650		
56	Feedforward Control Design for the Inviscid Burger Equation using Formal Power Series and Summation Methods. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2008 , 41, 8743-8748		3
55	Zur Kombination von differenzieller Flachheit und Backstepping für die Trajektorienfolgeregelung eines Diffusions-Konvektions-Reaktionssystems. <i>Elektrotechnik Und Informationstechnik</i> , 2008 , 125, 2-11 ^{0.4}		1
54	Inversion-Based Feedforward Control for the Transient Shaping of a Piezo-Actuated Cantilevered Kirchhoff Plate. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2008 , 8, 10913-10914	0.2	
53	Ein neuartiger Ansatz zur Querdynamikregelung von Personenkraftwagen (A New Approach to Lateral Dynamics Control of Passenger Vehicles). <i>Automatisierungstechnik</i> , 2007 , 55, 488-496	0.8	2
52	Nichtlineare Regelung von verstellbaren eigenversorgten Axialkolbenpumpen (Nonlinear Control of Variable-displacement Self-supplied Axial Piston Pumps). <i>Automatisierungstechnik</i> , 2007 , 55, 58-68	0.8	4
51	Stress measurement in a cantilevered silicon beam undergoing coupled motion of torsion and bending. <i>Smart Materials and Structures</i> , 2007 , 16, 296-304	3.4	1
50	CONTROL OF PLATE THICKNESS IN HEAVY PLATE MILLS: A NEW PERSPECTIVE. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2007 , 40, 107-112		0
49	MODELING AND CONTROL OF FRONT END BENDING IN HEAVY PLATE MILLS. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2007 , 40, 231-236		4
48	Feedforward Control of Plate Thickness in Reversing Plate Mills. <i>IEEE Transactions on Industry Applications</i> , 2007 , 43, 386-394	4.3	11

47	Erratum to "Feedforward control of plate thickness in reversing plate mills". <i>IEEE Transactions on Industry Applications</i> , 2007 , 43, 1652-1652	4.3	
46	Mathematical Modeling and Nonlinear Controller Design for a Novel Electrohydraulic Power-Steering System. <i>IEEE/ASME Transactions on Mechatronics</i> , 2007 , 12, 85-97	5.5	45
45	Regelung adaptronischer Systeme, Teil II: Elektrorheologische Aktoren (Control of Adaptronic Systems, Part II: Electrorheological Actuators). <i>Automatisierungstechnik</i> , 2006 , 54, 334-341	0.8	
44	Application of a combined flatness- and passivity-based control concept to a crane with heavy chains and payload 2006 ,		2
43	Compensation of parasitic effects for a silicon tuning fork gyroscope. <i>IEEE Sensors Journal</i> , 2006 , 6, 596-604	4.0	25
42	Regelung adaptronischer Systeme, Teil I: Piezoelektrische Strukturen (Control of Adaptronic Systems, Part I: Piezoelectric Structures). <i>Automatisierungstechnik</i> , 2006 , 54, 259-269	0.8	2
41	INVERSIONBASED TRANSIENT SHAPING OF A PIEZOACTUATED PLATE: MOTION PLANNING AND FEEDFORWARD CONTROL. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2006 , 39, 169-174		2
40	DESIGN, MATHEMATICAL MODELING AND CONTROL OF AN ASYMMETRICAL ELECTORHEOLOGICAL DAMPER. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2006 , 39, 372-377		4
39	An infinite-dimensional control concept for piezoelectric structures with complex hysteresis. <i>Structural Control and Health Monitoring</i> , 2006 , 13, 1099-1119	4.5	28
38	Application of a Combined Flatness- and Passivity-Based Control Concept to a Crane With Heavy Chains and Payload 2006 ,		4
37	Nichtlineare Trajektorienfolgeregelung für einen Laborhelikopter. <i>Elektrotechnik Und Informationstechnik</i> , 2005 , 122, 300-307	0.4	2
36	Feedforward Control Strategies for Hot Rolling in a Reversing Plate Mill. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2005 , 5, 165-166	0.2	3
35	A Combination of Flatness-Based Tracking Control with Passivity-Based Control for a Certain Class of Infinite-Dimensional Systems. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2005 , 5, 169-172	0.2	2
34	Passivitäts- und Lyapunovbasierte Reglerentwurfsmethoden (Passivity- and Lyapunov-based Control Design Methods). <i>Automatisierungstechnik</i> , 2005 , 53, 353-355	0.8	
33	Infinite-dimensionale Regelung eines Brückenkranes mit schweren Ketten (Infinite-dimensional Control of a Gantry Crane with Heavy Chains). <i>Automatisierungstechnik</i> , 2005 , 53, 400-410	0.8	11
32	Kartesische Impedanzregelung von Robotern mit elastischen Gelenken: Ein passivitätsbasierter Ansatz (Cartesian Impedance Control of Flexible Joint Robots: A Passivity Based Approach). <i>Automatisierungstechnik</i> , 2005 , 53, 378-388	0.8	1
31	Active and Semi-Active Control of Electrorheological Fluid Devices 2005 , 203-212		3
30	Modelling and Optimization of a Silicon Tuning Fork Gyroscope. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2004 , 4, 59-62	0.2	5

