

Masayuki Sato

List of Publications by Year in descending order

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101
papers

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623734

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docs citations

101
times ranked

479
citing authors

#	ARTICLE	IF	CITATIONS
1	Gain-scheduled output-feedback controllers using inexact scheduling parameters for continuous-time LPV systems. <i>Automatica</i> , 2013, 49, 1019-1025.	5.0	117
2	Gain-scheduled output-feedback controllers depending solely on scheduling parameters via parameter-dependent Lyapunov functions. <i>Automatica</i> , 2011, 47, 2786-2790.	5.0	83
3	Filter design for LPV systems using quadratically parameter-dependent Lyapunov functions. <i>Automatica</i> , 2006, 42, 2017-2023.	5.0	73
4	Flight Controller Design and Demonstration of Quad-Tilt-Wing Unmanned Aerial Vehicle. <i>Journal of Guidance, Control, and Dynamics</i> , 2015, 38, 1071-1082.	2.8	51
5	LMI Tests for Positive Definite Polynomials: Slack Variable Approach. <i>IEEE Transactions on Automatic Control</i> , 2009, 54, 886-891.	5.7	40
6	Flight evaluation of a sliding mode online control allocation scheme for fault tolerant control. <i>Automatica</i> , 2020, 114, 108829.	5.0	40
7	Gain-Scheduled Flight Controller Using Bounded Inexact Scheduling Parameters. <i>IEEE Transactions on Control Systems Technology</i> , 2018, 26, 1074-1082.	5.2	34
8	Flight Control Experiment of Multipurpose-Aviation-Laboratory-alpha In-Flight Simulator. <i>Journal of Guidance, Control, and Dynamics</i> , 2011, 34, 1081-1096.	2.8	31
9	Control Augmentation System Design for Quad-Tilt-Wing Unmanned Aerial Vehicle via Robust Output Regulation Method. <i>IEEE Transactions on Aerospace and Electronic Systems</i> , 2017, 53, 357-369.	4.7	31
10	Robust Stability/Performance Analysis for Linear Time-Invariant Polynomially Parameter-Dependent Systems using Polynomially Parameter-Dependent Lyapunov Functions. , 2006, , .		25
11	Design method of gain-scheduled controllers not depending on derivatives of parameters. <i>International Journal of Control</i> , 2008, 81, 1013-1025.	1.9	23
12	Discrete-time Gain-Scheduled Output-Feedback controllers exploiting inexact scheduling parameters via Parameter-Dependent Lyapunov Functions. , 2011, , .		22
13	Gain-Scheduled state-feedback controllers using inexact scheduling parameters: H_2 and H_∞ problems. , 2010, , .		21
14	Simultaneous Realization of Handling and Gust Responses: In-Flight Simulator Controller Design. <i>Journal of Guidance, Control, and Dynamics</i> , 2008, 31, 1545-1560.	2.8	19
15	Gain-Scheduled output-feedback controllers using inexact scheduling parameters. , 2010, , .		18
16	Inverse system design for LPV systems using parameter-dependent Lyapunov functions. <i>Automatica</i> , 2008, 44, 1072-1077.	5.0	17
17	Robust model-following controller design for LTI systems affected by parametric uncertainties: a design example for aircraft motion. <i>International Journal of Control</i> , 2009, 82, 689-704.	1.9	16
18	Gain-scheduled output feedback controllers for discrete-time LPV systems using bounded inexact scheduling parameters. , 2015, , .		16

