# Wen-Hua Chen

## List of Publications by Year
in descending order

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|---|---|---|---|
| 227<br>papers | 15,120<br>citations | 50276<br>46<br>h-index | 18647<br>119<br>g-index |
| 228<br>all docs | 228<br>docs citations | 228<br>times ranked | 8793<br>citing authors |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 1 | Disturbance-Observer-Based Control and Related Methods—An Overview. IEEE Transactions on Industrial Electronics, 2016, 63, 1083-1095. | 7.9 | 1,951 |
| 2 | A nonlinear disturbance observer for robotic manipulators. IEEE Transactions on Industrial Electronics, 2000, 47, 932-938. | 7.9 | 1,373 |
| 3 | Disturbance Observer Based Control for Nonlinear Systems. IEEE/ASME Transactions on Mechatronics, 2004, 9, 706-710. | 5.8 | 1,149 |
| 4 | Adaptive fuzzy tracking control for a class of uncertain MIMO nonlinear systems using disturbance observer. Science China Information Sciences, 2014, 57, 1-13. | 4.3 | 785 |
| 5 | Disturbance attenuation and rejection for systems with nonlinearity via DOBC approach. International Journal of Robust and Nonlinear Control, 2005, 15, 109-125. | 3.7 | 656 |
| 6 | Generalized Extended State Observer Based Control for Systems With Mismatched Uncertainties. IEEE Transactions on Industrial Electronics, 2012, 59, 4792-4802. | 7.9 | 646 |
| 7 | Real-time motion planning methods for autonomous on-road driving: State-of-the-art and future research directions. Transportation Research Part C: Emerging Technologies, 2015, 60, 416-442. | 7.6 | 549 |
| 8 | Continuous nonsingular terminal sliding mode control for systems with mismatched disturbances. Automatica, 2013, 49, 2287-2291. | 5.0 | 503 |
| 9 | Nonlinear Disturbance Observer-Enhanced Dynamic Inversion Control of Missiles. Journal of Guidance, Control, and Dynamics, 2003, 26, 161-166. | 2.8 | 474 |
| 10 | Disturbance/Uncertainty Estimation and Attenuation Techniques in PMSM Drives—A Survey. IEEE Transactions on Industrial Electronics, 2017, 64, 3273-3285. | 7.9 | 453 |
| 11 | Optimal control of nonlinear systems: a predictive control approach. Automatica, 2003, 39, 633-641. | 5.0 | 339 |
| 12 | Non-linear disturbance observer-based robust control for systems with mismatched disturbances/uncertainties. IET Control Theory and Applications, 2011, 5, 2053-2062. | 2.1 | 308 |
| 13 | High-Order Mismatched Disturbance Compensation for Motion Control Systems Via a Continuous Dynamic Sliding-Mode Approach. IEEE Transactions on Industrial Informatics, 2014, 10, 604-614. | 11.3 | 233 |
| 14 | A review of source term estimation methods for atmospheric dispersion events using static or mobile sensors. Information Fusion, 2017, 36, 130-148. | 19.1 | 232 |
| 15 | Robust control of nonlinear MAGLEV suspension system with mismatched uncertainties via DOBC approach. ISA Transactions, 2011, 50, 389-396. | 5.7 | 194 |
| 16 | Disturbance Observer Design for Nonlinear Systems Represented by Input–Output Models. IEEE Transactions on Industrial Electronics, 2020, 67, 1222-1232. | 7.9 | 191 |
| 17 | Tracking control of small-scale helicopters using explicit nonlinear MPC augmented with disturbance observers. Control Engineering Practice, 2012, 20, 258-268. | 5.5 | 183 |
| 18 | Wheat yellow rust monitoring by learning from multispectral UAV aerial imagery. Computers and Electronics in Agriculture, 2018, 155, 157-166. | 7.7 | 180 |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 19 | Nonlinear disturbance observer-based control for multi-input multi-output nonlinear systems subject to mismatching condition. International Journal of Control, 2012, 85, 1071-1082. | 1.9 | 169 |
