Alessandro Astolfi

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.

253 papers 6,619 citations

44 h-index 75 g-index

283 ext. papers

8,229 ext. citations

3.7 avg, IF

6.45 L-index

| # | Paper | IF | Citations |
|-----|---|-------|-----------|
| 253 | Adaptive Control for Systems with Time-Varying Parameters Survey. Lecture Notes in Control and Information Sciences, 2022, 217-247 | 0.5 | |
| 252 | Spatiotemporal dynamics in spiking recurrent neural networks using modified-full-FORCE on EEG signals <i>Scientific Reports</i> , 2022 , 12, 2896 | 4.9 | 0 |
| 251 | Attitude Regulation With Bounded Control in the Presence of Large Disturbances With Bounded Moving Average. <i>IEEE/CAA Journal of Automatica Sinica</i> , 2022 , 9, 834-846 | 7 | O |
| 250 | On the analysis of open-loop Nash equilibria admitting a feedback synthesis in nonlinear differential games. <i>Automatica</i> , 2022 , 142, 110389 | 5.7 | |
| 249 | A Direct Bounded Control Method for Transient Stability Assessment. IFAC-PapersOnLine, 2021, 54, 294 | -30⁄1 | O |
| 248 | Energy Management and Control of Photovoltaic and Storage Systems in Active Distribution Grids. <i>IEEE Transactions on Power Systems</i> , 2021 , 1-1 | 7 | 2 |
| 247 | . IEEE Transactions on Control Systems Technology, 2021 , 29, 2312-2324 | 4.8 | O |
| 246 | . IEEE Transactions on Automatic Control, 2021 , 66, 1986-2001 | 5.9 | 12 |
| 245 | Position regulation in Cartesian space of a class of inextensible soft continuum manipulators with pneumatic actuation. <i>Mechatronics</i> , 2021 , 76, 102573 | 3 | 3 |
| 244 | . IEEE Transactions on Automatic Control, 2021 , 66, 2265-2272 | 5.9 | 22 |
| 243 | Adaptive energy shaping control of robotic needle insertion. <i>Mechanism and Machine Theory</i> , 2021 , 155, 104060 | 4 | 7 |
| 242 | . IEEE Transactions on Automatic Control, 2021 , 66, 3562-3574 | 5.9 | 1 |
| 241 | On the Dynamics of Inherent Balancing of Modular Multilevel DCACDC Converters. <i>IEEE Transactions on Power Electronics</i> , 2021 , 36, 34-40 | 7.2 | 2 |
| 240 | . IEEE Transactions on Automatic Control, 2021 , 1-1 | 5.9 | О |
| 239 | On the Approximation of Moments for Nonlinear Systems. <i>IEEE Transactions on Automatic Control</i> , 2021 , 1-1 | 5.9 | 2 |
| 238 | . IEEE Transactions on Control Systems Technology, 2021 , 1-15 | 4.8 | 5 |
| 237 | Adaptive Formation Tracking Control for First-Order Agents in a Time-Varying Flowfield. <i>IEEE Transactions on Automatic Control</i> , 2021 , 1-1 | 5.9 | 8 |

(2020-2021)

