Introduction to Mathematical Systems Theory

Texts in Applied Mathematics

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Citation Report

#	Article	IF	CITATIONS
1	A new look on poles and zeros at infinity in the light of systems interconnection. , 0, , .		3
2	Recent progress in polynomial methods and Polynomial Toolbox for Matlab version 2.0. , 0, , .		5
3	Controllability and observability of linear differential behaviors. , 0, , .		0
4	Linear variational behaviors. , 0, , .		O
5	Modelling dynamical systems using manifest and latent variables. Mathematics and Computers in Simulation, 2000, 53, 227-237.	2.4	5
6	Behavioral interpolation for coding and control., 0,,.		O
7	Controllability of Systems Described by Convolutional or Delay-Differential Equations. SIAM Journal on Control and Optimization, 2000, 39, 728-756.	1.1	16
8	An observer point of view on synchronization of discrete-time systems. , 0, , .		1
9	System identification in communication with chaotic systems. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2000, 47, 800-808.	0.1	196
10	Automotive engine control and hybrid systems: challenges and opportunities. Proceedings of the IEEE, 2000, 88, 888-912.	16.4	169
11	Nonnegative Realization of Autonomous Systems in the Behavioral Approach. SIAM Journal on Control and Optimization, 2001, 40, 540-556.	1.1	9
12	Pick Matrix Conditions for Sign-Definite Solutions of the Algebraic Riccati Equation. SIAM Journal on Control and Optimization, 2001, 40, 969-991.	1.1	19
13	Equivalent realizations for IQC uncertain systems. , 2001, , 259-282.		2
14	Compositionality issues in discrete, continuous, and hybrid systems. International Journal of Robust and Nonlinear Control, 2001, 11, 417-434.	2.1	16
15	Mathematical control theory [Book Review]. IEEE Transactions on Automatic Control, 2001, 46, 173-174.	3.6	0
16	A data driven approach to learning dynamical systems. , 0, , .		4
17	Average H 2 control by randomized algorithms. International Journal of Control, 2002, 75, 637-644.	1.2	3
18	State construction in discrete event and continuous systems. , 0, , .		0

#	Article	IF	CITATIONS
19	Achievable behavior by composition., 0,,.		11
20	Lossless and Dissipative Distributed Systems. SIAM Journal on Control and Optimization, 2002, 40, 1406-1430.	1.1	44
21	Review: Automatic Model Reduction for Transient Simulation of MEMS-based Devices. Sensors Update, 2002, 11 , 3-33.	0.5	88
22	Reflections on Fourteen Cryptic Issues Concerning the Nature of Statistical Inference*. International Statistical Review, 2003, 71, 277-303.	1.1	9
23	Dynamical neural networks for planning and low-level robot control. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2003, 33, 523-532.	3.4	34
24	Distance between behaviours. International Journal of Control, 2003, 76, 1214-1223.	1.2	8
25	Balanced state representations from higher order differential equations. , 0, , .		2
26	A note on the driving variable realization of behaviors. , 0, , .		1
27	Application of structured total least squares for system identification. , 2004, , .		3
28	Optimally controlling the internal dynamics of a randomly oriented ensemble of molecules. Physical Review A, 2004, 70, .	1.0	31
29	A toolbox for dynamic inversion based control systems design. , 2004, , .		0
30	LIMIT CYCLING IN AN OBSERVER-BASED CONTROLLED SYSTEM WITH FRICTION: NUMERICAL ANALYSIS AND EXPERIMENTAL VALIDATION. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2004, 14, 3083-3093.	0.7	13
31	Hidden variables in dissipative systems. , 2004, , .		6
32	Conditional gain is necessary and sufficient for the robust stabilization of nonlinear systems. , 2004, , .		1
33	A note on persistency of excitation. , 2004, , .		11
34	A note on the nonnegative realization of rational transfer functions. , 2004, , .		1
35	A quotient subspace algorithm for testing controllability and computing Brunovsky's outputs. , 2004, , .		2
36	Learning about dynamical systems via unfalsification of hypotheses. International Journal of Robust and Nonlinear Control, 2004, 14, 933-943.	2.1	5

#	Article	IF	CITATIONS
37	A multiport diagram for batch system modeling. Methodology and implementation. Simulation Modelling Practice and Theory, 2004, 12, 425-449.	2.2	4
38	A fault accommodation strategy based on closed-loop performance monitoring. , 2004, , .		5
39	Equivalence of Dynamical Systems by Bisimulation. IEEE Transactions on Automatic Control, 2004, 49, 2160-2172.	3.6	140
40	Conservative linear systems, unitary colligations and Lax–Phillips scattering: multidimensional generalizations. International Journal of Control, 2004, 77, 802-811.	1.2	7
41	Robust residual generation for linear fault diagnosis: an algebraic setting with examples. International Journal of Control, 2004, 77, 1223-1242.	1.2	75
42	Causal and Stable Input/Output Structures on Multidimensional Behaviors. SIAM Journal on Control and Optimization, 2004, 43, 1493-1520.	1.1	14
43	Linear Hamiltonian Behaviors and Bilinear Differential Forms. SIAM Journal on Control and Optimization, 2004, 43, 769-791.	1.1	12
44	Understanding Complex Regulatory Systems: Integrating Molecular Biology and Systems Analysis. Transfusion Medicine and Hemotherapy, 2005, 32, 304-321.	0.7	9
45	Hybrid process algebra. The Journal of Logic and Algebraic Programming, 2005, 62, 191-245.	1.4	74
46	Effective algorithms for parametrizing linear control systems over Ore algebras. Applicable Algebra in Engineering, Communications and Computing, 2005, 16, 319-376.	0.3	86
47	An Algebraic Interpretation to the Operator-Theoretic Approach to Stabilizability. Part I: SISO Systems. Acta Applicandae Mathematicae, 2005, 88, 1-45.	0.5	11
48	Two-dimensional behavior decompositions with Finite-Dimensional Intersection: A Complete Characterization. Multidimensional Systems and Signal Processing, 2005, 16, 335-354.	1.7	10
49	Behavioral control in the presence of disturbances. , 0, , .		1
50	Quotients of Fully Nonlinear Control Systems. SIAM Journal on Control and Optimization, 2005, 43, 1844-1866.	1.1	33
51	Event driven manufacturing systems as time domain control systems. , 0, , .		10
52	Further results on periodically time-varying behavioral systems. , 0, , .		1
53	Tools for Stability of Switching Linear Systems: Gain Automata and Delay Compensation. , 0, , .		5
54	Bisimulation as congruence in the behavioral setting. , 0, , .		3

