

Toshimitsu Ushio

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4315324/publications.pdf>

Version: 2024-02-01

158
papers

1,047
citations

516710

16
h-index

552781

26
g-index

160
all docs

160
docs citations

160
times ranked

485
citing authors

#	ARTICLE	IF	CITATIONS
1	Abstraction-Based Symbolic Control Barrier Functions for Safety-Critical Embedded Systems. , 2022, 6, 1436-1441.		2
2	Optimal Control of Timed Petri Nets Under Temporal Logic Constraints with Generalized Mutual Exclusion. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2022, E105.A, 808-815.	0.3	2
3	A mobile robot controller using reinforcement learning under scLTL specifications with uncertainties. Asian Journal of Control, 2022, 24, 2916-2930.	3.0	2
4	Abstraction-Based Control Under Quantized Observation With Approximate Opacity Using Symbolic Control Barrier Functions. , 2022, 6, 2222-2227.		4
5	Collaborative Rover-copter Path Planning and Exploration with Temporal Logic Specifications Based on Bayesian Update Under Uncertain Environments. ACM Transactions on Cyber-Physical Systems, 2022, 6, 1-24.	2.5	4
6	Hyper-Labeled Transition System and Its Application to Planning Under Linear Temporal Logic Constraints. , 2022, 6, 2437-2442.		0
7	Dynamics of miners' decision making under taxation in blockchain. Nonlinear Theory and Its Applications IEICE, 2022, 13, 233-238.	0.6	0
8	A novel asymptotic stability condition for a delayed distributed order nonlinear composite system with uncertain fractional order. Journal of the Franklin Institute, 2022, 359, 10986-11006.	3.4	6
9	Learning-Based Bounded Synthesis for Semi-MDPs With LTL Specifications. , 2022, 6, 2557-2562.		0
10	Learning Self-Triggered Controllers With Gaussian Processes. IEEE Transactions on Cybernetics, 2021, 51, 6294-6304.	9.5	16
11	Game-Theoretic Approach to a Decision-Making Problem for Blockchain Mining. , 2021, 5, 1783-1788.		7
12	Continuous deep Q-learning with a simulator for stabilization of uncertain discrete-time systems. Nonlinear Theory and Its Applications IEICE, 2021, 12, 738-757.	0.6	1
13	Deadlock-free Symbolic Smith Controllers Based on Prediction for Nondeterministic Systems. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2021, , .	0.3	1
14	Modeling and Supervisory Control of Blockchain Forks. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2021, E104.A, 474-475.	0.3	1
15	A Bayesian Optimization Approach to Decentralized Event-Triggered Control. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2021, E104.A, 447-454.	0.3	1
16	Hopf Bifurcations of a Quadrotor with a Tilting Frame. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2021, E104.A, 632-635.	0.3	0
17	Game-theoretic Approach to a Decision-making Problem for Blockchain Mining. , 2021, , .		0
18	Event-triggered control for mitigating SIS spreading processes. Annual Reviews in Control, 2021, 52, 479-494.	7.9	7

#	ARTICLE	IF	CITATIONS
19	Stability analysis and control of decision-making of miners in blockchain. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2021, , .	0.3	1
20	Finite-Memory Supervisory Control of Discrete Event Systems for LTL[F] Specifications. IEEE Transactions on Automatic Control, 2021, , 1-1.	5.7	1
21	Attack Detection and Defense System Using an Unknown Input Observer for Cooperative Adaptive Cruise Control Systems. IEEE Access, 2021, 9, 148810-148820.	4.2	7
22	Supervisory Control of Communicating Timed Discrete Event Systems for State Avoidance Problem. , 2020, 4, 259-264.		6
23	Novel stability condition for delayed fractional-order composite systems based on vector Lyapunov function. Nonlinear Dynamics, 2020, 99, 1253-1267.	5.2	18
24	On-Line Supervisory Control for Surveillance under Partial Observation with scLTL Specifications. , 2020, , .		0
25	Reinforcement Learning of Control Policy for Linear Temporal Logic Specifications Using Limit-Deterministic Generalized BÄ¼chi Automata. , 2020, 4, 761-766.		15
26	WiP Abstract: Detection of False Injection Attacks Based on LTL for Fallback Control. , 2020, , .		3
27	On-Line Permissive Supervisory Control of Discrete Event Systems for scLTL Specifications. , 2020, 4, 530-535.		9
28	Effects of minersâ€™ location on blocks selection in blockchain. IEICE Communications Express, 2020, 9, 610-615.	0.4	0
29	Control of Timed Discrete Event Systems with Ticked Linear Temporal Logic Constraints. IFAC-PapersOnLine, 2020, 53, 2143-2148.	0.9	3
30	On-Line Synthesis of Permissive Supervisors for Partially Observed Discrete Event Systems under scLTL Constraints. IFAC-PapersOnLine, 2020, 53, 2130-2136.	0.9	0
31	Application of deep reinforcement learning to networked control systems with uncertain network delays. Nonlinear Theory and Its Applications IEICE, 2020, 11, 480-500.	0.6	5
32	Design of Event-Triggered Controllers Using Gaussian Processes. Transactions of the Institute of Systems Control and Information Engineers, 2020, 33, 219-228.	0.1	0
33	Control of Discrete-Time Chaotic Systems with Policy-Based Deep Reinforcement Learning. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2020, E103.A, 885-892.	0.3	0
34	On Stability of Consensus Control of Discrete-Time Multi-Agent Systems by Multiple Pinning Agents. , 2019, 3, 1038-1043.		2
35	A Symbolic Approach to the Self-Triggered Design for Networked Control Systems. , 2019, 3, 1050-1055.		9
36	Application of reinforcement learning to adaptive control of connected vehicles. Nonlinear Theory and Its Applications IEICE, 2019, 10, 443-454.	0.6	5

