

LMI Relaxations in Robust Control

European Journal of Control

12, 3-29

DOI: [10.3166/ejc.12.3-29](https://doi.org/10.3166/ejc.12.3-29)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Robust Stability Analysis against Perturbations of Smoothly Time-Varying Parameters. , 2006, , .		22
2	Robust l1 Performance Analysis in face of Parametric Uncertainties. , 2006, , .		2
3	A Linear Matrix Inequality for Robust Stability Analysis with Frequency-Dependent Multipliers. , 2006, , .		8
4	Rational optimization using sum-of-squares techniques. , 2007, , .		1
5	Robust control against disturbance model uncertainty: a convex solution. , 2007, , .		7
6	Design of Robust Optimal Feedforward Controllers for Periodic Disturbances. Proceedings of the American Control Conference, 2007, , .	0.0	3
7	A region-dividing technique for constructing the sum-of-squares approximations to robust semidefinite programs. , 2007, , .		2
8	Exploiting Sparsity in the Matrix-Dilation Approach to Robust Semidefinite Programming. Proceedings of the American Control Conference, 2007, , .	0.0	6
9	POLYNOMIAL LPV SYNTHESIS APPLIED TO TURBOFAN ENGINES. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 645-650.	0.4	25
10	Parameter-Dependent LMIs in Robust Analysis: Characterization of Homogeneous Polynomially Parameter-Dependent Solutions Via LMI Relaxations. IEEE Transactions on Automatic Control, 2007, 52, 1334-1340.	3.6	376
11	GPC Robust Design Using Linear and/or Bilinear Matrix Inequalities*. European Journal of Control, 2007, 13, 451-467.	1.6	1
12	Robust Performance Analysis for Structured Linear Time-Varying Perturbations With Bounded Rates-of-Variation. IEEE Transactions on Automatic Control, 2007, 52, 197-211.	3.6	22
13	Robust performance analysis of uncertain LTI systems: Dual LMI approach and verifications for exactness. , 2007, , .		1
14	An LPV Control Approach to Asymptotic Rejection of Non-stationary Disturbances with Guaranteed Worst-Case Performance. Proceedings of the American Control Conference, 2007, , .	0.0	7
15	Discussion on: "GPC Robust Design Using Linear and/or Bilinear Matrix Inequalities" European Journal of Control, 2007, 13, 470-472.	1.6	1
16	L2 -Gain based controller design for linear systems with distributed delays and rational delay kernels. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 77-82.	0.4	5
17	Establishing tightness in robust analysis via homogeneous parameter-dependent Lyapunov functions. Automatica, 2007, 43, 1992-1995.	3.0	22
18	On the Kalmanâ€“Yakovovichâ€“Popov lemma and the multidimensional models. Multidimensional Systems and Signal Processing, 2008, 19, 425-447.	1.7	30

#	ARTICLE	IF	CITATIONS
19	Verifying exactness of relaxations for robust semi-definite programs by solving polynomial systems. Linear Algebra and Its Applications, 2008, 429, 1758-1778.	0.4	6
20	Stability analysis of uncertain genetic sum regulatory networks. Automatica, 2008, 44, 2298-2305.	3.0	94
21	Robust high-order repetitive control: Optimal performance trade-offs. Automatica, 2008, 44, 2628-2634.	3.0	136
22	On the non-conservatism of a novel LMI relaxation for robust analysis of polytopic systems. Automatica, 2008, 44, 2973-2976.	3.0	38
23	Computing the distance to uncontrollability via LMIs: Lower bound computation with exactness verification. Systems and Control Letters, 2008, 57, 763-771.	1.3	5
24	Boundedness of Multidimensional Filters Over a Prescribed Frequency Domain. IEEE Transactions on Signal Processing, 2008, 56, 5487-5499.	3.2	14
25	Robust Minimax Strategies for Missile Guidance Design. , 2008, , .		3
26	Generalized S -Procedure for Inequality Conditions on One-Vector-Lossless Sets and Linear System Analysis. SIAM Journal on Control and Optimization, 2008, 47, 1547-1555.	1.1	8
27	Periodically time-varying dynamical controller synthesis for polytopic-type uncertain discrete-time linear systems. , 2008, , .		12
28	Robust H_2 performance analysis for linear systems with parametric uncertainties. International Journal of Control, 2008, 81, 851-864.	1.2	7
29	Robust generalized asymptotic regulation against non-stationary sinusoidal disturbances. , 2008, , .		4
30	Robust high-order repetitive control. , 2008, , .		5
31	Robust Stability of Distributed Delay Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 12354-12358.	0.4	6
32	The Scenario Approach for Systems and Control Design. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 381-389.	0.4	63
33	LPV Control for Robust Attenuation of Non-stationary Sinusoidal Disturbances with Measurable Frequencies. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 4928-4933.	0.4	17
34	An LMI approach for robust stability of genetic networks. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 12593-12598.	0.4	0
35	Robust Controller Synthesis for the Attenuation of Non-stationary Sinusoidal Disturbances with Uncertain Frequencies. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 14115-14120.	0.4	3
36	Robust controller synthesis for disturbance filter uncertainty described by dynamic integral quadratic constraints.. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 1325-1330.	0.4	1