#	ARTICLE	IF	CITATIONS
55	Stability Radii of Linear Systems Under Multi-perturbations. Numerical Functional Analysis and Optimization, 2005, 25, 221-238.	0.6	20
56	A Behavioral Approach to Time-Varying Linear Systems. Part 1: General Theory. SIAM Journal on Control and Optimization, 2005, 44, 1725-1747.	1.1	27
57	A Behavioral Approach to Time-Varying Linear Systems. Part 2: Descriptor Systems. SIAM Journal on Control and Optimization, 2005, 44, 1748-1765.	1.1	19
58	Structured Noncommutative Multidimensional Linear Systems. SIAM Journal on Control and Optimization, 2005, 44, 1474-1528.	1.1	62
59	Driving variable realizations and the non-negative realization problem for controllable behaviours. International Journal of Control, 2005, 78, 720-733.	1.2	0
60	Application of structured total least squares for system identification and model reduction. IEEE Transactions on Automatic Control, 2005, 50, 1490-1500.	3.6	63
61	Reconfigurable Control via Online Closed-Loop System Performance Assessment., 2005,,.		0
63	Invariance and polynomial design of strategies in the linear-quadratic game. Automation and Remote Control, 2006, 67, 1547-1572.	0.4	2
64	A lattice approach to analysis and synthesis problems. Mathematics of Control, Signals, and Systems, 2006, 18, 147-186.	1.4	28
65	Canonical State Representations and Hilbert Functions of Multidimensional Systems. Acta Applicandae Mathematicae, 2006, 94, 83-135.	0.5	6
66	State/Signal Linear Time-Invariant Systems Theory, Part I: Discrete Time Systems., 2005, , 115-177.		11
67	Behaviors Defined by Rational Functions. , 2006, , .		3
68	Generalized bang-bang control for feedforward constrained regulation. , 2006, , .		13
69	Minimum-time feedforward control with input and output constraints. , 2006, , .		4
70	Design by Extension and Inheritance of Behavior in Dynamical Systems. , 2006, , .		0
71	On time: Clocks, chronometers, and open-loop control., 2007,,.		7
72	An Iterative Approach for Noncausal Feedforward Tuning. Proceedings of the American Control Conference, 2007, , .	0.0	4
73	Intermittent model predictive control. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2007, 221, 1007-1018.	0.7	35

#	ARTICLE	IF	CITATIONS
74	Network modelling of a class of Surface Acoustic Wave filters. Mathematical and Computer Modelling of Dynamical Systems, 2007, 13, 19-43.	1.4	0
75	Using a Chebyshev technique for solving the generalized bang-bang control problem. , 2007, , .		3
76	Parametrization of the set of regular and superregular stabilizing controllers. , 2007, , .		2
77	The Behavioral Approach to Open and Interconnected Systems. IEEE Control Systems, 2007, 27, 46-99.	1.0	256
78	Behavioral interpretation of the object-oriented paradigm for interconnected dynamic system modeling. International Journal of Systems Science, 2007, 38, 319-326.	3.7	2
79	Feature - Multidimensional systems and signal processing: Good theory for good practice. IEEE Circuits and Systems Magazine, 2007, 7, 20-41.	2.6	7
80	Direct transcription solution of high index optimal control problems and regular Euler–Lagrange equations. Journal of Computational and Applied Mathematics, 2007, 202, 186-202.	1.1	14
81	Rival approaches to mathematical modelling in immunology. Journal of Computational and Applied Mathematics, 2007, 205, 669-686.	1.1	46
82	Representations and structural properties of periodic systems. Automatica, 2007, 43, 1921-1931.	3.0	12
83	Dissipativity and stability of interconnections. International Journal of Robust and Nonlinear Control, 2007, 17, 563-586.	2.1	32
84	Fault Diagnosis of Discretely Controlled Continuous Systems by Means of Discrete-Event Models. Discrete Event Dynamic Systems: Theory and Applications, 2008, 18, 181-210.	0.6	22
85	Optimal control for unstructured nonlinear differential-algebraic equations of arbitrary index. Mathematics of Control, Signals, and Systems, 2008, 20, 227-269.	1.4	36
86	Transparency in Port-Hamiltonian-Based Telemanipulation. IEEE Transactions on Robotics, 2008, 24, 903-910.	7.3	15
87	Behavioral Systems Theory: A Survey. International Journal of Applied Mathematics and Computer Science, 2008, 18, 265-270.	1.5	8
88	Parametrization of the Regular Equivalences of the Canonical Controller. IEEE Transactions on Automatic Control, 2008, 53, 1032-1036.	3.6	8
89	Representations of linear systems. , 2008, , .		0
90	Dynamic test selection for reconfigurable diagnosis. , 2008, , .		0
91	Control by Interconnection and Standard Passivity-Based Control of Port-Hamiltonian Systems. IEEE Transactions on Automatic Control, 2008, 53, 2527-2542.	3.6	255

