Ying Tan

List of Publications by Year
in descending order

173 papers	3,146 citations	201674 27 h-index	175258 52 g-index
174 all docs	174 docs citations	174 times ranked	1852 citing authors

#	Article	IF	Citations
1	Application of the extended technology acceptance model to explore clinician likelihood to use robotics in rehabilitation. Disability and Rehabilitation: Assistive Technology, 2024, 19, 52-59.	2.2	3
2	Task-Driven Formation of Nonholonomic Vehicles With Communication Constraints. IEEE Transactions on Control Systems Technology, 2023, 31, 442-450.	5.2	2
3	Promoting clinical best practice in a user-centred design study of an upper limb rehabilitation robot. Disability and Rehabilitation: Assistive Technology, 2022, 17, 531-538.	2.2	5
4	Distributed Stochastic Model Predictive Control for Heterogeneous Vehicle Platoons Subject to Modeling Uncertainties. IEEE Intelligent Transportation Systems Magazine, 2022, 14, 25-40.	3.8	20
5	Robustness of Vibrational Control in the Presence of Additive Disturbances. IEEE Transactions on Automatic Control, 2022, 67, 3112-3119.	5.7	1
6	Limiting Behavior of Hybrid Time-Varying Systems. IEEE Transactions on Automatic Control, 2022, 67, 5777-5792.	5.7	2
7	Remote State Estimation With Enhanced Robustness in the Presence of Data Packet Dropouts. IEEE Transactions on Automatic Control, 2022, 67, 6552-6566.	5.7	5
8	Coverage control of mobile sensor networks with directional sensing. Mathematical Biosciences and Engineering, 2022, 19, 2913-2934.	1.9	1
9	Model‐guided extremum seeking–case studies. International Journal of Adaptive Control and Signal Processing, 2022, 36, 708-728.	4.1	1
10	Beta Mixture Model for the Uncertainties in Robotic Haptic Object Identification. IEEE/ASME Transactions on Mechatronics, 2022, 27, 1955-1963.	5.8	1
11	Personalized Online Adaptation of Kinematic Synergies for Human-Prosthesis Interfaces. IEEE Transactions on Cybernetics, 2021, 51, 1070-1084.	9.5	12
12	Evaluating Rehabilitation Progress Using Motion Features Identified by Machine Learning. IEEE Transactions on Biomedical Engineering, 2021, 68, 1417-1428.	4.2	12
13	Inducing Human Motor Adaptation Without Explicit Error Feedback: A Motor Cost Approach. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2021, 29, 1403-1412.	4.9	1
14	Exploiting Inherent Human Motor Behaviour in the Online Personalisation of Human-Prosthetic Interfaces. IEEE Robotics and Automation Letters, 2021, 6, 1973-1980.	5.1	6
15	On the Efficiency of Haptic Based Object Identification: Determining Where to Grasp to Get the Most Distinguishing Information. Frontiers in Robotics and AI, 2021, 8, 686490.	3.2	3
16	Invariance Principles and Observability in Switched Systems With an Application in Consensus. IEEE Transactions on Automatic Control, 2021, 66, 5128-5143.	5.7	14
17	A Generalized Matrosov Theorem for Signal Sets on Time Scales. , 2021, , .		0
18	Comparing the Outcomes of Population-averaged and Personalised Input Feature Selection for Transhumeral Prosthetic Interfaces. , 2021, , .		2