| 20 | Robust Nonlinear Predictive Controller for Permanent-Magnet Synchronous Motors With an Optimized Cost Function. IEEE Transactions on Industrial Electronics, 2012, 59, 2849-2858. | 7.9 | 153 |
| 21 | Robust Cascaded Nonlinear Predictive Control of a Permanent Magnet Synchronous Motor With Antiwindup Compensator. IEEE Transactions on Industrial Electronics, 2012, 59, 3078-3088. | 7.9 | 131 |
| 22 | Robust Fault-Tolerant Tracking Control for Spacecraft Proximity Operations Using Time-Varying Sliding Mode. IEEE Transactions on Aerospace and Electronic Systems, 2018, 54, 2-17. | 4.7 | 120 |
| 23 | Sliding mode control for a class of uncertain nonlinear system based on disturbance observer. International Journal of Adaptive Control and Signal Processing, 2010, 24, 51-64. | 4.1 | 115 |
| 24 | Genetic algorithm based on receding horizon control for arrival sequencing and scheduling. Engineering Applications of Artificial Intelligence, 2005, 18, 633-642. | 8.1 | 104 |
| 25 | Fast and Accurate Trajectory Tracking Control of an Autonomous Surface Vehicle With Unmodeled Dynamics and Disturbances. IEEE Transactions on Intelligent Vehicles, 2016, 1, 230-243. | 12.7 | 103 |
| 26 | Disturbance-observer-based robust control for time delay uncertain systems. International Journal of Control, Automation and Systems, 2010, 8, 445-453. | 2.7 | 101 |
| 27 | Aerial Visual Perception in Smart Farming: Field Study of Wheat Yellow Rust Monitoring. IEEE Transactions on Industrial Informatics, 2021, 17, 2242-2249. | 11.3 | 96 |
| 28 | Backpropagating Constraints-Based Trajectory Tracking Control of a Quadrotor With Constrained Actuator Dynamics and Complex Unknowns. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2019, 49, 1322-1337. | 9.3 | 84 |
| 29 | Receding Horizon Control for Aircraft Arrival Sequencing and Scheduling. IEEE Transactions on Intelligent Transportation Systems, 2005, 6, 189-197. | 8.0 | 80 |
| 30 | A new integrated collision risk assessment methodology for autonomous vehicles. Accident Analysis and Prevention, 2019, 127, 61-79. | 5.7 | 75 |
| 31 | Entrotaxis as a strategy for autonomous search and source reconstruction in turbulent conditions. Information Fusion, 2018, 42, 179-189. | 19.1 | 65 |
| 32 | Prediction of Lane-Changing Maneuvers with Automatic Labeling and Deep Learning. Transportation Research Record, 2020, 2674, 336-347. | 1.9 | 65 |
| 33 | A machine learning based personalized system for driving state recognition. Transportation Research Part C: Emerging Technologies, 2019, 105, 241-261. | 7.6 | 64 |
| 34 | Experimental evaluation of UAV spraying for peach trees of different shapes: Effects of operational parameters on droplet distribution. Computers and Electronics in Agriculture, 2020, 170, 105282. | 7.7 | 63 |
| 35 | Robust adaptive neural network synchronization controller design for a class of time delay uncertain chaotic systems. Chaos, Solitons and Fractals, 2009, 41, 2716-2724. | 5.1 | 62 |
| 36 | On existence, optimality and asymptotic stability of the Kalman filter with partially observed inputs. Automatica, 2015, 53, 149-154. | 5.0 | 62 |

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| 37 | Spatio-temporal monitoring of wheat yellow rust using UAV multispectral imagery. Computers and Electronics in Agriculture, 2019, 167, 105035. | 7.7 | 60 |
| 38 | Harmonic Disturbance Observer for Nonlinear Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2003, 125, 114-117. | 1.6 | 58 |
| 39 | Disturbance Observer Based Control with Anti-Windup Applied to a Small Fixed Wing UAV for Disturbance Rejection. Journal of Intelligent and Robotic Systems: Theory and Applications, 2017, 88, 329-346. | 3.4 | 56 |