#	Article	IF	CITATIONS
92	On Abstraction and Interpretability: A Behavioural Perspective. , 2008, , .		0
93	Living in a bubble? Toward a unified bubble theory. International Journal of General Systems, 2008, 37, 627-635.	1.2	0
94	A real-time model-free reconfiguration mechanism for fault-tolerance: Application to a hydraulic process. , 2008, , .		5
95	Dual Lyapunov stability analysis in behavioral approach. , 2008, , .		0
96	Quantum behaviors and networks. , 2008, , .		0
97	New results in optimal quadratic supply rates. , 2008, , .		5
98	Controller synthesis for L <inf>2</inf> behaviors using rational kernel representations., 2008,,.		3
99	Novel synchronization of discrete-time chaotic systems using neural network observer. Chaos, 2008, 18, 033110.	1.0	4
100	Modeling interconnected systems. , 2008, , .		5
101	Controllability properties of nonlinear behaviors. Transactions of the American Mathematical Society, 2008, 360, 5667-5682.	0.5	0
102	Stabilizing controllers, Lyapunov functions, and the inverse problem of optimal control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 5885-5890.	0.4	0
103	On Linear Canonical Controllers Within The Unfalsified Control Framework. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 12279-12284.	0.4	9
104	Adaptation and the effort needed to adapt. , 2009, , .		1
105	New results in dissipativity of uncontrollable systems and Lyapunov functions. , 2009, , .		0
106	Implicit systems reachability: A geometric point of view. , 2009, , .		2
107	(Generalised) autoregressive models and their trajectories. International Journal of Control, 2009, 82, 1929-1936.	1.2	4
108	Matching a system behavior with a known set of models: A quadratic optimizationâ€based adaptive solution. International Journal of Adaptive Control and Signal Processing, 2009, 23, 882-906.	2.3	4
109	Modelling and controller design for distributed parameter systems via residence time distribution. International Journal of Control, 2009, 82, 1404-1413.	1.2	1

#	Article	IF	CITATIONS
110	Agroterrorism. Public Administration and Public Policy, 2009, , 233-250.	0.0	O
111	Strongly autonomous interconnections and stabilization of 2D behaviors. Asian Journal of Control, 2010, 12, 127-135.	1.9	6
112	On Passive and Conservative State/Signal Systems. Integral Equations and Operator Theory, 2010, 67, 377-424.	0.4	11
113	Well-Posed State/Signal Systems in Continuous Time. Complex Analysis and Operator Theory, 2010, 4, 319-390.	0.3	13
114	Dynamics of Plateau Bursting Depending on the Location of its Equilibrium. Journal of Neuroendocrinology, 2010, 22, 1301-1314.	1.2	30
115	The Theory of Timed I/O Automata, Second Edition. Synthesis Lectures on Distributed Computing Theory, 2010, 1, 1-137.	0.1	19
116	On the elimination of latent variables in & amp; $\#x2112$; < inf & gt; 2< /inf & gt; behaviors., 2010,,.		1
117	Conditioned switching between two-degree-of-freedom controllers for plants with changing dynamics. , 2010, , .		3
118	Enhanced user experience design based on user behavior data by using theory of Inventive Problem Solving. , $2010, , .$		11
119	Linear systems, and ARMA- and Fliess models. International Journal of Control, 2010, 83, 2165-2180.	1.2	3
120	Available Energy and Passivity of First-Order LLTI One-Ports. IEEE Transactions on Circuits and Systems I: Regular Papers, 2010, 57, 1983-1992.	3.5	6
121	A model based 2-DOF fault tolerant control strategy. , 2010, , .		2
122	On a control-oriented notion of finite state approximation. , 2011, , .		2
123	Available Energy of Proper LLTIP One-Ports. IEEE Transactions on Circuits and Systems I: Regular Papers, 2011, 58, 521-528.	3 . 5	5
124	An Application of Adaptive Control in the Behavioural Framework. , 2011, , .		0
125	Smooth/impulsive linear systems: controllability. International Journal of Control, 2011, 84, 679-692.	1.2	1
126	On restrictions of n-D systems to 1-D subspaces. , 2011, , .		1
127	System Response Methods. Advanced Textbooks in Control and Signal Processing, 2011, , 17-27.	0.6	2

#	Article	IF	Citations
129	Singular LQR control, impulse-free interconnection and optimal PD controller design. , 2011, , .		0
130	HESS Opinions: Hydrologic predictions in a changing environment: behavioral modeling. Hydrology and Earth System Sciences, 2011, 15, 635-646.	1.9	82
131	Stabilization of discrete 2D behaviors by regular partial interconnection. Mathematics of Control, Signals, and Systems, 2011, 22, 295-316.	1.4	2
132	Checking dissipativity of linear behavior systems given in kernel representation. Mathematics of Control, Signals, and Systems, 2011, 23, 159-175.	1.4	9
133	Generational analysis of tension and entropy in data structures: impact on automatic data integration and on the semantic web. Knowledge and Information Systems, 2011, 28, 175-196.	2.1	2
134	On Homotopy and Similarity in Linear Systems Theory. Acta Applicandae Mathematicae, 2011, 116, 87-105.	0.5	2
135	On necessary and sufficient conditions for differential flatness. Applicable Algebra in Engineering, Communications and Computing, 2011, 22, 47-90.	0.3	139
136	Canonical State/Signal Shift Realizations of Passive Continuous Time Behaviors. Complex Analysis and Operator Theory, 2011, 5, 331-402.	0.3	12
137	Rational relations for modelling and analyzing LTI systems. , 2011, , .		0
138	A rank minimization approach to trajectory (in)validation., 2011,,.		7
139	More about Almost Controllability Subspaces. , 2011, , .		0
140	On the stability of switched behavioral systems. , 2011, , .		17
141	Quantitative stochastic fault diagnosability analysis. , 2011, , .		15
142	An internal model principle for observers. , 2011, , .		9
143	A note on the canonical controller in the behavioral system-theoretic approach. , 2012, , .		4
144	Minimum-time rest-to-rest feedforward action for PID feedback MIMO systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 217-222.	0.4	3
145	The interâ€disciplinary modelling of supply chains in the context of collaborative multiâ€structural cyberâ€physical networks. Journal of Manufacturing Technology Management, 2012, 23, 976-997.	3.3	38
147	Controllability and observability in non-linear flow reservoir model - RETRACTED. IET Control Theory and Applications, 2012, 6, 1456-1467.	1,2	1