#	ARTICLE	IF	CITATIONS
37	Sum-of-Squares Approximations to Robust Semidefinite Programs with Functional Variables: A Region-Dividing Approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 1331-1336.	0.4	2
38	Stability Analysis of Discrete LPV Systems Subject to Rate-Bounded Parameters. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 6383-6388.	0.4	1
39	Extracting Worst Case Perturbations for Robustness Analysis of Parameter-Dependent LTI Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 11379-11384.	0.4	1
40	Scheduled controller synthesis via Lyapunov matrices that depend on the filtered scheduling parameter. , 2009, , .		0
41	An elementary proof for the exactness of (D, G) scaling. , 2009, , .		1
42	Exploiting sparsity in the sum-of-squares approximations to robust semidefinite programs. , 2009, , .		0
43	Gain-scheduled control synthesis by using filtered scheduling parameters. , 2009, , .		9
44	Further results on periodically time-varying memory state-feedback controller synthesis for discrete-time linear systems. , 2009, , .		11
45	A parameter-dependent Lyapunov approach for the control of nonstationary and hybrid LPV systems. , 2009, , .		2
46	A successive SDP-NSDP approach to a robust optimization problem in finance. Computational Optimization and Applications, 2009, 44, 443-466.	0.9	20
47	A recursive algorithm of exactness verification of relaxations for robust SDPs. Systems and Control Letters, 2009, 58, 592-601.	1.3	9
48	Delay-scheduled state-feedback design for time-delay systems with time-varying delays – A LPV approach. Systems and Control Letters, 2009, 58, 664-671.	1.3	16
49	Further results on the boundedness of multidimensional systems. Systems and Control Letters, 2009, 58, 818-825.	1.3	7
50	On the conservativeness of fuzzy and fuzzy-polynomial control of nonlinear systems. Annual Reviews in Control, 2009, 33, 48-58.	4.4	129
51	The scenario approach for systems and control design. Annual Reviews in Control, 2009, 33, 149-157.	4.4	302
52	A Region-Dividing Technique for Constructing the Sum-of-Squares Approximations to Robust Semidefinite Programs. IEEE Transactions on Automatic Control, 2009, 54, 1029-1035.	3.6	7
53	An Asymptotically Exact Approach to Robust Semidefinite Programming Problems with Function Variables. IEEE Transactions on Automatic Control, 2009, 54, 1000-1006.	3.6	13
54	Optimal Linear Controller Design for Periodic Inputs. Lecture Notes in Control and Information Sciences, 2009, , .	0.6	14

#	ARTICLE	IF	CITATIONS
55	Randomized Strategies for Probabilistic Solutions of Uncertain Feasibility and Optimization Problems. IEEE Transactions on Automatic Control, 2009, 54, 2545-2559.	3.6	151
56	Robust Stabilization and H_2 Control of Uncertain Distributed Delay Systems. Lecture Notes in Control and Information Sciences, 2009, , 221-231.	0.6	4
57	Synthesis of Robust Feedback Missile Control Strategies by Using LMI Techniques. , 2009, , .		0
58	Robust Performance Analysis of Uncertain LTI Systems: Dual LMI Approach and Verifications for Exactness. IEEE Transactions on Automatic Control, 2009, 54, 938-951.	3.6	33
59	Robust Stability Analysis of Nonlinear Hybrid Systems. IEEE Transactions on Automatic Control, 2009, 54, 1035-1041.	3.6	50
60	EXPLOITING SPARSITY IN THE MATRIX-DILATION APPROACH TO ROBUST SEMIDEFINITE PROGRAMMING. Journal of the Operations Research Society of Japan, 2009, 52, 321-338.	0.3	4
61	LPV Synthesis with Integral Quadratic Constraints for Distributed Control of Interconnected Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 13-18.	0.4	12
62	Time-invariant uncertain systems: A necessary and sufficient condition for stability and instability via homogeneous parameter-dependent quadratic Lyapunov functions. Automatica, 2010, 46, 471-474.	3.0	12
63	Polynomial LPV synthesis applied to turbofan engines. Control Engineering Practice, 2010, 18, 1077-1083.	3.2	89
64	Robust H_2 control of uncertain discrete-time linear systems with periodically time-varying memory state-feedback. , 2010, , .		1
65	Exactness verification of sum-of-squares approximations to robust semidefinite programs with functional variables. , 2010, , .		0
66	LPV analysis and control using fast iterative solutions to rationally parametric Lyapunov and Riccati equations. , 2010, , .		4
67	On the robust stability of continuous-time and discrete-time time-invariant uncertain systems with rational dependence on the uncertainty: A non-conservative condition. , 2010, , .		0
68	Asymptotic exactness of dual LMI approach for robust performance analysis of uncertain LTI systems. , 2010, , .		1
69	LMI Techniques for Optimization Over Polynomials in Control: A Survey. IEEE Transactions on Automatic Control, 2010, 55, 2500-2510.	3.6	322
70	Robust Missile Feedback Control Strategies. Journal of Guidance, Control, and Dynamics, 2010, 33, 1837-1846.	1.6	4
71	Exactness verification of upper-bound relaxations derived via parameter-dependent multipliers for rational uncertainty blocks. , 2010, , .		0
72	Optimal feedforward controller design for periodic inputs. International Journal of Control, 2010, 83, 1044-1053.	1.2	8

