

# Andrew G Alleyne

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3040683/publications.pdf>

Version: 2024-02-01

295  
papers

7,923  
citations

76326

40  
h-index

60623

81  
g-index

298  
all docs

298  
docs citations

298  
times ranked

5745  
citing authors

#	ARTICLE	IF	CITATIONS
1	Robust Design and Evaluation of a Novel Modular Origami-Enabled Mobile Robot (OSCAR). Journal of Mechanisms and Robotics, 2023, 15, .	2.2	2
2	A Series-Hierarchical Iterative Learning Controller for Multi-Stage Systems. , 2022, 6, 914-919.		2
3	Control as an Enabler for Electrified Mobility. Annual Review of Control, Robotics, and Autonomous Systems, 2022, 5, .	11.8	1
4	Graph-Based Dynamic Modeling of Two-Phase Heat Exchangers in Vapor Compression Systems. International Journal of Refrigeration, 2022, 137, 244-256.	3.4	5
5	Mission and Shape Optimization of a HALE Aircraft including Transient Power and Thermal Constraints. , 2022, , .		2
6	Framework for integrated plant and control optimization of electro-thermal systems: An energy storage system case study. Energy, 2022, 258, 124855.	8.8	7
7	An Improved Approach to Iterative Learning Control for Uncertain Systems. IEEE Transactions on Control Systems Technology, 2021, 29, 546-555.	5.2	20
8	Nanostructured jumping-droplet thermal rectifier. Physical Review E, 2021, 103, 023110.	2.1	24
9	Process monitoring and control strategies in extrusion-based bioprinting to fabricate spatially graded structures. Bioprinting, 2021, 21, e00126.	5.8	20
10	Plant and Controller Optimization for Power and Energy Systems With Model Predictive Control. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2021, 143, .	1.6	8
11	A Multi-Input Single-Output iterative learning control for improved material placement in extrusion-based additive manufacturing. Control Engineering Practice, 2021, 111, 104783.	5.5	14
12	Graphene-based electromechanical thermal switches. 2D Materials, 2021, 8, 035055.	4.4	4
13	Hierarchical model-based predictive controller for a hybrid UAV powertrain. Control Engineering Practice, 2021, 115, 104883.	5.5	10
14	Hierarchical Control of Aircraft Electro-Thermal Systems. IEEE Transactions on Control Systems Technology, 2020, 28, 1218-1232.	5.2	26
15	Direct process feedback in extrusion-based 3D bioprinting. Biofabrication, 2020, 12, 015017.	7.1	30
16	Hierarchical Hybrid MPC for Management of Distributed Phase Change Thermal Energy Storage. , 2020, , .		7
17	Experimental Model and Controller Validation for a Series Hybrid Unmanned Aerial Vehicle. , 2020, , .		5
18	Extremum seeking control of battery powered vapor compression systems for commercial vehicles. International Journal of Refrigeration, 2020, 115, 63-72.	3.4	6

