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QM: GIORGIO QUAZZA MEDAL
(Created 1979)

CONGRESS SITE, YEAR	WINNER	COUNTR
KYOTO, 1981	JOHN F. COALES	UK
BUDAPEST, 1984	YAKOV Z. TSYPKIN	SU
MUNICH, 1987	KARL J. ÅSTRÖM	SE
TALLIN, 1990	PETAR KOKOTOVIC	US
SYDNEY, 1993	EDWARD J. DAVISON	CA
SAN FRANCISCO, 1996	ALBERTO ISIDORI	IT
BEIJING, 1999	BRIAN D.O. ANDERSON	AU
BARCELONA, 2002	LENNART LJUNG	SE
PRAGUE, 2005	TAMER BASAR	US
SEOUL, 2008	GRAHAM GOODWIN	AU
MILAN, 2011	HIDENORI KIMURA	JP
CAPE TOWN, 2014	DAVID MAYNE	UK
TOULOUSE, 2017	ROGER BROCKETT	US
BERLIN, 2020	W. MURRAY WONHAM	CA

NM: NATHANIEL B. NICHOLS MEDAL
(Created 1996)

CONGRESS SITE, YEAR	WINNER	COUNTRY
SAN FRANCISCO, 1996	JÜRGEN ACKERMANN	DE
BEIJING, 1999	GUNTHER STEIN	US
BARCELONA, 2002	CARL NETT	US
PRAGUE, 2005	WILLIAM F. POWERS	US
SEOUL, 2008	GERD HIRZINGER	DE
MILAN, 2011	SIVA BANDA	US
CAPE TOWN, 2014	REZA MOHEIMANI	AU
TOULOUSE, 2017	LENNART LJUNG	SE
BERLIN, 2020	MASAYOSHI TOMIZUKA	US

IAA: INDUSTRIAL ACHIEVEMENT AWARD (Created 2000)

CONGRESS SITE, YEAR	WINNER	COUNTRY
BARCELONA, 2002	YASUO ICHII, SHOJI MURAYAMA AND TAKAHIRO YAMASAKI	JP
PRAGUE, 2005	SERGE BOVERIE	FR
SEOUL, 2008	NOT AWARDED	
MILAN, 2011	ANTON VAN ZANTEN	DE
CAPE TOWN, 2014	ANGELIKI PANTAZI, MARK LANTZ, JENS JELITTO AND GIOVANNI CHERUBINI	CH
TOULOUSE, 2017	FRANCESCO BORRELLI, DAVID GERMANN, DEJAN KIHAS, DANIEL PACHNER, GREG STEWART	US/CA/CZ
BERLIN, 2020	FRANCIS J. DOYLE III	US

MTM: MANFRED THOMA MEDAL (Created 2015)

CONGRESS SITE, YEAR	WINNER	COUNTRY
TOULOUSE, 2017	MING CAO	NL
BERLIN, 2020	FLORIAN DÖRFLER	CH

IIHPA: HIGH IMPACT PAPER AWARD (Created 2010)

CONGRESS SITE, YEAR	WINNER	COUNTRY
MILAN, 2011	DAVID MAYNE, J.B. RAWLINGS, C.V. RAO, P.O.M. SCOKAERT	UK, US, BE
CAPE TOWN, 2014	ALBERTO BEMPORAD AND MANFRED MORARI	IT, CH
TOULOUSE, 2017	FRANCO BLANCHINI	IT
BERLIN, 2020	WILSON J. RUGH AND JEFF S. SHAMMA	US, SA

TBP: HAROLD CHESTNUT TEXTBOOK PRIZE
(Created 1986, renamed in 2002)

CONGRESS SITE, YEAR	WINNER	COUNTRY
MUNICH, 1987	G. GOODWIN, K.H. SIN: Adaptive Filtering, Prediction and Control, Prentice Hall, 1984	AU
TALLIN, 1990	G.F. FRANKLIN, J.D. POWELL, E. EMAMI-NAEINI: Feedback Control of Dynamic Systems, Addison Wesley, 1986	US
SYDNEY, 1993	K.J. ÅSTRÖM, B. WITTENMARK: Computer Controlled Systems, Theory and Design, Prentice Hall, 1984	SE
SAN FRANCISCO, 1996	J.M. MACIEJOWSKI: Multivariable Feedback Design, Addison-Wesley, 1989	UK
BEIJING, 1999	C.G. CASSANDRAS: Discrete event systems: modeling and performance analysis, R.D. Irwin, Inc. And Aksen Associates, Inc., Boston, MA, 1993.	US
BARCELONA, 2002	HASSAN K. KHALIL: Nonlinear Systems (Prentice Hall, 1996 and 2002)	US
PRAGUE, 2005	G. GOODWIN, S. GRAEBE, M. SALGADO Control Systems Design (Prentice Hall, 2001)	AU/AT/CL
SEOUL, 2008	Not awarded	
MILAN, 2011	K.J. ÅSTRÖM, R. MURRAY Feedback Systems: An Introduction for Scientists and Engineers (Princeton University Press 2008)	SE/UK
CAPE TOWN, 2014	M. KRSTIC, A. SMYSHLYAEV Boundary Control of PDEs: A Course on Backstepping Designs (published by SIAM, 2008)	US/US
TOULOUSE, 2017	P. ALBERTOS, I. MAREELS Feedback and Control for Everyone (published by Springer, 2010)	ES/AU
BERLIN, 2020	Y. SHTESEL, C. EDWARDS, L. FRIDMAN, A. LEVANT Sliding Mode Control and Observation (Birkhäuser, 2013)	US/UK/MX/IL

