Noboru Sakamoto

List of Publications by Year
in descending order

71 papers	516 citations	758635 12 h-index	713013 21 g-index
71 all docs	71 docs citations	71 times ranked	320 citing authors

#	Article	IF	Citations
1	A Dynamical System View on Nonlinear Optimal Control Analysis and Design. Lecture Notes in Control and Information Sciences - Proceedings, 2022, , 3-10.	0.1	0
2	The turnpike property in nonlinear optimal control—A geometric approach. Automatica, 2021, 134, 109939.	3.0	5
3	Implementation Approach of Fractional Nonlinear Systems to Stable Manifold Method. IFAC-PapersOnLine, 2021, 54, 43-47.	0.5	0
4	Control of a Class of Underactuated Systems by Successive Submanifold Stabilization. IFAC-PapersOnLine, 2021, 54, 352-358.	0.5	0
5	Modeling of overturned multi-legged robot and leg-swing motion for recovery. The Proceedings of JSME Annual Conference on Robotics and Mechatronics (Robomec), 2021, 2021, 2P1-I02.	0.0	0
6	The turnpike property in the maximum hands-off control. , 2020, , .		2
7	Nonlinear Optimal Tracking Control for a Periodic Reference Signal. Transactions of the Society of Instrument and Control Engineers, 2020, 56, 243-248.	0.1	0
8	The turnpike property in nonlinear optimal control — A geometric approach. , 2019, , .		10
9	Nonlinear Optimal Control for Swing Up and Stabilization of the Acrobot via Stable Manifold Approach: Theory and Experiment. IEEE Transactions on Control Systems Technology, 2019, 27, 2374-2387.	3.2	16
10	Optimal Swing Up and Stabilization Control for Inverted Pendulum via Stable Manifold Method. IEEE Transactions on Control Systems Technology, 2018, 26, 708-715.	3.2	29
11	A combination of analytical and model predictive optimal methods for adaptive cruise control problem. , 2018, , .		4
12	2-Dimensional Dynamical Modeling and Control of Spherical Robot Driven by Inner Car. , 2018, , .		1
13	Data-Driven Nonlinear Optimal Control for Distributed Parameter Systems with Output Delay. IFAC-PapersOnLine, 2018, 51, 101-106.	0.5	0
14	Nonlinear gain-scheduled flight controller design via stable manifold method. Aerospace Science and Technology, 2018, 80, 301-308.	2.5	1
15	Control Augmentation System Design for Quad-Tilt-Wing Unmanned Aerial Vehicle via Robust Output Regulation Method. IEEE Transactions on Aerospace and Electronic Systems, 2017, 53, 357-369.	2.6	31
16	Nonlinear Optimal Control Design Considering a Class of System Constraints With Validation on a Magnetic Levitation System. , 2017, 1, 418-423.		20
17	Pilot induced oscillation suppression controller design via nonlinear optimal output regulation method. Aerospace Science and Technology, 2017, 68, 278-286.	2.5	24
18	Numerical Computational Improvement of the Stable-Manifold Method for Nonlinear Optimal Control * *This work is supported by the JSPS Kakenhi Grant Number JP15K06157 and the Nanzan University Pache Research Subsidy I-A-2 for the academic years 2016 and 2017.. IFAC-PapersOnLine, 2017, 50, 5103-5108.	0.5	1