#	ARTICLE	IF	CITATIONS
148	Algorithms for recursive/semi-recursive bias-compensating least squares system identification within the errors-in-variables framework. International Journal of Control, 2012, 85, 1625-1643.	1.2	10
149	Switched behaviors with impulses - a unifying framework. , 2012, , .		9
150	Zero-controllability and dead-beat control of discrete-time behaviors. , 2012, , .		0
151	On the control of generic abelian group codes. , 2012, , .		0
152	Stabilisation and control design by partial output feedback and by partial interconnection. International Journal of Control, 2012, 85, 1717-1736.	1.2	5
153	Stability Analysis for Bilateral Teleoperation: An IQC Formulation. IEEE Transactions on Robotics, 2012, 28, 1294-1308.	7.3	28
154	Improper & lt; formula formulatype="inline" & gt; & lt; tex Notation="TeX" & gt; \$ { cal L}_{infty} & lt; / formula & gt; Optimal / Suboptimal Controllers. IEEE Transactions on Automatic Control, 2012, 57, 1280-1285.	3.6	1
155	Dead-Beat Control in the Behavioral Approach. IEEE Transactions on Automatic Control, 2012, 57, 2163-2175.	3.6	9
156	Description of switched systems by implicit representations. , 2012, , .		4
157	A tractable nonlinear fault detection and isolation technique with application to the cyber-physical security of power systems. , 2012, , .		14
158	System Identification Methods for (Operational) Modal Analysis: Review and Comparison. Archives of Computational Methods in Engineering, 2012, 19, 51-124.	6.0	456
159	Continuousâ€Time Modeling with Spatial Dependence. Geographical Analysis, 2012, 44, 29-46.	1.9	17
160	A behavioral interpretation of LivÅ _i ic systems. Multidimensional Systems and Signal Processing, 2012, 23, 17-48.	1.7	3
161	A Hoare logic for linear systems. Formal Aspects of Computing, 2013, 25, 345-363.	1.4	7
162	A geometric approach to nonlinear dissipative balanced reduction I: exogenous signals. Mathematics of Control, Signals, and Systems, 2013, 25, 63-96.	1.4	0
163	A geometric approach to nonlinear dissipative balanced reduction II: internal isometries. Mathematics of Control, Signals, and Systems, 2013, 25, 97-131.	1.4	0
164	On some features of the canonical controller of the behavioral approach. , 2013, , .		0
165	On the descriptor variable observation of rectangular implicit representations. , 2013, , .		0

#	Article	IF	CITATIONS
166	Robust synchronization of coprime factor perturbed multi-agent systems. , 2013, , .		2
167	Networks, multipoles and multiports. , 2013, , .		4
168	Fractional Order Modeling of Large Three-Dimensional RC Networks. IEEE Transactions on Circuits and Systems I: Regular Papers, 2013, 60, 624-637.	3.5	83
169	Dissipativity Enforcement via Perturbation of Para-Hermitian Pencils. IEEE Transactions on Circuits and Systems I: Regular Papers, 2013, 60, 164-177.	3.5	16
170	Passivity of circuit components. Electronics Letters, 2013, 49, 1610-1612.	0.5	6
171	Funnel Control for Linear DAEs. Proceedings in Applied Mathematics and Mechanics, 2013, 13, 463-464.	0.2	1
172	Decentralized controllability of multi-inverter microgrids. , 2013, , .		1
173	Reconstructibility of time-invariant and periodic behavioural systems. International Journal of Control, 2013, 86, 84-94.	1.2	0
174	Algebraic Controllability of Nonlinear Mechanical Control Systems. SICE Journal of Control Measurement and System Integration, 2014, 7, 191-198.	0.4	3
175	Trajectory tracking for inertial systems using a right inverse approach. , 2014, , .		2
176	Computation of state reachable points of descriptor systems. , 2014, , .		2
177	The consensus problem in the behavioral approach. , 2014, , .		1
178	Dissipativity analysis of SISO systems using Nyquist-Plot-Compatible (NPC) supply rates. , 2014, , .		1
179	Graceful gait transitions for biomimetic locomotion - the worm. , 2014, , .		4
180	Internal stability of a class of switched systems designed by implicit control techniques. , 2014, , .		1
181	Control of Quantum Systems. , 2014, , 1-10.		1
182	Robust output regulation of variable structure systems with multivalued controls., 2014,,.		2
183	(Singular) state models and (singular) LTID systems. International Journal of Control, 2014, 87, 567-580.	1.2	0

#	ARTICLE	IF	CITATIONS
184	On restrictions of n-d systems to 1-d subspaces. Multidimensional Systems and Signal Processing, 2014, 25, 115-144.	1.7	7
185	The asymptotic stability of stable and time-autonomous discrete multidimensional behaviors. Mathematics of Control, Signals, and Systems, 2014, 26, 215-258.	1.4	25
186	Uncontrollable dissipative systems: observability and embeddability. International Journal of Control, 2014, 87, 101-119.	1.2	4
187	Internal Model Principles for Observers. IEEE Transactions on Automatic Control, 2014, 59, 1737-1749.	3.6	13
188	Feedforward control with on-line tuning: A perspective on two-degree-of-freedom structure. , 2014, , .		0
189	A New Parametrization of Linear Observers. IEEE Transactions on Automatic Control, 2014, 59, 1778-1788.	3.6	2
190	Addendum to  (Singular) state models and (singular) LTID systems'. International Journal of Control, 2014, 87, 1312-1315.	1.2	0
191	Funnel control for electrical circuits. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 3-6.	0.2	0
192	Using the equitable partition technique to determine the non-controllability of dynamic networks. , 2014, , .		0
193	A Farewell to Jan Willems [Obituary]. IEEE Control Systems, 2014, 34, 89-91.	1.0	0
194	Physical interpretations of negative imaginary systems theory. , 2015, , .		11
195	Decoupling of internal variable structure for a class of switched systems. , 2015, , .		2
196	Available energy of improper lossless LLTIP oneâ€ports. International Journal of Circuit Theory and Applications, 2015, 43, 1971-1988.	1.3	2
197	Shared hidden state and network representations of interconnected dynamical systems. , 2015, , .		10
198	Consensus of positive real systems cascaded with a single integrator. International Journal of Robust and Nonlinear Control, 2015, 25, 418-429.	2.1	17
199	One step right inversion with stability: SISO case. , 2015, , .		1
200	Fractional State Space Analysis of Temperature Time Series. Fractional Calculus and Applied Analysis, 2015, 18, 1518-1536.	1.2	20
201	The canonical controller approach to data-driven update of state feedback gain., 2015,,.		2

