

# Zhenhua Wang

## List of Publications by Year in descending order

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83  
papers

2,014  
citations

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g-index

83  
all docs

83  
docs citations

83  
times ranked

940  
citing authors

| #  | ARTICLE                                                                                                                                                                            | IF  | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 1  | Interval-Observer-Based Fault Detection and Isolation Design for T-S Fuzzy System Based on Zonotope Analysis. IEEE Transactions on Fuzzy Systems, 2022, 30, 945-955.               | 6.5 | 26        |
| 2  | Functional Interval Observer for Discrete-Time Switched Descriptor Systems. IEEE Transactions on Automatic Control, 2022, 67, 2497-2504.                                           | 3.6 | 27        |
| 3  | Interval estimation based on the reduced-order observer and peak-to-peak analysis. International Journal of Control, 2022, 95, 2876-2884.                                          | 1.2 | 13        |
| 4  | On prescribed-time functional observers of linear descriptor systems with unknown input. International Journal of Control, 2022, 95, 3137-3147.                                    | 1.2 | 5         |
| 5  | Zonotopic Kalman Filter-Based Interval Estimation for Discrete-Time Linear Systems With Unknown Inputs. , 2022, 6, 806-811.                                                        |     | 8         |
| 6  | Fault Symptoms Generation via Reachable Set Estimation. Lecture Notes in Electrical Engineering, 2022, , 2811-2821.                                                                | 0.3 | 0         |
| 7  | Fast interval estimation for discrete-time linear systems: An $\mathcal{L}_1$ optimization method. Automatica, 2022, 137, 110029.                                                  | 3.0 | 21        |
| 8  | Two-step zonotopic estimation method for discrete-time linear delayed systems. European Journal of Control, 2022, 64, 100608.                                                      | 1.6 | 5         |
| 9  | A zonotopic characterization of cyber-physical system vulnerabilities. International Journal of Robust and Nonlinear Control, 2022, 32, 5379-5397.                                 | 2.1 | 5         |
| 10 | $\mathcal{L}_1$ fault estimation observer design for discrete-time linear parameter-varying systems. , 2022, , .                                                                   |     | 0         |
| 11 | Efficient Fault Detection for Discrete-Time PWA Systems. , 2022, 6, 3361-3366.                                                                                                     |     | 1         |
| 12 | Fault Detection for Lipschitz Nonlinear Systems With Restricted Frequency-Domain Specifications. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2021, 51, 7486-7496. | 5.9 | 28        |
| 13 | Interval Estimation for Uncertain Systems via Polynomial Chaos Expansions. IEEE Transactions on Automatic Control, 2021, 66, 468-475.                                              | 3.6 | 8         |
| 14 | Interval Estimation for Discrete-Time Switched Linear Systems Based on $\mathcal{L}_1$ Observer and Ellipsoid Analysis. , 2021, 5, 13-18.                                          |     | 8         |
| 15 | Sensor fault detection for switched systems using interval observer with $\mathcal{L}_1$ performance. European Journal of Control, 2021, 57, 147-156.                              | 1.6 | 17        |
| 16 | Zonotopic reachable set estimation for bilinear systems with time-varying delays. International Journal of Systems Science, 2021, 52, 848-856.                                     | 3.7 | 1         |
| 17 | Reduced-order observer-based interval estimation for discrete-time linear systems. Systems Science and Control Engineering, 2021, 9, 50-59.                                        | 1.8 | 4         |
| 18 | Unknown Input Observer Design for Linear Parameter-Varying Systems in a Bounded Error Context. IEEE Transactions on Automatic Control, 2021, 66, 4246-4251.                        | 3.6 | 18        |

