

Anh-Tu Nguyen

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7006471/publications.pdf>

Version: 2024-02-01

74
papers

1,771
citations

304602

22
h-index

289141

40
g-index

74
all docs

74
docs citations

74
times ranked

1042
citing authors

#	ARTICLE	IF	CITATIONS
1	Fuzzy Control Systems: Past, Present and Future. IEEE Computational Intelligence Magazine, 2019, 14, 56-68.	3.4	214
2	Driver-Automation Cooperative Approach for Shared Steering Control Under Multiple System Constraints: Design and Experiments. IEEE Transactions on Industrial Electronics, 2017, 64, 3819-3830.	5.2	153
3	Sensor Reduction for Driver-Automation Shared Steering Control via an Adaptive Authority Allocation Strategy. IEEE/ASME Transactions on Mechatronics, 2018, 23, 5-16.	3.7	95
4	Driver-Automation Cooperation Oriented Approach for Shared Control of Lane Keeping Assist Systems. IEEE Transactions on Control Systems Technology, 2019, 27, 1962-1978.	3.2	95
5	Cooperative Trajectory Planning for Haptic Shared Control Between Driver and Automation in Highway Driving. IEEE Transactions on Industrial Electronics, 2019, 66, 9846-9857.	5.2	88
6	Fuzzy Static Output Feedback Control for Path Following of Autonomous Vehicles With Transient Performance Improvements. IEEE Transactions on Intelligent Transportation Systems, 2020, 21, 3069-3079.	4.7	68
7	Optimal control based algorithms for energy management of automotive power systems with battery/supercapacitor storage devices. Energy Conversion and Management, 2014, 87, 410-420.	4.4	64
8	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
9	Fuzzy steering control for autonomous vehicles under actuator saturation: Design and experiments. Journal of the Franklin Institute, 2018, 355, 9374-9395.	1.9	62
10	Unknown Input Observer Based Approach for Distributed Tube-Based Model Predictive Control of Heterogeneous Vehicle Platoons. IEEE Transactions on Vehicular Technology, 2021, 70, 2930-2944.	3.9	62
11	Gain-scheduled static output feedback control for saturated LPV systems with bounded parameter variations. Automatica, 2018, 89, 420-424.	3.0	59
12	Robust Set-Invariance Based Fuzzy Output Tracking Control for Vehicle Autonomous Driving Under Uncertain Lateral Forces and Steering Constraints. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 5849-5860.	4.7	47
13	A Multiple-Parameterization Approach for local stabilization of constrained Takagi-Sugeno fuzzy systems with nonlinear consequents. Information Sciences, 2020, 506, 295-307.	4.0	45
14	Unknown Input Observers for Simultaneous Estimation of Vehicle Dynamics and Driver Torque: Theoretical Design and Hardware Experiments. IEEE/ASME Transactions on Mechatronics, 2019, 24, 2508-2518.	3.7	44
15	Anti-windup based dynamic output feedback controller design with performance consideration for constrained Takagi-Sugeno systems. Engineering Applications of Artificial Intelligence, 2015, 40, 76-83.	4.3	38
16	LMI-based control synthesis of constrained Takagi-Sugeno fuzzy systems subject to	3.5	33
17	Takagi-Sugeno Fuzzy Unknown Input Observers to Estimate Nonlinear Dynamics of Autonomous Ground Vehicles: Theory and Real-Time Verification. IEEE/ASME Transactions on Mechatronics, 2021, 26, 1328-1338.	3.7	32
18	A Unified Framework for Asymptotic Observer Design of Fuzzy Systems With Unmeasurable Premise Variables. IEEE Transactions on Fuzzy Systems, 2021, 29, 2938-2948.	6.5	31