APP: APPLICATION PAPER PRIZE (Created 1986)

CONGRESS SITE, YEAR	WINNER	COUNTRY
MUNICH, 1987	Not Awarded Candidates for APP were published in Newsletters, 6, 1987	
TALLIN, 1990	S.M. MEERKOV, F. TOP: Asymptotically Reliable Serial Lines: Analysis, Synthesis and a Case Study	US
SYDNEY, 1993	M. NAKAMOTO, K. SHIMIZU, H. FUKUDA: Multivariable Control for a Combined Cycle Power Plant	JP
SAN FRANCISCO, 1996	J.M. SEEM: A New Pattern Recognition Adaptive Controller	US
BEIJING, 1999	J.F. MAGNI, C. DOLL, C. CHIAPPA, B. FRAPARD, B. GIROUART Mixed mu Analysis for Flexible Systems (I and II).	FR
BARCELONA, 2002	JOACHIM HORN, JOACHIM BAMBERGER, PETER MICHAU AND STEPHAN PINDL: Flatness-Based Clutch Control for Automated Manual Transmissions	DE
PRAGUE, 2005	ANDREA BALLUCHI, LUCA BENVENUTI, ALBERTO SANGIOVANNI-VINCENTELLI, GABRIELE SERRA, CLAUDIO LEMMA Actual Engaged Gear Identification: A Hybrid Observer Approach	IT
	STAFFAN HAUGWITZ, PER HAGANDER Process Control of an Open Plate Reactor	SE
SEOUL, 2008	CHRISTIAN BENATZKY, MARTIN KOZEK, ALEXANDER SCHIRRER, & ANTON STRIBERSKY Vibration Damping of a Flexible Car Body Structure Using Piezo-Stack Actuators	AT
MILAN, 2011	GODHAVN, A. PAVLOV, G-OL KAASA, N.L. ROLLAND Drilling Seeking Automatic Control Solutions	NO
CAPE TOWN, 2014	C. CASENAVE, D. DOCHAIN, J. HARMAND, M. PEREZ, A. RAPAPORT, J-M. SABLAYROLLES, Control of a Multi-stage Continuous Fermentor for the Study of the Wine Fermentation	FR/BE
TOULOUSE, 2017	D. MOSER, M. REITER, L. DEL RE Stochastic Modeling of Lane Changes for Predictive aptive Cruise Control	AT

BERLIN, 2020	D. Bonzanini, J.A. Paulson, D. B. Graves and A. Mesbah: Toward Safe Dose Delivery in Plasma Medicine using Projected Neural Network-based Feedback Approximate NMPC	US
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YAP: YOUNG AUTHOR PRIZE (Created 1986)

CONGRESS SITE, YEAR	WINNER	COUNTRY
MUNICH, 1987	H. KASAHARA, H. FUJII, M. IWATA Parallel Processing of Robot Simulation	JP
TALLIN, 1990	R. KULHAVY Differential Geometry of Recursive Nonlinear Estimation	CZ
SYDNEY, 1993	L. GUO The Logarithm Law of Self Tuning Regulators	CN
SAN FRANCISCO, 1996	L. PAO Input Shaping Design for Flexible Systems with Multiple Actuators K.H. JOHANSSON; A. RANTZER Global analysis of third-order relay feedback systems	US SE
BEIJING, 1999	Y. HONG H-infinity control, stabilization and input-output stability of nonlinear systems based on homogeneous techniques	US
BARCELONA, 2002	DANIEL LIBERZON Stabilization by Quantized State or Output Feedback: A Hybrid Control Approach	US
PRAGUE, 2005	LEI ZHANG, DIMITRIOS HRISTU-VARSAKELIS: Stabilization of Networked Control Systems: Designing Effective Communication Sequences SATORU SAKAI, KENJI FUJIMOTO: Dynamic Output Feedback Stabilization of a Class of Nonholonomic Hamiltonian Systems	US JP
SEOUL, 2008	LACHLAN BLACKHALL & MICHAEL ROTKOWITZ Recursive Sparse Estimation using a Gaussian Sum Filter	AU
MILAN, 2011	JING ZHANG AND RE-BING WU Coherent Nonlinear Feedback Control of Quantum Systems with Applications to Quantum Optics on Chip	CN