| 236 | Robust traffic wave damping via shared control. <i>Transportation Research Part C: Emerging Technologies</i> , 2021 , 128, 103110 | 8.4 | 1 |
|-----|--|-----------------------|-----|
| 235 | Energy-maximising moment-based constrained optimal control of ocean wave energy farms. <i>IET Renewable Power Generation</i> , 2021 , 15, 3395 | 2.9 | 2 |
| 234 | Adaptive Formation Tracking Control of Directed Networked Vehicles in a Time-Varying Flowfield. Journal of Guidance, Control, and Dynamics, 2021 , 44, 1883-1891 | 2.1 | 8 |
| 233 | Constructive design of open-loop Nash equilibrium strategies that admit a feedback synthesis in LQ games. <i>Automatica</i> , 2021 , 133, 109840 | 5.7 | |
| 232 | Adaptive energy shaping control of a class of nonlinear soft continuum manipulators. <i>IEEE/ASME Transactions on Mechatronics</i> , 2021 , 1-1 | 5.5 | 5 |
| 231 | Nonlinear Model Reduction in the Loewner Framework. <i>IEEE Transactions on Automatic Control</i> , 2021 , 1-1 | 5.9 | O |
| 230 | Robust dynamic state feedback for underactuated systems with linearly parameterized disturbances. <i>International Journal of Robust and Nonlinear Control</i> , 2020 , 30, 4112-4128 | 3.6 | 7 |
| 229 | Stability of nonlinear differential-algebraic systems via additive identity. <i>IEEE/CAA Journal of Automatica Sinica</i> , 2020 , 7, 929-941 | 7 | 4 |
| 228 | On the Active Nodes of Network Systems 2020 , | | 1 |
| 227 | Stabilization of a Class of Under-Actuated Nonlinear Systems via Under-Actuated Back-Stepping. <i>IEEE Transactions on Automatic Control</i> , 2020 , 1-1 | 5.9 | 2 |
| 226 | Loewner Functions for Linear Time-Varying Systems with Applications to Model Reduction. <i>IFAC-PapersOnLine</i> , 2020 , 53, 5623-5628 | 0.7 | 1 |
| 225 | Adaptive Control for Nonlinear Systems with Time-Varying Parameters and Control Coefficient. <i>IFAC-PapersOnLine</i> , 2020 , 53, 3829-3834 | 0.7 | 3 |
| 224 | . IEEE Transactions on Automatic Control, 2020 , 65, 2107-2122 | 5.9 | 4 |
| 223 | Data-driven constrained optimal model reduction. European Journal of Control, 2020, 53, 68-78 | 2.5 | 1 |
| 222 | Singularities and Moments of Nonlinear Systems. IEEE Transactions on Automatic Control, 2020, 65, 364 | 47 5 3∕65∙ | 4 2 |
| 221 | Orbital stabilization of nonlinear systems via the immersion and invariance technique. <i>International Journal of Robust and Nonlinear Control</i> , 2020 , 30, 1850-1871 | 3.6 | 8 |
| 220 | . IEEE Transactions on Automatic Control, 2020 , 65, 4016-4030 | 5.9 | 1 |
| 219 | . IEEE Transactions on Automatic Control, 2020 , 65, 5312-5327 | 5.9 | 5 |

| 218 | . IEEE Transactions on Automatic Control, 2020 , 65, 3229-3240 | 5.9 | 3 |
|-----|---|-----|----|
| 217 | Active Damping of a DC Network with a Constant Power Load: An Adaptive Observer-based Design 2019 , | | 3 |
| 216 | . IEEE Transactions on Automatic Control, 2019 , 64, 4407-4422 | 5.9 | 1 |
| 215 | An Interconnection-Based Interpretation of the Loewner Matrices 2019, | | 2 |
| 214 | Output-Feedback I&I Adaptive Control for Linear Systems with Time-Varying Parameters 2019, | | 4 |
| 213 | Robust Moment-Based Energy-Maximising Optimal Control of Wave Energy Converters 2019 , | | 2 |
| 212 | Moment-based constrained optimal control of an array of wave energy converters 2019, | | 8 |
| 211 | Optimal Control for Continuous-time Nonlinear Systems based on a Linear-like Policy Iteration 2019 , | | 1 |
| 210 | Simulation-driven fixed-order controller tuning via moment matching 2019 , | | 2 |
| 209 | Output-Feedback Adaptive Control for Systems with Time-Varying Parameters. <i>IFAC-PapersOnLine</i> , 2019 , 52, 586-591 | 0.7 | 3 |
| 208 | An algebraic approach to dynamic optimisation of nonlinear systems: a survey and some new results. <i>Journal of Control and Decision</i> , 2019 , 6, 1-29 | 0.9 | 5 |
| 207 | . IEEE Transactions on Automatic Control, 2019 , 64, 111-126 | 5.9 | 8 |
| 206 | Lateral Control of an Autonomous Vehicle. IEEE Transactions on Intelligent Vehicles, 2018, 3, 228-237 | 5 | 35 |
| 205 | Energy shaping control for buck B oost converters with unknown constant power load. <i>Control Engineering Practice</i> , 2018 , 74, 33-43 | 3.9 | 19 |
| 204 | . IEEE Transactions on Automatic Control, 2018 , 63, 1943-1958 | 5.9 | 9 |
| 203 | Adaptive Control of Linear Systems with Time-Varying Parameters 2018, | | 8 |
| 202 | Shared-Control for the Lateral Motion of Vehicles 2018, | | 1 |
| 201 | Under-Actuated Back-Stepping: An Introduction 2018 , | | 4 |