#	ARTICLE	IF	CITATIONS
73	Analysis of Uncertain Discrete-Time Linear Periodic Systems based on System Lifting and LMIs. European Journal of Control, 2010, 16, 532-544.	1.6	9
74	Robust generalized asymptotic regulation via an LPV controller without parameter derivative dependence. , 2010, , .		19
75	Adaptive Control for Uncertain Continuous-Time Systems Using Implicit Inversion of Prandtl-Ishlinskii Hysteresis Representation. IEEE Transactions on Automatic Control, 2010, 55, 2357-2363.	3.6	90
76	The polytopic/fuzzy polynomial approach for non-linear control: Advantages and drawbacks. , 2010, , .		0
77	A novel control-oriented multi-affine qLPV modeling framework. , 2010, , .		11
78	Robust Stability of Time-Varying Uncertain Systems With Rational Dependence on the Uncertainty. IEEE Transactions on Automatic Control, 2010, 55, 2353-2357.	3.6	13
79	Robust nonlinear least squares via consecutive LMI optimizations. , 2011, , .		1
80	Development of an Integrated LPV/LFT Framework: Modeling and Data-Based Validation Tool. IEEE Transactions on Control Systems Technology, 2011, 19, 104-117.	3.2	14
81	On Nonsingularity Verification of Uncertain Matrices Over a Quadratically Constrained Set. IEEE Transactions on Automatic Control, 2011, 56, 2206-2212.	3.6	14
82	Domain of Attraction. Lecture Notes in Control and Information Sciences, 2011, , .	0.6	82
83	Robust Semidefinite Programming Problems with General Nonlinear Parameter Dependence: Application of the DC-Representations. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 7939-7944.	0.4	0
84	On parametric solution of fault detection problems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 6697-6702.	0.4	13
85	Spatially Interconnected Systems Positive on a Quadratically Constrained Frequency Domain. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 1296-1301.	0.4	0
86	Necessary and sufficient condition for robust stability of discrete-time descriptor polytopic systems. IET Control Theory and Applications, 2011, 5, 713-720.	1.2	6
87	Gain-scheduled control via filtered scheduling parameters. Automatica, 2011, 47, 1821-1826.	3.0	13
88	Robust generalized asymptotic regulation against non-stationary sinusoidal disturbances with uncertain frequencies. International Journal of Robust and Nonlinear Control, 2011, 21, 883-903.	2.1	8
89	Scheduled control for robust attenuation of non-stationary sinusoidal disturbances with measurable frequencies. Automatica, 2011, 47, 504-514.	3.0	17
90	Periodically time-varying memory state-feedback controller synthesis for discrete-time linear systems. Automatica, 2011, 47, 14-25.	3.0	56