#	Article	IF	Citations
202	Inverse feedforward control with output polynomial smoothing. , 2015, , .		1
203	Zero Dynamics and Stabilization for Analytic Linear Systems. Acta Applicandae Mathematicae, 2015, 138, 17-57.	0.5	14
204	Identification of Linear Time-Invariant Systems From Multiple Experiments. IEEE Transactions on Signal Processing, 2015, 63, 3549-3554.	3.2	19
205	Recent progress in an algebraic analysis approach to linear systems. Multidimensional Systems and Signal Processing, 2015, 26, 349-388.	1.7	14
206	A robust linear control methodology based on fictitious failure rejection. , 2016, , .		3
207	State-space construction for scalar continuous-time transfer function via Nerode equivalence. , 2016, , .		1
208	Controllability of passive single-input single-output systems. , 2016, , .		3
209	Robust control for a class of continuous dynamical system governed by semi-explicit DAE with data-sample outputs. , 2016, , .		2
210	Analysis of global terrorism dynamics by means of entropy and state space portrait. Nonlinear Dynamics, 2016, 85, 1547-1560.	2.7	20
211	Robust motion planning for a heat rod process. Nonlinear Dynamics, 2016, 86, 1271-1283.	2.7	8
212	Innerâ€Outer Factorization via Lur'e Equations. Proceedings in Applied Mathematics and Mechanics, 2016, 16, 829-830.	0.2	0
213	New results and algorithms for computing storage functions: The lossless/all-pass cases. , 2016, , .		2
214	Robust stability and performance analysis based on integral quadratic constraints. European Journal of Control, 2016, 31, 1-32.	1.6	104
215	Zero dynamics and funnel control of general linear differential-algebraic systems. ESAIM - Control, Optimisation and Calculus of Variations, 2016, 22, 371-403.	0.7	15
216	State space analysis of forest fires. JVC/Journal of Vibration and Control, 2016, 22, 2153-2164.	1.5	7
217	Polynomial matrix approach to tracking control of nonâ€inear systems. IET Control Theory and Applications, 2016, 10, 477-483.	1.2	1
218	Impulse Controllability: From Descriptor Systems to Higher Order DAEs. IEEE Transactions on Automatic Control, 2016, 61, 2463-2472.	3.6	3
219	Introducing measurement science into sustainability systems. Clean Technologies and Environmental Policy, 2016, 18, 359-371.	2.1	8

#	Article	IF	CITATIONS
220	On Controllability and Normalizability for Linear Descriptor Systems. Journal of Control, Automation and Electrical Systems, 2016, 27, 19-28.	1.2	13
221	A Tractable Fault Detection and Isolation Approach for Nonlinear Systems With Probabilistic Performance. IEEE Transactions on Automatic Control, 2016, 61, 633-647.	3.6	34
222	Minimal state space realisation of continuous-time linear time-variant input–output models. International Journal of Control, 2016, 89, 722-730.	1.2	4
223	Observability of Linear Differential-Algebraic Systems: A Survey. Differential-algebraic Equations Forum, 2017, , 161-219.	0.6	24
224	Interpretation and diagnosis of fouling progress in membrane bioreactor plants using a periodic pattern recognition method. Korean Journal of Chemical Engineering, 2017, 34, 2966-2977.	1.2	9
225	On the Robust Stabilization of One Class of Nonlinear Discrete Systems. Journal of Mathematical Sciences, 2017, 220, 483-497.	0.1	0
226	Approximation of data using non-integer harmonics series. Nonlinear Dynamics, 2017, 89, 2845-2854.	2.7	2
227	New Results and Techniques for Computation of Stored Energy in Lossless/All-Pass Systems. IEEE Transactions on Circuits and Systems I: Regular Papers, 2017, 64, 72-85.	3.5	5
228	A Missing Data Approach to Data-Driven Filtering and Control. IEEE Transactions on Automatic Control, 2017, 62, 1972-1978.	3.6	26
229	Subspace identification with constraints on the impulse response. International Journal of Control, 2017, 90, 1728-1735.	1.2	14
230	State of circuit components in the behavioral framework. International Journal of Circuit Theory and Applications, 2017, 45, 18-35.	1.3	3
231	Local uncontrollability for affine control systems with jumps. International Journal of Control, 2017, 90, 1893-1902. Conditioned invariance and detectability subspaces in the behavioral approach * *This work was	1.2	3
232	supported in part by the Portuguese Foundation for Science and Technology (FCT-Fundação para a) Tj ETQq0 0 Applications, within project UID/MAT/04106/2013 and also by Project POCI-01-0145-FEDER-006933 - SYSTEC - Research Center for Systems and Technologies - funded by FEDER funds through COMPETE2020 -	0 o rgBT /C 0.5	Overlock 10 1 1
233	Programa Operacional Competiti. IFAC-PapersOnLine, 2017, 50, 687-692. On the link between storage functions of allpass systems and Gramians., 2017, , .		2
234	A behavior based robust fault detection approach for LTI systems. , 2017, , .		1
235	Outer transfer functions of differential-algebraic systems. ESAIM - Control, Optimisation and Calculus of Variations, 2017, 23, 391-425.	0.7	8
236	Electrical Network Synthesis: A Survey of Recent Work. Lecture Notes in Control and Information Sciences - Proceedings, 2018, , 281-293.	0.1	6
237	Consistent input/output partitions in a causal systems. , 2018, , .		0