#	Article	IF	Citations
19	Parallelization of search scheme in stable manifold method. , 2017, , .		0
20	Swing up and stabilization of the Acrobot via nonlinear optimal control based on stable manifold method. IFAC-PapersOnLine, 2016, 49, 374-379.	0.5	13
21	A general framework for constrained optimal control based on stable manifold method. , 2016, , .		5
22	Optimal Port Allocation for Nonlinear Distributed Parameter Systems**This work was supported by JSPS Grants-in-Aid for Scientific Research (C) No. 264204f 5, and JSPS Grants-in-Aid for Challenging Exploratory Research No. 26630197. N. Sakamoto was supported by Nanzan University Pache Research Subsidy I-A-2 for the 2015 academic year. IFAC-PapersOnLine, 2016, 49, 284-289.	0.5	0
23	Nonlinear Optimal Control in Catalytic Process via Stable Manifold Method. IFAC-PapersOnLine, 2015, 48, 250-255.	0.5	5
24	Nonlinear optimal stabilization of unstable periodic orbits. IFAC-PapersOnLine, 2015, 48, 215-220.	0.5	1
25	Robust Nonlinear H^{∞} Control Design via Stable Manifold Method. Mathematical Problems in Engineering, 2015, 2015, 1-8.	0.6	1
26	Swing-up and Stabilization Control of a Flexible Rotational Inverted Pendulum by Nonlinear Frequency Optimal Control. Transactions of the Society of Instrument and Control Engineers, 2015, 51, 148-154.	0.1	0
27	Center manifold method for the orbit design of the restricted three body problem. , 2015, , .		3
28	Pseudo random number generator based on the generalized Lorenz chaotic system. IFAC-PapersOnLine, 2015, 48, 257-261.	0.5	23
29	Optimal Servo Design for Lock-Up Slip Control for Torque Converter—Nonlinear Output Regulation Approach. IEEE Transactions on Control Systems Technology, 2015, 23, 1587-1593.	3.2	15
30	Abort recovery strategy for future vertical landing systems. Acta Astronautica, 2015, 116, 148-153.	1.7	1
31	Optimal Feedback Control of Nonlinear Distributed Parameter Systems Based on Model Reduction. Transactions of the Society of Instrument and Control Engineers, 2015, 51, 181-188.	0.1	1
32	Rapid Numerical Solution of Hamilton-Jacobi Equations in Stable Manifold Method. Transactions of the Institute of Systems Control and Information Engineers, 2015, 28, 32-39.	0.1	0
33	Nonlinear Controller Design Based on Invariant Manifold Theory. Lecture Notes in Control and Information Sciences, 2015, , 221-235.	0.6	0
34	Optimal control for control moment gyros &#x2014; Center-stable manifold approach. , 2014, , .		8
35	Nonlinear Luenberger observer design via invariant manifold computation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 37-42.	0.4	6
36	Slip Control of a Lock-up Clutch via Optimal Output Regulation for LPV Systems. Transactions of the Society of Instrument and Control Engineers, 2014, 50, 274-280.	0.1	0

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37	Optimal Control for Control Moment Gyros. Transactions of the Society of Instrument and Control Engineers, 2014, 50, 731-738.	0.1	1
38	Case studies on the application of the stable manifold approach for nonlinear optimal control design. Automatica, 2013, 49, 568-576.	3.0	49
39	Optimality of passivity-based controls for distributed port-Hamiltonian systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 146-151.	0.4	3
40	A recent progress in the optimal control design under various constraints. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 1506-1511.	0.4	4
41	Output Regulation Control Experiment for Inverted Pendulum (Nonlinear Control via Center) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Society of Mechanical Engineers, Part C, 2013, 79, 2373-2382.	0.2	0
42	Nonlinear Optimal Servo Control Design for PMSM with Inverter Voltage Norm Constraints. Transactions of the Institute of Systems Control and Information Engineers, 2013, 26, 252-260.	0.1	1
43	Passivity-based Boundary Controls of Flexible Beams with Large Deformations. Transactions of the Institute of Systems Control and Information Engineers, 2013, 26, 288-296.	0.1	0
44	Nonlinear Optimal Controller Designs Satisfying State and Input Norm Constraints. Transactions of the Society of Instrument and Control Engineers, 2013, 49, 345-352.	0.1	0
45	Energy Estimation in Numerical Scheme for Nonlinear Partial Differential Equations*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 132-137.	0.4	0
46	Swing-up and Stabilization of Inverted Pendulum by Nonlinear Optimal Control. Transactions of the Society of Instrument and Control Engineers, 2012, 48, 423-430.	0.1	2
47	The stable manifold approach for optimal swing up and stabilization of an inverted pendulum with input saturation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 8046-8051.	0.4	16
48	Iterative methods to compute center and center-stable manifolds with application to the optimal output regulation problem. , 2011, , .		18
49	Approximate solution method for the Hamilton-Jacobi equation based on stable manifold theory with applications. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 1224-1231.	0.4	0
50	Port-based modeling of magnetohydrodynamics equations for Tokamaks. , 2010, , .		0
51	CONTROLLING IDEAL TURBULENCE IN TIME-DELAYED CHUA'S CIRCUIT: STABILIZATION AND SYNCHRONIZATION. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2010, 20, 1351-1363.	0.7	10
52	Controlling ideal turbulence in time-delayed chua's circuits and an application to communications. , 2009, , .		3
53	Design of a Nonlinear Optimal Servo System for a Magnetic Levitation System. Transactions of the Society of Instrument and Control Engineers, 2009, 45, 388-390.	0.1	0
54	A Study on Controlling Ideal Turbulence: Stabilization and Synchronization of Time-delayed Chua's Circuits. Transactions of the Society of Instrument and Control Engineers, 2009, 45, 398-405.	0.1	0