| #  | ARTICLE                                                                                                                                                                                      | IF  | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | Interval estimation of sensor fault based on zonotopic Kalman filter. International Journal of Control, 2021, 94, 1641-1650.                                                                 | 1.2 | 8         |
| 20 | Prescribed-time observers of LPV systems: A linear matrix inequality approach. Applied Mathematics and Computation, 2021, 398, 125982.                                                       | 1.4 | 6         |
| 21 | Joint interval state and actuator fault estimation for linear discrete-time delayed systems. , 2021, , .                                                                                     |     | 1         |
| 22 | $H^{\hat{z}}$ interval observer design for uncertain discrete-time linear switched systems with unknown inputs. , 2021, , .                                                                  |     | 2         |
| 23 | Fault detection and isolation for discrete-time descriptor systems based on $H^{\hat{z}}$ observer and zonotopic residual evaluation. International Journal of Control, 2020, 93, 1867-1878. | 1.2 | 51        |
| 24 | Optimal interval observers for discrete-time linear switched systems. International Journal of Control, 2020, 93, 2613-2621.                                                                 | 1.2 | 35        |
| 25 | A state augmentation approach to interval fault estimation for descriptor systems. European Journal of Control, 2020, 51, 19-29.                                                             | 1.6 | 43        |
| 26 | Zonotopic Fault Estimation for Discrete-Time LPV Systems With Bounded Parametric Uncertainty. IEEE Transactions on Intelligent Transportation Systems, 2020, 21, 690-700.                    | 4.7 | 41        |
| 27 | Distributed fault estimation for linear systems with actuator faults. International Journal of Robust and Nonlinear Control, 2020, 30, 6853-6878.                                            | 2.1 | 8         |
| 28 | Zonotopic reachable set estimation for linear discrete-time systems with time delay. International Journal of Robust and Nonlinear Control, 2020, 30, 5542-5558.                             | 2.1 | 14        |
| 29 | Interval estimation of state and unknown input for linear discrete-time systems. Journal of the Franklin Institute, 2020, 357, 9045-9062.                                                    | 1.9 | 10        |
| 30 | Set-membership estimation for linear time-varying descriptor systems. Automatica, 2020, 115, 108867.                                                                                         | 3.0 | 54        |
| 31 | Zonotopic fault detection observer design for discrete-time systems with adaptively adjusted event-triggered mechanism. IET Control Theory and Applications, 2020, 14, 96-104.               | 1.2 | 8         |
| 32 | Fault Detection for Switched Systems based on Pole Assignment and Zonotopic Residual Evaluation. IFAC-PapersOnLine, 2020, 53, 4695-4700.                                                     | 0.5 | 5         |
| 33 | On Fixed-Time Interval Estimation of Discrete-Time Nonlinear Time-Varying Systems With Disturbances. , 2020, , .                                                                             |     | 2         |
| 34 | Ellipsoid-based sensor fault detection for discrete-time switched systems. , 2020, , .                                                                                                       |     | 0         |
| 35 | Ellipsoid bundle and its application to set-membership estimation. IFAC-PapersOnLine, 2020, 53, 13688-13693.                                                                                 | 0.5 | 5         |
| 36 | Interval estimation for linear discrete-time delay systems. IFAC-PapersOnLine, 2020, 53, 4798-4803.                                                                                          | 0.5 | 8         |