CAPE TOWN, 2014	PONTUS GISELSSON Improved Fast Dual Gradient Methods for Embedded Model Predictive Control	SE
TOULOUSE, 2017	RAIK SUTTNER: Exponential Stability for Extremum Seeking Control Systems LUCA DEORI: On the Connection between Nash Equilibria and Social Optima in Electric Vehicle Charging Control Games	DE IT
BERLIN, 2020	LUCA BALLOTTA: From Sensor to Processing Networks: Optimal Estimation with Computation and Communication Latency	IT

AUT PP: AUTOMATICA PAPER PRIZE (Created 1979)

(1. SURVEY; 2. THEORY/METHODOLOGY ORIENTED; 3. APPLICATION)

CONGRESS SITE, YEAR	WINNERS	COUNTRY
KYOTO, 1981	<ol style="list-style-type: none"> 1. T. SÖDERSTRÖM, L. LJUNG, I. GUSTAVSSON: A Theoretical Analysis of Recursive Identification Methods, 14, 231-244, 1978 2. J. RISSANEN: Modeling by Shortest Data Description, 14, 465-471, 1978 3. G.K. LAUSTERER, W.H. RAY, H.R. MARTENS: Real Time Distributed Parameter State Estimation Applied to a Two Dimensional Heated Ingot, 14, 335-344, 1978 	SE CA DE, US
BUDAPEST, 1984	<ol style="list-style-type: none"> 1. K.J. ÅSTRÖM: Theory and Applications of Adaptive Control - A Survey, 19, 5, 471-486, 1983 2. H. KIMURA: Perfect and Subperfect Regulation in Linear Multivariable Control Systems, 18, 2, 125-145, 1982 R. ROUHANI, R.K. MEHRA: Model Algorithmic Control (MAC); Basic Theoretical Properties, 18, 4, 401-414, 1982 3. T. SHIRAIWA, Y. SAKAMOTO, S. KOBAYASHI, S. ANEZAKI, H. KATO, A. KUWABARA: Automatic Control of Casting Speed in Ingot Casting, 17, 4, 613-618, 1981 	SE JP US JP
MUNICH, 1987	<ol style="list-style-type: none"> 1. W. LEINHARD: Microcomputer Control of High Dynamic Performance AC-Drives - A Survey, 22, 1, 1-19, 1986 2. D.W. CLARKE: Self-Tuning Control of Nonminimum-Phase Systems, 20,5,501-517, 1984 J.C. WILLEMS: From Time Series to Linear Systems, Part 1: Finite Dimensional Linear Time Invariant Systems, 22,5, 561-580, 1986; Part 2: Exact Modeling, 22, 6, 675-694, 1986; Part 3: Approximate Modeling, 1, 87-115, 1987 3. O.L.R. JACOBS, R.E.S. BULLINGHAM, P. LAMMER, H.J. MCDUAY, G.O. SULLIVAN, M.P. REASBECK: Modeling, Estimation and Control in the Relief of Post-Operative Pain, 21, 4, 349-360, 1985 	UK NL BE UK
TALLIN, 1990	<ol style="list-style-type: none"> 1. V. KUCERA, P. ZAGALAK: Fundamental Theorem of State Feedback for Singular Perturbations, 24, 5, 653-658, 1988 2. B.R. BARMISH, Z. SHI: Robust stability of Perturbed Systems with Time Delays, 25, 3, 371-381, 1989 3. I. HOSHINA, Y. MAEKAWA, T. FUJIMOTO, H. KIMURA, H. KIMURA: Observer-Based Multivariable Control of the Aluminum Cold Tandem Mill, 24, 6, 741-754, 1988 	CZ US JP
SYDNEY, 1993	<ol style="list-style-type: none"> 1. L. LJUNG, S. GUNNARSSON: Adaptation and Tracking in System Identification - A Survey, 26,1, 7-21, 1990 2. B.R. BARMISH, R. TEMPO: The Robust Root Locus, 26, 2, 283-292, 1990 3. C.I. BYRNES, A. ISIDORI: On the Attitude Stabilization of Rigid Spacecraft, 27, 1, 87-95, 1991 	SE US, IT US, IT
SAN FRANCISCO, 1996	<ol style="list-style-type: none"> 1. R. DAVID, H. ALLA: Petri Nets for Modeling of Dynamic Systems - A Survey, 30, 2, 175-202, 1994 2. P. VAN OVERSCHEE, B. DE MOOR: N4SID: Subspace Algorithms for the Identification of Combined Deterministic-Stochastic Systems, 30, 1, 75-94, 1994 3. A. J. SORENSON, O. EGELAND: Design of Ride Control System for Surface Effect Ships Using Dissipative Control, 31, 2, 183-200, 1995 	FR BE NO