#	ARTICLE	IF	CITATIONS
19	Robust Gain-Scheduled Flight Controller for an In-Flight Simulator. IEEE Transactions on Aerospace and Electronic Systems, 2020, 56, 2122-2135.	4.7	15
20	Flight test of fault-tolerant flight control system using simple adaptive control with PID controller. Aircraft Engineering and Aerospace Technology, 2018, 90, 210-218.	1.2	15
21	Gain-scheduled open-loop system design for LPV systems using polynomially parameter-dependent Lyapunov functions. Systems and Control Letters, 2010, 59, 265-276.	2.3	14
22	Robust Gain-Scheduled flight controller using inexact scheduling parameters. , 2013, , .		14
23	Flight testing of an structured H-infinity controller: An EU-Japan collaborative experience. , 2017, , .		13
24	One-shot design of performance scaling matrices and observer-based gain-scheduled controllers depending on inexact scheduling parameters. Systems and Control Letters, 2020, 137, 104632.	2.3	13
25	Flight Test Verification of Flight Controller for Quad Tilt Wing Unmanned Aerial Vehicle. , 2013, , .		11
26	Discrete-time gain-scheduled model-matching flight controller using inexact scheduling parameters. , 2014, , .		10
27	Observer-Based Robust Controller Design With Simultaneous Optimization of Scaling Matrices. IEEE Transactions on Automatic Control, 2020, 65, 861-866.	5.7	10
28	Fault tolerant linear parameter varying flight control design, verification and validation. Journal of the Franklin Institute, 2022, 359, 653-676.	3.4	10
29	Robust Flight Controller Design That Takes Into Account Handling Quality. Journal of Guidance, Control, and Dynamics, 2005, 28, 71-77.	2.8	8
30	Gain-Scheduled H ∞ filters using inexact scheduling parameters. , 2010, , .		8
31	Flight Controller Design for Small Quad Tilt Wing UAV. Journal of the Japan Society for Aeronautical and Space Sciences, 2016, 64, 79-82.	0.1	8
32	Design and Testing of a Low-Order Flight Control System for Quad-Tilt-Wing UAV. Journal of Guidance, Control, and Dynamics, 2016, 39, 2426-2433.	2.8	8
33	Conservatism reduction for linear parameter-varying control design facing inexact scheduling parameters illustrated on flight tests. International Journal of Robust and Nonlinear Control, 2020, 30, 6130-6148.	3.7	8
34	Filter design for LPV systems using biquadratic Lyapunov functions. , 2004, , .		7
35	Comparison Between SOS Approach and Slack Variable Approach for Non-negativity Check of Polynomial Functions: Single Variable Case. , 2007, , .		7
36	Discrete-time Gain-Scheduled Output-Feedback controllers exploiting inexact scheduling parameters. , 2011, , .		7

#	ARTICLE	IF	CITATIONS
37	Flight evaluation of an LPV sliding mode controller with online control allocation. , 2017, , .		7
38	Design and Flight Testing of an Adaptive Gain-Scheduled Controller Using On-Line Model Estimation. , 2018, , .		7
39	Gain-Scheduled Output-Feedback Controllers with Good Implementability and Robustness. , 2012, , 181-215.		7
40	Gain-scheduled inverse system and filtering system without derivatives of scheduling parameters. , 0, , .		6
41	Controller Design Using Standard Operator Model. Journal of Guidance, Control, and Dynamics, 2005, 28, 872-877.	2.8	6
42	Robust Stability/Performance Analysis for Linear Time-Invariant Polytopically Parameter-Dependent Systems using Polynomially Parameter-Dependent Lyapunov Functions. , 2006, , .		6
43	Flight Test of Model-Matching Controller for In-Flight Simulator MuPAL-alpha. Journal of Guidance, Control, and Dynamics, 2006, 29, 1476-1482.	2.8	6
44	Robust controller synthesis for a class of uncertain systems and application to visual feedback control. , 2013, , .		6
45	Gain-Scheduled State Feedback Controllers for Discrete-Time LPV systems Using Scheduling Parameters Affected by Absolute and Proportional Uncertainties**This work was supported by JSPS KAKENHI Grant Numbers 23760398 and 15K06159.. IFAC-PapersOnLine, 2015, 48, 31-36.	0.9	6
46	Simultaneous Design of Discrete-Time Observer-Based Robust Scaled-H8 Controllers and Scaling Matrices. SICE Journal of Control Measurement and System Integration, 2018, 11, 65-71.	0.7	6
47	A New Method for Gain-Scheduled Output Feedback Controller Design Using Inexact Scheduling Parameters. , 2018, , .		6
48	Design of Model-Matching Controllers Using the Right Inverse System With Application to MuPAL-ALPHA. and Verification by Ground and Flight Experiments. Journal of the Japan Society for Aeronautical and Space Sciences, 2003, 51, 276-284.	0.1	6
49	Gain-Scheduled Output-Feedback Controllers Using Inexactly Measured Scheduling Parameters for Linear Parametrically Affine Systems. SICE Journal of Control Measurement and System Integration, 2011, 4, 145-152.	0.7	5
50	Flight Evaluation of an LPV Sliding Mode Observer for Sensor FTC. IEEE Transactions on Control Systems Technology, 2022, 30, 1319-1327.	5.2	5
51	Gain-Scheduled State-Feedback Controllers Using Inexactly Measured Scheduling Parameters: Stabilizing and H ∞ Control Problems. SICE Journal of Control Measurement and System Integration, 2010, 3, 285-291.	0.7	5
52	Disturbance suppression via robust MPC using prior disturbance data application to flight controller design for Gust Alleviation. , 2009, , .		4
53	Disturbance suppression via robust MPC using prior disturbance data: Low computational complexity method. , 2009, , .		4
54	Gain-Scheduled H ∞ Controllers being Derivative-Free of Scheduling Parameters via Parameter-Dependent Lyapunov Functions. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 7951-7956.	0.4	4