#	ARTICLE	IF	CITATIONS
19	Lyapunov-based robust control design for a class of switching nonlinear systems subject to input saturation: application to engine control. IET Control Theory and Applications, 2014, 8, 1789-1802.	1.2	30
20	Static output feedback design for a class of constrained Takagi-Sugeno fuzzy systems. Journal of the Franklin Institute, 2017, 354, 2856-2870.	1.9	28
21	Human-machine shared control for vehicle lane keeping systems: a Lyapunov-based approach. IET Intelligent Transport Systems, 2019, 13, 63-71.	1.7	28
22	LPV Static Output Feedback for Constrained Direct Tilt Control of Narrow Tilting Vehicles. IEEE Transactions on Control Systems Technology, 2020, 28, 661-670.	3.2	24
23	Takagi-Sugeno fuzzy observer design for nonlinear descriptor systems with unmeasured premise variables and unknown inputs. International Journal of Robust and Nonlinear Control, 2021, 31, 8353-8372.	2.1	24
24	Constrained Output-Feedback Control for Discrete-Time Fuzzy Systems With Local Nonlinear Models Subject to State and Input Constraints. IEEE Transactions on Cybernetics, 2021, 51, 4673-4684.	6.2	21
25	Avoiding Unmeasured Premise Variables in Designing Unknown Input Observers for Takagi-Sugeno Fuzzy Systems. , 2021, 5, 79-84.		21
26	A New Scheme for Haptic Shared Lateral Control in Highway Driving Using Trajectory Planning. IFAC-PapersOnLine, 2017, 50, 13834-13840.	0.5	20
27	Shared lateral control with on-line adaptation of the automation degree for driver steering assist system: A weighting design approach. , 2015, , .		18
28	Simultaneous Design of Parallel Distributed Output Feedback and Anti-windup Compensators for Constrained Takagi-Sugeno Fuzzy Systems. Asian Journal of Control, 2016, 18, 1641-1654.	1.9	18
29	An augmented system approach for LMI-based control design of constrained Takagi-Sugeno fuzzy systems. Engineering Applications of Artificial Intelligence, 2017, 61, 96-102.	4.3	18
30	Simultaneous Estimation of Vehicle Lateral Dynamics and Driver Torque using LPV Unknown Input Observer. IFAC-PapersOnLine, 2018, 51, 13-18.	0.5	16
31	Nonlinear Tracking Control with Reduced Complexity of Serial Robots: A Robust Fuzzy Descriptor Approach. International Journal of Fuzzy Systems, 2019, 21, 1038-1050.	2.3	16
32	Human-Machine Shared Driving Control for Semi-Autonomous Vehicles Using Level of Cooperativeness. Sensors, 2021, 21, 4647.	2.1	15
33	LMI-Based Stability Analysis for Piecewise Multi-affine Systems. IEEE Transactions on Fuzzy Systems, 2017, 25, 707-714.	6.5	14
34	Simultaneous Estimation of State and Unknown Input With L_{∞} Guarantee on Error-Bounds for Fuzzy Descriptor Systems. , 2019, 3, 1020-1025.		11
35	Delayed nonquadratic L_{∞} control design for switching uncertain system: Application for turbocharged gasoline air system control. , 2012, , .	4.0	11
36	Robust H_{∞} control design for switching uncertain system: Application for turbocharged gasoline air system control. , 2012, , .		10

#	ARTICLE	IF	CITATIONS
37	Online adaptation of the authority level for shared lateral control of driver steering assist system using dynamic output feedback controller. , 2015, , .		10
38	Improved LMI Conditions for Local Quadratic Stabilization of Constrained Takagi-Sugeno Fuzzy Systems. International Journal of Fuzzy Systems, 2017, 19, 225-237.	2.3	10
39	On the Effective Use of Vehicle Sensors for Automatic Lane Keeping via LPV Static Output Feedback Control. IFAC-PapersOnLine, 2017, 50, 13808-13815.	0.5	10
40	Equivalent-Input-Disturbance-Based Dynamic Tracking Control for Soft Robots via Reduced-Order Finite-Element Models. IEEE/ASME Transactions on Mechatronics, 2022, 27, 4078-4089.	3.7	8
41	Takagi-Sugeno Model-based Steering Control for Autonomous Vehicles with Actuator Saturation**This work has been done in the framework of the CoCoVeA research program, funded by the National Research Agency. This work was also sponsored by the International Campus on Safety and Intermodality in Transportation, the Nord-Pas-de-Calais Region, the European Community, the Regional Delegation for Research and Technology, the Ministry of Higher Education and Research, and the French National Center for Scientific. IFAC-PapersOnLine, 2016, 49, 206-211.	0.5	7
42	Stabilizing unstable biomechanical model to understand sitting stability for persons with spinal cord injury. IFAC-PapersOnLine, 2020, 53, 8001-8006.	0.5	7
43	A comparison of different upper-bound inequalities for the membership functions derivative. IFAC-PapersOnLine, 2017, 50, 3001-3006.	0.5	6
44	Input-Constrained LPV Output Feedback Control for Path Following of Autonomous Ground Vehicles. , 2018, , .		6
45	Adaptive gain-scheduling control for continuous-time systems with polytopic uncertainties: An LMI-based approach. Automatica, 2021, 133, 109856.	3.0	5
46	A sufficient condition to design unknown input observers for nonlinear systems with arbitrary relative degree. International Journal of Robust and Nonlinear Control, 2022, 32, 8331-8348.	2.1	5
47	Control of SISO non-affine-in-control discrete-time systems using Takagi-Sugeno models. IFAC-PapersOnLine, 2019, 52, 79-84.	0.5	4
48	Designing Fuzzy Descriptor Observer with Unmeasured Premise Variables for Head-Two-Arms-Trunk System. IFAC-PapersOnLine, 2020, 53, 8007-8012.	0.5	4
49	Reduced-Complexity Affine Representation for Takagi-Sugeno Fuzzy Systems. IFAC-PapersOnLine, 2020, 53, 8031-8036.	0.5	4
50	Robust Zonotopic Observer Design: Avoiding Unmeasured Premise Variables for Takagi-Sugeno Fuzzy Systems. IFAC-PapersOnLine, 2021, 54, 68-73.	0.5	4
51	Human-Machine Shared Control for Semi-Autonomous Vehicles Using Level of Cooperativeness. , 2020, , .		4
52	Takagi-Sugeno fuzzy descriptor approach for trajectory control of a 2-DOF serial manipulator. , 2018, , .		3
53	Fuzzy descriptor tracking control with guaranteed L_∞ error-bound for robot manipulators. Transactions of the Institute of Measurement and Control, 2021, 43, 1404-1415.	1.1	3
54	Reference-Free Human-Automation Shared Control for Obstacle Avoidance of Automated Vehicles. , 2020, , .		3