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19	Separability of Input Features and the Resulting Accuracy in Classifying Target Poses for Active Transhumeral Prosthetic Interfaces. , 2021, 2021, 4615-4618.		3
20	Web Tension and Speed Control in Rewinding Systems using Active Disturbance Rejection Control. , 2021, , .		1
21	Flexible mechanical metamaterials enabling soft tactile sensors with multiple sensitivities at multiple force sensing ranges. Scientific Reports, 2021, 11, 24125.	3.3	16
22	Detectability and Uniform Global Asymptotic Stability in Switched Nonlinear Time-Varying Systems. IEEE Transactions on Automatic Control, 2020, 65, 2123-2138.	5.7	8
23	Extremum Seeking Control With Input Dead-Zone. IEEE Transactions on Automatic Control, 2020, 65, 3184-3190.	5.7	12
24	Effective Assessments of a Short-Duration Poor Posture on Upper Limb Muscle Fatigue Before Physical Exercise. Frontiers in Physiology, 2020, 11, 541974.	2.8	5
25	Psychometric Evaluation of Multi-Point Bone-Conducted Tactile Stimulation on the Three Bony Landmarks of the Elbow. , 2020, , .		0
26	Tactile Feedback in Closed-Loop Control of Myoelectric Hand Grasping: Conveying Information of Multiple Sensors Simultaneously via a Single Feedback Channel. Frontiers in Neuroscience, 2020, 14, 348.	2.8	15
27	A practical 3D-printed soft robotic prosthetic hand with multi-articulating capabilities. PLoS ONE, 2020, 15, e0232766.	2.5	62
28	Integral sliding mode control design for systems with fast sensor dynamics. Automatica, 2020, 119, 109093.	5.0	17
29	Deception Attack Detection and Estimation for a Local Vehicle in Vehicle Platooning Based on a Modified UFIR Estimator. IEEE Internet of Things Journal, 2020, 7, 3693-3705.	8.7	64
30	Pressure Sensor Data-Driven Optimization of Combustion Phase in a Diesel Engine. IEEE/ASME Transactions on Mechatronics, 2020, 25, 694-704.	5.8	11
31	Extremum Seeking Control With Sporadic Packet Transmission for Networked Control Systems. IEEE Transactions on Control of Network Systems, 2020, 7, 758-769.	3.7	4
32	Distributed Deception Attack Detection in Platoon-Based Connected Vehicle Systems. IEEE Transactions on Vehicular Technology, 2020, 69, 4609-4620.	6.3	75
33	Task-Space Synergies for Reaching Using Upper-Limb Prostheses. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 2966-2977.	4.9	9
34	Stability and Robustness Analysis of Switched Vibrational Control. , 2020, , .		0
35	A practical 3D-printed soft robotic prosthetic hand with multi-articulating capabilities. , 2020, 15, e0232766.		0
36	A practical 3D-printed soft robotic prosthetic hand with multi-articulating capabilities. , 2020, 15, e0232766.		0

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37	A practical 3D-printed soft robotic prosthetic hand with multi-articulating capabilities. , 2020, 15, e0232766.		0
38	A practical 3D-printed soft robotic prosthetic hand with multi-articulating capabilities. , 2020, 15, e0232766.		0
39	Generalized Switched Systems with Application to Hybrid Systems. , 2019, , .		2
40	Indirect Robotic Movement Shaping through Motor Cost Influence. , 2019, 2019, 977-982.		2
41	Direct versus Indirect Visual Feedback: the Effect of Technology in Neurorehabilitation. , 2019, , .		4
42	Spatial Resolution of Visual Stimuli in SSVEP-based Brain-Computer Interface. , 2019, , .		6
43	Effects of varying the rest period on the onset angle of lumbar flexion-relaxation in simulated sheep shearing: a preliminary study. , 2019, 2019, 83-88.		3
44	Interaction Force Estimation Using Extended State Observers: An Application to Impedance-Based Assistive and Rehabilitation Robotics. IEEE Robotics and Automation Letters, 2019, 4, 1156-1161.	5.1	36
45	Model-Guided Data-Driven Optimization for Automotive Compression Ignition Engine Systems. Mechanical Engineering, 2019, 141, S16-S23.	0.1	2
46	New Control Design for Switched Linear Time-Invariant Systems under Arbitrary Switching. , 2019, , .		0
47	Extremum Seeking Control in the Presence of Actuator Hysteresis. , 2019, , .		0
48	On implementation of feedback-based PD-type iterative learning control for robotic manipulators with hard input constraints. , 2019, , .		5
49	Revisit of LQG Control—A New Paradigm with Recovered Robustness. , 2019, , .		18
50	Analysis and experimental verification of a current-cycle iterative learning control for robotic manipulators with output constraints. , 2019, , .		1
51	On Model-guided Neural Networks for System Identification. , 2019, , .		4
52	An Iterative Learning Control Synthesis for Nonlinear Systems with Hard Input and Output Constraints. , 2019, , .		1
53	Magnetic-based Soft Tactile Sensors with Deformable Continuous Force Transfer Medium for Resolving Contact Locations in Robotic Grasping and Manipulation. Sensors, 2019, 19, 4925.	3.8	29
54	Overcoming overshoot performance limitations of linear systems with reset control. Automatica, 2019, 101, 27-35.	5.0	43