#	ARTICLE	IF	CITATIONS
91	LMI conditions for time-varying uncertain systems can be non-conservative. <i>Automatica</i> , 2011, 47, 621-624.	3.0	26
92	Delay range stability of a class of distributed time delay systems. <i>Systems and Control Letters</i> , 2011, 60, 211-217.	1.3	23
93	Generalized KYP Lemma With Real Data. <i>IEEE Transactions on Automatic Control</i> , 2011, 56, 2942-2946.	3.6	35
94	Synthesis of robust gain scheduling based fault detection filters for a class of parameter uncertain nonlinear systems. , 2011, , .		7
95	Parameter-varying state feedback control for discrete-time polytopic systems. <i>International Journal of Systems Science</i> , 2011, 42, 997-1005.	3.7	9
96	A new condition and equivalence results for robust stability analysis of rationally time-varying uncertain linear systems. , 2011, , .		1
97	A polynomial LPV approach for flexible robot end-effector position controller analysis. , 2011, , .		3
98	A necessary and sufficient condition for robust stability analysis of continuous-time descriptor polytopic systems. , 2012, , .		0
99	A matrix sign function framework for robust stability analysis and parameter-dependent Lyapunov and Riccati equalities. , 2012, , .		5
100	Fixed order LPV controller design for LPV models in input-output form. , 2012, , .		7
101	qLPV design method for multi-objective vehicle control. , 2012, , .		0
102	Input-output LPV model identification with guaranteed quadratic stability. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2012, 45, 1767-1772.	0.4	3
103	Obstacle-Sensitive Trajectory Regulation via Gain Scheduling and Semidefinite Programming. <i>IEEE Transactions on Control Systems Technology</i> , 2012, 20, 1107-1115.	3.2	6
104	LPV Control of Nonstationary Systems: A Parameter-Dependent Lyapunov Approach. <i>IEEE Transactions on Automatic Control</i> , 2012, 57, 209-215.	3.6	24
105	Robust semidefinite programming problems with general nonlinear parameter dependence: Approaches using the DC-representations. <i>Automatica</i> , 2012, 48, 2937-2944.	3.0	0
106	Inner Approximations for Polynomial Matrix Inequalities and Robust Stability Regions. <i>IEEE Transactions on Automatic Control</i> , 2012, 57, 1456-1467.	3.6	31
107	Randomized control design through probabilistic validation. , 2012, , .		8
108	Nonstationary LPV control for trajectory tracking: a double pendulum example. <i>International Journal of Control</i> , 2012, 85, 545-562.	1.2	15

#	ARTICLE	IF	CITATIONS
109	Möbius transform and efficient LPV synthesis. , 2012, , .		6
110	Robust optimization of nonlinear dynamic systems with application to a jacketed tubular reactor. Journal of Process Control, 2012, 22, 1152-1160.	1.7	63
111	Periodically Time-Varying Memory State-Feedback for Robust H_2 Control of Uncertain Discrete-Time Linear Systems. Asian Journal of Control, 2013, 15, 409-419.	1.9	9
112	Performance-oriented transfer for switching control. Automatica, 2013, 49, 2302-2305.	3.0	15
113	A Lyapunov functional approach to robust stability analysis of continuous-time uncertain linear systems in polytopic domains. International Journal of Control, Automation and Systems, 2013, 11, 460-469.	1.6	20
114	Two-DOF lifted LMI conditions for robust D-stability of polynomial matrix polytopes. International Journal of Control, Automation and Systems, 2013, 11, 636-642.	1.6	6
115	Robust control for an uncertain LCL resonant ICPT system using LMI method. Control Engineering Practice, 2013, 21, 31-41.	3.2	24
116	Exact robust stability analysis of uncertain systems with a scalar parameter via LMIs. Automatica, 2013, 49, 1083-1086.	3.0	21
117	Unified treatment of robust stability conditions for discrete-time systems through an infinite matrix framework. Automatica, 2013, 49, 1488-1493.	3.0	5
118	Sufficient and Necessary LMI Conditions for Robust Stability of Rationally Time-Varying Uncertain Systems. IEEE Transactions on Automatic Control, 2013, 58, 1546-1551.	3.6	23
119	Optimal Linear Filters for Discrete-Time Systems With Randomly Delayed and Lost Measurements With/Without Time Stamps. IEEE Transactions on Automatic Control, 2013, 58, 1551-1556.	3.6	128
120	Positive Polynomial Matrices for LPV Controller Synthesis. Lecture Notes in Control and Information Sciences, 2013, , 87-96.	0.6	2
121	On the design of robust static output feedback controllers via robust stabilizability functions. , 2013, , .		2
122	(Generalized) KYP lemma and applications. , 2013, , 1-7.		0
123	A Lagrangian dual approach to the Generalized KYP lemma. , 2013, , .		2
124	A Novel Parameter Varying Controller Synthesis Method for Quadrotor Control. , 2013, , .		5
125	Robust control of a chemical reactor with uncertainties. Acta Chimica Slovaca, 2013, 6, 194-201.	0.5	3
126	Structured adaptive control for solving LMIs. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 426-431.	0.4	2

