Charles James Taylor

List of Publications by Year
in descending order

74 papers	1,448 citations	393982 19 h-index	344852 36 g-index
86 all docs	86 docs citations	86 times ranked	1052 citing authors

#	ARTICLE	IF	CITATIONS
1	Environmental time series analysis and forecasting with the Captain toolbox. Environmental Modelling and Software, 2007, 22, 797-814.	1.9	226
2	A review of ground-based robotic systems for the characterization of nuclear environments. Progress in Nuclear Energy, 2019, 111, 109-124.	1.3	134
3	State space control system design based on non-minimal state-variable feedback: Further generalization and unification results. International Journal of Control, 2000, 73, 1329-1345.	1.2	108
4	Real-time recognition of sick pig cough sounds. Computers and Electronics in Agriculture, 2008, 63, 207-214.	3.7	72
5	Dynamic modelling and parameter estimation of a hydraulic robot manipulator using a multi-objective genetic algorithm. International Journal of Control, 2017, 90, 661-683.	1.2	57
6	Heuristic Algorithm Based Optimal Power Flow Model Incorporating Stochastic Renewable Energy Sources. IEEE Access, 2020, 8, 148622-148643.	2.6	56
7	Multi-objective performance optimisation for model predictive control by goal attainment. International Journal of Control, 2010, 83, 1374-1386.	1.2	53
8	State-dependent control of a hydraulically actuated nuclear decommissioning robot. Control Engineering Practice, 2013, 21, 1716-1725.	3.2	45
9	Vision-Based Assisted Tele-Operation of a Dual-Arm Hydraulically Actuated Robot for Pipe Cutting and Grasping in Nuclear Environments. Robotics, 2019, 8, 42.	2.1	39
10	Non-linear control by input–output state variable feedback pole assignment. International Journal of Control, 2009, 82, 1029-1044.	1.2	35
11	A Stacked Machine and Deep Learning-Based Approach for Analysing Electricity Theft in Smart Grids. IEEE Transactions on Smart Grid, 2022, 13, 1633-1644.	6.2	33
12	A genetic algorithm approach for parameter optimization of a 7DOF robotic manipulator. IFAC-PapersOnLine, 2016, 49, 1261-1266.	0.5	30
13	An analysis of the dynamic response of stomatal conductance to a reduction in humidity over leaves ofCedrella odorata. Plant, Cell and Environment, 1999, 22, 913-924.	2.8	27
14	Proportional-integral-plus (PIP) control of ventilation rate in agricultural buildings. Control Engineering Practice, 2004, 12, 225-233.	3.2	27
15	Development of an automated verticality alignment system for a vibro-lance. Automation in Construction, 2008, 17, 645-655.	4.8	26
16	Modelling and PIP control design for open-top chambers. Control Engineering Practice, 1998, 6, 1209-1216.	3.2	25
17	Stabilizing global mean surface temperature: A feedback control perspective. Environmental Modelling and Software, 2009, 24, 665-674.	1.9	23
18	Time-series analysis for online recognition and localization of sick pig (Sus scrofa) cough sounds. Journal of the Acoustical Society of America, 2008, 124, 3803-3809.	0.5	20