| 40 | Flight Control Design for Small-Scale Helicopter Using Disturbance-Observer-Based Backstepping. Journal of Guidance, Control, and Dynamics, 2015, 38, 2235-2240. | 2.8 | 55 |
| 41 | Disturbance Rejection Flight Control for Small Fixed-Wing Unmanned Aerial Vehicles. Journal of Guidance, Control, and Dynamics, 2016, 39, 2810-2819. | 2.8 | 54 |
| 42 | On the terminal region of model predictive control for non-linear systems with input/state constraints. International Journal of Adaptive Control and Signal Processing, 2003, 17, 195-207. | 4.1 | 51 |
| 43 | On Relationship Between Time-Domain and Frequency-Domain Disturbance Observers and Its Applications. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2016, 138, . | 1.6 | 51 |
| 44 | Path–following control for small fixed–wing unmanned aerial vehicles under wind disturbances. International Journal of Robust and Nonlinear Control, 2013, 23, 1682-1698. | 3.7 | 50 |
| 45 | Information-Based Search for an Atmospheric Release Using a Mobile Robot: Algorithm and Experiments. IEEE Transactions on Control Systems Technology, 2019, 27, 2388-2402. | 5.2 | 50 |
| 46 | Sentinel-2 Satellite Imagery for Urban Land Cover Classification by Optimized Random Forest Classifier. Applied Sciences (Switzerland), 2021, 11, 543. | 2.5 | 50 |
| 47 | Optimal Polygon Decomposition for UAV Survey Coverage Path Planning in Wind. Sensors, 2018, 18, 2132. | 3.8 | 45 |
| 48 | Optimal Path Following for Small Fixed-Wing UAVs Under Wind Disturbances. IEEE Transactions on Control Systems Technology, 2021, 29, 996-1008. | 5.2 | 44 |
| 49 | Predictive control of general nonlinear systems using approximation. IET Control Theory and Applications, 2004, 151, 137-144. | 1.7 | 43 |
| 50 | Source term estimation of a hazardous airborne release using an unmanned aerial vehicle. Journal of Field Robotics, 2019, 36, 797-817. | 6.0 | 43 |
| 51 | Continuous finite-time anti-disturbance control for a class of uncertain nonlinear systems. Transactions of the Institute of Measurement and Control, 2014, 36, 300-311. | 1.7 | 42 |
| 52 | Predictor-Based Disturbance Rejection Control for Sampled Systems With Input Delay. IEEE Transactions on Control Systems Technology, 2019, 27, 772-780. | 5.2 | 42 |
| 53 | Static disturbance–to–output decoupling for nonlinear systems with arbitrary disturbance relative degree. International Journal of Robust and Nonlinear Control, 2013, 23, 562-577. | 3.7 | 41 |
| 54 | Online optimisation–based backstepping control design with application to quadrotor. IET Control Theory and Applications, 2016, 10, 1601-1611. | 2.1 | 39 |

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| 55 | Advances in Disturbance/Uncertainty Estimation and Attenuation [Guest editors' introduction]. IEEE Transactions on Industrial Electronics, 2015, 62, 5758-5762. | 7.9 | 38 |
| 56 | Trajectory Clustering Aided Personalized Driver Intention Prediction for Intelligent Vehicles. IEEE Transactions on Industrial Informatics, 2019, 15, 3693-3702. | 11.3 | 38 |
| 57 | Model-Based Fault Diagnosis System Verification Using Reachability Analysis. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2019, 49, 742-751. | 9.3 | 38 |
| 58 | Potential Bands of Sentinel-2A Satellite for Classification Problems in Precision Agriculture. International Journal of Automation and Computing, 2019, 16, 16-26. | 4.5 | 37 |
| 59 | Boustrophedon coverage path planning for UAV aerial surveys in wind. , 2017, , . | | 35 |
| 60 | Dimension Reduction Aided Hyperspectral Image Classification with a Small-sized Training Dataset: Experimental Comparisons. Sensors, 2017, 17, 2726. | 3.8 | 35 |
| 61 | Output‐based disturbance rejection control for non‐linear uncertain systems with unknown frequency disturbances using an observer backstepping approach. IET Control Theory and Applications, 2016, 10, 1052-1060. | 2.1 | 34 |