#	ARTICLE	IF	CITATIONS
37	Networked Control of Nonlinear Systems under Partial Observation Using Continuous Deep Q-Learning. , 2019, , .		1
38	Anti-jamming mobile control using QoS-based reinforcement learning. IEICE Communications Express, 2019, 8, 501-506.	0.4	1
39	Learning in Two-Player Matrix Games by Policy Gradient Lagging Anchor. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2019, E102.A, 708-711.	0.3	0
40	Application of Deep Reinforcement Learning to Control Problems. The Brain & Neural Networks, 2019, 26, 135-144.	0.1	1
41	Consensus Speed of Static Pinning Consensus Control of Multi-Agent Systems. , 2018, , .		1
42	Dynamic Pinning Consensus Control of Discrete-time Multi-agent Systems. , 2018, , .		1
43	Decentralized Event-Triggered Control of Composite Systems Using M-Matrices. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2018, E101.A, 1156-1161.	0.3	4
44	Deadlock-free output feedback controller design based on approximately abstracted observers. Nonlinear Analysis: Hybrid Systems, 2018, 30, 58-71.	3.5	11
45	Hierarchical Control of Concurrent Discrete Event Systems with Linear Temporal Logic Specifications. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2018, E101.A, 313-321.	0.3	3
46	Looking Back on My Research on Systems Engineering for 40 Years. Ieice Ess Fundamentals Review, 2018, 11, 151-154.	0.1	0
47	Dynamic Pinning Consensus Control of Multi-Agent Systems. , 2017, 1, 340-345.		13
48	Development of parallel linked quadrotor for increment of flight freedom, attitude control and improvement of transient response. Transactions of the JSME (in Japanese), 2017, 83, 17-00207-17-00207.	0.2	0
49	Detection of Mode Confusion in Human-Machine System Model with Temporal Information on Operations.. IFAC-PapersOnLine, 2017, 50, 9374-9379.	0.9	1
50	Supervisory Control of Partially Observed Quantitative Discrete Event Systems for Fixed-Initial-Credit Energy Problem. IEICE Transactions on Information and Systems, 2017, E100.D, 1166-1171.	0.7	7
51	Receding horizon control with iLQG method considering computational delay and its application to nonholonomic systems. , 2017, , .		0
52	Symbolic Design of Networked Control Systems with State Prediction. IEICE Transactions on Information and Systems, 2017, E100.D, 1158-1165.	0.7	5
53	Optimal Stabilizing Supervisor of Quantitative Discrete Event Systems under Partial Observation. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2016, E99.A, 475-482.	0.3	6
54	Reset control of pressure-drop oscillations in boiling micro-channel systems. , 2016, , .		3