#	ARTICLE	IF	CITATIONS
19	Controllable forms for stabilising pole assignment design of generalised bilinear systems. Electronics Letters, 2011, 47, 437.	0.5	20
20	Overview of wave energy converter devices and the development of a new multi-axis laboratory prototype. IFAC-PapersOnLine, 2017, 50, 15651-15656.	0.5	20
21	Design and application of PIP controllers: robust control of the IFAC93 benchmark. Transactions of the Institute of Measurement and Control, 2001, 23, 183-200.	1.1	19
22	Development of a grow-cell test facility for research into sustainable controlled-environment agriculture. Biosystems Engineering, 2016, 150, 40-53.	1.9	18
23	The Microphenotron: a robotic miniaturized plant phenotyping platform with diverse applications in chemical biology. Plant Methods, 2017, 13, 10.	1.9	18
24	Alpha Particle Detection Using Alpha-Induced Air Radioluminescence: A Review and Future Prospects for Preliminary Radiological Characterisation for Nuclear Facilities Decommissioning. Sensors, 2018, 18, 1015.	2.1	18
25	Feedback Control–Based Inverse Kinematics Solvers for a Nuclear Decommissioning Robot. IFAC-PapersOnLine, 2016, 49, 177-184.	0.5	17
26	Modelling and Proportional-integral-plus Control Design for Free Air Carbon Dioxide Enrichment systems. Biosystems Engineering, 2000, 75, 365-374.	0.4	16
27	Non-minimal state-space model-based continuous-time model predictive control with constraints. International Journal of Control, 2009, 82, 1122-1137.	1.2	15
28	Macroscopic traffic flow modelling and ramp metering control using Matlab/Simulink. Environmental Modelling and Software, 2004, 19, 975-988.	1.9	14
29	Towards a Cooperative Robotic System for Autonomous Pipe Cutting in Nuclear Decommissioning. , 2018, , .		14
30	Recent Developments in the CAPTAIN Toolbox for Matlab. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1838-1843.	0.4	13
31	Modelling of an hydraulic excavator using simplified refined instrumental variable (SRIV) algorithm. Journal of Control Theory and Applications, 2007, 5, 391-396.	0.8	12
32	Non-minimal state variable feedback decoupling control for multivariable continuous-time systems. International Journal of Control, 2012, 85, 722-734.	1.2	11
33	Environmental Test Chamber for the Support of Learning and Teaching in Intelligent Control. International Journal of Electrical Engineering and Education, 2004, 41, 375-387.	0.4	10
34	Dealing with observational data in control. Annual Reviews in Control, 2018, 46, 94-106.	4.4	10
35	Control of Nonlinear Biological Systems by Non-minimal State Variable Feedback. Statistics in Biosciences, 2014, 6, 290-313.	0.6	9
36	Modelling seasonal and multi-annual variation in bank vole populations and nephropathia epidemica. Biosystems Engineering, 2014, 121, 25-37.	1.9	8

#	Article	IF	Citations
37	State-dependent parameter model identification for inverse dead-zone control of a hydraulic manipulator. IFAC-PapersOnLine, 2018, 51, 126-131.	0.5	8
38	State dependent control of a robotic manipulator used for nuclear decommissioning activities. , 2010, , .		7
39	Modeling and analysis of secondary sources coupling for active sound field reduction in confined spaces. Mechanical Systems and Signal Processing, 2017, 95, 286-309.	4.4	7
40	The Captain Toolbox for Matlab. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 758-763.	0.4	6
41	Pulse shape discrimination performance of a pixelated plastic scintillator (EJ-299-34) for a coded-aperture based dual particle imaging system. Journal of Instrumentation, 2019, 14, P07017-P07017.	0.5	6
42	Gamma-ray modulation properties of tungsten coded apertures for a novel mixed-field imaging system. Journal of Instrumentation, 2019, 14, P02007-P02007.	0.5	6
43	System Identification of mGluR-Dependent Long-Term Depression. Neural Computation, 2013, 25, 650-670.	1.3	5
44	Inverse kinematics for a redundant robotic manipulator used for nuclear decommissioning. , 2014, , .		4
45	Heuristic Algorithm Based Dynamic Scheduling Model of Home Appliances in Smart Grid. , 2018, , .		4
46	Robustness evaluation and robust design for proportional-integral-plus control. International Journal of Control, 2019, 92, 2939-2951.	1.2	4
47	Big Data Analytics Based Short Term Load Forecasting Model for Residential Buildings in Smart Grids. , 2020, , .		4
48	Implementation and Evaluation of a Semi-Autonomous Hydraulic Dual Manipulator for Cutting Pipework in Radiologically Active Environments. Robotics, 2021, 10, 62.	2.1	4
49	Big Data Analytics for Electricity Theft Detection in Smart Grids. , 2021, , .		4
50	Optimal Power Flow Solution with Uncertain RES using Augmented Grey Wolf Optimzation. , 2020, , .		4
51	Time-Domain Implementation and Analyses of Multi-Motion Modes of Floating Structures. Journal of Marine Science and Engineering, 2022, 10, 662.	1.2	4
52	Linear and Nonlinear Non-minimal State Space Control System Design. , 2012, , 559-581.		3
53	Micro–Climate Control in a Grow–Cell: System Development and Overview. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 4417-4422.	0.4	3
54	Adaptive Biomedical Treatment and Robust Control 1 1This work is supported by the UK Engineering & Physical Sciences Research Council (EPSRC) grant EP/M015637/1 (2015–2018).. IFAC-PapersOnLine, 2017, 50, 12191-12196.	0.5	3