| #  | ARTICLE                                                                                                                                                                                                          | IF  | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | A two-step approach to interval estimation for continuous-time switched linear systems. IFAC-PapersOnLine, 2020, 53, 4175-4180.                                                                                  | 0.5 | 2         |
| 38 | Zonotope-based Interval Estimation for Discrete-Time Linear Switched Systems. IFAC-PapersOnLine, 2020, 53, 4707-4712.                                                                                            | 0.5 | 9         |
| 39 | Fast interval estimation for discrete-time systems based on fixed-time convergence. IFAC-PapersOnLine, 2020, 53, 4571-4575.                                                                                      | 0.5 | 0         |
| 40 | Fault Diagnosis for Attitude Sensors Based on Analytical Redundancy and Wavelet Transform. , 2020, , .                                                                                                           |     | 2         |
| 41 | Comment and Further Result on "Fault Detection and Isolation Method Based on $H^{\wedge}/H^{\tilde{z}}$ Unknown Input Observer Design in Finite Frequency Domain" Asian Journal of Control, 2019, 21, 2484-2487. | 1.9 | 3         |
| 42 | Zonotopic Set-Membership State Estimation for Discrete-Time Descriptor LPV Systems. IEEE Transactions on Automatic Control, 2019, 64, 2092-2099.                                                                 | 3.6 | 74        |
| 43 | Interval observer design for continuous-time linear parameter-varying systems. Systems and Control Letters, 2019, 134, 104541.                                                                                   | 1.3 | 40        |
| 44 | Event-triggered fault estimation and fault-tolerant control for networked control systems. Journal of the Franklin Institute, 2019, 356, 4420-4441.                                                              | 1.9 | 34        |
| 45 | Zonotopic fault detection observer for linear parameter-varying descriptor systems. International Journal of Robust and Nonlinear Control, 2019, 29, 3426-3445.                                                  | 2.1 | 31        |
| 46 | $H^{\wedge}/L^{\tilde{z}}$ fault detection observer for linear parameter-varying systems with parametric uncertainty. International Journal of Robust and Nonlinear Control, 2019, 29, 2912-2926.                | 2.1 | 29        |
| 47 | Luenberger-like interval observer design for discrete-time descriptor linear system. Systems and Control Letters, 2019, 126, 21-27.                                                                              | 1.3 | 33        |
| 48 | Interval Estimation Methods for Discrete-Time Linear Time-Invariant Systems. IEEE Transactions on Automatic Control, 2019, 64, 4717-4724.                                                                        | 3.6 | 114       |
| 49 | Robust fault estimation in the finite-frequency domain for multi-agent systems. Transactions of the Institute of Measurement and Control, 2019, 41, 3171-3181.                                                   | 1.1 | 8         |
| 50 | Interval Observer Design for Discrete-Time Uncertain Takagi-Sugeno Fuzzy Systems. IEEE Transactions on Fuzzy Systems, 2019, 27, 816-823.                                                                         | 6.5 | 40        |
| 51 | On-line Input Signal Design Based on State Set-membership Estimation for Active Fault Detection. , 2019, , .                                                                                                     |     | 1         |
| 52 | Interval estimation of actuator fault by interval analysis. IET Control Theory and Applications, 2019, 13, 2717-2724.                                                                                            | 1.2 | 8         |
| 53 | Ellipsoid-based interval estimation for Takagi-Sugeno fuzzy systems. , 2019, , .                                                                                                                                 |     | 6         |
| 54 | $H^{\wedge}/L^{\tilde{z}}$ fault detection observer design for uncertain linear systems. International Journal of Systems Science, 2019, 50, 283-293.                                                            | 3.7 | 7         |

