

# Feng Xu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5762582/publications.pdf>

Version: 2024-02-01

42  
papers

653  
citations

567144

15  
h-index

610775

24  
g-index

43  
all docs

43  
docs citations

43  
times ranked

399  
citing authors

#	ARTICLE	IF	CITATIONS
1	Recursive sliding mode control with adaptive disturbance observer for a linear motor positioner. Mechanical Systems and Signal Processing, 2021, 146, 107014.	4.4	105
2	Actuator-fault detection and isolation based on set-theoretic approaches. Journal of Process Control, 2014, 24, 947-956.	1.7	46
3	Adaptive sliding mode control for uncertain Euler–Lagrange systems with input saturation. Journal of the Franklin Institute, 2021, 358, 8356-8376.	1.9	43
4	Mixed Active/Passive Robust Fault Detection and Isolation Using Set-Theoretic Unknown Input Observers. IEEE Transactions on Automation Science and Engineering, 2018, 15, 863-871.	3.4	40
5	Generalized set-theoretic unknown input observer for LPV systems with application to state estimation and robust fault detection. International Journal of Robust and Nonlinear Control, 2017, 27, 3812-3832.	2.1	38
6	Set-theoretic methods in robust detection and isolation of sensor faults. International Journal of Systems Science, 2015, 46, 2317-2334.	3.7	29
7	Sensor-fault tolerance using robust MPC with set-based state estimation and active fault isolation. International Journal of Robust and Nonlinear Control, 2017, 27, 1260-1283.	2.1	28
8	Robust fault detection and isolation based on zonotopic unknown input observers for discrete-time descriptor systems. Journal of the Franklin Institute, 2019, 356, 5293-5314.	1.9	27
9	Observer-based asymptotic active fault diagnosis: A two-layer optimization framework. Automatica, 2021, 128, 109558.	3.0	26
10	Robust Fault Detection and Set-Theoretic UIO for Discrete-Time LPV Systems With State and Output Equations Scheduled by Inexact Scheduling Variables. IEEE Transactions on Automatic Control, 2019, 64, 4982-4997.	3.6	25
11	A novel design of unknown input observers using set-theoretic methods for robust fault detection. , 2016, , .		21
12	Conservatism comparison of set-based robust fault detection methods: Set-theoretic UIO and interval observer cases. Automatica, 2019, 105, 307-313.	3.0	20
13	Set-based guaranteed active fault diagnosis for LPV systems with unknown bounded uncertainties. Automatica, 2021, 128, 109602.	3.0	20
14	Invariant Set-Based Analysis of Minimal Detectable Fault for Discrete-Time LPV Systems With Bounded Uncertainties. IEEE Access, 2019, 7, 152564-152575.	2.6	17
15	ZKF-based optimal robust fault estimation of descriptor LPV systems with measurement error-affected scheduling variables. ISA Transactions, 2019, 94, 119-134.	3.1	16
16	Combining set-theoretic UIO and invariant sets for optimal guaranteed robust fault detection and isolation. Journal of Process Control, 2019, 78, 155-169.	1.7	15
17	A Novel Online Active Fault Diagnosis Method Based on Invariant Sets. , 2021, 5, 457-462.		15
18	Optimal robust fault detection of discrete-time LPV systems with measurement error-affected scheduling variables combining ZKF and pQP. International Journal of Robust and Nonlinear Control, 2020, 30, 6782-6802.	2.1	13

#	ARTICLE	IF	CITATIONS
19	Design of optimal interval observers using set-theoretic methods for robust state estimation. International Journal of Robust and Nonlinear Control, 2020, 30, 3692-3705.	2.1	12
20	A Novel Set-Theoretic Interval Observer for Discrete Linear Time-Invariant Systems. IEEE Transactions on Automatic Control, 2021, 66, 773-780.	3.6	12
21	Chattering-free adaptive sliding-mode control of nonlinear systems with unknown disturbances. Computers and Electrical Engineering, 2021, 96, 107538.	3.0	10
22	Improvements on stability conditions and control design of Takagi-Sugeno fuzzy descriptor systems. ISA Transactions, 2021, , .	3.1	7
23	Admissibility Analysis and Robust $H_{\infty}$ Control for T-S Fuzzy Descriptor Systems With Structured Parametric Uncertainties. IEEE Transactions on Fuzzy Systems, 2021, 29, 3192-3200.	6.5	7
24	Invariant set-based robust fault detection and optimal fault estimation for discrete-time LPV systems with bounded uncertainties. International Journal of Systems Science, 2019, 50, 2962-2978.	3.7	6
25	Robust state estimation and fault detection combining unknown input observer and set-membership approach. , 2016, , .		5
26	Modeling and Control of Free-Floating Space Manipulator Using the T-S Fuzzy Descriptor System Approach. , 2019, , .		5
27	Interval set-membership estimation for continuous linear systems. International Journal of Robust and Nonlinear Control, 2020, 30, 5305-5321.	2.1	5
28	Multiple actuator-fault detectability analysis using invariant sets for discrete-time LPV systems. International Journal of Systems Science, 2020, 51, 3451-3470.	3.7	5
29	Minimal Detectable and Isolable Faults of Active Fault Diagnosis. IEEE Transactions on Automatic Control, 2023, 68, 1138-1145.	3.6	4
30	Analysis of set-theoretic unknown input observer and interval observer in robust fault detection. , 2016, , .		3
31	LPV Model-Based Gain-Scheduled Control of a Space Manipulator. , 2018, , .		3
32	Set-based Active Fault Diagnosis for Discrete-time Linear Descriptor Systems. , 2019, , .		3
33	Adaptive chattering-free terminal sliding mode control for a coordinate measuring machine system. Computers and Electrical Engineering, 2021, 96, 107486.	3.0	3
34	Interval Observer for Discrete Periodic Time-varying Descriptor Systems. IFAC-PapersOnLine, 2020, 53, 4493-4498.	0.5	3
35	Zonotopic Unknown Input Observer of Discrete-time Descriptor Systems for State Estimation and Robust Fault Detection. IFAC-PapersOnLine, 2018, 51, 307-313.	0.5	2
36	A Novel RPI Set Computation Method for Discrete-time LPV Systems with Bounded Uncertainties. , 2019, , .		2

#	ARTICLE	IF	CITATIONS
37	Generalized set-theoretic interval observer using element-wise nonnegativity transformation. Automatica, 2021, 125, 109452.	3.0	2
38	Reinforcement learning-based integrated active fault diagnosis and tracking control. ISA Transactions, 2023, 132, 364-376.	3.1	2
39	Invariant-set based minimal detectable fault computation of discrete-time LPV systems with bounded uncertainties. , 2019, , .		1
40	Admissibility Analysis and Robust Stabilization via State Feedback for Uncertain T-S Fuzzy Descriptor Systems. , 2020, , .		0
41	Robust Fault Detection and Isolation of Discrete-Time LPV Systems Combining Set-theoretic UIO and Invariant Sets. IFAC-PapersOnLine, 2020, 53, 724-729.	0.5	0
42	Trigonometric-Type Sliding Mode Control With Exact Convergence Time. , 2022, 6, 2389-2394.		0