#	Article	IF	Citations
55	Radiation testing of low cost, commercial off the shelf microcontroller board. Nuclear Engineering and Technology, 2021, 53, 3335-3343.	1.1	3
56	Nonâ€minimal stateâ€space polynomial form of the Kalman filter for a general noise model. Electronics Letters, 2018, 54, 204-206.	0.5	3
57	Stateâ€"dependent system identification for control of a hydraulicallyâ€"actuated nuclear decommissioning robot. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1233-1238.	0.4	2
58	Practical experience with unified discrete and continuousâ€"time, multiâ€"input identification for control system design. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 822-827.	0.4	2
59	A 2 dimensional Hammerstein model for heating and ventilation control of conceptual thermal zones. , 2014, , .		2
60	Partitioning of indoor airspace for multi-zone thermal modelling using hierarchical cluster analysis. , 2015, , .		2
61	Computational Fluid Dynamics and Dataâ€"Based Mechanistic Modelling of a Forced Ventilation Chamber. IFAC-PapersOnLine, 2018, 51, 263-268.	0.5	2
62	Robust and adaptive anticoagulant control. Journal of the Royal Statistical Society Series C: Applied Statistics, 2020, 69, 503-524.	0.5	2
63	SSpace: A Flexible and General State Space Toolbox for MATLAB. , 2012, , 615-636.		2
64	Challenges in Oil and Gas Subsea Production Systems: Control, Monitoring and Reliability â€" An Introduction. Measurement and Control, 2011, 44, 206-207.	0.9	1
65	State-dependent control of a hydraulically-actuated nuclear decommissioning robot. , 2012, , .		1
66	Combined pole assignment and mean value engine model multivariable decoupling control. Transactions of the Institute of Measurement and Control, 2015, 37, 40-49.	1.1	1
67	[Regular Paper] Model Predictive and Proportional Integral Control of Blood Clotting Speed Using Warfarin when Data are Missing. , 2018, , .		1
68	[Regular Paper] Stochastic Non-minimal State Space Control with Application to Automated Drug Delivery. , 2018, , .		1
69	A Low-Cost and Semi-Autonomous Robotic Scanning System for Characterising Radiological Waste. Robotics, 2021, 10, 119.	2.1	1
70	COTS vision system, radiation sensor and 6 DoF robot for use in identifying radiologically uncharacterised objects. , 2020, , .		1
71	Non-minimal State Dependent Riccati Equation and Pole Assignment Control of Nonlinear Systems. , 2008, , .		0
72	Compact Viscometer Prototype for Remote In Situ Analysis of Sludge. Sensors, 2019, 19, 3299.	2.1	0

#	Article	IF	Citations
73	Plant Leaf Position Estimation with Computer Vision. Sensors, 2020, 20, 5933.	2.1	0
74	Adaptive treatment and robust control. Biometrics, 2021, 77, 223-236.	0.8	0