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55	Gain-Scheduled Observers Using Inexact Scheduling Parameters. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 369-374.	0.4	4
56	Design of Gain Scheduled Stability and Control Augmentation System for Quad-Tilt-Wing UAV. , 2015, , .		4
57	Gain-Scheduled Model-Matching Flight Controller Using Inexact Scheduling Parameters**Supported by JSPS KAKENHI Grant 15K06159. IFAC-PapersOnLine, 2016, 49, 88-93.	0.9	4
58	Evaluation of a Sliding Mode Fault Tolerant Controller on the MuPAL- α Research Aircraft. , 2018, , .		4
59	Causal Gain-scheduled output feedback controllers using parameter-dependent Lyapunov Functions. Automatica, 2021, 129, 109569.	5.0	4
60	Simultaneous Fault and Input Time Delay Estimation for an Actuator System: Theory and Flight Data Validation. , 2022, 6, 1172-1177.		4
61	Flight test of flight controller for arbitrary maneuverability and wind gust rejection. , 2006, , .		3
62	Robust stability/performance analysis for uncertain linear systems via multiple slack variable approach: Polynomial LTIPD systems. , 2007, , .		3
63	$\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="M1"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle H \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle \hat{z} \langle \text{mml:mrow} \rangle \langle \text{mml:m} \rangle$ Control-Based Robust CAS Design for QTW-UAV via the Multiple-Model Approach with Particle Swarm Optimization. International Journal of Aerospace Engineering, 2019, 2019, 1-17.	0.9	3
64	On-line parameter estimation for indirect adaptive flight control: a practical evaluation of several techniques. , 2020, , .		3
65	Structured $\hat{1}/4$ -Synthesis of Robust Attitude Control Laws for Quad-Tilt-Wing Unmanned Aerial Vehicle. Journal of Guidance, Control, and Dynamics, 2020, 43, 2258-2274.	2.8	3
66	Flight Controller Design of Unmanned Airplane for Radiation Monitoring System via Structured Robust Controller Design Using Multiple Model Approach. Transactions of the Society of Instrument and Control Engineers, 2015, 51, 215-225.	0.2	3
67	H2 Filter Design for Linear Parameter-Varying Systems using Higher-Order Parameter-Dependent Lyapunov Functions. , 2006, , .		2
68	Flight Control Design and Demonstration of Unmanned Airplane for Radiation Monitoring System. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 2527-2532.	0.4	2
69	Flight Testing of a Gain-Scheduled Stability and Control Augmentation System for a Quad-Tilt-Wing UAV. , 2016, , .		2
70	$\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="M1"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle H \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle \hat{z} \langle \text{mml:mrow} \rangle \langle \text{mml:m} \rangle$ <i>H</i><sub> \hat{z} </sub> Control-based CAS Design of QTW-UAVs Using Particle Swarm Optimization. Transactions of the Japan Society for Aeronautical and Space Sciences, 2018, 61, 226-229.	0.7	2
71	Flight Evaluations of Sliding Mode Fault Tolerant Controllers. , 2018, , .		2
72	Active Fault Tolerant Control of MuPAL-a Using Sliding Modes. , 2018, , .		2

