

Chris T Freeman

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7326993/publications.pdf>

Version: 2024-02-01

100
papers

2,053
citations

236833

25
h-index

254106

43
g-index

101
all docs

101
docs citations

101
times ranked

1115
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimentally supported 2D systems based iterative learning control law design for error convergence and performance. Control Engineering Practice, 2010, 18, 339-348.	3.2	186
2	Iterative Learning Control With Mixed Constraints for Point-to-Point Tracking. IEEE Transactions on Control Systems Technology, 2013, 21, 604-616.	3.2	143
3	Identification of electrically stimulated muscle models of stroke patients. Control Engineering Practice, 2010, 18, 396-407.	3.2	103
4	Iterative Learning Control for Multiple Point-to-Point Tracking Application. IEEE Transactions on Control Systems Technology, 2011, 19, 590-600.	3.2	91
5	Recursive identification of Hammerstein systems with application to electrically stimulated muscle. Control Engineering Practice, 2012, 20, 386-396.	3.2	87
6	Constrained point-to-point iterative learning control with experimental verification. Control Engineering Practice, 2012, 20, 489-498.	3.2	80
7	Using Functional Electrical Stimulation Mediated by Iterative Learning Control and Robotics to Improve Arm Movement for People With Multiple Sclerosis. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2016, 24, 235-248.	2.7	79
8	Norm-Optimal Iterative Learning Control With Intermediate Point Weighting: Theory, Algorithms, and Experimental Evaluation. IEEE Transactions on Control Systems Technology, 2013, 21, 999-1007.	3.2	71
9	Functional electrical stimulation mediated by iterative learning control and 3D robotics reduces motor impairment in chronic stroke. Journal of NeuroEngineering and Rehabilitation, 2012, 9, 32.	2.4	68
10	A Model of the Upper Extremity Using FES for Stroke Rehabilitation. Journal of Biomechanical Engineering, 2009, 131, 031011.	0.6	66
11	Point-to-Point Iterative Learning Control With Optimal Tracking Time Allocation. IEEE Transactions on Control Systems Technology, 2018, 26, 1685-1698.	3.2	51
12	Development of User-Friendly Wearable Electronic Textiles for Healthcare Applications. Sensors, 2018, 18, 2410.	2.1	49
13	Upper Limb Electrical Stimulation Using Input-Output Linearization and Iterative Learning Control. IEEE Transactions on Control Systems Technology, 2015, 23, 1546-1554.	3.2	48
14	Predictive-repetitive control with constraints: From design to implementation. Journal of Process Control, 2013, 23, 956-967.	1.7	40
15	A Novel Design Framework for Point-to-Point ILC Using Successive Projection. IEEE Transactions on Control Systems Technology, 2015, 23, 1156-1163.	3.2	40
16	Norm-Optimal Iterative Learning Control with Application to Problems in Accelerator-Based Free Electron Lasers and Rehabilitation Robotics. European Journal of Control, 2010, 16, 497-522.	1.6	38
17	Output Information Based Iterative Learning Control Law Design With Experimental Verification. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2012, 134, .	0.9	36
18	Iterative Learning Control With Predictive Trial Information: Convergence, Robustness, and Experimental Verification. IEEE Transactions on Control Systems Technology, 2016, 24, 1101-1108.	3.2	35