#	Article	IF	CITATIONS
238	On the Optimal Control of Passive or Nonexpansive Systems. IEEE Transactions on Automatic Control, 2018, 63, 4079-4093.	3.6	8
239	Initial Conditions in Time- and Frequency-Domain System Identification: Implications of the Shift Operator Versus the Z and Discrete Fourier Transforms. IEEE Control Systems, 2018, 38, 80-93.	1.0	21
240	Application of the object model in the modelling process of locomotive drive units. IOP Conference Series: Materials Science and Engineering, 2018, 450, 042005.	0.3	1
241	On the descriptor variable observation of rectangular implicit representations, in the presence of column minimal indices blocks. IMA Journal of Mathematical Control and Information, 2018, 35, 1157-1186.	1.1	1
242	Lossless Systems Storage Function: New Results and Numerically Stable and Non-Iterative Computational Methods. IEEE Transactions on Circuits and Systems I: Regular Papers, 2018, 65, 4349-4362.	3.5	1
243	Robust Control Synthesis for Linear Differential Systems with Parametric Uncertainty., 2018, , .		1
244	Increase of accuracy of capacitance parameters measurements of power semiconductor modules on base IGBT and FRD. Journal of Physics: Conference Series, 2018, 1124, 071017.	0.3	0
245	On the State-Space Realization of 2-Periodic Image Behaviors. , 2018, , .		0
246	Available active power of the <i>N</i> â€port AC Thévenin source: A simple behavioral derivation. International Journal of Circuit Theory and Applications, 2018, 46, 2554-2560.	1.3	0
247	Linear port-Hamiltonian descriptor systems. Mathematics of Control, Signals, and Systems, 2018, 30, 1.	1.4	71
248	Control systems analysis for the Fornasini-Marchesini 2D systems model – progress after four decades. International Journal of Control, 2018, 91, 2801-2822.	1.2	10
249	Inner–outer factorization for differential-algebraic systems. Mathematics of Control, Signals, and Systems, 2018, 30, 1.	1.4	3
250	Basic Principles of Building aÂMathematical Model of Immune Response. , 2018, , 15-34.		0
251	Parameter Estimation and Model Selection. , 2018, , 35-95.		1
252	Spectral Characterizations of Solvability and Stability for Delay Differential-Algebraic Equations. Acta Mathematica Vietnamica, 2018, 43, 715-735.	0.2	5
253	Available Energy of Improper Lossy LLTIP One-Ports. IEEE Transactions on Circuits and Systems II: Express Briefs, 2018, 65, 456-460.	2.2	1
254	Power Balancing Approach for Modeling and Stabilization of DC Networks. IEEE Transactions on Smart Grid, 2019, 10, 4188-4200.	6.2	10
255	Rayleigh Quotient Methods for Estimating Common Roots of Noisy Univariate Polynomials. Computational Methods in Applied Mathematics, 2019, 19, 147-163.	0.4	1

#	Article	IF	Citations
256	On Observers For Nonlinear Differential-Algebraic Systems. IEEE Transactions on Automatic Control, 2019, 64, 2150-2157.	3.6	10
257	Liability, Ethics, and Culture-Aware Behavior Specification using Rulebooks. , 2019, , .		62
258	The set of controllable multi-input systems is generically convex. Mathematics of Control, Signals, and Systems, 2019, 31, 265-278.	1.4	1
259	Data-driven Simulation Using the Nuclear Norm Heuristic. , 2019, , .		2
260	Dissipativity Analysis for Linear Systems in the Behavioural Framework., 2019,,.		0
261	Dissipativity Analysis for Linear Systems in the Behavioural Framework., 2019,,.		2
262	Software package for mosaic-Hankel structured low-rank approximation. , 2019, , .		1
263	Computing common factors of matrix polynomials with applications in system and control theory. , 2019, , .		2
264	Subspace methods for multi-channel sum-of-exponentials common dynamics estimation., 2019,,.		3
265	Solution formulas for differential Sylvester and Lyapunov equations. Calcolo, 2019, 56, 1.	0.6	23
266	Controllability and Stabilizability of Networks of Linear Systems. IEEE Transactions on Automatic Control, 2019, 64, 3391-3398.	3.6	16
267	Disturbance decoupled estimation for linear differential-algebraic systems. International Journal of Control, 2019, 92, 593-612.	1.2	9
268	Model Predictive Control for Smart Grids With Multiple Electric-Vehicle Charging Stations. IEEE Transactions on Smart Grid, 2019, 10, 2127-2136.	6.2	103
269	Principles of Lossless Adjustable One-Ports. IEEE Transactions on Automatic Control, 2020, 65, 252-262.	3.6	7
270	A trajectory-based framework for data-driven system analysis and control. , 2020, , .		66
271	A differential extension of Descartes' foundational approach: AÂnewÂbalance between symbolic and analog computation. Computability, 2020, 9, 51-83.	0.3	2
272	Fractionability of circuit components. International Journal of Circuit Theory and Applications, 2020, 48, 2280-2285.	1.3	0
273	Continuous dependence of linear differential systems on polynomial modules. Mathematics of Control, Signals, and Systems, 2020, 32, 385-409.	1.4	1