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55	Convergence analysis of feedback-based iterative learning control with input saturation. Automatica, 2019, 101, 44-52.	5.0	45
56	Unilateral Manipulability Quality Indices: Generalized Manipulability Measures for Unilaterally Actuated Robots. Journal of Mechanical Design, Transactions of the ASME, 2019, 141, .	2.9	12
57	Sensorless Force Estimator in Rehabilitation Robotics. Biosystems and Biorobotics, 2019, , 180-184.	0.3	0
58	Modulation of shoulder muscle and joint function using a powered upper-limb exoskeleton. Journal of Biomechanics, 2018, 72, 7-16.	2.1	20
59	Disturbance Rejection in Multi-DOF Local Magnetic Actuation for the Robotic Abdominal Surgery. IEEE Robotics and Automation Letters, 2018, 3, 1568-1575.	5.1	5
60	Upper Limb Deweighting Using Underactuated End-Effector-Based Backdrivable Manipulanda. IEEE Robotics and Automation Letters, 2018, 3, 2116-2122.	5.1	9
61	Model-Guided Extremum Seeking for Diesel Engine Fuel Injection Optimization. IEEE/ASME Transactions on Mechatronics, 2018, 23, 936-946.	5.8	14
62	Decentralized PID Control Design for Magnetic Levitation Systems Using Extremum Seeking. IEEE Access, 2018, 6, 3059-3067.	4.2	39
63	Dual-loop iterative optimal control for the finite horizon LQR problem with unknown dynamics. Systems and Control Letters, 2018, 111, 49-57.	2.3	21
64	Feature Learning in Assistive Rehabilitation Robotic Systems. , 2018, 2018, 2511-2514.		3
65	Time Scale Framework for Hybrid Systems. , 2018, , .		2
66	Iterative Learning Control for Linear Time-varying Systems with Input and Output Constraints. , 2018, , .		3
67	Extended State Observer for Nonlinear Time-Varying Dynamic Systems. , 2018, , .		1
68	Model-Guided Data-Driven Decentralized Control for Magnetic Levitation Systems. IEEE Access, 2018, 6, 43546-43562.	4.2	10
69	On the Relationship Between Human Motor Control Performance and Kinematic Synergies in Upper Limb Prosthetics. , 2018, 2018, 3194-3197.		4
70	On-line Synergy Identification for Personalized Active Arm Prosthesis: a Feasibility Study. , 2018, , .		5
71	Robustness of Nonlinear Vibrational Control Systems based on Sampling Lyapunov Method. , 2018, , .		2
72	Optimization Methods on Riemannian Manifolds via Extremum Seeking Algorithms. SIAM Journal on Control and Optimization, 2018, 56, 3867-3892.	2.1	1