#	ARTICLE	IF	CITATIONS
55	Symbolic control of systems with dead times using symbolic smith predictors. , 2016, , .		4
56	Optimal Stabilizing Controller for the Region of Weak Attraction under the Influence of Disturbances. IEICE Transactions on Information and Systems, 2016, E99.D, 1428-1435.	0.7	6
57	Dynamic event-triggered minimal-order observer for linear systems. , 2016, , .		3
58	A Bisimulation-Based Design of User Interface With Alerts Avoiding Automation Surprises. IEEE Transactions on Human-Machine Systems, 2016, 46, 317-323.	3.5	3
59	Subsidy-Based Control of Heterogeneous Multiagent Systems Modeled by Replicator Dynamics. IEEE Transactions on Automatic Control, 2016, 61, 3158-3163.	5.7	15
60	Optimal Digital Control with Uncertain Network Delay of Linear Systems Using Reinforcement Learning. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2016, E99.A, 454-461.	0.3	3
61	Adaptive Assignment of Deadline and Clock Frequency in Real-Time Embedded Control Systems. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2015, E98.A, 323-330.	0.3	0
62	RL-based optimal networked control considering network delay of discrete-time linear systems. , 2015, , .		3
63	Optimal directed control of discrete event systems with linear temporal logic constraints. , 2015, , .		1
64	Distributed event-triggered output feedback control with cloud-assisted observer. , 2015, , .		2
65	Learning an Optimal Control Policy for a Markov Decision Process Under Linear Temporal Logic Specifications. , 2015, , .		7
66	Prediction of limit cycles in nonlinear systems with reset controllers using describing function. , 2015, , .		3
67	Observer-based Similarity Output Feedback Control of Cyber-Physical Systems**This work was supported by JSPS KAKENHI No. 15K14007.. IFAC-PapersOnLine, 2015, 48, 248-253.	0.9	6
68	SMT-based scheduling of distributed mediator for web service composition. , 2015, , .		1
69	Self-Triggered Predictive Control with Time-Dependent Activation Costs of Mixed Logical Dynamical Systems. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2014, E97.A, 476-483.	0.3	7
70	Game theoretic approach to the stabilization of heterogeneous multiagent systems using subsidy. , 2013, , .		1
71	Effective Combination of Search Policy Based on Probability and Entropy for Heterogeneous Mobile Sensors. , 2013, , .		2
72	A Control Method of Dynamic Selfish Routing Based on a State-Dependent Tax. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2013, E96.A, 1794-1802.	0.3	8

#	ARTICLE	IF	CITATIONS
73	Evolutionarily and Neutrally Stable Strategies in Multicriteria Games. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2013, E96.A, 814-820.	0.3	5
74	Co-scheduling of Communication and Control of Multi-Hop Control Networks. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2013, E96.A, 878-885.	0.3	3
75	Temperature-aware Frequency Assignment for MP-SoC using Potential Games. Transactions of the Institute of Systems Control and Information Engineers, 2013, 26, 147-155.	0.1	2
76	Capitation tax based control of multipopulation replicator dynamics under incomplete information. , 2012, , .		1
77	Verification of Codiagnosability for Discrete Event Systems Modeled by Mealy Automata With Nondeterministic Output Functions. IEEE Transactions on Automatic Control, 2012, 57, 798-804.	5.7	46
78	Poster Abstract: Design of Modified Observer to Reduce State Estimation Error Caused by Job Skipping in Cyber-Physical Systems. , 2012, , .		1
79	Potential Game Based Distributed Control for Voronoi Coverage Problems with Obstacle Avoidance. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2012, E95.A, 1156-1163.	0.3	4
80	Optimal Arbitration of Control Tasks by Job Skipping in Cyber-Physical Systems. , 2011, , .		9
81	Voronoi coverage control with time-driven communication for mobile sensing networks with obstacles. , 2011, , .		3
82	Potential Game Theoretic Approach to Power-Aware Mobile Sensor Coverage Problem. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2011, E94-A, 929-936.	0.3	9
83	Optimal Configuration for Multiversion Real-Time Systems Using Slack Based Schedulability. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2010, E93-A, 2709-2716.	0.3	0
84	Decentralized diagnosis of discrete event systems modeled by Mealy automata with nondeterministic output functions. , 2010, , .		3
85	Optimal Resource Allocation under Fair QoS in Multi-tier Server Systems. Transactions of the Institute of Systems Control and Information Engineers, 2010, 23, 39-45.	0.1	1
86	Diagnosis of Discrete Event Systems Modeled by Mealy Automata with Nondeterministic Output Functions. Transactions of the Institute of Systems Control and Information Engineers, 2010, 23, 128-135.	0.1	0
87	Adaptive Arbitration of Fair QoS Based Resource Allocation in Multi-Tier Computing Systems. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2010, E93-A, 1678-1683.	0.3	2
88	Replicator dynamics with Pigovian subsidy and capitation tax. Nonlinear Analysis: Theory, Methods & Applications, 2009, 71, e818-e826.	1.1	15
89	Adaptive fair resource management with an arbiter for multi-tier computing systems. , 2009, , .		0
90	A control method of selfish routing based on replicator dynamics with capitation tax and subsidy. , 2009, , .		2