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55	Analytical Approximation Method for the Center Manifold in the Nonlinear Output Regulation Problem. Transactions of the Society of Instrument and Control Engineers, 2009, 45, 451-458.	0.1	0
56	A butterfly-shaped localization set for the Lorenz attractor. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 2614-2617.	0.9	9
57	Analytical approximation method for the center manifold in the nonlinear output regulation problem. , 2008, , .		3
58	Analytical Approximation Methods for the Stabilizing Solution of the Hamilton–Jacobi Equation. IEEE Transactions on Automatic Control, 2008, 53, 2335-2350.	3.6	116
59	Pilot-Induced Oscillation Analysis with Rate Limiter. Nippon Kikai Gakkai Ronbunshu, C Hen/Transactions of the Japan Society of Mechanical Engineers, Part C, 2007, 73, 1059-1066.	0.2	2
60	An analytical approximation method for the stabilizing solution of the Hamilton-Jacobi equation based on stable manifold theory. Proceedings of the American Control Conference, 2007, , .	0.0	1
61	Model Predictive Controller Design to Suppress Rate-Limiter-Based Pilot-Induced Oscillations. Transactions of the Japan Society for Aeronautical and Space Sciences, 2007, 49, 239-245.	0.4	13
62	An Approximation Method for the Stabilizing Solution of the Hamilton-Jacobi Equation for Integrable Systems. Transactions of the Society of Instrument and Control Engineers, 2007, 43, 572-580.	0.1	0
63	An approximation method for the stabilizing solution of the Hamilton-Jacobi equation for integrable systems using Hamiltonian perturbation theory. , 2006, , .		1
64	Floquet-based chaos control for continuous-time systems with stability analysis. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 356, 316-323.	0.9	5
65	An Observer Design and Separation Principle for the Motion of the n-dimensional Rigid Body. Transactions of the Society of Instrument and Control Engineers, 2004, 40, 502-508.	0.1	0
66	Analysis of the Hamilton–Jacobi Equation in Nonlinear Control Theory by Symplectic Geometry. SIAM Journal on Control and Optimization, 2002, 40, 1924-1937.	1.1	24
67	Controller Design with Guarantee of Prescribed Gain and Phase Margins. Transactions of the Society of Instrument and Control Engineers, 1999, 35, 577-579.	0.1	9
68	A Design of Nonlinear High Gain Feedback Systems. Transactions of the Society of Instrument and Control Engineers, 1996, 32, 1637-1639.	0.1	0
69	Relation Between H^|^infin; Problem and Passivity Problem in Nonlinear Control Systems. Transactions of the Society of Instrument and Control Engineers, 1995, 31, 728-735.	0.1	0
70	Rotor imbalance suppression by optimal control. Optimal Control Applications and Methods, 0, , .	1.3	0
71	A study on global stabilization of periodic orbits in discrete-time chaotic systems by using symbolic dynamics. Kybernetika, 0, , 4-19.	0.0	0