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73	Reference State Trajectory Generation for Output Tracking with Constraints using Search Trees. , 2018, , .		1
74	Editorial: Special Issue in Memory of the Late Professor Jian-Xin Xu. Unmanned Systems, 2018, 06, 145-146.	3.6	0
75	On Feedback-Based Iterative Learning Control for Nonlinear Systems Without Global Lipschitz Continuity. , 2018, , .		1
76	Input and Output Constraints in Iterative Learning Control Design for Robotic Manipulators. Unmanned Systems, 2018, 06, 197-208.	3.6	5
77	Compatible Formation Set for UAVs with Visual Sensing Constraint. , 2018, , .		13
78	Feedback-Based Iterative Learning Design and Synthesis With Output Constraints for Robotic Manipulators. , 2018, 2, 513-518.		20
79	Analyzing the Stability of Switched Systems Using Common Zeroing-Output Systems. IEEE Transactions on Automatic Control, 2017, 62, 5138-5153.	5.7	25
80	Output feedback consensus tracking for second-order nonlinear multi-agent systems with directed communication graphs. , 2017, , .		0
81	Online calibration of combustion phase in a diesel engine. Control Theory and Technology, 2017, 15, 129-137.	1.6	8
82	Modeling of Endpoint Feedback Learning Implemented Through Point-to-Point Learning Control. IEEE Transactions on Control Systems Technology, 2017, 25, 1576-1585.	5.2	6
83	Modeling and Control of Local Electromagnetic Actuation for Robotic-Assisted Surgical Devices. IEEE/ASME Transactions on Mechatronics, 2017, 22, 2449-2460.	5.8	13
84	An Algorithm to Find Common Zeroing-Output Systems of Arbitrarily Switched Linear Time-Invariant Systems. IFAC-PapersOnLine, 2017, 50, 14867-14872.	0.9	1
85	Design of feedback gain in feedback-based iterative learning control. , 2017, , .		0
86	On non-local vibrational stabilization of nonlinear systems. , 2017, , .		2
87	On V-shaped flight formation of bird flocks with visual communication constraints. , 2017, , .		5
88	Sampled-data leader-following rendezvous with input saturation. , 2017, , .		0
89	A new condition for output-persistent-excitation of switched nonlinear time-varying systems. , 2017, , .		2
90	Model-based optimal auto-transition and control synthesis for tail-sitter UAV KH-Lion. , 2017, , .		8

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91	EMU: A transparent 3D robotic manipulandum for upper-limb rehabilitation. , 2017, 2017, 771-776.		21
92	Spatial Iterative Learning Control: Systems with input saturation. , 2017, , .		3
93	Calibration free upper limb joint motion estimation algorithm with wearable sensors. , 2016, , .		1
94	Quantifying task similarity for skill generalisation in the context of human motor control. , 2016, , .		2
95	A diesel engine combustion phasing optimization using a model guided extremum seeking approach. , 2016, , .		4
96	On robustness analysis of a vibrational control system: Input-to-state practical stability. , 2016, , .		3
97	On detectability conditions in signal sets with application to switched systems. , 2016, , .		5
98	A refinement of Matrosovâ€™s theorem for differential inclusions. Automatica, 2016, 68, 378-383.	5.0	11
99	Learning control in robot-assisted rehabilitation of motor skills â€" a review. Journal of Control and Decision, 2016, 3, 19-43.	1.6	32
100	On Designing Event-Triggered Schemes for Networked Control Systems Subject to One-Step Packet Dropout. IEEE Transactions on Industrial Informatics, 2016, 12, 902-910.	11.3	45
101	Synchronization of Heterogeneous Multiâ€Agent Systems by Adaptive Iterative Learning Control. Asian Journal of Control, 2015, 17, 2091-2104.	3.0	29
102	Model-based predictive sampled-data control and its robustness. , 2015, , .		1
103	Nonlinear model reference observer design for feedback control of a low temperature combustion diesel engine. , 2015, , .		7
104	Coordination of blind agents on Lie groups. , 2015, , .		2
105	Effects of robotic exoskeleton dynamics on joint recruitment in a neurorehabilitation context. , 2015, , .		5
106	Electromagnetic Actuator Across Abdominal Wall for Minimally Invasive Robotic Surgery1. Journal of Medical Devices, Transactions of the ASME, 2015, 9, .	0.7	4
107	Stability and Persistent Excitation in Signal Sets. IEEE Transactions on Automatic Control, 2015, 60, 1188-1203.	5.7	25
108	Extremum seeking of dynamical systems via gradient descent and stochastic approximation methods. Automatica, 2015, 56, 44-52.	5.0	28