| 200 | I&I Adaptive Control for Systems with Varying Parameters 2018 , | | 9 |
|-----|--|-------------------|----|
| 199 | Discretization schemes for constraint stabilization in nonlinear differential-algebraic systems 2018, | | 1 |
| 198 | Energy-maximising control of wave energy converters using a moment-domain representation. <i>Control Engineering Practice</i> , 2018 , 81, 85-96 | 3.9 | 29 |
| 197 | Robust balancing control of flexible inverted-pendulum systems. <i>Mechanism and Machine Theory</i> , 2018 , 130, 539-551 | 4 | 18 |
| 196 | A globally stable convergent algorithm for the integration of constrained mechanical systems ${f 2018}$, | | 2 |
| 195 | Data-driven model reduction by moment matching for linear and nonlinear systems. <i>Automatica</i> , 2017 , 79, 340-351 | 5.7 | 43 |
| 194 | . IEEE Transactions on Automatic Control, 2017 , 62, 5666-5677 | 5.9 | 20 |
| 193 | A Differential Game Approach to Multi-agent Collision Avoidance. <i>IEEE Transactions on Automatic Control</i> , 2017 , 62, 4229-4235 | 5.9 | 67 |
| 192 | Shared-Control for a Rear-Wheel Drive Car: Dynamic Environments and Disturbance Rejection. <i>IEEE Transactions on Human-Machine Systems</i> , 2017 , 47, 723-734 | 4.1 | 12 |
| 191 | A Review on Model Reduction by Moment Matching for Nonlinear Systems. <i>Lecture Notes in Control and Information Sciences</i> , 2017 , 29-52 | 0.5 | |
| 190 | Nonlinear Model Reduction by Moment Matching. <i>Foundations and Trends in Systems and Control</i> , 2017 , 4, 224-409 | 4 | 21 |
| 189 | Moments of random variables: A system-theoretic interpretation 2017, | | 1 |
| 188 | Model reduction for linear differential inclusions: moment-set and time-variance 2017, | | 3 |
| 187 | Robust H Control for Autonomous Scooters. <i>IFAC-PapersOnLine</i> , 2017 , 50, 297-302 | 0.7 | O |
| 186 | Model reduction by moment matching at isolated singularities for linear systems: a complex analytic approach. <i>IFAC-PapersOnLine</i> , 2017 , 50, 6350-6354 | 0.7 | 4 |
| 185 | A note on the stability of nonlinear differential-algebraic systems. IFAC-PapersOnLine, 2017, 50, 7421-7 | 7426 y | O |
| 184 | A lateral control assistant for the dynamic model of vehicles subject to state constraints 2017, | | 7 |
| 183 | Eigenvalues and poles of nonlinear systems: A geometric approach 2017, | | 3 |