#	ARTICLE	IF	CITATIONS
19	Multivariable Repetitive-Predictive Controllers Using Frequency Decomposition. IEEE Transactions on Control Systems Technology, 2012, 20, 1597-1604.	3.2	34
20	Multivariable norm optimal iterative learning control with auxiliary optimisation. International Journal of Control, 2013, 86, 1026-1045.	1.2	34
21	Multiple-Model Adaptive Control of Functional Electrical Stimulation. IEEE Transactions on Control Systems Technology, 2015, 23, 1901-1913.	3.2	33
22	Electrode array-based electrical stimulation using ILC with restricted input subspace. Control Engineering Practice, 2014, 23, 32-43.	3.2	31
23	Iterative Learning Control Based on Relaxed 2-D Systems Stability Criteria. IEEE Transactions on Control Systems Technology, 2013, 21, 1016-1023.	3.2	30
24	An inverse-model approach to multivariable norm optimal iterative learning control with auxiliary optimisation. International Journal of Control, 2014, 87, 1646-1671.	1.2	29
25	Generalized Iterative Learning Control Using Successive Projection: Algorithm, Convergence, and Experimental Verification. IEEE Transactions on Control Systems Technology, 2020, 28, 2079-2091.	3.2	27
26	Predictive iterative learning control with experimental validation. Control Engineering Practice, 2016, 53, 24-34.	3.2	25
27	Iterative Learning Control for Robotic Path Following With Trial-Varying Motion Profiles. IEEE/ASME Transactions on Mechatronics, 2022, 27, 4697-4706.	3.7	25
28	Repetitive Control of Electrical Stimulation for Tremor Suppression. IEEE Transactions on Control Systems Technology, 2019, 27, 540-552.	3.2	23
29	Using 2D systems theory to design output signal based iterative learning control laws with experimental verification. , 2008, , .		20
30	Generalized iterative learning control with mixed system constraints: A gantry robot based verification. Control Engineering Practice, 2020, 95, 104260.	3.2	20
31	An Optimality-Based Repetitive Control Algorithm for Discrete-Time Systems. IEEE Transactions on Circuits and Systems I: Regular Papers, 2008, 55, 412-423.	3.5	19
32	A 2D systems approach to iterative learning control for discrete linear processes with zero Markov parameters. International Journal of Control, 2011, 84, 1246-1262.	1.2	19
33	Factors affecting rehabilitation and use of upper limb after stroke: views from healthcare professionals and stroke survivors. Topics in Stroke Rehabilitation, 2019, 26, 94-100.	1.0	19
34	A common setting for the design of iterative learning and repetitive controllers with experimental verification. International Journal of Adaptive Control and Signal Processing, 2013, 27, 230-249.	2.3	18
35	Iterative Learning Control for Path-Following Tasks With Performance Optimization. IEEE Transactions on Control Systems Technology, 2022, 30, 234-246.	3.2	18
36	Point-to-point iterative learning control with mixed constraints. , 2011, , .		17

#	ARTICLE	IF	CITATIONS
37	FES based rehabilitation of the upper limb using input/output linearization and ILC. , 2012, , .		17
38	Control System Design for Electrical Stimulation in Upper Limb Rehabilitation. , 2016, , .		17
39	Computational models of upper-limb motion during functional reaching tasks for application in FES-based stroke rehabilitation. Biomedizinische Technik, 2015, 60, 179-91.	0.9	16
40	A coordinate descent approach to optimal tracking time allocation in point-to-point ILC. Mechatronics, 2019, 59, 25-34.	2.0	16
41	Influence of Nonminimum Phase Zeros on the Performance of Optimal Continuous-Time Iterative Learning Control. IEEE Transactions on Control Systems Technology, 2014, 22, 1151-1158.	3.2	14
42	Generalized norm optimal iterative learning control with intermediate point and sub-interval tracking. International Journal of Automation and Computing, 2015, 12, 243-253.	4.5	14
43	Data-driven gradient-based point-to-point iterative learning control for nonlinear systems. Nonlinear Dynamics, 2020, 102, 269-283.	2.7	13
44	Iterative learning control of functional electrical stimulation in the presence of voluntary user effort. Control Engineering Practice, 2020, 96, 104303.	3.2	13
45	Spatial path tracking using iterative learning control. , 2016, , .		9
46	Objective-driven ilc for point-to-point movement tasks. , 2009, , .		8
47	Assessment of gradient-based iterative learning controllers using a multivariable test facility with varying interaction. Control Engineering Practice, 2014, 29, 158-173.	3.2	8
48	System identification for FES-based tremor suppression. European Journal of Control, 2016, 27, 45-59.	1.6	8
49	Iterative Learning Control for multiple point-to-point tracking. , 2009, , .		7
50	Generalized Norm Optimal Iterative Learning Control: Constraint Handling. IFAC-PapersOnLine, 2017, 50, 13396-13401.	0.5	7
51	Repetitive process based iterative learning control designed by LMIs and experimentally verified on a gantry robot. , 2009, , .		6
52	Robust higher order repetitive control applied to human tremor suppression. , 2012, , .		6
53	Point-to-point iterative learning control with optimal tracking time allocation. , 2015, , .		6
54	Modeling of Endpoint Feedback Learning Implemented Through Point-to-Point Learning Control. IEEE Transactions on Control Systems Technology, 2017, 25, 1576-1585.	3.2	6