#	Article	IF	Citations
274	The Graphical Conditions for Controllability of Multiagent Systems Under Equitable Partition. IEEE Transactions on Cybernetics, 2021, 51, 4661-4672.	6.2	31
275	Data-Driven Structured Noise Filtering via Common Dynamics Estimation. IEEE Transactions on Signal Processing, 2020, 68, 3064-3073.	3.2	2
276	A Behavioral Approach to Estimation in the Presence of Disturbances. IEEE Transactions on Automatic Control, 2021, 66, 2795-2801.	3.6	1
277	Mechanical Control Systems. Lecture Notes in Mathematics, 2021, , 95-109.	0.1	0
278	Further Developments., 2021,, 177-187.		0
279	A general approach to multivariable recursive interpolation. Mathematics of Control, Signals, and Systems, 2021, 33, 1-48.	1.4	0
280	Control of Quantum Systems. , 2021, , 368-375.		0
281	The Transformation and Enterprise Architecture Framework. Advances in Human and Social Aspects of Technology Book Series, 2021, , 80-127.	0.3	0
282	Realization theory for poset-causal systems: controllability, observability and duality. Mathematics of Control, Signals, and Systems, 2021, 33, 197-236.	1.4	0
283	Random matrices and controllability of dynamical systems. IMA Journal of Mathematical Control and Information, $0, , .$	1.1	0
284	Normal forms and internal regularization of nonlinear differentialâ€algebraic control systems. International Journal of Robust and Nonlinear Control, 2021, 31, 6562-6584.	2.1	7
285	Balanced State Representations with Polynomial Algebra. , 2003, , 345-357.		5
286	SEM State Space Modeling of Panel Data in Discrete and Continuous Time and its Relationship to Traditional State Space Modeling. Mathematical Modelling: Theory and Applications, 2004, , 13-40.	0.2	12
287	Asymptotic Dynamics in Adaptive Gain Control. , 1999, , 29-63.		12
288	Algorithms for Decoding and Interpolation. The IMA Volumes in Mathematics and Its Applications, 2001, , 265-282.	0.5	7
289	Nonlinearly Structured Low-Rank Approximation. , 2014, , 1-22.		2
290	The Flexibility of DAE Formulations. Differential-algebraic Equations Forum, 2015, , 1-59.	0.6	1
291	Applications of Polynomial Common Factor Computation in Signal Processing. Lecture Notes in Computer Science, 2018, , 99-106.	1.0	4

#	Article	IF	CITATIONS
292	How Many Experiments Are Needed to Adapt?. , 2007, , 5-14.		2
293	Model Reduction of Interconnected Systems. Mathematics in Industry, 2008, , 305-321.	0.1	35
294	Chemical Analog Computers for Clock Frequency Control Based on P Modules. Lecture Notes in Computer Science, 2012, , 182-202.	1.0	5
295	New Issues in the Mathematics of Control. , 2001, , 189-219.		38
296	Zero Dynamics and Stabilization for Linear DAEs. Differential-algebraic Equations Forum, 2014, , 21-45.	0.6	11
298	The Theory of Timed I/O Automata. Synthesis Lectures on Computer Science, 2006, 1, 1-114.	0.3	57
299	Stable input-output inversion for nondecoupable nonminimum-phase linear systems. , 2018, , .		1
300	The Phaseâ€"Space Approach to time Evolution of Quantum States in Confined Systems: the Spectral Splitâ€"Operator Method. International Journal of Applied Mathematics and Computer Science, 2019, 29, 439-451.	1.5	3
301	The Business Transformation and Enterprise Architecture Framework The Applied Holistic Mathematical Model's Persistence Concept (AHMMPC). WSEAS Transactions on Computers, 2020, 19, 208-215.	0.2	1
302	Algebraic characterization of autonomy and controllability of behaviours of spatially invariant systems. Mathematical Control and Related Fields, 2014, 4, 115-124.	0.6	1
303	Auxiliary branch method and modified nodal voltage equations. Advances in Radio Science, 0, 6, 157-163.	0.7	4
304	Generalizations of Blakesley's Source Shift Theorem. Advances in Radio Science, 0, 7, 67-71.	0.7	3
306	Modelling the Behavior of Systems: Basic Concepts and Algorithms. IFIP Advances in Information and Communication Technology, 2000, , 97-117.	0.5	0
307	Dissipative Distributed Systems. Kluwer International Series in Engineering and Computer Science, 2000, , 39-53.	0.2	0
308	State and Continuity. Systems and Control: Foundations and Applications, 2001, , 93-102.	0.1	0
309	Agroeconomic Bioterrorism. Public Administration and Public Policy, 2002, , .	0.0	0
310	A behavioral approach to control related analysis of discrete linear repetitive processes. , 2003, , .		0
311	A prediction-based behavioral model for financial markets. , 2003, , .		0

#	Article	IF	CITATIONS
312	Interconnection by sharing variables. , 2007, , .		1
313	Philosophy of Science, Mathematical Models in. , 2009, , 6789-6804.		0
314	An Information Space View of "Time†From Clocks to Open-Loop Control. Lecture Notes in Control and Information Sciences, 2009, , 93-106.	0.6	1
315	Behavioural Hybrid Process Calculus for Modelling and Analysis of Hybrid and Electronic Systems. Lecture Notes in Electrical Engineering, 2009, , 429-443.	0.3	0
316	Linear Systems in Discrete Time. , 2009, , 3-12.		1
317	Dissipativity and Stability Analysis Using Rational Quadratic Differential Forms. Lecture Notes in Control and Information Sciences, 2010, , 229-238.	0.6	0
318	STREAM: Stability-based Realization of Economic Performance and Management. , 2010, , 93-117.		0
319	Quantitative Modelling of Supply Chains. , 2010, , 119-136.		0
320	Characterization of Finite Frequency Properties Using Quadratic Differential Forms. SICE Journal of Control Measurement and System Integration, 2010, 3, 466-475.	0.4	2
322	Alternative Approach of Inventive Problem Solving for Location Based Service Implementation. International Journal of Social Science and Humanity, 2011, , 132-134.	1.0	1
324	Philosophy of Science, Mathematical Models in. , 2012, , 1407-1422.		1
325	Extensive Methodologies for Design of User Experience by Systematic Innovations. International Journal of Social Science and Humanity, 2013, , 100-102.	1.0	2
329	Structure of Discrete Systems with Variable Nonlocal Behavior. Advances in Delays and Dynamics, 2014, , 185-198.	0.4	1
330	Introduction, Motivation, and Background. Springer Briefs in Electrical and Computer Engineering, 2014, , 1-20.	0.3	0
331	State and storage. , 1998, , 165-177.		0
332	Path Integrals and Stability. , 1999, , 1-32.		6
333	Elimination of latent variables in real differential algebraic systems. Communications and Control Engineering, 1999, , 141-147.	1.0	0
335	Algebraic Controllability and Observability of Nonlinear Differential Algebraic Systems with Geometric Index One. SICE Journal of Control Measurement and System Integration, 2014, 7, 283-290.	0.4	0