| 182 | On the stability of constrained mechanical systems 2017, | | 3 |
|-----|---|--------------|----|
| 181 | Model reduction by moment matching at isolated singularities for linear systems: A geometric approach 2017 , | | 3 |
| 180 | 2017, | | 3 |
| 179 | Robust Shared-Control for Rear-Wheel Drive Cars 2017 , 15-40 | | 1 |
| 178 | . IEEE Transactions on Automatic Control, 2016 , 61, 1438-1451 | 5.9 | 49 |
| 177 | . IEEE Transactions on Automatic Control, 2016 , 61, 648-661 | 5.9 | 7 |
| 176 | An adaptive observer for a class of parabolic PDEs based on a convex optimization approach for backstepping PDE design 2016 , | | 3 |
| 175 | Nonlinear system identification for autonomous systems via functional equations methods 2016 , | | 4 |
| 174 | A Note on Delay Coordinates for Locally Observable Analytic Systems. <i>IEEE Transactions on Automatic Control</i> , 2016 , 61, 1409-1412 | 5.9 | 2 |
| 173 | . IEEE Transactions on Automatic Control, 2016 , 61, 1882-1894 | 5.9 | 9 |
| 172 | State and Output-Feedback Shared-Control for a Class of Linear Constrained Systems. <i>IEEE Transactions on Automatic Control</i> , 2016 , 61, 3209-3214 | 5.9 | 15 |
| 171 | . IEEE Transactions on Power Electronics, 2016 , 31, 8448-8460 | 7.2 | 15 |
| 170 | Model Reduction by Matching the Steady-State Response of Explicit Signal Generators. <i>IEEE Transactions on Automatic Control</i> , 2016 , 61, 1995-2000 | 5.9 | 25 |
| 169 | Constrained optimal reduced-order models from input/output data 2016, | | 6 |
| 168 | A geometric characterisation of persistently exciting signals generated by continuous-time autonomous systems. <i>IFAC-PapersOnLine</i> , 2016 , 49, 826-831 | 0.7 | 4 |
| 167 | Model reduction for hybrid systems with state-dependent jumps. IFAC-PapersOnLine, 2016, 49, 850-855 | 5 0.7 | 10 |
| 166 | Backstepping PDE-based adaptive observer for a Single Particle Model of Lithium-Ion Batteries 2016 , | | 1 |
| 165 | Shared Control for the Kinematic and Dynamic Models of a Mobile Robot. <i>IEEE Transactions on Control Systems Technology</i> , 2016 , 24, 2112-2124 | 4.8 | 22 |

| 164 | . IEEE Transactions on Automatic Control, 2016 , 61, 2837-2847 | 5.9 | 20 |
|-----|--|--------------|-----|
| 163 | . IEEE Transactions on Automatic Control, 2015 , 60, 950-965 | 5.9 | 34 |
| 162 | Characterization of the moments of a linear system driven by explicit signal generators 2015, | | 13 |
| 161 | Towards deterministic subspace identification for autonomous nonlinear systems 2015, | | 2 |
| 160 | Model reduction for nonlinear systems and nonlinear time-delay systems from input/output data 2015 , | | 5 |
| 159 | Some results on disturbance attenuation for Hamiltonian systems via direct discrete-time design. <i>International Journal of Robust and Nonlinear Control</i> , 2015 , 25, 1927-1940 | 3.6 | 2 |
| 158 | Backstepping PDE design, Volterra and Fredholm operators: A convex optimization approach 2015, | | 3 |
| 157 | Shared-control for the kinematic model of a rear-wheel drive car 2015 , | | 5 |
| 156 | Shared-control for a UAV operating in the 3D space 2015 , | | 2 |
| 155 | Dimension estimation for autonomous nonlinear systems 2015 , | | 1 |
| 154 | Model reduction for linear systems and linear time-delay systems from input/output data 2015, | | 12 |
| 153 | . IEEE Transactions on Automatic Control, 2015 , 60, 2350-2361 | 5.9 | 36 |
| 152 | Immune Response Enhancement Strategy via Hybrid Control Perspective. <i>Lecture Notes in Computer Science</i> , 2015 , 1-26 | 0.9 | |
| 151 | Dynamic generalized controllability and observability functions with applications to model reduction and sensor deployment. <i>Automatica</i> , 2014 , 50, 1349-1359 | 5.7 | 10 |
| 150 | Conditions for stability of droop-controlled inverter-based microgrids. <i>Automatica</i> , 2014 , 50, 2457-2469 | 9 5.7 | 256 |
| 149 | Semi-Global Multi-Frequency Estimation in the Presence of Deadzone and Saturation. <i>IEEE Transactions on Automatic Control</i> , 2014 , 59, 1913-1918 | 5.9 | 4 |
| 148 | Solution to the multi-machine transient stability problem and simulated validation in realistic scenarios. <i>IET Generation, Transmission and Distribution</i> , 2014 , 8, 1392-1405 | 2.5 | 3 |
| 147 | A two-point boundary value formulation of a mean-field crowd-averse game. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 7819-7824 | | O |