#	ARTICLE	IF	CITATIONS
55	Multichannel Biphasic Muscle Stimulation System for Post Stroke Rehabilitation. Electronics (Switzerland), 2020, 9, 1156.	1.8	6
56	On structure selection for multivariable repetitive-predictive controllers. , 2010, , .		5
57	Convergence and robustness of a point-to-point iterative learning control algorithm. , 2012, , .		5
58	Estimation based multiple model iterative learning control. , 2015, , .		5
59	Decentralised Collaborative Iterative Learning Control for MIMO Multi-Agent Systems. , 2019, , .		5
60	Disturbance observer-based predictive repetitive control with constraints. International Journal of Control, 2022, 95, 1060-1069.	1.2	5
61	An Experimental Facility using Functional Electrical Stimulation for Stroke Rehabilitation of the Upper Limb. , 2007, , .		4
62	Design & control of an upper arm fes workstation for rehabilitation. , 2009, , .		4
63	Upper limb rehabilitation of stroke participants using electrical stimulation: Changes in tracking and EMG timing. , 2009, , .		4
64	Experimentally verified Iterative Learning Control based on repetitive process stability theory. , 2012, , .		4
65	A dual Iterative Learning Control loops for cascade systems. , 2012, , .		4
66	ILC for FES-based stroke rehabilitation of hand and wrist. , 2012, , .		4
67	Point-to-point iterative learning control with optimal tracking time allocation: A coordinate descent approach. , 2017, , .		4
68	Multiple model switched repetitive control. , 2017, , .		4
69	Functional electrical stimulation for home-based upper-limb stroke rehabilitation. Current Directions in Biomedical Engineering, 2017, 3, 25-29.	0.2	4
70	Upper limb and eye movement coordination during reaching tasks in people with stroke. Disability and Rehabilitation, 2018, 40, 2424-2432.	0.9	4
71	Iterative Learning Control for Minimum Time Path Following. IFAC-PapersOnLine, 2019, 52, 320-325.	0.5	4
72	Norm optimal Iterative Learning Control with auxiliary optimization - An inverse model approach. , 2013, , .		3

#	ARTICLE	IF	CITATIONS
73	On on-line sampled-data optimal learning for dynamic systems with uncertainties. , 2013, , .		3
74	Norm Optimal Iterative Learning Control for General Spatial Path Following Problem. , 2018, , .		3
75	Reference Shift Iterative Learning Control for a Non-minimum Phase Plant. Proceedings of the American Control Conference, 2007, , .	0.0	2
76	Experimental verification of constrained iterative learning control using successive projection. , 2012, , .		2
77	Assessment of gradient-based point-to-point ILC for MIMO systems with varying interaction. , 2012, , .		2
78	Point-to-point learning in human motor systems. , 2013, , .		2
79	2D systems based iterative learning control design for multiple-input multiple-output systems. , 2014, , .		2
80	Iterative Learning Vector Field for FES-Supported Cyclic Upper Limb Movements in Combination with Robotic Weight Compensation. , 2018, , .		2
81	A decentralised iterative learning control framework for collaborative tracking. Mechatronics, 2020, 72, 102465.	2.0	2
82	Decentralised Collaborative and Formation Iterative Learning Control for Multi-Agent Systems. , 2020, , .		2
83	Design of a Hybrid Adaptive Support Device for FES Upper Limb Stroke Rehabilitation. Mechanisms and Machine Science, 2016, , 13-22.	0.3	2
84	Experimental comparison of stochastic iterative learning control algorithms. , 2008, , .		1
85	Iterative Learning Control based on strong practical stability of repetitive processes. , 2009, , .		1
86	Experimental implementation of iterative learning control for processes with stochastic disturbances. , 2011, , .		1
87	Iterative learning control for discrete linear systems with Zero Markov parameters using repetitive process stability theory. , 2011, , .		1
88	Experimentally validated repetitive-predictive control of a robot arm with constraints. , 2012, , .		1
89	Electrical stimulation and iterative learning control combined with real objects and simulated tasks to assist motor recovery in the upper extremity post-stroke. , 2014, , .		1
90	Observer-based Predictive Repetitive Control with Experimental Validation. IFAC-PapersOnLine, 2017, 50, 3674-3679.	0.5	1

#	ARTICLE	IF	CITATIONS
91	Model-Based Control of FES Embedding Simultaneous Volitional EMG Measurement. , 2018, , .		1
92	Experimentally verified 2D systems theory based robust iterative learning control. , 2010, , .		0
93	Iterative learning and repetitive controller design via duality with experimental verification. , 2010, , .		0
94	Intermediate point norm optimal iterative learning control. , 2012, , .		0
95	Repetitive control based tremor suppression using electrical stimulation. , 2014, , .		0
96	Iterative Learning Control with Time Domain Prediction using Laguerre Functions. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 395-400.	0.4	0
97	Goal-Oriented Stroke Rehabilitation. Springer Briefs in Electrical and Computer Engineering, 2015, , 93-116.	0.3	0
98	Conclusions and Further Research. Springer Briefs in Electrical and Computer Engineering, 2015, , 117-120.	0.3	0
99	Modeling and Identification. , 2016, , 7-20.		0
100	Constrained ILC for Human Motor Control. , 2016, , 85-109.		0