| 62 | Review of intelligent sprinkler irrigation technologies for remote autonomous system. International Journal of Agricultural and Biological Engineering, 2018, 11, 23-30. | 0.6 | 33 |
| 63 | Multiairport Capacity Management: Genetic Algorithm With Receding Horizon. IEEE Transactions on Intelligent Transportation Systems, 2007, 8, 254-263. | 8.0 | 32 |
| 64 | A Simulation Study of Predicting Real-Time Conflict-Prone Traffic Conditions. IEEE Transactions on Intelligent Transportation Systems, 2018, 19, 3196-3207. | 8.0 | 32 |
| 65 | Optimal control for systems with varying sampling rate. , 2002, , . | | 31 |
| 66 | Piecewise constant model predictive control for autonomous helicopters. Robotics and Autonomous Systems, 2011, 59, 571-579. | 5.1 | 31 |
| 67 | Implicit Personalization in Driving Assistance: State-of-the-Art and Open Issues. IEEE Transactions on Intelligent Vehicles, 2020, 5, 397-413. | 12.7 | 31 |
| 68 | Motion-control techniques of today and tomorrow: a review and discussion of the challenges of controlled motion. IEEE Industrial Electronics Magazine, 2020, 14, 41-55. | 2.6 | 31 |
| 69 | Reachability Analysis of Landing Sites for Forced Landing of a UAS. Journal of Intelligent and Robotic Systems: Theory and Applications, 2014, 73, 635-653. | 3.4 | 30 |
| 70 | Dynamic decision making in lane change: Game theory with receding horizon. , 2016, , . | | 30 |
| 71 | Multiple Model Ballistic Missile Tracking With State-Dependent Transitions and Gaussian Particle Filtering. IEEE Transactions on Aerospace and Electronic Systems, 2018, 54, 1066-1081. | 4.7 | 30 |
| 72 | Negotiation and Decision-Making for a Pedestrian Roadway Crossing: A Literature Review. Sustainability, 2019, 11, 6713. | 3.2 | 30 |

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| 73 | Nonlinearity Estimator-Based Control of A Class of Uncertain Nonlinear Systems. IEEE Transactions on Automatic Control, 2020, 65, 2230-2236. | 5.7 | 30 |
| 74 | On a switching control scheme for nonlinear systems with ill-defined relative degree. Systems and Control Letters, 2002, 47, 159-166. | 2.3 | 29 |
| 75 | New Multiple-Target Tracking Strategy Using Domain Knowledge and Optimization. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2017, 47, 605-616. | 9.3 | 29 |
| 76 | Personalized Driver Workload Inference by Learning From Vehicle Related Measurements. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2019, 49, 159-168. | 9.3 | 29 |
| 77 | Bayesian Multiple Extended Target Tracking Using Labeled Random Finite Sets and Splines. IEEE Transactions on Signal Processing, 2018, 66, 6076-6091. | 5.3 | 28 |
| 78 | Prediction of rear-end conflict frequency using multiple-location traffic parameters. Accident Analysis and Prevention, 2021, 152, 106007. | 5.7 | 28 |
| 79 | Trajectory Planning for Communication Relay Unmanned Aerial Vehicles in Urban Dynamic Environments. Journal of Intelligent and Robotic Systems: Theory and Applications, 2018, 89, 7-25. | 3.4 | 27 |
| 80 | Spectral analysis and mapping of blackgrass weed by leveraging machine learning and UAV multispectral imagery. Computers and Electronics in Agriculture, 2022, 192, 106621. | 7.7 | 27 |
| 81 | Stability analysis of classic finite horizon model predictive control. International Journal of Control, Automation and Systems, 2010, 8, 187-197. | 2.7 | 25 |
| 82 | Robust Control of Uncertain Nonlinear Systems: A Nonlinear DOBC Approach. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2016, 138, . | 1.6 | 25 |
| 83 | Optimal positioning of communication relay unmanned aerial vehicles in urban environments. , 2016, , . | | 25 |