| 146 | Stability of Synchronized Motions of Inverter B ased Microgrids Under Droop Control. <i>IFAC</i> Postprint Volumes IPPV / International Federation of Automatic Control, 2014 , 47, 6361-6367 | | 8 |
|-----|---|-----|----|
| 145 | Shared-control for the kinematic model of a mobile robot 2014 , | | 6 |
| 144 | Model reduction by moment matching for ZIP systems 2014, | | 1 |
| 143 | Output-feedback shared-control for fully actuated linear mechanical systems 2014, | | 2 |
| 142 | Model reduction by moment matching for nonlinear time-delay systems 2014, | | 4 |
| 141 | Families of moment matching based, low order approximations for linear systems. <i>Systems and Control Letters</i> , 2014 , 64, 47-56 | 2.4 | 35 |
| 140 | Approximate Solution of HJBE and Optimal Control in Internal Combustion Engines. <i>Lecture Notes in Control and Information Sciences</i> , 2014 , 59-73 | 0.5 | |
| 139 | Dynamics of Autoimmune Diseases 2014 , 491-500 | | |
| 138 | Voltage Regulation of a Boost Converter in Discontinuous Conduction Mode: A Simple Robust Adaptive Feedback Controller. <i>IEEE Control Systems</i> , 2013 , 33, 55-65 | 2.9 | 6 |
| 137 | Families of moment matching based, structure preserving approximations for linear port Hamiltonian systems. <i>Automatica</i> , 2013 , 49, 2424-2434 | 5.7 | 17 |
| 136 | Dynamic Lyapunov functions. <i>Automatica</i> , 2013 , 49, 1058-1067 | 5.7 | 12 |
| 135 | Passivity-based control of AC drives: theory for the user and application examples. <i>International Journal of Control</i> , 2013 , 86, 625-635 | 1.5 | 7 |
| 134 | Sensorless Estimation and Nonlinear Control of a Rotational Energy Harvester. <i>Journal of Physics: Conference Series</i> , 2013 , 476, 012052 | 0.3 | 1 |
| 133 | Shared-control for fully actuated linear mechanical systems 2013, | | 8 |
| 132 | Application of Hamiltonian dynamics to manipulator control in constrained workspace 2013, | | 1 |
| 131 | Moment matching for nonlinear port Hamiltonian and gradient systems. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2013 , 46, 395-399 | | 5 |
| 130 | The Design and Control of a Bipedal Robot with Sensory Feedback. <i>International Journal of Advanced Robotic Systems</i> , 2013 , 10, 277 | 1.4 | 3 |
| 129 | A stochastic approach to distributed power frequency control by means of smart appliances 2012 , | | 3 |

(2010-2012)

