

Imad M Jaimoukha

List of Publications by Year in descending order

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48
papers

1,364
citations

430874

18
h-index

414414

32
g-index

48
all docs

48
docs citations

48
times ranked

842
citing authors

#	ARTICLE	IF	CITATIONS
1	Krylov Subspace Methods for Solving Large Lyapunov Equations. SIAM Journal on Numerical Analysis, 1994, 31, 227-251.	2.3	246
2	A matrix factorization solution to the H_2/H_∞ fault detection problem. Automatica, 2006, 42, 1907-1912.	5.0	141
3	Mixed-sensitivity approach to H_2/H_∞ control of power system oscillations employing multiple facts devices. IEEE Transactions on Power Systems, 2003, 18, 1149-1156.	6.5	132
4	A linear matrix inequality approach to robust damping control design in power systems with superconducting magnetic energy storage device. IEEE Transactions on Power Systems, 2000, 15, 356-362.	6.5	106
5	A Study on LQG/LTR Control for Damping Inter-Area Oscillations in Power Systems. IEEE Transactions on Control Systems Technology, 2007, 15, 151-160.	5.2	86
6	Implicitly Restarted Krylov Subspace Methods for Stable Partial Realizations. SIAM Journal on Matrix Analysis and Applications, 1997, 18, 633-652.	1.4	74
7	Oblique Production Methods for Large Scale Model Reduction. SIAM Journal on Matrix Analysis and Applications, 1995, 16, 602-627.	1.4	60
8	Observer-based fault detection and isolation filter design for linear time-invariant systems. International Journal of Control, 2009, 82, 171-182.	1.9	56
9	Computation of a Reference Model for Robust Fault Detection and Isolation Residual Generation. Journal of Control Science and Engineering, 2008, 2008, 1-12.	1.0	41
10	Model predictive control based on mixed H_2/H_∞ control approach for active vibration control of railway vehicles. Vehicle System Dynamics, 2008, 46, 151-160.	3.7	34
11	State-space solution to the H_2/H_∞ fault detection problem. International Journal of Robust and Nonlinear Control, 2012, 22, 282-299.	3.7	33
12	Robust feedback model predictive control of constrained uncertain systems. Journal of Process Control, 2013, 23, 189-200.	3.3	29
13	On the gap between the quadratic integer programming problem and its semidefinite relaxation. Mathematical Programming, 2006, 107, 505-515.	2.4	28
14	On-line fault detection and isolation for linear discrete-time uncertain systems. Automatica, 2014, 50, 513-518.	5.0	27
15	Low-Complexity Polytopic Invariant Sets for Linear Systems Subject to Norm-Bounded Uncertainty. IEEE Transactions on Automatic Control, 2015, 60, 1416-1421.	5.7	25
16	Modeling and control of TCV. IEEE Transactions on Control Systems Technology, 2005, 13, 356-369.	5.2	23
17	Model Predictive Control based on Mixed H_2/H_∞ Control Approach. Proceedings of the American Control Conference, 2007, , .	0.0	22
18	Full-complexity polytopic robust control invariant sets for uncertain linear discrete-time systems. International Journal of Robust and Nonlinear Control, 2019, 29, 3587-3605.	3.7	19

#	ARTICLE	IF	CITATIONS
19	Adaptive Rational Interpolation: Arnoldi and Lanczos-like Equations. European Journal of Control, 2008, 14, 342-354.	2.6	17
20	Causal state-feedback parameterizations in robust model predictive control. Automatica, 2013, 49, 2675-2682.	5.0	17
21	Metalearning-Based Alternating Minimization Algorithm for Nonconvex Optimization. IEEE Transactions on Neural Networks and Learning Systems, 2023, 34, 5366-5380.	11.3	14
22	State Space Solution to the H_2 Fault Detection Problem. , 2006, , .		13
23	A Semidefinite Relaxation Procedure for Fault-Tolerant Observer Design. IEEE Transactions on Automatic Control, 2015, 60, 3332-3337.	5.7	13
24	A Semidefinite Relaxation-Based Algorithm for Robust Attitude Estimation. IEEE Transactions on Signal Processing, 2012, 60, 3942-3952.	5.3	10
25	The computation of full-complexity polytopic robust control invariant sets. , 2015, , .		10
26	Controller reduction for linear parameter-varying systems with a priori bounds. Automatica, 2005, 41, 273-279.	5.0	9
27	Robust Positively Invariant Sets for Linear Systems subject to model-uncertainty and disturbances. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 213-217.	0.4	8
28	Robust Model Predictive Control through Dynamic State-feedback: An LMI Approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 3672-3677.	0.4	7
29	New iterative linear matrix inequality based procedure for H_2 and H_∞ state feedback control of continuous-time polytopic systems. International Journal of Robust and Nonlinear Control, 2021, 31, 51-68.	3.7	7
30	Rational interpolation: Modified rational Arnoldi algorithm and Arnoldi-like equations. , 2007, , .		6
31	H_2 LMI-based Robust Control for Damping Oscillations in Power Systems. , 2007, , .		6
32	Fault detection and isolation for linear discrete-time systems using input/output measurement analysis. , 2009, , .		6
33	Fault-tolerant observer design with a tolerance measure for systems with sensor failures. , 2016, , .		5
34	Tracking Control for Directional Drilling Systems Using Robust Feedback Model Predictive Control. IFAC-PapersOnLine, 2020, 53, 11974-11981.	0.9	5
35	Krylov subspace restart scheme for solving large-scale Sylvester equations. , 2010, , .		4
36	An optimal solution to an H_2 fault detection problem. , 2011, , .		4

#	ARTICLE	IF	CITATIONS
37	The 2-block superoptimal AAK problem. Mathematics of Control, Signals, and Systems, 1998, 11, 244-264.	2.3	3
38	A measurement analysis approach to online fault detection and isolation for linear discrete-time uncertain systems. , 2010, , .		3
39	Optimal State Space Solution to the Fault Detection Problem at Single Frequency. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 7619-7624.	0.4	3
40	ℋ<inf>2</inf> Optimal model reduction of linear dynamical systems. , 2010, , .		2
41	Second order H2 optimal approximation of linear dynamical systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 12767-12771.	0.4	2
42	Fault-tolerant controller design with a tolerance measure for systems with actuator and sensor faults. , 2017, , .		2
43	Computation of Invariant Tubes for Robust Output Feedback Model Predictive Control. IFAC-PapersOnLine, 2020, 53, 7063-7069.	0.9	2
44	A semidefinite relaxation for the quadratic minimax problem with application to H<inf>∞</inf> model predictive control. , 2007, , .		1
45	Integrated design of dynamic controller with fault diagnosis and tolerance. , 2009, , .		1
46	Semidefinite relaxation of a robust static attitude determination problem. , 2011, , .		1
47	Sensor Failure“Tolerant Observer Design With Regional Pole Placement. , 2022, 6, 2102-2107.		1
48	Optimal design of nanowire array based thermocouple. , 2012, , .		0