BEIJING, 1999	<ol style="list-style-type: none"> 1. B.D.O. ANDERSON: From Youla-Kucera to Identification, Adaptation and Nonlinear Control, 34, 12,1485-1506, 1998. 2. N. LEONARD: Stability of Bottom-Heavy Underwater Vehicles, 33, 3, 331-346, 1997. 3. A. SEEM: A New Pattern Recognition Adaptive Controller with Applications to HVAC Systems, 34, 8, 969-982, 1998. 	<p>AU US</p> <p>US</p>
BARCELONA, 2002	<ol style="list-style-type: none"> 1. F. BLANCHINI: Set Invariance in Control, 35, 11, 1747-1767, 1999. 2. M. VIDYASAGAR: Randomized Algorithms for Robust Controller Synthesis Using Statistical learning Theory, 37, 10, 1515-1528, 2001. 3. T.I. FOSSEN: Nonlinear Passive Weather Optimal Positioning Control (WOPC) System for Ships and Rigs: Experimental Results, 37, 5, 701-715, 2001. 	<p>IT</p> <p>IN</p> <p>NO</p>
PRAGUE, 2005	<ol style="list-style-type: none"> 1. J.P. RICHARD: Time Delay Systems: An overview of some recent advances and open problems 2. J.P. HESPANHA and A.S. MORSE: Switching Between Stabilizing Controllers 3. C. BONIVENTO, A. ISIDORI, L. MARCONI and A. PAOLI: Implicit Fault-tolerant Control: Application to Induction Motors 	<p>FR</p> <p>US</p> <p>IT</p>
SEOUL, 2008	<ol style="list-style-type: none"> 1. P.F. HOKAYEM and M.W. SPONG: Bilateral teleoperation: An historical survey 2. S.C. BENGEEA and R.A. DECARLO: Optimal control of switching systems 3. E. PREMPAIN and I. POSTLETHWAITE: Static H-infinity loop shaping control of a fly-by-wire helicopter 	<p>US</p> <p>US</p> <p>UK</p>
MILAN, 2011	<ol style="list-style-type: none"> 1. V. ANDRIEU and L. PRALY: A unifying point of view on output feedback designs for global asymptotic stabilization 2. DAIZHAN CHENG and HONGSHENG QI: Controllability and observability of Boolean control networks 3. HAN-LIM CHOI and J.P. HOW: Continuous Trajectory planning of mobile sensors for informative forecasting 	<p>FR</p> <p>CN</p> <p>KR</p>
CAPE TOWN, 2014	<ol style="list-style-type: none"> 1. H. OHLSSON, F. GUSTAFSSON, L. LJUNG and S. BOYD: Smoothed state estimates under abrupt changes using sum-of-norms regularization, Automatica, Vol. 48, No. 4, 595-605, 2012. 2. T. B. SCHON, A. WILLS and B. NINNESS: System identification of nonlinear state-space models, Automatica, vol. 47, No.1, pp. 39-49, 2011. 3. J. W. SIMPSON-PORCO, F. DORFLER and F. BULLO: Synchronization and power sharing for droop-controlled inverters in islanded microgrids, Automatica, Vol. 49, No. 9, 2603-2611, 2013. 	<p>SE,SE,SE,US</p> <p>SE,AU,AU</p> <p>US</p>
TOULOUSE, 2017	<ol style="list-style-type: none"> 1. G. PILLONETTO: A new kernel-based approach to hybrid system identification. Automatica, Vol. 70, August 2016, pp. 21-31. 2. J. SCHIFFER, R. ORTEGA, A. ASTOLFI, J. RAISCH, T. SEZI: Conditions for stability of droop-controlled inverter-based microgrids. Automatica, Vol. 50, October 2014, pp. 2457-2469. 3. J. K. SCOTT, D. M. RAIMONDO, G. R. MARSEGLIA, R. D. BRAATZ: Constrained zonotopes: A new tool for set-based estimation and fault detection. Automatica, Vol. 69, July 2016, pp. 126-136. 	<p>IT</p> <p>UK, FR, DE</p> <p>US, IT</p>