#	ARTICLE	IF	CITATIONS
19	1D and 2D error assessment and correction for extrusion-based bioprinting using process sensing and control strategies. <i>Biofabrication</i> , 2020, 12, 045023.	7.1	22
20	Optimal Sensor Placement Methods in Active High Power Density Electronic Systems With Experimental Validation. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2020, 142, .	2.9	8
21	A Novel Framework for Simultaneous Topology and Sizing Optimization of Complex, Multi-Domain Systems-of-Systems. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2020, 142, .	2.9	9
22	Multilevel Hierarchical Estimation for Thermal Management Systems of Electrified Vehicles With Experimental Validation. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2020, 142, .	1.6	2
23	Low-Complexity Hierarchical Control for Distributed Shopping Center HVAC. <i>IFAC-PapersOnLine</i> , 2020, 53, 6597-6603.	0.9	0
24	An Improved Iterative Learning Control for Uncertain Multi-Axis Systems. , 2020, , .		1
25	Graph-Based Design and Control Optimization of a Hybrid Electrical Energy Storage System. , 2020, , .		3
26	Multi-Level Hierarchical Estimation for Thermal Management Systems of Electrified Vehicles. , 2020, , .		0
27	Numerical model for liquid-to-liquid heat pumps implementing switching mode. <i>Applied Thermal Engineering</i> , 2019, 160, 114054.	6.0	2
28	Innentitelbild: Selective Autonomous Molecular Transport and Collection by Hydrogelâ€Embedded Supramolecular Chemical Gradients ( <i>Angew. Chem. 50/2019</i> ). <i>Angewandte Chemie</i> , 2019, 131, 18046-18046.	2.0	0
29	Selective Autonomous Molecular Transport and Collection by Hydrogelâ€Embedded Supramolecular Chemical Gradients. <i>Angewandte Chemie</i> , 2019, 131, 18333-18338.	2.0	6
30	Selective Autonomous Molecular Transport and Collection by Hydrogelâ€Embedded Supramolecular Chemical Gradients. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 18165-18170.	13.8	9
31	Optimal Flow Control and Single Split Architecture Exploration for Fluid-Based Thermal Management. <i>Journal of Mechanical Design, Transactions of the ASME</i> , 2019, 141, .	2.9	15
32	Fault Detection and Isolation for Complex Thermal Management Systems. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2019, 141, .	1.6	3
33	Model-based temperature estimation of power electronics systems. <i>Control Engineering Practice</i> , 2019, 85, 206-215.	5.5	7
34	Cooperativity and Hierarchical MPC of State-Constrained Switched Power Flow Systems. , 2019, , .		2
35	Graph-Based Electro-Mechanical Modeling of a Hybrid Unmanned Aerial Vehicle for Real-Time Applications. , 2019, , .		4
36	Path Following for the Soft Origami Crawling Robot. , 2019, , .		2

#	ARTICLE	IF	CITATIONS
37	Hierarchical Estimation for Complex Multi-Domain Dynamical Systems. , 2019, , .		0
38	A Hybrid Electro-Thermal Energy Storage System for High Ramp Rate Power Applications. , 2019, , .		1
39	Dynamical Graph Models of Aircraft Electrical, Thermal, and Turbomachinery Components. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2018, 140, .	1.6	24
40	Multi-zone Temperature Modeling and Control. Advances in Industrial Control, 2018, , 139-166.	0.5	2
41	HVAC System Modeling and Control: Vapor Compression System Modeling and Control. Advances in Industrial Control, 2018, , 73-103.	0.5	5
42	Power Density as the Key Enabler for Electrified Mobility. Polytechnica, 2018, 1, 10-18.	2.1	4
43	Controller Design for Two-Input Single-Output Systems Exploiting Plant/Controller Alignment. , 2018, , .		0
44	Electro-Thermal Graph-Based Modeling for Hierarchical Control with Application to an Electric Vehicle. , 2018, , .		8
45	Hierarchical Control for Electro-Thermal Power Management of an Electric Vehicle Powertrain. , 2018, , .		8
46	Improved Cross-Coupled Iterative Learning Control for Contouring NURBS Curves. , 2018, , .		0
47	Optimal Flow Control and Single Split Architecture Exploration for Fluid-Based Thermal Management. , 2018, , .		5
48	Model Predictive Control of a Pumped Two-Phase Cooling System With Microchannel Heat Exchangers. , 2018, , .		0
49	Passivity and Decentralized MPC of Switched Graph-Based Power Flow Systems. , 2018, , .		11
50	Experimental Validation of Graph-Based Hierarchical Control for Thermal Management. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2018, 140, .	1.6	24
51	Directed Molecular Collection by E-Field-Printed Microscale Chemical Potential Wells in Hydrogel Films. Advanced Materials, 2018, 30, 1803140.	21.0	8
52	Robust hierarchical model predictive control of graph-based power flow systems. Automatica, 2018, 96, 127-133.	5.0	11
53	Two-Level Hierarchical Mission-Based Model Predictive Control. , 2018, , .		7
54	Integrated Modeling for Battery Electric Vehicle Transcritical Thermal Management System. , 2018, , .		1