#	Article	IF	Citations
337	$ \hbox{Trajectory-Based Theory for Hybrid Systems. Lecture Notes in Control and Information Sciences, 2015, , 363-384. }$	0.6	O
338	Realization Theory for Linear Dynamical Quantum Systems. Communications and Control Engineering, 2017, , 73-122.	1.0	0
339	Using Hankel Structured Low-Rank Approximation for Sparse Signal Recovery. Lecture Notes in Computer Science, 2018, , 479-487.	1.0	0
341	Data-Driven Filtering and Control. Communications and Control Engineering, 2019, , 161-172.	1.0	О
343	Advances of Implicit Description Techniques in Modelling and Control of Switched Systems. Lecture Notes in Control and Information Sciences, 2020, , 203-239.	0.6	1
344	A Scenario Approach to Robust Distributed Control for Plantwide Process Systems., 2019,,.		0
345	Control of Quantum Systems. , 2020, , 1-8.		0
346	On the equivalence of model inversion architectures for control applications. , 2020, , .		0
347	Observers for Differential-Algebraic Systems with Lipschitz or Monotone Nonlinearities. Differential-algebraic Equations Forum, 2020, , 257-289.	0.6	1
348	An Applied Mathematical Model for Business Transformation and Enterprise Architecture. Advances in Business Information Systems and Analytics Book Series, 2020, , 172-210.	0.3	0
349	Strong robustness in adaptive control. , 2003, , 45-54.		3
351	Transmission Matrices for Physical-System Modeling [Lecture Notes]. IEEE Control Systems, 2019, 39, 88-109.	1.0	0
352	Fault Detection Using Autoencoder with Linear Hidden Layer Dynamics. , 2020, , .		0
353	Behavioural contracts for linear dynamical systems: input assumptions and output guarantees. , 2021, , .		4
354	Linear System Security: Detection and Correction of Adversarial Attacks on a Quanser AERO System. , 2021, , .		0
355	System theory without transfer functions and state-space? Yes, it's possible!. , 2021, , .		0
356	The Continuous-Time Singular LQR Problem and the Riddle of Nonautonomous Hamiltonian Systems: A Behavioral Solution. IEEE Transactions on Automatic Control, 2022, 67, 4770-4777.	3.6	1
357	On theÂOre Extension Ring ofÂDifferential Time-Varying Delay Operators. Advances in Delays and Dynamics, 2022, , 87-107.	0.4	1

#	Article	IF	Citations
358	Behavioural assume-guarantee contracts for linear dynamical systems. , 2021, , .		3
359	On state-space representations of general discrete-time dynamical systems. IEEE Transactions on Automatic Control, 2022, , 1-1.	3.6	0
360	State space construction for continuous time transfer function matrices via Nerode equivalence. Asian Journal of Control, 0 , , .	1.9	0
361	Dissipativity, Reciprocity, and Passive Network Synthesis: From the Seminal Dissipative Dynamical Systems Articles of Jan Willems to The Present Day. IEEE Control Systems, 2022, 42, 36-57.	1.0	2
362	Passive and Reciprocal Networks: From Simple Models to Simple Optimal Controllers. IEEE Control Systems, 2022, 42, 73-92.	1.0	3
363	A New Insight onÂState-Trimness andÂMinimal State-Space Realizations ofÂlnput-Output Behaviors. Lecture Notes in Electrical Engineering, 2022, , 679-688.	0.3	1
364	Data-Predictive Control of Multi-Timescale Processes. , 2022, , .		1
365	Passivity criteria for controlled affine resistive components. International Journal of Circuit Theory and Applications, 0, , .	1.3	0
366	Are delay-differential systems generically controllable?. Mathematics of Control, Signals, and Systems, $0, , .$	1.4	0
367	Relative genericity of controllablity and stabilizability for differential-algebraic systems. Mathematics of Control, Signals, and Systems, 2023, 35, 45-76.	1.4	2
368	System Dynamics Modeling., 2022,, 1-5.		0
369	Composition of behavioural assume-guarantee contracts. IEEE Transactions on Automatic Control, 2022, , 1-16.	3.6	0
370	Mathematical Modelling of Real Physical Systems. Studies in Systems, Decision and Control, 2023, , 5-11.	0.8	0
371	Standard and Fractional Discrete-Time Linear Systems with Zero Transfer Matrices. Acta Mechanica Et Automatica, 2023, 17, 188-191.	0.3	0
378	Academic and Educational Transformation Projects. Advances in Educational Technologies and Instructional Design Book Series, 2023, , 78-120.	0.2	0
380	Data-Driven Eigenstructure Assignment for Sparse Feedback Design. , 2023, , .		0
381	Academic and Educational Transformation Projects. Advances in Educational Technologies and Instructional Design Book Series, 2023, , 142-182.	0.2	0
382	System Dynamics Modeling. , 2023, , 7113-7117.		0

ARTICLE IF CITATIONS
383 Business Transformation Projects. Advances in Media, Entertainment and the Arts, 2024, , 241-271. 0.0 0