BERLIN, 2020	<ol style="list-style-type: none"> <li data-bbox="549 280 1206 360">1. J. MAIDENS, A. BARRAU, S. BONNABEL, M. ARCAK: Symmetry reduction for dynamic programming Automatica, Volume 97 (November 2018), pages 367-375. <li data-bbox="549 360 1206 448">2. K.S. PHOGAT, D. CHATTERJEE, R. BANAVAR: A discrete-time Pontryagin maximum principle on matrix Lie groups, Automatica, Vol. 97, pp. 376-391, 2018. <li data-bbox="549 448 1206 528">3. X. CHENG, J.M.A. SCHERPEN, B. BESSELINK: Balanced Truncation of Networked Linear Passive Systems, Automatica, Vol. 104, pp. 17-25, June 2019. 	<p data-bbox="1206 280 1369 360">CA, FR, FR, US</p> <p data-bbox="1206 360 1369 448">IN</p> <p data-bbox="1206 448 1369 528">NL</p>
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CEP PP:
CONTROL ENGINEERING PRACTICE PAPER PRIZE
(Created 1993)

(1. SURVEY; 2. THEORY/METHODOLOGY ORIENTED; 3. APPLICATION)

CONGRESS SITE, YEAR	WINNERS	COUNTRY
SAN FRANCISCO, 1996	N.G. WALKER, G.F. WYATT-MAIR: Sensor Signal Validation using Analytical Redundancy for an Aluminum Cold Rolling Mill, 3,6, 753-760	US
BEIJING, 1999	1. P. BIDAN, L.K. KOUADIO, M. VALENTIN and G. MONTSENY: Electrical assistance for SI engine idle-speed control, 6, 7, 829-836, 1998.	FR
	2. J.H. MORTENSEN, T. MOELBAK, P. ANDERSEN and T.S. PEDERSEN: Optimization of boiler control to improve the load-following capability of power-plant units, 6, 12, 1531-1539, 1998.	DK
	3. M. WU, M. NAKANO and J.H. SHE: A distributed expert control system for a hydrometallurgical zinc process, 6, 12, 1435-1446, 1998.	JP
BARCELONA, 2002	1. H. SEKI, M. OGAWA, S. OYAMA, K. KAMATSU, M. OHSHIMA AND W. YANG: Industrial Application of a Nonlinear Model Predictive Control to Polymerization Reactors, 9, 8, 819-828, 2001.	JP
	2. A.J. SMERLAS, D.J. WALKER, I. POSTLETHWAITE, M.E. STRANGE, J. HOWITT, A.W. GUBBLES: Evaluation H-infinite Controllers on the NRC Bell 205 fly-by-wire helicopter, 9, 1, 1-10, 2001.	UK
	3. M. JÄRVENSIVU, K. SAARI, S.-L. JÄMSÄ-JOUNELA: Intelligent Control System of an Industrial Lime Kiln Process, 9, 6, 589-606, 2001.	FI
PRAGUE, 2005	1. S. JOE QIN and THOMAS A. BADGWELL: A survey of industrial model predictive control technology, 11, 7, 733-764, 2003	US
	2. C. A. BODE, B. S. KO, and T. F. EDGAR: Run-to-run control and performance monitoring of overlay in semiconductor manufacturing, 12, 7, 893-900, 2004	US
	3. OLIVER SAWODNY, HARALD ASCHEMANN, and STEPHAN LAHRES: An automated gantry crane as a large workspace robot, 10, 12, 1323-1338, 2002	DE

SEOUL, 2008	<ol style="list-style-type: none"> 1. Z. K. NAGY, B. MAHN, R. FRANKE, F. ALLGÖWER: Evaluation study of an efficient output feedback nonlinear model predictive control for temperature tracking in an industrial batch reactor, Volume 15, Issue 7, pgs 839-850 2. M MENSLER, S. JOE, T. KAWABE: Identification of a toroidal continuously variable transmission using continuous-time system identification methods", Volume 14, Issue 1, pgs 45-58 3. S. HAUGWITZ, P. HAGANDER, T. NOREN: Modeling and control of a novel heat exchange reactor, the Open Plate Reactor, Volume 15, Issue 7, pgs 779-792 	<p>DE</p> <p>JP</p> <p>SE</p>
MILAN, 2011	<ol style="list-style-type: none"> 1. SEUNGWUK MOON, ILKI MOON, KYONGSU YI: Design, tuning and evaluation of a full-range adaptive Cruise control system with collision avoidance 2. M. CORNO, S.M. SAVARESI, M. TANELLI, L. FABBRI: On optimal motorcycle braking 3. C.A. MONJE, B.M. VINAGRE, V. FELIU, YANGQUAN CHEN: Tuning and auto-tuning of fractional order controllers for industry applications 	<p>KR</p> <p>IT</p> <p>ES</p>
CAPE TOWN, 2014	<ol style="list-style-type: none"> 1. G.M. HOFFMANN, H. HUANG, S. L. WASLANDER and C. J. TOMLIN: Precision flight control for a multi-vehicle quadrotor helicopter testbed, Control Engineering Practice, Vol. 19, No. 9, 1023-1036, 2011. 2. T. CHAI, J. DING and F. WU: Hybrid intelligent control for optimal operation of shaft furnace roasting process, Control Engineering Practice , Vol. 19, No. 3, pp. 264-275, 2011. 3. M. HILAIRET, M. GHANES, O. BETHOUX, V. TANASA, J-P. BARBOT and D. NORMAND-CYROT: A passivity-based controller for coordination of converters in a fuel cell system, Control Engineering Practice , Vol. 21, No. 8, 1097-1109, 2013. 	<p>US, US,CA, US</p> <p>CN</p> <p>FR</p>
TOULOUSE, 2017	<p>J. MONNIN, F. KUSTER, K. WEGENER: Optimal control for chatter mitigation in milling,</p> <ul style="list-style-type: none"> • Part 1: Modeling and Control Design, Control Engineering Practice, 24 (2014), 156–166 • Part 2: Experimental Validation, Control Engineering Practice, 24 (2014), 167–175 	CH