29	New Energy-based Nonlinear Controller for Hydraulic Piston Actuators. <i>European Journal of Control</i> , 2004 , 10, 163-173	2.5	15
28	Modeling and flatness-based control of a 3d of helicopter laboratory experiment. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2004 , 37, 207-212		2
27	Modeling and Control of an Electrorheological Actuator. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2004 , 37, 265-270		3
26	Impedance Control of hydraulic piston actuators. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2004 , 37, 961-966		4
25	Analyse und Synthese nichtlinearer dissipativer Systeme: Ein Überblick (Teil 2) (Analysis and Synthesis of Non-linear Dissipative Systems: An Overview (Part 2)). <i>Automatisierungstechnik</i> , 2002 , 50, 103	0.8	6
24	Analyse und Synthese nichtlinearer dissipativer Systeme: Ein Überblick (Teil 1) (Analysis and Synthesis of Non-linear Dissipative Systems: An Overview (Part 1)). <i>Automatisierungstechnik</i> , 2002 , 50, 63	0.8	6
23	Passivitätsbasierte Regelung piezoelektrischer Strukturen (Passivity-based Control of Piezoelectric Structures). <i>Automatisierungstechnik</i> , 2002 , 50, 422	0.8	7
22	SYMBOLIC METHODS FOR SYSTEMS OF IMPLICIT ORDINARY DIFFERENTIAL EQUATIONS*. <i>Mechanics Based Design of Structures and Machines</i> , 2002 , 30, 103-121		
21	Control of nonlinear descriptor systems, a computer algebra based approach 2001 , 379-395		3
20	Nonlinear control in rolling mills: a new perspective. <i>IEEE Transactions on Industry Applications</i> , 2001 , 37, 1394-1402	4.3	19
19	Rotational Hydraulic Piston Actuators and DC-DC-Power Converters: A Unifying Modeling and Control Approach. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2000 , 33, 359-364		
18	Modeling and simulation of a hydrostatic transmission with variable-displacement pump. <i>Mathematics and Computers in Simulation</i> , 2000 , 53, 409-414	3.3	42
17	Regelung eines Cuk-Konverters (Control of a Cuk-Converter). <i>Automatisierungstechnik</i> , 2000 , 48, 116	0.8	1
16	Active compensation of roll eccentricity in rolling mills. <i>IEEE Transactions on Industry Applications</i> , 2000 , 36, 625-632	4.3	30
15	Position Control and Active Eccentricity Compensation in Rolling Mills. <i>Automatisierungstechnik</i> , 1999 , 47,	0.8	3
14	Infinite-Dimensional Control of Nonlinear Beam Vibrations by Piezoelectric Actuator and Sensor Layers. <i>Nonlinear Dynamics</i> , 1999 , 19, 71-91	5	10
13	Nonlinear H/sub /spl infin// controller design for a DC-to-DC power converter. <i>IEEE Transactions on Control Systems Technology</i> , 1999 , 7, 230-237	4.8	50
12	Control of mechanical structures by piezoelectric actuators and sensors. <i>Lecture Notes in Control and Information Sciences</i> , 1999 , 275-292	0.5	4

11	Control of earthquake excited nonlinear structures using Liapunov's theory. <i>Computers and Structures</i> , 1998 , 67, 83-90	4.5	10
10	H ∞ control of random structural vibrations with piezoelectric actuators. <i>Computers and Structures</i> , 1998 , 67, 137-145	4.5	3
9	Tensor analysis based symbolic computation for mechatronic systems. <i>Mathematics and Computers in Simulation</i> , 1998 , 46, 517-525	3.3	6
8	Aktiver Erdbebenschutz für mehrstöckige Gebäude. <i>Elektrotechnik Und Informationstechnik</i> , 1997 , 114, 85-91	0.4	
7	Regelung von Hamilton-Systemen. <i>Elektrotechnik Und Informationstechnik</i> , 1997 , 114, 353-359	0.4	
6	Modellierung und Regelung eines piezoelektrischen Balkens. <i>Elektrotechnik Und Informationstechnik</i> , 1997 , 114, 380-386	0.4	
5	Nonlinear control of earthquake excited high raised buildings by approximate disturbance decoupling. <i>Acta Mechanica</i> , 1997 , 125, 49-62	2.1	11
4	Neural network for identification of roll eccentricity in rolling mills. <i>Journal of Materials Processing Technology</i> , 1996 , 60, 387-392	5.3	14
3	Mathematical modeling and computational principles for the analysis and simulation of long-distance energy systems. <i>Mathematics and Computers in Simulation</i> , 1995 , 39, 565-572	3.3	
2	Modeling and Nonlinear Control of an Electrohydraulic Closed-Center Power-Steering System		1
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