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73	Design and Hardware-In-the-Loop Validation of a Fault-Tolerant Y* Flight Control Law. , 2019, , .		2
74	Synthesis of a Calibration-Free Visual Feedback Controller for an Inverted Pendulum Using a Fisheye Lens. IEEE Transactions on Industrial Electronics, 2022, 69, 13348-13358.	7.9	2
75	Luenberger Observer-Based Flight Controller Design Using Robust Control Toolbox®, 2021, , .		2
76	Robust Stability/Performance Analysis for Polytopic Systems via Multiple Slack Variable Approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 11391-11396.	0.4	1
77	Parameter-Dependent Slack Variable approach for positivity check of polynomials over hyper-rectangle. , 2009, , .		1
78	Notice of Removal Control performance improvement for QTW UAV by using feedforward gains. , 2015, , .		1
79	Flight Demonstration of Simple Preview Altitude Control Algorithm for Unmanned Airplane. Journal of Aircraft, 2017, 54, 1571-1579.	2.4	1
80	Observer-based continuous-time robust scaled- H_{∞} controller design with simultaneous optimization of scaling matrices. , 2017, , .		1
81	Continuous-time observer-based gain-scheduled output feedback controller design with simultaneous optimization of scaling matrices. , 2017, , .		1
82	Hardware-in-the-loop evaluation of an LPV sliding mode fixed control allocation scheme on the MuPAL-1± research aircraft. , 2017, , .		1
83	Conversion from Full-Order Controllers to Observer-Structured Controllers. , 2018, , .		1
84	Robust Gain-Scheduled Flight Controller via A New Formulation for Over-Bounding Scheduling Parameter Errors. IFAC-PapersOnLine, 2018, 51, 62-67.	0.9	1
85	Continuous-Time Gain-Scheduled H_{∞} Controllers with Causality for Scheduling Parameters via Parameter-Dependent Lyapunov Functions. , 2018, , .		1
86	Robust Attitude Control Design of Quad-Tilt-Wing UAV: A Structured μ -Synthesis Approach. , 2018, , .		1
87	Dual formulation of causal gain-scheduled output feedback controller design using parameter-dependent Lyapunov functions. SICE Journal of Control Measurement and System Integration, 2021, 14, 196-205.	0.7	1
88	Flight Test of Flight Controller for Arbitrary Maneuverability and Wind Gust Rejection. , 2006, , .		1
89	Pilot Assessment of Fault-Tolerant PID Flight Controller for Elevator Efficiency Reduction via Hardware-In-the-Loop Simulations. IFAC-PapersOnLine, 2020, 53, 14918-14923.	0.9	1
90	Conversion from Non-structured Controller to Observer-structured Controller for Linear Time-invariant Parameter-dependent Plant. Transactions of the Society of Instrument and Control Engineers, 2022, 58, 255-261.	0.2	1

#	ARTICLE	IF	CITATIONS
91	FLIGHT TEST OF IN-FLIGHT SIMULATOR CONTROLLER FOR SIMULTANEOUS SIMULATION OF GUST RESPONSE AND HANDLING RESPONSE. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 853-858.	0.4	0
92	Discrete-time feedforward controllers using prior external input information via descriptor system representation and GKYP lemma. , 2016, , .		0
93	Flight demonstration of Unmanned Airplane for Radiation Monitoring System with preview path-tracking controller. , 2016, , .		0
94	Discrete-Time H^{∞} Preview Feedforward Controller Using Uncertain Prior External Input Information via GKYP Lemma * *Supported by JSPS KAKENHI Grant Number 15K06159.. IFAC-PapersOnLine, 2017, 50, 1527-1532.	0.9	0
95	Discrete-time observer-based gain-scheduled output feedback controller design with simultaneous optimization of scaling matrices. , 2017, , .		0
96	State Feedback Synthesis for Discrete-time Linear Systems with Stochastic Parameters Guaranteeing Deterministic H_2 Performance and Stochastic Stability. IFAC-PapersOnLine, 2019, 52, 664-669.	0.9	0
97	Observer-based Scaled H^{∞} Control with Optimized State Estimation Performance. Transactions of the Society of Instrument and Control Engineers, 2021, 57, 101-109.	0.2	0
98	Passive Fault-Tolerant Flight Control Design Example for Elevator Efficiency Reduction Using Structured H^{∞} Control. , 2021, , .		0
99	Design and Performance Check of Gain-Scheduled Flight Controller Depending on Uncertain Scheduling Parameters for MuPAL-1. Journal of the Japan Society for Aeronautical and Space Sciences, 2020, 68, 12-23.	0.1	0
100	Parameter Estimation in Input Matrix Under Gain Constraints in Specified Frequency Ranges. IFAC-PapersOnLine, 2020, 53, 604-609.	0.9	0
101	Hardware-In-the-Loop Evaluation of a Robust C^{∞} Control Law on MuPAL-1 Research Aircraft. IFAC-PapersOnLine, 2020, 53, 14833-14838.	0.9	0