| 84 | On the Actuator Dynamics of Dynamic Control Allocation for a Small Fixed-Wing UAV With Direct Lift Control. IEEE Transactions on Control Systems Technology, 2020, 28, 984-991. | 5.2 | 25 |
| 85 | Probabilistic faster R-CNN with stochastic region proposing: Towards object detection and recognition in remote sensing imagery. Neurocomputing, 2021, 459, 290-301. | 5.9 | 25 |
| 86 | Fast mission reliability prediction for Unmanned Aerial Vehicles. Reliability Engineering and System Safety, 2013, 120, 3-9. | 8.9 | 24 |
| 87 | Interaction of automated driving systems with pedestrians: challenges, current solutions, and recommendations for eHMIs. Transport Reviews, 2021, 41, 788-813. | 8.8 | 23 |
| 88 | Optimisation of attraction domains of nonlinear MPC via LMI methods. , 2001, , . | | 22 |
| 89 | An Auxiliary Particle Filtering Algorithm With Inequality Constraints. IEEE Transactions on Automatic Control, 2017, 62, 4639-4646. | 5.7 | 22 |
| 90 | Model predictive control for constrained systems with uncertain state-delays. International Journal of Robust and Nonlinear Control, 2004, 14, 1421-1432. | 3.7 | 21 |

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| 91 | Artificial Situation Awareness for Increased Autonomy of Unmanned Aerial Systems in the Terminal Area. Journal of Intelligent and Robotic Systems: Theory and Applications, 2013, 70, 545-555. | 3.4 | 21 |
| 92 | Further results on "Reduced order disturbance observer for discrete-time linear systems". Automatica, 2018, 93, 550-553. | 5.0 | 21 |
| 93 | QFT design for uncertain non-minimum phase and unstable plants revisited. International Journal of Control, 2001, 74, 957-965. | 1.9 | 20 |
| 94 | A Hybrid Approach of Learning and Model-Based Channel Prediction for Communication Relay UAVs in Dynamic Urban Environments. IEEE Robotics and Automation Letters, 2019, 4, 2370-2377. | 5.1 | 20 |
| 95 | MAINTAINING SYNCHRONIZATION BY DECENTRALIZED FEEDBACK CONTROL IN TIME DELAY NEURAL NETWORKS WITH PARAMETER UNCERTAINTIES. International Journal of Neural Systems, 2007, 17, 115-122. | 5.2 | 19 |
| 96 | Optimization-Based Safety Analysis of Obstacle Avoidance Systems for Unmanned Aerial Vehicles. Journal of Intelligent and Robotic Systems: Theory and Applications, 2012, 65, 219-231. | 3.4 | 19 |
| 97 | Landing Site Reachability in a Forced Landing of Unmanned Aircraft in Wind. Journal of Aircraft, 2017, 54, 1415-1427. | 2.4 | 19 |
| 98 | Unmanned Aerial Vehicle-Based Hazardous Materials Response: Information-Theoretic Hazardous Source Search and Reconstruction. IEEE Robotics and Automation Magazine, 2020, 27, 108-119. | 2.0 | 19 |
| 99 | Decomposition-based mission planning for fixed-wing UAVs surveying in wind. Journal of Field Robotics, 2020, 37, 440-465. | 6.0 | 19 |
| 100 | State and parameter estimation of the AquaCrop model for winter wheat using sensitivity informed particle filter. Computers and Electronics in Agriculture, 2021, 180, 105909. | 7.7 | 19 |
| 101 | Crash Risk Estimation Due to Lane Changing: A Data-Driven Approach Using Naturalistic Data. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 3756-3765. | 8.0 | 19 |
| 102 | Attitude control of magnetically actuated satellites with an uneven inertia distribution. Aerospace Science and Technology, 2013, 25, 29-39. | 4.8 | 18 |
| 103 | Particle Filtering With Soft State Constraints for Target Tracking. IEEE Transactions on Aerospace and Electronic Systems, 2019, 55, 3492-3504. | 4.7 | 18 |
| 104 | Model predictive control of nonlinear systems: Stability region and feasible initial control. International Journal of Automation and Computing, 2007, 4, 195-202. | 4.5 | 17 |
| 105 | Gaussian Process Based Channel Prediction for Communication-Relay UAV in Urban Environments. IEEE Transactions on Aerospace and Electronic Systems, 2020, 56, 313-325. | 4.7 | 17 |