#	ARTICLE	IF	CITATIONS
128	Multivariate S-procedure. , 2013, , .		2
130	Generalizing the KYP lemma to the union of intervals. , 2013, , .		0
131	Observer design for differentiable Lipschitz nonlinear systems with time-varying parameters. , 2014, , .		17
132	Nu-gap metric a sum-of-squares and linear matrix inequality approach. , 2014, , .		1
133	New LMI conditions for static output feedback synthesis with multiple performance objectives. , 2014, , .		16
134	Generalizing the KYP Lemma to Multiple Frequency Intervals. SIAM Journal on Control and Optimization, 2014, 52, 3618-3638.	1.1	1
135	Observer-based linear parameter-varying control with guaranteed gain and type performance objectives. International Journal of Robust and Nonlinear Control, 2014, 24, 2000-2017.	2.1	7
136	Robust Static Output Feedback Controllers via Robust Stabilizability Functions. IEEE Transactions on Automatic Control, 2014, 59, 1618-1623.	3.6	27
137	H ∞ Synthesis Method for Control of Non-linear Flexible Joint Models. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 8372-8377.	0.4	0
138	Robust Fixed-order Discrete-time LPV Controller Design. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 6914-6919.	0.4	6
139	IQC-synthesis with general dynamic multipliers. International Journal of Robust and Nonlinear Control, 2014, 24, 3027-3056.	2.1	54
140	Design and Experimental Tests of an LPV Power System Stabilizer on a 10kVA Small-scale Generating Unit. IFAC-PapersOnLine, 2015, 48, 236-241.	0.5	2
141	Sequential Randomized Algorithms for Robust Convex Optimization. IEEE Transactions on Automatic Control, 2015, 60, 3356-3361.	3.6	11
142	Robust Gain-Scheduling Output Feedback Control With Noisy Scheduling Parameters. , 2015, , .		0
143	Primal robustness and semidefinite cones. , 2015, , .		1
144	Computation of the Structured Singular Value via Moment LMI Relaxations. IEEE Transactions on Automatic Control, 2015, , 1-1.	3.6	0
145	On the robust asymptotical stability of uncertain complex matrices over the complex unit circumference. , 2015, , .		2
146	H ∞ performance limitations analysis for SISO systems: A dual LMI approach. , 2015, , .		4

#	ARTICLE	IF	CITATIONS
147	Robust static output feedback synthesis under an integral quadratic constraint on the states. , 2015, , .		1
148	Distributed control of LPV systems over arbitrary graphs: A parameter-dependent lyapunov approach. , 2015, , .		7
149	S-Variable Approach to LMI-Based Robust Control. Communications and Control Engineering, 2015, , .	1.0	88
150	Fuzzy control turns 50: 10 years later. Fuzzy Sets and Systems, 2015, 281, 168-182.	1.6	93
151	Necessary and sufficient conditions for input-output finite-time stability of impulsive dynamical systems. , 2015, , .		4
152	Optimal switching surface design for state-feedback switching LPV control. , 2015, , .		3
153	Comparison of Robust Control Techniques for Use in Continuous Stirred Tank Reactor Control. IFAC-PapersOnLine, 2015, 48, 284-289.	0.5	5
154	Randomized methods for design of uncertain systems: Sample complexity and sequential algorithms. Automatica, 2015, 52, 160-172.	3.0	115
155	Optimality of robust disturbance-feedback strategies. International Journal of Robust and Nonlinear Control, 2016, 26, 1475-1488.	2.1	0
156	Static output feedback synthesis under an integral quadratic constraint with application to high capacity transport vehicles. , 2016, , .		1
157	Reduction of SDPs in H ∞ control of SISO systems and performance limitations analysis. , 2016, , .		3
158	Robust performance iterative learning control : Analysis, synthesis and experimental validation. , 2016, , .		1
159	Robust Gain-Scheduling Control with Guaranteed Performance**Ali Khudhair Al-Jiboory would like to thank the Higher Committee for Education Development (HCED) and University of Diyala in Iraq for their financial support during his graduate study at Michigan State University (MSU).. IFAC-PapersOnLine, 2016, 49, 528-533.	0.5	3
160	Dual LMI approach to H ∞ performance limitation analysis of sensitivity and complementary sensitivity functions. , 2016, , .		1
161	Distributed state observer design for networked dynamic systems. IET Control Theory and Applications, 2016, 10, 1001-1008.	1.2	15
162	A Short Note on Constrained Linear Control Systems With Multiplicative Ellipsoidal Uncertainty. IEEE Transactions on Automatic Control, 2016, 61, 4106-4111.	3.6	9
163	Optimisation of transient and ultimate inescapable sets with polynomial boundaries for nonlinear systems. Automatica, 2016, 73, 82-87.	3.0	12
164	From static output feedback to structured robust static output feedback: A survey. Annual Reviews in Control, 2016, 42, 11-26.	4.4	175