| 128 | Immersion and invariance adaptive control for discrete time systems in strict feedback form. <i>Systems and Control Letters</i> , 2012 , 61, 1132-1137 | 2.4 | 24 |
|-----|--|-----|-----|
| 127 | . IEEE Transactions on Automatic Control, 2012 , 57, 2490-2503 | 5.9 | 55 |
| 126 | Hamiltonian-Based Clustering: Algorithms for Static and Dynamic Clustering in Data Mining and Image Processing. <i>IEEE Control Systems</i> , 2012 , 32, 74-91 | 2.9 | 19 |
| 125 | A solution to the problem of transient stability of multimachine power systems 2012, | | 12 |
| 124 | A weak version of the small-gain theorem 2012 , | | 6 |
| 123 | . IEEE Transactions on Control Systems Technology, 2011 , 19, 601-614 | 4.8 | 94 |
| 122 | Sampled-data adaptive control for a class of nonlinear systems with parametric uncertainties. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2011 , 44, 1261-1266 | | 5 |
| 121 | Moment matching for linear systems Ibverview and new results*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011 , 44, 12739-12744 | | 1 |
| 120 | Passivity and robust PI control of the air supply system of a PEM fuel cell model. <i>Automatica</i> , 2011 , 47, 2554-2561 | 5.7 | 35 |
| 119 | Asymptotic stabilization of passive systems without damping injection: A sampled integral technique. <i>Automatica</i> , 2011 , 47, 262-271 | 5.7 | 20 |
| 118 | A discrete-time observer design for spacecraft attitude determination using an orthogonality-preserving algorithm. <i>Automatica</i> , 2011 , 47, 975-980 | 5.7 | 18 |
| 117 | Discrete time immersion and invariance adaptive control for systems in strict feedback form 2011 , | | 6 |
| 116 | Global stabilization of non-globally linearizable triangular systems: Application to transient stability of power systems 2011 , | | 9 |
| 115 | Contraction and observer design on cones 2011 , | | 18 |
| 114 | A LaSalle version of Matrosov theorem 2011 , | | 7 |
| 113 | Stochastic Detectability and Mean Bounded Error Covariance of the Recursive Kalman Filter with Markov Jump Parameters. <i>Stochastic Analysis and Applications</i> , 2010 , 28, 190-201 | 1.1 | 1 |
| 112 | Model Reduction by Moment Matching for Linear and Nonlinear Systems. <i>IEEE Transactions on Automatic Control</i> , 2010 , 55, 2321-2336 | 5.9 | 165 |
| 111 | A Condition for Certainty Equivalence Output Feedback Stabilization of Nonlinear Systems. <i>IEEE Transactions on Automatic Control</i> , 2010 , 55, 1180-1185 | 5.9 | 9 |

| 110 | Characterization of Exponential Divergence of the Kalman Filter for Time-Varying Systems. <i>SIAM Journal on Control and Optimization</i> , 2010 , 48, 2917-2944 | 1.9 | 4 |
|--|---|---------------------|---------------------|
| 109 | Sensorless Control of Surface-Mount Permanent-Magnet Synchronous Motors Based on a Nonlinear Observer. <i>IEEE Transactions on Power Electronics</i> , 2010 , 25, 290-297 | 7.2 | 135 |
| 108 | Hybrid Observer for multi-frequency signals. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2010 , 43, 43-48 | | 3 |
| 107 | A globally exponentially convergent immersion and invariance speed observer for mechanical systems with non-holonomic constraints. <i>Automatica</i> , 2010 , 46, 182-189 | 5.7 | 101 |
| 106 | Observer design for range and orientation identification. <i>Automatica</i> , 2010 , 46, 1369-1375 | 5.7 | 20 |
| 105 | Model reduction by moment matching for switched power converters 2009, | | 6 |
| 104 | Estimation of the dynamics of two-dimensional clusters 2009 , | | 2 |
| 103 | Asymptotic stabilization of passive systems without damping injection: A sampled integral-approximation technique 2009 , | | 1 |
| 102 | Speed and load torque observer for rotating machines 2009, | | 7 |
| | | | |
| 101 | Integrator forwarding without PDEs 2009 , | | 4 |
| 100 | Integrator forwarding without PDEs 2009, Homogeneity in the bi-limit as a tool for observer and feedback design 2009, | | 1 |
| | | 2.4 | |
| 100 | Homogeneity in the bi-limit as a tool for observer and feedback design 2009 , Dynamic extension is unnecessary for stabilization via interconnection and damping assignment | 2.4 | 1 |
| 100 | Homogeneity in the bi-limit as a tool for observer and feedback design 2009, Dynamic extension is unnecessary for stabilization via interconnection and damping assignment passivity-based control. Systems and Control Letters, 2009, 58, 133-135 Asymptotic tracking of a reference trajectory by output-feedback for a class of non linear systems. | 2.4 | 1 |
| 100 99 98 | Homogeneity in the bi-limit as a tool for observer and feedback design 2009, Dynamic extension is unnecessary for stabilization via interconnection and damping assignment passivity-based control. Systems and Control Letters, 2009, 58, 133-135 Asymptotic tracking of a reference trajectory by output-feedback for a class of non linear systems. Systems and Control Letters, 2009, 58, 652-663 | 2.4 | 1 11 15 |
| 100999897 | Homogeneity in the bi-limit as a tool for observer and feedback design 2009, Dynamic extension is unnecessary for stabilization via interconnection and damping assignment passivity-based control. <i>Systems and Control Letters</i> , 2009, 58, 133-135 Asymptotic tracking of a reference trajectory by output-feedback for a class of non linear systems. <i>Systems and Control Letters</i> , 2009, 58, 652-663 Dynamic scaling and observer design with application to adaptive control. <i>Automatica</i> , 2009, 45, 2883-2 | 2.4 2.889 5.7 | 1 11 15 69 |
| 100 99 98 97 96 | Homogeneity in the bi-limit as a tool for observer and feedback design 2009, Dynamic extension is unnecessary for stabilization via interconnection and damping assignment passivity-based control. <i>Systems and Control Letters</i> , 2009, 58, 133-135 Asymptotic tracking of a reference trajectory by output-feedback for a class of non linear systems. <i>Systems and Control Letters</i> , 2009, 58, 652-663 Dynamic scaling and observer design with application to adaptive control. <i>Automatica</i> , 2009, 45, 2883-2 On global extremum seeking in the presence of local extrema. <i>Automatica</i> , 2009, 45, 245-251 | 2.4 2.889 5.7 | 1 11 15 69 122 |