#	ARTICLE	IF	CITATIONS
109	COMPUTATION OF CLOSED, CONTROLLABLE, AND WEAKLY OBSERVABLE SUBLANGUAGES FOR TIMED DISCRETE EVENT SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 139-144.	0.4	0
110	Control-invariance of hybrid systems with forcible events. Automatica, 2005, 41, 669-675.	5.0	8
111	Maximally permissive mutually and globally nonblocking supervision with application to switching control. Automatica, 2005, 41, 1299-1312.	5.0	13
112	Supervisory Control of a Class of Concurrent Discrete Event Systems Under Partial Observation. Discrete Event Dynamic Systems: Theory and Applications, 2005, 15, 7-32.	1.5	7
113	PID congestion control in ATM with propagation delay. Electronics and Communications in Japan, 2004, 87, 90-99.	0.1	1
114	Decentralized Supervisory Control of Discrete Event Systems Based on Reinforcement Learning. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 367-372.	0.4	1
115	Asymptotic Stabilization and Synchronization of Parametric LCR Resonant Circuit using Characteristics of its Coefficients. IEJ Transactions on Electronics, Information and Systems, 2004, 124, 1141-1147.	0.2	0
116	State feedback control of timed hybrid Petri nets. Electronics and Communications in Japan, Part III: Fundamental Electronic Science (English Translation of Denshi Tsushin Gakkai Ronbunshi), 2003, 86, 1-7.	0.1	0
117	Effective computation of an $L_m(G)$ -closed, controllable, and observable sublanguage arising in supervisory control. Systems and Control Letters, 2003, 49, 191-200.	2.3	44
118	A high-dimensional chaotic discrete-time neuron model and bursting phenomena. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 308, 41-46.	2.1	8
119	ANALYSIS OF APERIODIC OSCILLATIONS IN A FLOW MODEL OF A SWITCHING SYSTEM. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2003, 13, 981-994.	1.7	4
120	STABILIZATION OF UNSTABLE PERIODIC ORBITS OF CHAOTIC DISCRETE-TIME SYSTEMS USING PREDICTION-BASED FEEDBACK CONTROL. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2002, 12, 439-446.	1.7	29
121	DELAYED FEEDBACK CONTROL WITH A MINIMAL-ORDER OBSERVER FOR STABILIZATION OF CHAOTIC DISCRETE-TIME SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2002, 12, 1047-1055.	1.7	17
122	A modified normality condition for decentralized supervisory control of discrete event systems. Automatica, 2002, 38, 185-189.	5.0	16
123	Strong Co-Observability for Decentralized Supervisory Control of Discrete Event Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2001, 34, 127-132.	0.4	0
124	Chaos communication using unknown input observers. Electronics and Communications in Japan, Part III: Fundamental Electronic Science (English Translation of Denshi Tsushin Gakkai Ronbunshi), 2001, 84, 21-27.	0.1	13
125	Discrete-time Hogg-Huberman strategy with net bias. Electronics and Communications in Japan, Part III: Fundamental Electronic Science (English Translation of Denshi Tsushin Gakkai Ronbunshi), 2000, 83, 31-37.	0.1	2
126	Scrambling method using chaotic discrete-time systems. Electronics and Communications in Japan, Part III: Fundamental Electronic Science (English Translation of Denshi Tsushin Gakkai Ronbunshi), 2000, 83, 38-43.	0.1	1