BERLIN, 2020	<ol style="list-style-type: none"> 1. T. BÖHM, T. MEURER: Trajectory planning and tracking control for the temperature distribution in a deep drawing tool, CEP, Vol. 64, 127-138, Jul. 2017. 2. K.V. NIELSEN, M. BLANKE, L. ERIKSSON, M. VEJLGAARD-LAURSEN: Adaptive feedforward control of exhaust recirculation in large diesel engines, CEP, Vol. 65, 26-35, Aug. 2017. 3. L. JADACHOWSKI, A. STEINBOECK, A. KUGI: State estimation and advanced control of the 2D temperature field in an experimental oscillating annealing device, CEP, Vol. 78, 116-128, Sept. 2018. 	DE DK, DK, SE, DK AT
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JPCPP: JOURNAL OF PROCESS CONTROL PAPER PRIZE
(Created 2002)

(1. SURVEY; 2. THEORY/METHODOLOGY; 3. APPLICATION)

CONGRESS SITE, YEAR	WINNERS	COUNTRY
PRAGUE, 2005	<p>1. R. K. PEARSON: A survey of industrial model predictive control technology, 13, 1, 1-26, 2003</p> <p>2. N. F. THORNHILL, BIAO HUANG, H. ZHANG: Detection of multiple oscillations in control loops, 13, 1, 91-100, 2003</p> <p>3. N. PETIT, P. ROUCHON, J.-M. BOUEILH, F. GUÉRIN, P. PINVIDIC: Control of an industrial polymerization reactor using flatness, 12, 659-665, 2002</p>	<p>CH</p> <p>UK, CA</p> <p>FR</p>
SEOUL, 2008	<p>1. M. FUJIWARA, Z.K NAGY., J.W. CHEW, R.D: First-principles and direct design approaches for the control of pharmaceutical crystallization (2005) <i>Journal of Process Control</i>, 15 (5), pp. 493-504</p> <p>S. ENGELL: Feedback control for optimal process operation, <i>Journal of Process Control</i> 17 (2007) 203–219</p> <p>2. R.D BRAATZ, R.C. ALKIRE, E. SEEBAUER, E. RUSLI, R. GUNAWAN, T.O. DREWS, X. LI, Y.HE: Perspectives on the design and control of multiscale systems, <i>Journal of Process Control</i>, 16 (3), p.193-204, Mar 2006</p> <p>3. S. CAUX, J. LACHAIZE, M. FADEL, P. SHOTT, L. NICOD: Modelling and control of a Fuel Cell System and Storage Elements in transport applications (2005) <i>Journal of Process Control</i>, 15 (4), pp. 481-491</p> <p>E. ZAMPROGNA, M.BAROLO, D.E. SEBORG: Optimal selection of soft sensor inputs for batch distillation columns using principal component analysis <i>Journal of Process Control</i>, 15 (1), p.39-52, Feb 2005</p>	<p>US</p> <p>DE</p> <p>US</p> <p>UK</p> <p>IT/US</p>