(2008-2009)

| 92 | A globally exponentially convergent immersion and invariance speed observer for n degrees of freedom mechanical systems 2009 , | | 19 | |
|----|---|-----|-----|--|
| 91 | Existence, stability and robustness analysis of limit cycles in hybrid anti-lock braking systems. <i>International Journal of Control</i> , 2009 , 82, 659-678 | 1.5 | 28 | |
| 90 | Hybrid Observer for Global Frequency Estimation of Saturated Signals. <i>IEEE Transactions on Automatic Control</i> , 2009 , 54, 2461-2464 | 5.9 | 12 | |
| 89 | A Nonlinear Tracking Controller for Voltage-Fed Induction Motors With Uncertain Load Torque. <i>IEEE Transactions on Control Systems Technology</i> , 2009 , 17, 608-619 | 4.8 | 83 | |
| 88 | Activation of Immune Response in Disease Dynamics via Controlled Drug Scheduling. <i>IEEE Transactions on Automation Science and Engineering</i> , 2009 , 6, 248-255 | 4.9 | 16 | |
| 87 | Partial Stability for a Class of Nonlinear Systems. <i>SIAM Journal on Control and Optimization</i> , 2009 , 47, 3203-3219 | 1.9 | 2 | |
| 86 | . IEEE Transactions on Automatic Control, 2008 , 53, 2602-2614 | 5.9 | 83 | |
| 85 | Nonlinear and Adaptive Control with Applications. Communications and Control Engineering, 2008, | 0.6 | 206 | |
| 84 | Homogeneous Approximation, Recursive Observer Design, and Output Feedback. <i>SIAM Journal on Control and Optimization</i> , 2008 , 47, 1814-1850 | 1.9 | 446 | |
| 83 | Design of Positive Linear Observers for Positive Linear Systems via Coordinate Transformations and Positive Realizations. <i>SIAM Journal on Control and Optimization</i> , 2008 , 47, 345-373 | 1.9 | 57 | |
| 82 | Control of HIV Infection Dynamics. <i>IEEE Control Systems</i> , 2008 , 28, 28-39 | 2.9 | 35 | |
| 81 | Observer design for a class of nonlinear systems using dynamic scaling with application to adaptive control 2008 , | | 19 | |
| 80 | Model reduction by moment matching for nonlinear systems 2008, | | 15 | |
| 79 | Stabilization of a class of non-holonomic systems by means of switching control laws 2008, | | 2 | |
| 78 | Control by Interconnection and Standard Passivity-Based Control of Port-Hamiltonian Systems. <i>IEEE Transactions on Automatic Control</i> , 2008 , 53, 2527-2542 | 5.9 | 185 | |
| 77 | Finite-time control of cross-chained nonholomic systems by switched state feedback 2008, | | 5 | |
| 76 | Control of a planar system with quantized and saturated input/output. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2008 , 55, 932-942 | 3.9 | 17 | |
| 75 | Extremum seeking without external dithering and its application to plasma RF heating on FTU 2008 , | | 3 | |