| #  | ARTICLE                                                                                                                                                                                                                                                                                                                                                                             | IF  | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | Unknown Input Observer Design for Takagi-Sugeno Systems with Fuzzy Output Equation. International Journal of Control, Automation and Systems, 2019, 17, 267-272.                                                                                                                                                                                                                    | 1.6 | 11        |
| 56 | Interval estimation for discrete-time linear systems: A two-step method. Systems and Control Letters, 2019, 123, 69-74.                                                                                                                                                                                                                                                             | 1.3 | 43        |
| 57 | Robust fault estimation observer in the finite frequency domain for descriptor systems. International Journal of Control, 2019, 92, 1590-1599.                                                                                                                                                                                                                                      | 1.2 | 25        |
| 58 | A Simple Approach to Distributed Observer Design for Linear Systems. IEEE Transactions on Automatic Control, 2019, 64, 329-336.                                                                                                                                                                                                                                                     | 3.6 | 126       |
| 59 | $H_\infty$ Observer for Uncertain Linear Systems. Asian Journal of Control, 2019, 21, 632-638.                                                                                                                                                                                                                                                                                      | 1.9 | 5         |
| 60 | Towards a minimal order distributed observer for linear systems. Systems and Control Letters, 2018, 114, 59-65.                                                                                                                                                                                                                                                                     | 1.3 | 31        |
| 61 | Fault-tolerant control for over-actuated systems with actuator fault and input saturation*. , 2018, , .                                                                                                                                                                                                                                                                             |     | 0         |
| 62 | Fault Detection Based on Multi-objective Observer and Interval Hull Computation. IFAC-PapersOnLine, 2018, 51, 332-337.                                                                                                                                                                                                                                                              | 0.5 | 6         |
| 63 | Zonotopic state estimation and fault detection for systems with time-invariant uncertainties. IFAC-PapersOnLine, 2018, 51, 494-499.                                                                                                                                                                                                                                                 | 0.5 | 5         |
| 64 | fault detection for linear discrete-time descriptor systems. IET Control Theory and Applications, 2018, 12, 2156-2163.                                                                                                                                                                                                                                                              | 1.2 | 25        |
| 65 | Zonotopic fault detection observer design for Takagi-Sugeno fuzzy systems. International Journal of Systems Science, 2018, 49, 3216-3230.                                                                                                                                                                                                                                           | 3.7 | 13        |
| 66 | Interval observer design for uncertain discrete-time linear systems. Systems and Control Letters, 2018, 116, 41-46.                                                                                                                                                                                                                                                                 | 1.3 | 137       |
| 67 | Dynamic threshold computation in fault detection for discrete-time linear systems. , 2018, , .                                                                                                                                                                                                                                                                                      |     | 3         |
| 68 | Fault Detection and Isolation Method Based on $H_\infty$ / $H_2$ Unknown Input Observer Design in Finite Frequency Domain. Asian Journal of Control, 2017, 19, 1777-1790.                                                                                                                                                                                                           | 1.9 | 38        |
| 69 | $H_\infty$ fault detection observer in finite frequency domain for linear parameter-varying descriptor systems. Automatica, 2017, 86, 38-45.                                                                                                                                                                                                                                        | 1.7 | 17        |
| 70 | Simultaneous fault estimation and fault-tolerant tracking control for uncertain nonlinear discrete-time systems. International Journal of Systems Science, 2017, 48, 1367-1379.                                                                                                                                                                                                     | 3.7 | 9         |
| 71 | $H_\infty$ fault detection observer design for linear parameter-varying systems * *This work was partially supported by National Natural Science Foundation of China (61403104, 61273162, U1509217), the Australian Research Council (DP170102644), and the Fundamental Research Funds for the Central Universities (HIT.KLOE.2015.076).. IFAC-PapersOnLine. 2017. 50. 15271-15276. | 0.5 | 19        |
| 72 | $H_\infty$ fault detection observer for discrete-time Takagi-Sugeno fuzzy systems. , 2017, , .                                                                                                                                                                                                                                                                                      |     | 6         |

| #  | ARTICLE                                                                                                                                                                                      | IF  | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 73 | Zonotopic fault detection observer with $H^{\infty}$ performance. , 2017, , .                                                                                                                |     | 10        |
| 74 | fault detection observer design in finite-frequency domain for Lipschitz nonlinear systems. IET Control Theory and Applications, 2017, 11, 2361-2369.                                        | 1.2 | 37        |
| 75 | Robust $H^{\infty}$ fault diagnosis observer design for multiple satellites attitude synchronization with disturbance. , 2016, , .                                                           |     | 1         |
| 76 | $H^{\infty}/H^{\infty}$ fault detection filter design for interval time-varying delays switched systems. Journal of Systems Engineering and Electronics, 2016, 27, 878-886.                  | 1.1 | 7         |
| 77 | A self-healing control method for satellite attitude tracking based on simultaneous fault estimation and control design. , 2016, , .                                                         |     | 4         |
| 78 | Fault estimation filter design for discrete-time descriptor systems. IET Control Theory and Applications, 2015, 9, 1587-1594.                                                                | 1.2 | 48        |
| 79 | Actuator fault estimation observer design for discrete-time linear parameter-varying descriptor systems. International Journal of Adaptive Control and Signal Processing, 2015, 29, 242-258. | 2.3 | 101       |
| 80 | Actuator fault estimation for a class of nonlinear descriptor systems. International Journal of Systems Science, 2014, 45, 487-496.                                                          | 3.7 | 59        |
| 81 | Observer design for discrete-time descriptor systems: An LMI approach. Systems and Control Letters, 2012, 61, 683-687.                                                                       | 1.3 | 134       |
| 82 | Fault diagnosis based on directed factor graph for mode switching spacecraft power system. , 2011, , .                                                                                       |     | 0         |
| 83 | Nonlinear dynamic systems fault detection and isolation using fuzzy adaptive observer. , 2010, , .                                                                                           |     | 0         |