MILAN, 2011	<ol style="list-style-type: none"> 1. YOUING WANG, FURONG GAO, F.J. DOYLE: Survey on iterative learning control, repetitive control and run-to-run control 2. M. CHEBRE, Y. CREFF, N. PETIT: Feedback control and optimization for the production of commercial fuels by blending 3. V. ADETOLA, M. GUAY: Integration of real-time optimization and model predictive control 	<p>USA</p> <p>FR</p> <p>CA</p>
CAPE TOWN, 2014	<ol style="list-style-type: none"> 1. Best Survey paper Not awarded for 2014. 2. Best Theory Paper R. HUANG, E. HARINATH and L.T. BIEGLER: Lyapunov stability of economically oriented NMPC for cyclic processes, Journal of Process Control, Vol. 21, No. 4, pp. 501-509, 2011. 3. Best Application Paper G. PIN, V. FRANCESCO, F. A. CUZZOLA and T. PARISINI: Adaptive task-space metal strip-flatness control in cold multi-roll mill stands, Journal of Process Control, Vol. 23, No. 2, pp. 108-119, 2013. 	<p>US</p> <p>IT</p>
TOULOUSE, 2017	<ol style="list-style-type: none"> 1. M. LÖHNING, M. REBLE, J. HASENAUER, S. YU, F. ALLGÖWER: Model predictive control using reduced order models: Guaranteed stability for constrained linear systems. Journal of Process Control, 24, pp. 1647-1659 (2014). 2. F. SCHAUSENBERGER, A. STEINBOECK, A. KUGI: Optimization-based reduction of contour errors of heavy plates in hot rolling. Journal of Process Control, 47, pp. 150-160 (2016). 3. P. DAOUTIDIS, M. ZACHAR, S. S. JOGWAR: Sustainability and process control: A survey and perspective. Journal of Process Control, 44, pp. 184-206 (2016). 	<p>DE/CN</p> <p>AT</p> <p>US/IN</p>

BERLIN, 2020	<ol style="list-style-type: none"> <li data-bbox="619 286 975 421">1. Perić N.D., R. Paulen, M.E. Villanueva and B. Chachuat (2018). Set-membership nonlinear regression approach to parameter estimation, 70, 80-95. <li data-bbox="619 421 975 607">2. Joy P., K. Rossow, F. Jung, H.-U. Moritz, W. Pauer, A. Mitsos and A. Mhamdi (2018). Model-based control of continuous emulsion copolymerization in a lab-scale tubular reactor. <li data-bbox="619 607 975 810">3. Saltik M.B., L. Ozkan L., J.H.A. Ludlage, S. Weiland and P.M.J Van den Hof (2018). An outlook on robust model predictive control algorithms: reflections on performance and computational aspects. 	<p data-bbox="995 286 1166 315">UK, SK, CN, UK</p> <p data-bbox="995 421 1031 450">DE</p> <p data-bbox="995 607 1031 636">NL</p>
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EAAI PP: ENGINEERING APPLICATIONS OF AI PAPER PRIZE (Created 2002)

(1. THEORY; 2. SYMBOLIC AI; 3. SUB-SYMBOLIC AI)

CONGRESS SITE, YEAR	WINNER	COUNTRY
PRAGUE, 2005	1. YIXIN DIAO AND KEVIN M. PASSINO: Immunity-based hybrid learning methods for approximator structure and parameter adjustment, 15, 6, 587-600, 2002	US
	2. MANO RAM MAURYA, RAGHUNATHAN RENGASWAMY and VENKAT VENKATASUBRAMANIAN: Application of signed digraphs-based analysis for fault diagnosis of chemical process flowsheets, 17, 5, 501-518, 2003	US
	3. E. MUHL, P. CHARPENTIER and F. CHAXEL: Optimization of physical flows in an automotive manufacturing plant: some experiments and issues, 16, 4, 293-305, 2004	FR
SEOUL, 2008	M.BARLETTA, A.GISARIO, S.GUARINO Modelling of electrostatic fluidized bed (EFB) coating process using artificial neural networks, EAAI, vol 20 issue 6 (2007), 721-733.	IT
MILAN, 2011	4. YONGMING LI, XIAOPING ZENG, LIANG HAN, PIN WANG: Two coding based adaptive parallel cogenetic algorithm with double agents structure	CN
	5. N. NARIMAN-ZADEH, M. SALEHPOUR, A. JAMALI, E. HAGHGOO: Pareto optimization of a five-degree of freedom	IR

CAPE TOWN, 2014	<ol style="list-style-type: none"> 1. AL-KHAZRAJI, N. ESSOUNBOULI, A. HAMZAOUI, F. NOLLET, J. ZAYTOON: Type-2 fuzzy sliding mode control without reaching phase for nonlinear systems, Engineering Applications of Artificial Intelligence, Vol. 24, Issue 1, February 2011, pp. 23-38 2. Y. BLANCO-FERNANDEZ, M. LOPEZ-NORES, J. J. PAZOS-ARIAS, and J. GARCHIA-DUCQUE: An improvement for semantics-based recommender systems grounded on attaching temporal information to ontologies and user profiles, Engineering Applications of Artificial Intelligence, Vol.24, Issue 8, December 2011, pp. 1385-1397 	<p>FR</p> <p>ES</p>
TOULOUSE, 2017	<ol style="list-style-type: none"> 1. B. LI, Y. LI, L. GONG: Protein secondary structure optimization using an improved artificial bee colony algorithm based on AB off-lattice model. Engineering Applications of Artificial Intelligence, Vol. 27, pp. 70-79 (2014). 2. X. LAI, J.-K. HAO: Iterated variable neighborhood search for the capacitated clustering problem. Engineering Applications of Artificial Intelligence, Vol. 56, 102-120 (2016). 	<p>CN</p> <p>CN/FR</p>
BERLIN, 2020	<ol style="list-style-type: none"> 1. Lin J.C.-W., Yang L., Fournier-Viger P., Hong T.-P. Mining of skyline patterns by considering both frequent and utility constraints, (2019, volume 77). 2. Lu C., Gao L., Li X., Xiao S. A hybrid multi-objective grey wolf optimizer for dynamic scheduling in a real-world welding industry (2017, volume 57). 	<p>NO, CN, CN, TW</p> <p>CN</p>