#	ARTICLE	IF	CITATIONS
55	Fault Detection and Isolation for Complex Thermal Management Systems. , 2018, , .		0
56	Dynamic Thermal Management for Aerospace Technology: Review and Outlook. Journal of Thermophysics and Heat Transfer, 2017, 31, 86-98.	1.6	45
57	Autonomous Vehicle Control: A Nonconvex Approach for Obstacle Avoidance. IEEE Transactions on Control Systems Technology, 2017, 25, 469-484.	5.2	115
58	Stability of decentralized model predictive control of graph-based power flow systems via passivity. Automatica, 2017, 82, 29-34.	5.0	27
59	Mitigating power systems variability in more electric aircraft utilizing power electronics implemented dynamic thermal storage. , 2017, , .		4
60	Hardware-in-the-Loop Validation of Advanced Fuel Thermal Management Control. Journal of Thermophysics and Heat Transfer, 2017, 31, 901-909.	1.6	16
61	A decentralized algorithm for control of autonomous agents coupled by feasibility constraints. , 2017, , .		1
62	Graph-based hierarchical control of thermal-fluid power flow systems. , 2017, , .		4
63	Time-varying Newton based extremum seeking for optimization of vapor compression systems. , 2017, , .		2
64	A Graph-Based Approach for Dynamic Compressor Modeling in Vapor Compression Systems. , 2017, , .		1
65	Easy-to-Use 3D Printer for Fabrication of Biological Scaffolds. , 2017, , .		0
66	An Improved Dynamic Friction Model Using a Data-Based Approach. , 2017, , .		0
67	Optimal Sensor Placement Methods for Active Power Electronic Systems. , 2017, , .		1
68	A Metameric Crawling Robot Enabled by Origami and Smart Materials. , 2017, , .		4
69	Dynamic temperature estimation of power electronics systems. , 2017, , .		4
70	ACC tutorial session proposal thermal and HVAC control systems: Challenges and opportunities. , 2017, , .		0
71	A Simulation and Experimental Environment for Teaching Chemical Reaction Process Dynamics and Control. IFAC-PapersOnLine, 2017, 50, 15692-15697.	0.9	4
72	Experimental Validation of Graph-Based Modeling for Thermal Fluid Power Flow Systems. , 2016, , .		19

#	ARTICLE	IF	CITATIONS
73	20x-Real time modeling and simulation of more electric aircraft thermally integrated electrical power systems. , 2016, , .		7
74	Iterative Learning Identification/Iterative Learning Control for Linear Time-Varying Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2016, 138, .	1.6	8
75	Event-based hierarchical control for power flow in vehicle systems. , 2016, , .		0
76	Hybrid model predictive control of multi-compressor vapor compression systems. , 2016, , .		2
77	Switched linear control for refrigerant superheat recovery in vapor compression systems. Control Engineering Practice, 2016, 57, 142-156.	5.5	4
78	Switched linear control of vapor compression systems under highly transient conditions. , 2016, , .		1
79	Combining self-optimizing control and extremum seeking for online optimization with application to Vapor Compression cycles. , 2016, , .		1
80	Net shape fabrication of calcium phosphate scaffolds with multiple material domains. Biofabrication, 2016, 8, 015005.	7.1	16
81	Iterative Learning Identification for Linear Time-Varying Systems. IEEE Transactions on Control Systems Technology, 2016, 24, 310-317.	5.2	20
82	Feedback shape control for deployable mesh reflectors using gain scheduling method. Acta Astronautica, 2016, 121, 241-255.	3.2	20
83	Printing: Mechanisms, Capabilities, and Applications of High-Resolution Electrohydrodynamic Jet Printing (Small 34/2015). Small, 2015, 11, 4412-4412.	10.0	6
84	A Cooperative Driving NLMPC for Real Time Collision Avoidance. , 2015, , .		0
85	Dynamic Modeling of Heat Exchangers With Humidity and Condensation. , 2015, , .		0
86	A Model Predictive Framework for Thermal Management of Aircraft. , 2015, , .		4
87	Polarization controlled output of electrohydrodynamic jet printed quantum dot embedded photonic crystals for display applications. , 2015, , .		0
88	Mechanisms, Capabilities, and Applications of High-Resolution Electrohydrodynamic Jet Printing. Small, 2015, 11, 4237-4266.	10.0	437
89	PowerFlow: A Toolbox for Modeling and Simulation of Aircraft Systems. , 2015, , .		6
90	NLMPC for Real Time Path Following and Collision Avoidance. SAE International Journal of Passenger Cars - Electronic and Electrical Systems, 2015, 8, 401-405.	0.3	8