#	ARTICLE	IF	CITATIONS
55	Membership Functions Integration Approach for State Feedback Control of T-S Fuzzy Systems. International Journal of Fuzzy Systems, 2022, 24, 2931-2945.	2.3	3
56	Zonotopic observer designs for uncertain Takagi-Sugeno fuzzy systems. Engineering Applications of Artificial Intelligence, 2022, 114, 105126.	4.3	3
57	Non-quadratic approach for control design of constrained Takagi-Sugeno fuzzy systems subject to persistent disturbances. , 2015, , .		2
58	Nonlinear Static Output Feedback Control for Human Heart Rate during Treadmill Exercise. , 2018, , .		2
59	A Robust Descriptor Approach for Nonlinear Tracking Control of Serial Robots. , 2018, , .		2
60	Multiple Controller Switching Concept for Human-Machine Shared Control of Lane Keeping Assist Systems. , 2018, , .		2
61	LMI-based 2-DoF control design of a manipulator via T-S descriptor approach. IFAC-PapersOnLine, 2018, 51, 102-107.	0.5	2
62	Comparison of Two Robust Static Output Feedback H_{∞} Design Approaches for Car Lateral Control. , 2019, , .		2
63	Practical approach of input delay nonlinear systems: Application to spinal cord injury sitting stability. IFAC-PapersOnLine, 2019, 52, 67-72.	0.5	2
64	Disturbance-Observer Based Tracking Control of Industrial SCARA Robot Manipulators. , 2019, , .		2
65	Simultaneous Estimation of State and Unknown Input for TS Fuzzy Systems with Unmeasured Premise Variables. , 2020, , .		2
66	Robust H_{∞} control for the turbocharged air system using the multiple model approach. , 2012, , .		1
67	Simultaneous LMI-based design of dynamic output feedback controller and anti-windup compensator for constrained Takagi-Sugeno fuzzy systems subject to persistent disturbances. , 2015, , .		1
68	Robust Observer-Based Tracking Control Design for Power-Assisted Wheelchairs. IFAC-PapersOnLine, 2019, 52, 61-66.	0.5	1
69	Control Synthesis for Fuzzy Systems with Local Nonlinear Models Subject to Actuator Saturation. , 2019, , .		1
70	Set-Invariance Based Fuzzy Output Tracking Control for Vehicle Autonomous Driving under Uncertain Lateral Forces and Steering Constraints. , 2020, , .		1
71	Local Sampled-Data Gain-Scheduling Control of quasi-LPV Systems. IFAC-PapersOnLine, 2021, 54, 86-91.	0.5	1
72	Takagi-Sugeno Fuzzy Fault Detector Design with Finite-Frequency Specifications for Autonomous Ground Vehicles. IFAC-PapersOnLine, 2021, 54, 195-200.	0.5	1

#	ARTICLE	IF	CITATIONS
73	LMI-based adaptive control for uncertain polytopic systems. , 2016, , .		0
74	Robust Feedback Linearization Approach for Fuel-Optimal Oriented Control of Turbocharged Spark-Ignition Engines. , 2020, , .		0