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109	Speed control of non-collocated stator-rotor synchronous motor with application in robotic surgery. , 2015, , .		4
110	An investigation into the reliability of upper-limb robotic exoskeleton measurements for clinical evaluation in neurorehabilitation. , 2015, , .		9
111	Effect of sensory experience on motor learning strategy. Journal of Neurophysiology, 2015, 113, 1077-1084.	1.8	5
112	Modeling and Control of Complex Networked Systems. Mathematical Problems in Engineering, 2014, 2014, 1-2.	1.1	0
113	On a new uniform dynamic coding algorithm for model-based networked control systems. , 2014, , .		0
114	Extremum seeking control for nonlinear systems on compact Riemannian manifolds. , 2014, , .		1
115	On sign-definite pairs of functions. , 2014, , .		4
116	Multi-agent source seeking via discrete-time extremum seeking control. Automatica, 2014, 50, 2312-2320.	5.0	42
117	Optimal iterative learning control design for multi-agent systems consensus tracking. Systems and Control Letters, 2014, 69, 80-89.	2.3	99
118	Improving â‚' 2 Gain Performance of Linear Systems by Reset Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 6400-6405.	0.4	7
119	Multi-agent gradient climbing via extremum seeking control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 9973-9978.	0.4	3
120	Extremum Seeking Methods for Online Automotive Calibration. Lecture Notes in Control and Information Sciences, 2014, , 23-39.	1.0	4
121	A non-gradient approach to global extremum seeking: An adaptation of the Shubert algorithm. Automatica, 2013, 49, 809-815.	5.0	41
122	Iterative Learning Control With Mixed Constraints for Point-to-Point Tracking. IEEE Transactions on Control Systems Technology, 2013, 21, 604-616.	5.2	143
123	Unified frameworks for sampled-data extremum seeking control: Global optimisation and multi-unit systems. Automatica, 2013, 49, 2720-2733.	5.0	86
124	Extremum Seeking for Constrained Inputs. IEEE Transactions on Automatic Control, 2013, 58, 2405-2410.	5.7	41
125	Trajectory redundancy iterative learning control. , 2013, , .		0
126	Averaging for nonlinear systems on Riemannian manifolds. , 2013, , .		3

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127	Closeness of solutions and averaging for nonlinear systems on Riemannian manifolds. , 2013, , .		1
128	Multidimensional global extremum seeking via the DIRECT optimisation algorithm. Automatica, 2013, 49, 1970-1978.	5.0	43
129	Open problems in reset control. , 2013, , .		12
130	On iterative learning control for synchronization of MIMO heterogeneous systems. , 2013, , .		1
131	On sampled-data extremum seeking control via stochastic approximation methods. , 2013, , .		0
132	Trajectory-based proofs for sampled-data extremum seeking control. , 2013, , .		1
133	Point-to-point learning in human motor systems. , 2013, , .		2
134	On on-line sampled-data optimal learning for dynamic systems with uncertainties. , 2013, , .		3
135	A dual Iterative Learning Control loops for cascade systems. , 2012, , .		4
136	A unifying framework for analysis and design of extremum seeking controllers. , 2012, , .		12
137	Modelling and control for an EMS system with two inputs. International Journal of Modelling, Identification and Control, 2012, 16, 190.	0.2	2
138	Unified iterative learning control schemes for nonlinear dynamic systems with nonlinear input uncertainties. Automatica, 2012, 48, 3173-3182.	5.0	42
139	Robustness analysis of leader–follower consensus for multi-agent systems characterized by double integrators. Systems and Control Letters, 2012, 61, 1103-1115.	2.3	20
140	Convergence and robustness of a point-to-point iterative learning control algorithm. , 2012, , .		5
141	Assessment of gradient-based point-to-point ILC for MIMO systems with varying interaction. , 2012, , .		2
142	Modeling Individual Human Motor Behavior Through Model Reference Iterative Learning Control. IEEE Transactions on Biomedical Engineering, 2012, 59, 1892-1901.	4.2	18
143	New stability criteria for switched time-varying systems: Output-persistently exciting conditions. , 2011, , .		9
144	Point-to-point iterative learning control with mixed constraints. , 2011, , .		17