#	ARTICLE	IF	CITATIONS
91	Hierarchical Control of Multi-Domain Power Flow in Mobile Systems: Part I " Framework Development and Demonstration. , 2015, , .		8
92	Dynamic Thermal Management for Aerospace Technology: A Review and Outlook. , 2015, , .		2
93	A semi-continuous Roll-to-Roll (R2R) electrohydrodynamic jet printing system. Mechatronics, 2015, 31, 243-254.	3.3	19
94	A comparison between finite volume and switched moving boundary approaches for dynamic vapor compression system modeling. International Journal of Refrigeration, 2015, 53, 101-114.	3.4	54
95	Exergy-based optimal control of a vapor compression system. Energy Conversion and Management, 2015, 92, 353-365.	9.2	46
96	Model predictive control of hybrid thermal energy systems in transport refrigeration. Applied Thermal Engineering, 2015, 82, 264-280.	6.0	24
97	Comparative Study of Energy Management Strategies for Hydraulic Hybrids. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2015, 137, .	1.6	9
98	Learning-Based Precool Algorithms for Exploiting Foodstuff as Thermal Energy Reserve. IEEE Transactions on Control Systems Technology, 2015, 23, 557-569.	5.2	10
99	Polarized quantum dot emission in electrohydrodynamic jet printed photonic crystals. Applied Physics Letters, 2015, 107, .	3.3	13
100	Wiener Modeling of a Closed Loop Vapor Compression System for Extremum Seeking Controller Design. , 2015, , .		1
101	Hierarchical Control of Multi-Domain Power Flow in Mobile Systems: Part II " Aircraft Application. , 2015, , .		4
102	Model Accuracy of Variable Fidelity Vapor Cycle System Simulations. , 2014, , .		10
103	Transient Thermal Systems: Dynamics and Control. Mechanical Engineering, 2014, 136, S4-S12.	0.1	0
104	Bumpless Transfer Filter for Exogenous Feedforward Signals. IEEE Transactions on Control Systems Technology, 2014, 22, 1581-1588.	5.2	19
105	Switched-fidelity modeling and optimization for multi-physics dynamical systems. , 2014, , .		2
106	Two Degree of Freedom Control Synthesis With Applications to Agricultural Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2014, 136, .	1.6	4
107	High Resolution Digital Elevation Modeling With On-Vehicle Sensors. , 2014, , .		0
108	Integrated design and control for header height control of combine harvesters. , 2014, , .		0