| 106 | Fuzzy-Based Super-Twisting Sliding Mode Stabilization Control for Under-Actuated Rotary Inverted Pendulum Systems. IEEE Access, 2020, 8, 185079-185092. | 4.2 | 17 |
| 107 | Ir-UNet: Irregular Segmentation U-Shape Network for Wheat Yellow Rust Detection by UAV Multispectral Imagery. Remote Sensing, 2021, 13, 3892. | 4.0 | 17 |
| 108 | Chattering-free condition for sliding mode control with unidirectional auxiliary surfaces. Transactions of the Institute of Measurement and Control, 2013, 35, 593-605. | 1.7 | 16 |

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| 109 | An improved multiple model particle filtering approach for manoeuvring target tracking using airborne GMTI with geographic information. Aerospace Science and Technology, 2016, 52, 62-69. | 4.8 | 16 |
| 110 | Composite nonlinear bilateral control for teleoperation systems with external disturbances. IEEE/CAA Journal of Automatica Sinica, 2019, 6, 1220-1229. | 13.1 | 16 |
| 111 | Path following for small UAVs in the presence of wind disturbance. , 2012, , . | | 15 |
| 112 | High order disturbance observer design for linear and nonlinear systems. , 2015, , . | | 15 |
| 113 | Robust nonlinear generalised predictive control for a class of uncertain nonlinear systems via an integral sliding mode approach. International Journal of Control, 2016, 89, 1698-1710. | 1.9 | 15 |
| 114 | Dual Control for Exploitation and Exploration (DCEE) in autonomous search. Automatica, 2021, 133, 109851. | 5.0 | 15 |
| 115 | Robust nonlinear generalized predictive control of a permanent magnet synchronous motor with an anti-windup compensator. , 2010, , . | | 14 |
| 116 | An explicit MPC for quadrotor trajectory tracking. , 2015, , . | | 14 |
| 117 | Disturbance observers and applications. Transactions of the Institute of Measurement and Control, 2016, 38, 621-624. | 1.7 | 14 |
| 118 | An enhanced particle filtering method for GMTI radar tracking. IEEE Transactions on Aerospace and Electronic Systems, 2016, 52, 1408-1420. | 4.7 | 14 |
| 119 | Joint State and Fault Estimation of Complex Networks Under Measurement Saturations and Stochastic Nonlinearities. IEEE Transactions on Signal and Information Processing Over Networks, 2022, 8, 173-186. | 2.8 | 14 |
| 120 | Site Selection During Unmanned Aerial System Forced Landings Using Decision-Making Bayesian Networks. Journal of Aerospace Information Systems, 2016, 13, 491-495. | 1.4 | 13 |
| 121 | Model Predictive Control of Low Earth Orbiting Spacecraft with Magneto-torquers. , 2006, , . | | 13 |
| 122 | Control of sampled-data systems with variable sampling rate. International Journal of Systems Science, 2006, 37, 609-618. | 5.5 | 12 |
| 123 | Constrained predictive pole-placement control with linear models. Automatica, 2006, 42, 613-618. | 5.0 | 12 |
| 124 | Reduced-order disturbance observer design for discrete-time linear stochastic systems. Transactions of the Institute of Measurement and Control, 2016, 38, 657-664. | 1.7 | 12 |
| 125 | Informative Path Planning for Gas Distribution Mapping in Cluttered Environments. , 2020, , . | | 12 |
| 126 | Plant Template Generation for Uncertain Plants in Quantitative Feedback Theory. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1999, 121, 358-364. | 1.6 | 11 |

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|---|---------|----|-----------|
| 127 | Model predictive control of low Earth-orbiting satellites using magnetic actuation. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2008, 222, 619-631. | 1.0 | 11 |
| 128 | State dependent multiple model-based particle filtering for ballistic missile tracking in a low-observable environment. Aerospace Science and Technology, 2017, 67, 144-154. | 4.8 | 11 |