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145	Iterative learning control and repetitive control. International Journal of Control, 2011, 84, 1193-1195.	1.9	13
146	Performance analysis of iterative algorithms for sylvester equations. , 2010, , .		1
147	On iterative learning control with high-order internal models. , 2009, , .		3
148	Dynamic practical stabilization of sampled-data linear distributed parameter systems. , 2009, , .		12
149	A dual-loop iterative learning control for nonlinear systems with hysteresis input uncertainty. , 2009, , .		3
150	On extremum seeking in bioprocesses with multivalued cost functions. Biotechnology Progress, 2009, 25, 683-689.	2.6	34
151	Robustness analysis of leader-follower consensus. Journal of Systems Science and Complexity, 2009, 22, 186-206.	2.8	43
152	On the choice of dither in extremum seeking systems: A case study. Automatica, 2008, 44, 1446-1450.	5.0	148
153	ON AUTOMATIC SEEKING OF OPTIMAL STEADY-STATES IN BIOCHEMICAL PROCESSES. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 733-738.	0.4	0
154	Sufficient Conditions for Stabilization of Sampled-data Linear Spatially Distributed Parameter Systems via Discrete time Approximations. , 2007, , .		0
155	Point-wise Extremum Seeking Control Scheme Under Repeatable Control Environment. , 2007, , .		0
156	Nonlinear Adaptive Wavelet Control Using Constructive Wavelet Networks. IEEE Transactions on Neural Networks, 2007, 18, 115-127.	4.2	58
157	On global extremum seeking in the presence of local extrema. , 2006, , .		26
158	On Stability Properties of A Simple Extremum Seeking Scheme. , 2006, , .		2
159	On non-local stability properties of extremum seeking control. Automatica, 2006, 42, 889-903.	5.0	501
160	Iterative learning control design based on composite energy function with input saturation. Automatica, 2004, 40, 1371-1377.	5.0	139
161	A composite energy function-based learning control approach for nonlinear systems with time-varying parametric uncertainties. IEEE Transactions on Automatic Control, 2002, 47, 1940-1945.	5.7	181
162	Enhancing trajectory tracking for a class of process control problems using iterative learning. Engineering Applications of Artificial Intelligence, 2002, 15, 53-64.	8.1	15

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163	On the P-type and Newton-type ILC schemes for dynamic systems with non-affine-in-input factors. Automatica, 2002, 38, 1237-1242.	5.0	56
164	Robust optimal design and convergence properties analysis of iterative learning control approaches. Automatica, 2002, 38, 1867-1880.	5.0	100
165	New iterative learning control approaches for nonlinear non-affine MIMO dynamic systems. , 2001, , .		2
166	On a constructive adaptive wavelet control approach. , 2001, , .		1
167	A suboptimal learning control scheme for non-linear systems with time-varying parametric uncertainties. Optimal Control Applications and Methods, 2001, 22, 111-126.	2.1	12
168	Nonlinear adaptive wavelet control using constructive wavelet networks. , 2001, , .		2
169	Iterative learning control design based on composite energy function with input saturation. , 0, , .		1
170	A new pointwise adaptive control approach for time-varying parameters with known periodicity. , 0, , .		2
171	Analysis and robust optimal design of iteration learning control. , 0, , .		0
172	Learning based nonlinear internal model control. , 0, , .		5
173	On the convergence speed of a class of higher-order ILC schemes. , 0, , .		13