#	ARTICLE	IF	CITATIONS
109	Iterative Learning Control for image based visual servoing applications. , 2014, , .		1
110	Scalable model predictive control for multi-evaporator vapor compression systems. , 2014, , .		4
111	Partially decentralized control of large-scale variable-refrigerant-flow systems in buildings. Journal of Process Control, 2014, 24, 798-819.	3.3	22
112	Optimal subcooling in vapor compression systems via extremum seeking control: Theory and experiments. International Journal of Refrigeration, 2014, 43, 14-25.	3.4	61
113	Decentralized predictive thermal control for buildings. Journal of Process Control, 2014, 24, 820-835.	3.3	33
114	Photonic crystal enhancement of a homogeneous fluorescent assay using submicron fluid channels fabricated by E-beam patterning. Journal of Biophotonics, 2014, 7, 266-275.	2.3	17
115	Iterative Learning Identification Applied to Automated Off-Highway Vehicle. IEEE Transactions on Control Systems Technology, 2014, 22, 331-337.	5.2	15
116	Electrohydrodynamic jet printing of micro-optical devices. Manufacturing Letters, 2014, 2, 4-7.	2.2	33
117	A robust two degree-of-freedom controller for systems with both model and measurement uncertainty. Control Engineering Practice, 2014, 25, 55-65.	5.5	7
118	A computationally efficient norm optimal iterative learning control approach for LTV systems. Automatica, 2014, 50, 141-148.	5.0	36
119	Block Copolymer Assembly on Nanoscale Patterns of Polymer Brushes Formed by Electrohydrodynamic Jet Printing. ACS Nano, 2014, 8, 6606-6613.	14.6	52
120	A Cross-Coupled Non-lifted Norm Optimal Iterative Learning Control Approach with Application to a Multi-axis Robotic Testbed. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 2046-2051.	0.4	7
121	Vision Based Iterative Learning Control for a Roll to Roll Micro/nano-manufacturing System. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 7202-7207.	0.4	1
122	Robust Two Degree-Of-Freedom Control for MIMO System with Both Model and Signal Uncertainties. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 9313-9320.	0.4	5
123	Variable Fidelity Modeling in Closed Loop Dynamical Systems. , 2014, , .		2
124	Hierarchical patterns of three-dimensional block-copolymer films formed by electrohydrodynamic jet printing and self-assembly. Nature Nanotechnology, 2013, 8, 667-675.	31.5	157
125	Optimal Partitioning for the Decentralized Thermal Control of Buildings. IEEE Transactions on Control Systems Technology, 2013, 21, 1756-1770.	5.2	23
126	A learning based precool algorithm for utilization of foodstuff as thermal energy storage. , 2013, , .		4



#	ARTICLE	IF	CITATIONS
127	Fundamental Limits in Combine Harvester Header Height Control. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2013, 135, 345031-345038.	1.6	28
128	Optimal Subcooling in Vapor Compression Systems via Extremum Seeking Control. , 2013, , .		1
129	A robust two degree-of-freedom controller for systems with delay. , 2013, , .		0
130	Time-varying norm optimal iterative learning identification. , 2013, , .		1
131	Norm Optimal Iterative Learning Control for a Roll to Roll nano/micro-manufacturing system. , 2013, , .		4
132	Decentralized controller analysis and design for multi-evaporator vapor compression systems. , 2013, , .		7
133	Motion control for magnetic micro-scale manipulation. , 2013, , .		1
134	Learning/repetitive control for building systems with nearly periodic disturbances. , 2013, , .		5
135	Energy management in Mobile Hydraulics. Mechanical Engineering, 2013, 135, S4-S6.	0.1	0
136	Modeling and optimization of a combined cooling, heating and power plant system. , 2012, , .		29
137	An energy management strategy for a hydraulic hybrid vehicle. , 2012, , .		5
138	Stability analysis for decentralized control of multi-evaporator vapor-compression cycle systems. , 2012, , .		2
139	High Throughput Electrohydrodynamic-Jet Printing System. , 2012, , .		3
140	Sensitivity Analysis of Energy Management Strategies for Hydraulic Hybrid Vehicles. , 2012, , .		0
141	Two Degrees of Freedom Control for Combine Harvester Header Height Control. , 2012, , .		4
142	Norm Optimal Iterative Learning Identification for Linear Time-Varying Systems. , 2012, , .		4
143	LMI Control Design for Nonlinear Vapor Compression Cycle Systems. , 2012, , .		4
144	Near-Net Shape Structures Fabricated by Micro-Robotic Deposition Using Precision Extrusion Control. , 2012, , .		0