| 129 | Constrained anti-disturbance control for a quadrotor based on differential flatness. International Journal of Systems Science, 2017, 48, 1182-1193. | 5.5 | 11 |
| 130 | Adaptive Bayesian Sensor Motion Planning for Hazardous Source Term Reconstruction. IFAC-PapersOnLine, 2017, 50, 2812-2817. | 0.9 | 11 |
| 131 | New Driver Workload Prediction Using Clustering-Aided Approaches. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2019, 49, 64-70. | 9.3 | 11 |
| 132 | Finite‐time disturbance observer‐based modified super‐twisting algorithm for systems with mismatched disturbances: Application to fixed‐wing UAVs under wind disturbances. International Journal of Robust and Nonlinear Control, 2021, 31, 7317-7343. | 3.7 | 11 |
| 133 | Regulation of Magnetically Actuated Satellites using Model Predictive Control with Disturbance Modelling. , 2008, , . | | 10 |
| 134 | Autonomous Source Term Estimation in Unknown Environments: From a Dual Control Concept to UAV Deployment. IEEE Robotics and Automation Letters, 2022, 7, 2274-2281. | 5.1 | 10 |
| 135 | Model Predictive Control With Preview: Recursive Feasibility and Stability. , 2022, 6, 2647-2652. | | 10 |
| 136 | Model predictive control of low earth orbiting spacecraft with magneto-torquers. , 2006, , . | | 9 |
| 137 | Model predictive control for non-linear missiles. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2007, 221, 1077-1089. | 1.0 | 9 |
| 138 | Optimisation based control framework for autonomous vehicles: Algorithm and experiment. , 2010, , . | | 9 |
| 139 | Variable sampling-time nonlinear model predictive control of satellites using magneto-torquers. Systems Science and Control Engineering, 2014, 2, 593-601. | 3.1 | 9 |
| 140 | Machine Vision for UAS Ground Operations. Journal of Intelligent and Robotic Systems: Theory and Applications, 2017, 88, 527-546. | 3.4 | 9 |
| 141 | Communication-Aware Trajectory Planning for Unmanned Aerial Vehicles in Urban Environments. Journal of Guidance, Control, and Dynamics, 2018, 41, 2271-2282. | 2.8 | 9 |
| 142 | Closed-form nonlinear MPC for multivariable nonlinear systems with different relative degree. , 0, , . | | 8 |
| 143 | Receding Horizon Control for Airport Capacity Management. IEEE Transactions on Control Systems Technology, 2007, 15, 1131-1136. | 5.2 | 8 |
| 144 | Trajectory tracking of small helicopters using explicit nonlinear MPC and DOBC. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 1498-1503. | 0.4 | 8 |

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| 145 | Simultaneous state and input estimation with partial information on the inputs. Systems Science and Control Engineering, 2015, 3, 445-452. | 3.1 | 8 |
| 146 | Worst-case analysis of moving obstacle avoidance systems for unmanned vehicles. Robotica, 2015, 33, 807-827. | 1.9 | 8 |
| 147 | Disturbance observer based control for gust alleviation of a small fixed-wing UAS. , 2016, , . | | 8 |
| 148 | Improved Situation Awareness for Autonomous Taxiing Through Self-Learning. IEEE Transactions on Intelligent Transportation Systems, 2016, 17, 3553-3564. | 8.0 | 8 |
| 149 | Fault diagnosis for vehicle lateral dynamics with robust threshold. , 2016, , . | | 8 |
| 150 | Fixed Wing UAV Survey Coverage Path Planning in Wind for Improving Existing Ground Control Station Software. , 2018, , . | | 8 |
| 151 | Snow Coverage Mapping by Learning from Sentinel-2 Satellite Multispectral Images via Machine Learning Algorithms. Remote Sensing, 2022, 14, 782. | 4.0 | 8 |
| 152 | Output feedback $H_\infty$ control for a class of uncertain nonlinear discrete-time delay systems. Transactions of the Institute of Measurement and Control, 2003, 25, 107-121. | 1.7 | 7 |