#	ARTICLE	IF	CITATIONS
165	Optimization of Polynomials in Non-Commuting Variables. SpringerBriefs in Mathematics, 2016, , .	0.2	16
166	Synthesis of Robust Piecewise Affine Output-Feedback Strategies. Journal of Guidance, Control, and Dynamics, 2016, 39, 1461-1469.	1.6	0
167	Robust stability and performance analysis based on integral quadratic constraints. European Journal of Control, 2016, 31, 1-32.	1.6	104
168	Guaranteed Performance State-Feedback Gain-Scheduling Control With Uncertain Scheduling Parameters. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2016, 138, .	0.9	20
169	Fixed-structure LPV discrete-time controller design with induced H_2 -norm and H_2 -performance. International Journal of Control, 2016, 89, 494-505.	1.2	22
170	Stability of uncertain systems using Lyapunov functions with non-monotonic terms. Automatica, 2017, 82, 187-193.	3.0	27
171	Parameter and Controller Dependent Lyapunov Functions for Robust D-Stability and Robust Performance Controller Design. IEEE Transactions on Automatic Control, 2017, 62, 4798-4803.	3.6	8
172	Robust simulation of continuous-time systems with rational dynamics. International Journal of Robust and Nonlinear Control, 2017, 27, 3097-3108.	2.1	5
173	Robust observed-state feedback design for discrete-time systems rational in the uncertainties. Automatica, 2017, 76, 96-102.	3.0	22
174	Implementation of a parametrized infinite-horizon model predictive control scheme with stability guarantees. , 2017, , .		6
175	Semidefinite Representations of Gauge Functions for Structured Low-Rank Matrix Decomposition. SIAM Journal on Optimization, 2017, 27, 1362-1389.	1.2	5
176	Observer Design for Parameter Varying Differentiable Nonlinear Systems, With Application to Slip Angle Estimation. IEEE Transactions on Automatic Control, 2017, 62, 1940-1945.	3.6	32
177	Robust static output feedback synthesis for platoons under leader and predecessor feedback. International Journal of Robust and Nonlinear Control, 2017, 27, 1726-1756.	2.1	6
178	Robust simulation of rational discrete-time systems via sum of squares relaxations. IFAC-PapersOnLine, 2017, 50, 4108-4113.	0.5	0
179	LPV Modeling and Control for Active Flutter Suppression of a Smart Airfoil. , 2018, , .		1
180	An outlook on robust model predictive control algorithms: Reflections on performance and computational aspects. Journal of Process Control, 2018, 61, 77-102.	1.7	75
181	Affine Parameter-Dependent Lyapunov Functions for LPV Systems With Affine Dependence. IEEE Transactions on Automatic Control, 2018, 63, 3865-3872.	3.6	17
182	On analysis and design of discrete-time constrained switched systems. International Journal of Control, 2018, 91, 437-452.	1.2	10

#	ARTICLE	IF	CITATIONS
183	Distributed Saturated Control for a Class of Semilinear PDE Systems: An SOS Approach. IEEE Transactions on Fuzzy Systems, 2018, 26, 749-760.	6.5	25
184	Distributed control of LPV systems over arbitrary graphs with communication latency. International Journal of Robust and Nonlinear Control, 2018, 28, 1281-1302.	2.1	4
185	Sequential LMI approach for the design of a BMI-based robust observer state feedback controller with nonlinear uncertainties. International Journal of Robust and Nonlinear Control, 2018, 28, 1246-1260.	2.1	30
186	Guaranteed systematic simulation of discrete-time systems defined by polynomial expressions via convex relaxations. International Journal of Robust and Nonlinear Control, 2018, 28, 1062-1073.	2.1	1
187	LPV-based power system stabilizer: Identification, control and field tests. Control Engineering Practice, 2018, 72, 53-67.	3.2	6
188	$\frac{d}{dt}x = Ax + Bv$ Analysis of LTI Systems via Conversion to Externally Positive Systems. IEEE Transactions on Automatic Control, 2018, 63, 2566-2572.	3.6	24
189	Towards rigorous robust optimal control via generalized high-order moment expansion. Optimal Control Applications and Methods, 2018, 39, 489-502.	1.3	10
190	Affine Versus Multi-Affine Models for S-Variable LMI Conditions. IFAC-PapersOnLine, 2018, 51, 453-458.	0.5	1
191	On the Complexity of Robust Stability Analysis of Polytopic LTI Systems. , 2018, , .		0
192	Robust H_∞ and H_2 linear parametric dynamic systems control. AIP Conference Proceedings, 2018, , .	0.3	0
193	Determinant-Based Hurwitz Test For Complex Matrices Over The Complex Unit Circumference And Applications in 2D Systems. , 2018, , .		1
194	Application of ICC LPV control to a blended-wing-body airplane with guaranteed H_∞ performance. Aerospace Guidance and Technology, 2018, 01, 88-98.	2.5	29
195	$\frac{d}{dt}x = Ax + Bv$ Analysis of LTI Discrete-Time Systems via Conversion to Externally Positive Systems. Transactions of the Institute of Systems Control and Information Engineers, 2018, 31, 75-84.	0.1	1
196	Computation of low-complexity control-invariant sets for systems with uncertain parameter dependence. Automatica, 2019, 101, 330-337.	3.0	12
197	A quadratic matrix inequality based PID controller design for LPV systems. Systems and Control Letters, 2019, 126, 67-76.	1.3	13
198	Observer-based state-feedback control design for LPV periodic discrete-time systems. European Journal of Control, 2019, 49, 1-14.	1.6	9
199	Stability Test for Complex Matrices Over the Complex Unit Circumference via LMIs and Applications in 2D Systems. IEEE Transactions on Circuits and Systems I: Regular Papers, 2019, 66, 1960-1969.	3.5	5
200	Robust performance for uncertain systems via Lyapunov functions with higher order terms. Journal of the Franklin Institute, 2019, 356, 3072-3089.	1.9	9