#	ARTICLE	IF	CITATIONS
145	Decentralized architectures for thermal control of buildings. , 2012, , .		6
146	Adaptive Model Predictive Control of an SCR Catalytic Converter System for Automotive Applications. IEEE Transactions on Control Systems Technology, 2012, 20, 1533-1547.	5.2	52
147	A multimaterial electrohydrodynamic jet (E-jet) printing system. Journal of Micromechanics and Microengineering, 2012, 22, 045008.	2.6	74
148	A framework for the optimization of integrated energy systems. Applied Thermal Engineering, 2012, 48, 495-505.	6.0	19
149	Functional Protein Microarrays by Electrohydrodynamic Jet Printing. Analytical Chemistry, 2012, 84, 10012-10018.	6.5	64
150	Optimal Energy Use in a Light Weight Hydraulic Hybrid Passenger Vehicle. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2012, 134, .	1.6	23
151	A Dynamic Modeling Toolbox for Air Vehicle Vapor Cycle Systems. , 2012, , .		17
152	Dynamic modeling of refrigerated transport systems with cooling-mode/heating-mode switch operations. HVAC and R Research, 2012, 18, 974-996.	0.6	2
153	High Precision Electrohydrodynamic Printing of Polymer Onto Microcantilever Sensors. IEEE Sensors Journal, 2011, 11, 2246-2253.	4.7	33
154	Semi-active Iterative Learning Control. , 2011, , .		0
155	Optimal control architecture selection for thermal control of buildings. , 2011, , .		10
156	Thermodynamics-based optimization and control of vapor-compression cycle operation: Optimization criteria. , 2011, , .		3
157	Cross-coupled iterative learning control of systems with dissimilar dynamics: design and implementation. International Journal of Control, 2011, 84, 1223-1233.	1.9	40
158	Basis Task Approach to Iterative Learning Control With Applications to Micro-Robotic Deposition. IEEE Transactions on Control Systems Technology, 2011, 19, 1138-1148.	5.2	94
159	A Norm Optimal Approach to Time-Varying ILC With Application to a Multi-Axis Robotic Testbed. IEEE Transactions on Control Systems Technology, 2011, 19, 166-180.	5.2	130
160	Optimal Control Architecture Selection for Thermal Control of Buildings. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 3090-3095.	0.4	0
161	Thermodynamics-Based Optimization and Control of Vapor-Compression Cycle Operation: Control Synthesis. , 2011, , .		4
162	Control of high-resolution electrohydrodynamic jet printing. Control Engineering Practice, 2011, 19, 1266-1273.	5.5	71

#	ARTICLE	IF	CITATIONS
163	Refrigerant mass migration modeling and simulation for air conditioning systems. Applied Thermal Engineering, 2011, 31, 1770-1779.	6.0	19
164	Fundamental limits in combine harvester header height control. , 2011, , .		1
165	Bumpless transfer for a flexible adaptation of Iterative Learning Control. , 2011, , .		7
166	A model predictive control approach for a parallel hydraulic hybrid powertrain. , 2011, , .		17
167	Iterative learning identification for an automated off-highway vehicle. , 2011, , .		4
168	Model Predictive Control of an Electro-Hydraulic Powertrain With Energy Storage. , 2011, , .		1
169	Micropositioning of a Multimaterial Electrohydrodynamic Jet Deposition System Using Vision Feedback. , 2011, , .		1
170	Design and Manufacture of Combinatorial Calcium Phosphate Bone Scaffolds. Journal of Biomechanical Engineering, 2011, 133, 101001.	1.3	15
171	Comparison of wind turbine operating transitions through the use of iterative learning control. , 2011, , .		12
172	Integrated Plant and Controller Design of a Combine Harvester System. , 2011, , .		4
173	Scheduled Feedforward Control of Superheat Through Hardware-in-the-Loop Load Emulation. , 2010, , .		0
174	A desktop electrohydrodynamic jet printing system. Mechatronics, 2010, 20, 611-616.	3.3	73
175	A dynamic model of a vapor compression cycle with shut-down and start-up operations. International Journal of Refrigeration, 2010, 33, 538-552.	3.4	136
176	Optimal on/off control of refrigerated transport systems. Control Engineering Practice, 2010, 18, 1406-1417.	5.5	35
177	Control of high-resolution Electrohydrodynamic jet printing. , 2010, , .		5
178	Predictive control of complex hydronic systems. , 2010, , .		12
179	Decentralized Feedback Structures of a Vapor Compression Cycle System. IEEE Transactions on Control Systems Technology, 2010, 18, 185-193.	5.2	27
180	Precision coordination and motion control of multiple systems via iterative learning control. , 2010, , .		9