| 74 | A minimal dimension observer for global frequency estimation 2008, | | 15 |
|----|--|------------------------------------|-------------|
| 73 | 2008, | | 2 |
| 72 | A necessary and sufficient condition for semi-stability of the recursive Kalman filter 2008, | | 2 |
| 71 | On the stability of the recursive Kalman filter for linear time-invariant systems 2008, | | 6 |
| 70 | 2008, | | 5 |
| 69 | Partial Semi-Stability for a Class of Nonlinear Systems. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2008 , 41, 1442-1447 | | |
| 68 | Towards applied nonlinear adaptive control. <i>Annual Reviews in Control</i> , 2008 , 32, 136-148 | 10.3 | 33 |
| 67 | Robust nonlinear output feedback control for brake by wire control systems. <i>Automatica</i> , 2008 , 44, 107 | 8 5 .1 / 087 | 7 79 |
| 66 | Global asymptotic stabilization of the attitude and the angular rates of an underactuated non-symmetric rigid body. <i>Automatica</i> , 2008 , 44, 1781-1789 | 5.7 | 33 |
| 65 | A constructive solution for stabilization via immersion and invariance: The cart and pendulum system. <i>Automatica</i> , 2008 , 44, 2352-2357 | 5.7 | 50 |
| 64 | Stabilization of continuous-time switched nonlinear systems. Systems and Control Letters, 2008, 57, 95-1 | 034 | 114 |
| 63 | Nonlinear adaptive control of systems in feedback form: An alternative to adaptive backstepping. <i>Systems and Control Letters</i> , 2008 , 57, 733-739 | 2.4 | 70 |
| 62 | A NOTE ON A PIECEWISE-LINEAR DUFFING-TYPE SYSTEM. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2007 , 17, 4425-4429 | 2 | 4 |
| 61 | Total Energy Shaping Control of Mechanical Systems: Simplifying the Matching Equations Via Coordinate Changes. <i>IEEE Transactions on Automatic Control</i> , 2007 , 52, 1093-1099 | 5.9 | 70 |
| 60 | A Globally Stabilizing Time-switching Control Strategy for an Underactuated Rigid Body. <i>Proceedings of the American Control Conference</i> , 2007 , | 1.2 | 3 |
| 59 | Stabilization of Uncertain Nonlinear Systems via Immersion and Invariance. <i>European Journal of Control</i> , 2007 , 13, 204-220 | 2.5 | 7 |
| 58 | Reduced-order observer design for nonlinear systems 2007 , | | 6 |
| 57 | A tight small-gain theorem for not necessarily ISS systems. <i>Systems and Control Letters</i> , 2007 , 56, 87-91 | 2.4 | 59 |

(2005-2007)

| 56 | Positive Linear Observer Design via Positive Realization. <i>Proceedings of the American Control Conference</i> , 2007 , | 1.2 | 5 |
|----|---|-----|----|
| 55 | A new look at model reduction by moment matching for linear systems 2007 , | | 18 |
| 54 | TOWARDS APPLIED NONLINEAR ADAPTIVE CONTROL. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2007 , 40, 298-309 | | 2 |
| 53 | A Remark on an Example By TeelHespanha With Applications to Cascaded Systems. <i>IEEE Transactions on Automatic Control</i> , 2007 , 52, 289-293 | 5.9 | 2 |
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