#	ARTICLE	IF	CITATIONS
201	Construction of Externally Positive Systems and Order Reduction for Discrete-Time LTI System Analysis. Transactions of the Institute of Systems Control and Information Engineers, 2019, 32, 284-293.	0.1	0
202	Performance-oriented quasi-LPV modeling of nonlinear systems. International Journal of Robust and Nonlinear Control, 2019, 29, 1230-1248.	2.1	18
203	Robust lateral control of long-combination vehicles under moments of inertia and tyre cornering stiffness uncertainties. Vehicle System Dynamics, 2019, 57, 1847-1873.	2.2	12
204	Novel linear parameter-varying modeling and flutter suppression control of a smart airfoil. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2019, 233, 609-624.	0.7	0
205	Polynomial LPV approach to robust H_∞ control of nonlinear sampled-data systems. International Journal of Control, 2020, 93, 2145-2160.	1.2	13
206	Gain-scheduled H_∞ controller synthesis for actively steered longer and heavier commercial vehicles. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2020, 234, 2045-2065.	1.1	5
207	Hard Constrained LPV Virtual Control with Application to Flutter Suppression of a Smart Airfoil. International Journal of Control, Automation and Systems, 2020, 18, 1215-1228.	1.6	2
208	Set-based gain-scheduled control via quasi-convex difference inclusions. International Journal of Robust and Nonlinear Control, 2020, , .	2.1	0
209	Induced L_2 -gain computation for rational LPV systems using Finsler's lemma and minimal generators. Systems and Control Letters, 2020, 142, 104738.	1.3	3
210	Multivariable control of regeneratively-cooled scramjet engine with two-stage kerosene injection based on H_∞ method. Results in Engineering, 2020, 7, 100161.	2.2	7
211	Robust disturbance rejection for discrete-time systems having Magnitude and rate bounded inputs. Journal of the Franklin Institute, 2020, 357, 8252-8276.	1.9	5
212	Stability analysis and robust performance of periodic discrete-time uncertain systems via structured Lyapunov functions. European Journal of Control, 2021, 58, 74-81.	1.6	4
213	Robust consensus for linear multi-agent systems with structured uncertainties. International Journal of Control, 2021, 94, 675-686.	1.2	8
214	Perturbation Analysis of Singular Semidefinite Programs and Its Applications to Control Problems. Journal of Optimization Theory and Applications, 2021, 188, 52-72.	0.8	4
215	From Noisy Data to Feedback Controllers: Nonconservative Design via a Matrix S-Lemma. IEEE Transactions on Automatic Control, 2022, 67, 162-175.	3.6	86
216	KYP Lemma and Generalizations/Applications. , 2021, , 1070-1075.		0
217	Reduced order dynamic controller synthesis conditions for LPV periodic discrete-time systems subject to input saturation. Journal of the Franklin Institute, 2022, 359, 743-761.	1.9	2
218	Designing controller parameters of an LPV system via design space exploration. European Journal of Control, 2021, 59, 47-57.	1.6	8