MECHATRONICS PAPER PRIZE (Created 2006)

CONGRESS SITE, YEAR	WINNER	COUNTRY
SEOUL, 2008	<ol style="list-style-type: none"> 1. A. Notenboom, D. Bruijnen, E. HOMBURG, R.v.d. MOLENGRAFT, L.v.d. BEDEM, M. STEINBUCH Mechatronic design of an active printhead alignment mechanism for wide format printing systems, 2007 Mechatronics 17 (2-3), pp109-120 2. E. van WEST, A. YAMAMOTO, T. HIGUCHI The concept of "Haptic Tweezer", a non-contact object handling system using levitation techniques and haptics, 2007 Mechatronics 17 (7), pp 345-356 	<p>NL</p> <p>JP</p>
MILAN, 2011	<ol style="list-style-type: none"> 1. V. De SARS, S. HALIYO, J. SZEWCZY: A practical approach to the design and control of active endoscopes 2. G. SCHITTER, P.J. THURNER, P.K. HANSMA: Design and input shaping control of a novel scanner for high speed atomic force microscopy 3. M.H. KIMMAN, H.H. LANGEN, R.H. MUNNIG SCHMID: A miniature milling spindle with active magnetic bearings 	<p>FR</p> <p>AT</p> <p>NL</p>
CAPE TOWN, 2014	<ol style="list-style-type: none"> 1. R. OUNG and R. D'ANDREA: The distributed flight array, Mechatronics, Vol. 21, No. 6, pp. 908-917, September 2011 2. H. ZHANG, Y. LIU and G. LIU: Multiple mode control of a compact wrist with application to door opening, Mechatronics, Vol. 23, No. 1, pp. 10-20, February 2013. 3. D. J. KLUK, Michael T. BOULET and David L. TRUMPER: A high-bandwidth, high-precision, two-axis steering mirror with moving iron actuator, Mechatronics, Vol. 22, No. 3, pp. 257-270, April 2012. 	<p>CH</p> <p>CA</p> <p>US</p>

TOULOUSE, 2017	<ol style="list-style-type: none"> 1. D. AMIN-SHAHIDI, D. L. TRUMPER: Design and control of a piezoelectric driven reticle assist device for prevention of reticle slip in lithography systems. Mechatronics, Vol. 24 (2014), pp. 562-571. 2. F. BOEREN, D. BRUIJNEN, N. VAN DIJK, T. OOMEN: Joint input shaping and feedforward for point-to-point motion: Automated tuning for an industrial nanopositioning system. Mechatronics, Vol. 24 (2014), pp. 572-581. 3. C. FREEMAN, P. SAMPSON, J. H. BURRIDGE, A. M. HUGHES: Repetitive control of functional electrical stimulation for induced tremor suppression. Mechatronics, Vol. 32 (2015), pp. 79-87. 	<p>US</p> <p>NL</p> <p>UK</p>
BERLIN, 2020	<ol style="list-style-type: none"> 1. Martin Saxinger, Lukas Marko, Andreas Steinboeck, Andreas Kugi, 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 56 (2018), pp. 73–86 2. Giovanni Cherubini, Angeliki Pantazi, Mark A. Lantz, Feedback control of transport systems in tape drives without tension transducers. Mechatronics 49 (2018), pp. 211–223 3. Stefan Flixeder, Tobias Glück, Andreas Kugi, Force-based cooperative handling and lay-up of deformable materials: Mechatronic design, modeling, and control of a demonstrator. Mechatronics 47 (2017), pp. 246–261 	<p>AT</p> <p>CH</p> <p>AT</p>

IPP: BEST INTERACTIVE (POSTER) PAPER PRIZE
(2014 still Congress based Award, starting from 2017 IFAC Award)

CONGRESS SITE, YEAR	WINNER	COUNTRY
CAPE TOWN 2014	MATTEO CORNO, PIERFRANCESCO SPAGNOL, SERGIO SAVARESI: Road Slope Estimation in Bicycles without Torque Measurements	IT, US, IT
TOULOUSE 2017	A. SCHAUM, H. WEISBARTH, T. MEURER: Robust Adaptive Feedforward Output - Feedback Tracking Control for Microalgae Cultures	DE
BERLIN, 2020	NOT AWARDED	