| 153 | Disturbance observer based control for nonlinear MAGLEV suspension system. , 2010, , . | | 7 |
| 154 | Stability Analysis of Constrained Nonlinear Model Predictive Control with Terminal Weighting. Asian Journal of Control, 2012, 14, 1374-1381. | 3.0 | 7 |
| 155 | Disturbance observer based fault diagnosis. , 2014, , . | | 7 |
| 156 | Image segmentation for automated taxiing of Unmanned Aircraft. , 2015, , . | | 7 |
| 157 | Enhanced situation awareness for unmanned aerial vehicle operating in terminal areas with circuit flight rules. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2016, 230, 1683-1693. | 1.3 | 7 |
| 158 | Prediction of air-to-ground communication strength for relay UAV trajectory planner in urban environments. , 2017, , . | | 7 |
| 159 | Cyber security and its impact on CAV safety: Overview, policy needs and challenges. Advances in Transport Policy and Planning, 2020, 5, 73-94. | 1.5 | 7 |
| 160 | Output feedback control for mobile robot systems with significant external disturbances. Science China Information Sciences, 2020, 63, 1. | 4.3 | 7 |
| 161 | Nonlinear ESO-based vibration control for an all-clamped piezoelectric plate with disturbances and time delay: Design and hardware implementation. Journal of Intelligent Material Systems and Structures, 2022, 33, 2321-2335. | 2.5 | 7 |
| 162 | Design of minimax robust LQG controllers under parameter and noise uncertainties. International Journal of Robust and Nonlinear Control, 1994, 4, 713-722. | 3.7 | 6 |

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| 163 | Maximisation of feasibility/stability regions of model predictive control for constrained linear systems. IET Control Theory and Applications, 2002, 149, 243-246. | 1.7 | 6 |
| 164 | Trajectory generation for autonomous soaring UAS. International Journal of Automation and Computing, 2012, 9, 248-256. | 4.5 | 6 |
| 165 | Road network based vehicle navigation using an improved IMM particle filter*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 193-198. | 0.4 | 6 |
| 166 | Development of a generic network enabled autonomous vehicle system. , 2014, , . | | 6 |
| 167 | Nonlinear composite bilateral control framework for n-DOF teleoperation systems with disturbances. Science China Information Sciences, 2018, 61, 1. | 4.3 | 6 |
| 168 | Experimental Assessment of Plume Mapping using Point Measurements from Unmanned Vehicles. , 2019, , . | | 6 |
| 169 | Identification of driving simulator sessions of depressed drivers: A comparison between aggregated and time-series classification. Transportation Research Part F: Traffic Psychology and Behaviour, 2020, 75, 16-25. | 3.7 | 6 |
| 170 | Perspective view of autonomous control in unknown environment: Dual control for exploitation and exploration vs reinforcement learning. Neurocomputing, 2022, 497, 50-63. | 5.9 | 6 |
| 171 | Nonlinear Disturbance Observer Based Control for Nonlinear Systems with Harmonic Disturbances. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2001, 34, 329-334. | 0.4 | 5 |
| 172 | Automatic differentiation based nonlinear model predictive control of satellites using magneto-torquers. , 2009, , . | | 5 |
| 173 | Experimental tests of autonomous ground vehicles with preview. International Journal of Automation and Computing, 2010, 7, 342-348. | 4.5 | 5 |
| 174 | Optimisation-based verification process of obstacle avoidance systems for unicycle-like mobile robots. International Journal of Automation and Computing, 2011, 8, 340-347. | 4.5 | 5 |
| 175 | Reachability analysis of landing sites for forced landing of a UAS. , 2013, , . | | 5 |
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