#	ARTICLE	IF	CITATIONS
127	Control of chaos in switched arrival systems with N buffers. Electronics and Communications in Japan, Part III: Fundamental Electronic Science (English Translation of Denshi Tsushin Gakkai) Tj ETQq1 1 0.7843140gBT /Overlock 10 Tf 50 457	0.784314	0
128	Prediction-based control of chaos. Physics Letters, Section A: General, Atomic and Solid State Physics, 1999, 264, 30-35.	2.1	91
129	A packet routing method based on a Hogg-Huberman strategy. Electronics and Communications in Japan, 1999, 82, 16-23.	0.1	0
130	Chaos coding with memory using many chaotic discrete-time systems. Electronics and Communications in Japan, Part III: Fundamental Electronic Science (English Translation of Denshi) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 457	0.0	0
131	Delayed feedback control with nonlinear estimation in chaotic discrete-time systems. Physics Letters, Section A: General, Atomic and Solid State Physics, 1998, 247, 112-118.	2.1	37
132	A Packet Routing Method Based on a Hogg-Huberman Strategy. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 757-762.	0.4	2
133	Chaos and Robots. Control of Chaos.. Journal of the Robotics Society of Japan, 1997, 15, 1114-1117.	0.1	0
134	Controlling chaotic discrete-time systems via nonlinear feedback. Electronics and Communications in Japan, Part III: Fundamental Electronic Science (English Translation of Denshi Tsushin Gakkai) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 457	0.0	0
135	Maximally permissive controllers for controlled time petri nets. Electronics and Communications in Japan, Part III: Fundamental Electronic Science (English Translation of Denshi Tsushin Gakkai) Tj ETQq1 1 0.7843140gBT /Overlock 10 Tf 50 457	0.784314	0
136	Command-Based Supervisory Control of Discrete Event Systems. Transactions of the Society of Instrument and Control Engineers, 1996, 32, 429-431.	0.2	0
137	Fault Diagnosis in Discrete Event Systems via State and Event Observations. Transactions of the Society of Instrument and Control Engineers, 1996, 32, 750-757.	0.2	0
138	Stabilization and blocking in state feedback control of discrete event systems. Discrete Event Dynamic Systems: Theory and Applications, 1995, 5, 33-57.	1.5	1
139	Controlling chaos in a switched arrival system. Systems and Control Letters, 1995, 26, 335-339.	2.3	47
140	Chaotic synchronization and controlling chaos based on contraction mappings. Physics Letters, Section A: General, Atomic and Solid State Physics, 1995, 198, 14-22.	2.1	63
141	Decentralized control of chaos in nonlinear networks. Physics Letters, Section A: General, Atomic and Solid State Physics, 1995, 198, 327-332.	2.1	8
142	Supervisory control using augmented languages in discrete event systems. Discrete Event Dynamic Systems: Theory and Applications, 1994, 4, 5-22.	1.5	2
143	Decentralized state feedback control of discrete event systems. Systems and Control Letters, 1994, 22, 369-375.	2.3	22
144	Synthesis of decentralized state feedbacks for large-scale discrete event systems. Electronics and Communications in Japan, Part III: Fundamental Electronic Science (English Translation of Denshi) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 457	0.0	0

#	ARTICLE	IF	CITATIONS
145	Controllability of predicates and languages in discrete-event systems. International Journal of Systems Science, 1992, 23, 1777-1783.	5.5	1
146	Computation of the Supremal Controllable Sublanguage Using an Augmented Language. Transactions of the Society of Instrument and Control Engineers, 1992, 28, 872-878.	0.2	0
147	Feedback logic for discrete event systems with arbitrary control patterns. International Journal of Control, 1990, 52, 159-174.	1.9	9
148	Controllability and control-invariance in discrete-event systems. International Journal of Control, 1989, 50, 1507-1515.	1.9	9
149	Several Properties of State Feedbacks in Discrete Event Systems. Transactions of the Society of Instrument and Control Engineers, 1989, 25, 552-557.	0.2	0
150	Controllable Firing Sequences in Event-Driven Systems. Transactions of the Society of Instrument and Control Engineers, 1988, 24, 156-161.	0.2	4
151	Simple example of digital control systems with chaotic rounding errors. International Journal of Control, 1987, 45, 17-31.	1.9	6
152	Cell simplex degeneracy, Liapunov function and stability of simple cell mapping systems. International Journal of Non-Linear Mechanics, 1986, 21, 183-195.	2.6	4
153	Chaos induced by the generalized Euler method. International Journal of Systems Science, 1986, 17, 669-678.	5.5	4
154	Chaotic behavior in piecewise-linear sampled-data control systems. International Journal of Non-Linear Mechanics, 1985, 20, 493-506.	2.6	26
155	Chaotic Behavior in Pulse-Width Modulated Feedback Systems. Transactions of the Society of Instrument and Control Engineers, 1985, 21, 539-545.	0.2	1
156	Chaos in Piecewise-Linear Sampled-Data Control Systems. Transactions of the Society of Instrument and Control Engineers, 1984, 20, 486-491.	0.2	0
157	Chaos in non-linear sampled-data control systems. International Journal of Control, 1983, 38, 1023-1033.	1.9	34
158	Output Feedback Controller Design with Symbolic Observers for Cyber-physical Systems. Electronic Proceedings in Theoretical Computer Science, EPTCS, 0, 232, 37-51.	0.8	5