#	ARTICLE	IF	CITATIONS
219	$\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ altimg="si1.svg"} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:math} \rangle$ induced norm analysis of discrete-time LTI systems for nonnegative input signals and its application to stability analysis of recurrent neural networks. European Journal of Control, 2021, 62, 99-104.	1.6	3
220	Developing stability and boundedness conditions for LPV systems exploiting pointwise hurwitzness. International Journal of Dynamics and Control, 0, , 1.	1.5	0
221	Analysis and Synthesis of Low-Gain Integral Controllers for Nonlinear Systems. IEEE Transactions on Automatic Control, 2021, 66, 4148-4159.	3.6	14
222	Robust gain-scheduling $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{ altimg="si2.svg"} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \text{ mathvariant="script"} \rangle H \langle \text{mml:mi} \rangle \hat{\alpha} \tilde{z} \langle \text{mml:mi} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:math} \rangle$ control of uncertain continuous-time systems having magnitude- and rate-bounded actuators: An application of full block S-procedure. Journal of the Franklin Institute, 2021, 358, 8226-8249.	1.9	5
223	Robust Linear Parameter Varying Scalar Control Applied in High Performance Induction Motor Drives. IEEE Transactions on Industrial Electronics, 2021, 68, 10558-10568.	5.2	12
224	Polytopic LPV approaches for intelligent automotive systems: State of the art and future challenges. Mechanical Systems and Signal Processing, 2021, 161, 107931.	4.4	64
225	A sequentially optimal randomized algorithm for robust LMI feasibility problems. , 2007, , .		14
226	Control-oriented Qlpv modeling using TP Transformation. , 2009, , .		2
228	On the Exactness Proof of (D,G) Scaling. SICE Journal of Control Measurement and System Integration, 2008, 1, 474-478.	0.4	1
229	Synthesis of Memory Gain-Scheduled Controllers for Discrete-Time LPV Systems. SICE Journal of Control Measurement and System Integration, 2020, 13, 249-255.	0.4	2
230	A Matrix-Dilation Approach to Robust Semidefinite Programming and Its Error Bound. SICE Journal of Control Measurement and System Integration, 2010, 3, 372-380.	0.4	5
231	LMI-Based Lower Bound Analysis of the Best Achievable H^∞ Performance for SISO Systems. SICE Journal of Control Measurement and System Integration, 2016, 9, 165-172.	0.4	3
232	Design of a Robust Load-dependent Steering Controller for Improved High Capacity Vehicle Safety. , 2021, , .		1
233	Convex relaxations for robust control problems. , 2007, , .		0
234	Derivation of Extended LMI Conditions for Robust H^∞ Performance Analysis via a Redundant Descriptor Approach. Transactions of the Society of Instrument and Control Engineers, 2008, 44, 147-155.	0.1	0
235	Gain-scheduled Control of a Crane Using the Sum-of-squares Technique. Transactions of the Society of Instrument and Control Engineers, 2009, 45, 208-214.	0.1	2
236	On Use of Filtered Parameters in Gain-Scheduled Control. Transactions of the Society of Instrument and Control Engineers, 2009, 45, 469-475.	0.1	0
237	Robust H^∞ Performance Analysis of LTI Systems with a Single Uncertain Parameter-Asymptotically Exact Construction of a Sequence of Relaxation Problems via Dual LMIs and Non-Asymptotic Exactness Verification. Transactions of the Institute of Systems Control and Information Engineers, 2010, 23, 46-55.	0.1	1

#	ARTICLE	IF	CITATIONS
238	A Parameter-Dependent Lyapunov Approach for the Control of Nonstationary LPV Systems. , 2012, , 105-126.		0
239	Generalized Asymptotic Regulation for LPV Systems with Additional Performance Objectives. , 2012, , 127-156.		0
240	Continuity of the maximal negative graph spaces. , 2013, , .		0
241	Descriptor Case and System Augmentation. Communications and Control Engineering, 2015, , 61-106.	1.0	0
242	Theoretical Foundation of Finite Frequency Control. Studies in Systems, Decision and Control, 2017, , 29-47.	0.8	0
243	Nonlinear Disturbance Observer based Control for Polynomial Systems with Mismatched Uncertainties using Sum-of-Squares Programming. , 2019, , .		1
244	New LMI Characterizations for H^{∞} -norm Guaranteed Cost Computation of Linear Systems with Polytopic Uncertainties. , 2020, , .		0
245	Computation of robust control invariant sets with predefined complexity for uncertain systems. International Journal of Robust and Nonlinear Control, 2021, 31, 1674-1688.	2.1	8
246	MPC controller performance evaluation and self-healing based on ISE-TSV index and LMI. , 2020, , .		1
247	Sum-of-squares chordal decomposition of polynomial matrix inequalities. Mathematical Programming, 2023, 197, 71-108.	1.6	4
248	Spurious Critical Points in Power System State Estimation. , 2018, , .		6
249	Multi-Performance State-Feedback for Time-Varying Linear Systems. IFAC-PapersOnLine, 2021, 54, 31-36.	0.5	2
250	Robust induced H^{∞} control of discrete-time systems having magnitude and rate-bounded actuators. ISA Transactions, 2023, 137, 23-34.	3.1	2
251	Robust Structural Stability, Stability Margins, and Maximum Uncertainty Amplification for 2D Uncertain Systems via Structured Lyapunov Functions and Matrix Annihilators. IEEE Transactions on Automatic Control, 2022, , 1-15.	3.6	0
252	Combining Prior Knowledge and Data for Robust Controller Design. IEEE Transactions on Automatic Control, 2023, 68, 4618-4633.	3.6	23
253	Data-driven H^{∞} control of constrained systems: An application to bilateral teleoperation system. ISA Transactions, 2023, 137, 23-34.	3.1	2
254	Grid-Forming Inverter Primary Control Using Robust-Residual-Observer-Based Digital-Twin Model. IEEE Transactions on Industrial Informatics, 2023, , 1-12.	7.2	0
255	Polytopic LPV Approaches for Intelligent Automotive Systems: State of the Art and Future Challenges. Key Technologies on New Energy Vehicles, 2023, , 1-49.	0.2	0

#	ARTICLE	IF	CITATIONS
---	---------	----	-----------