#	ARTICLE	IF	CITATIONS
181	Optimal on-off control of an air conditioning and refrigeration system. , 2010, , .		9
182	Gain Scheduled Control of an Air Conditioning System Using the Youla Parameterization. IEEE Transactions on Control Systems Technology, 2010, 18, 1216-1225.	5.2	42
183	High precision polymer deposition onto microcantilever sensors using electrohydrodynamic printing. , 2010, , .		2
184	Decoupled feedforward control for an air-conditioning and refrigeration system. , 2010, , .		9
185	Header Height Control of a Combine Harvester System. , 2010, , .		7
186	Predictive Energy Management for Parallel Hydraulic Hybrid Passenger Vehicle. , 2010, , .		11
187	Combined $H_{\infty}$ -Feedback Control and Iterative Learning Control Design With Application to Nanopositioning Systems. IEEE Transactions on Control Systems Technology, 2010, 18, 336-351.	5.2	72
188	A numerical method for determining monotonicity and convergence rate in iterative learning control. International Journal of Control, 2010, 83, 219-226.	1.9	22
189	High-speed and drop-on-demand printing with a pulsed electrohydrodynamic jet. Journal of Micromechanics and Microengineering, 2010, 20, 095026.	2.6	198
190	Nanoscale, Electrified Liquid Jets for High-Resolution Printing of Charge. Nano Letters, 2010, 10, 584-591.	9.1	120
191	Stochastic iterative learning control design for nonrepetitive events. , 2010, , .		2
192	A Robust Controller Interpolation Design Technique. IEEE Transactions on Control Systems Technology, 2010, 18, 1-10.	5.2	38
193	Robust gain-scheduled control. , 2010, , .		5
194	Control of Unstable Oscillations in Flows. The Electrical Engineering Handbook, 2010, , 34-1-34-20.	0.2	0
195	Load-Predictive Temperature Control of an Air Conditioning and Refrigeration System. , 2009, , .		1
196	Dimensionless Design of Variable Displacement Pumps. , 2009, , .		1
197	A Switched, Controls-Oriented SCR Catalyst Model Using On-Line Eigenvalue Estimation. , 2009, , .		11
198	A full dynamic model of a HVAC vapor compression cycle interacting with a dynamic environment. , 2009, , .		5

#	ARTICLE	IF	CITATIONS
199	Robust controller interpolation via convex optimization. , 2009, , .		1
200	Iterative Learning Control using a basis signal library. , 2009, , .		5
201	Comparison of SISO and MIMO control techniques for a diagonally dominant vapor compression system. , 2009, , .		4
202	Norm optimal ILC with time-varying weighting matrices. , 2009, , .		6
203	An anti-windup technique for LMI regions. Automatica, 2009, 45, 2344-2349.	5.0	16
204	Robust Wireless Servo Control Using a Discrete-Time Uncertain Markovian Jump Linear Model. IEEE Transactions on Control Systems Technology, 2009, 17, 733-742.	5.2	33
205	Modeling of Complex Hydronic Systems for Energy Efficient Operation. , 2009, , .		4
206	Cross Coupled Iterative Learning Control of Dissimilar Dynamical Systems. , 2009, , .		2
207	Modeling and Control of Interconnected Dimensionless Dynamic Systems. , 2009, , .		2
208	An advanced nonlinear switched heat exchanger model for vapor compression cycles using the moving-boundary method. International Journal of Refrigeration, 2008, 31, 1253-1264.	3.4	139
209	Dimensional analysis for robust control of planar vehicle dynamics. International Journal of Robust and Nonlinear Control, 2008, 18, 587-616.	3.7	1
210	Micro-robotic deposition guidelines by a design of experiments approach to maximize fabrication reliability for the bone scaffold application. Acta Biomaterialia, 2008, 4, 897-912.	8.3	32
211	Monotonic Convergence of Iterative Learning Control for Uncertain Systems Using a Time-Varying Filter. IEEE Transactions on Automatic Control, 2008, 53, 582-585.	5.7	51
212	A Cross-Coupled Iterative Learning Control Design for Precision Motion Control. IEEE Transactions on Control Systems Technology, 2008, 16, 1218-1231.	5.2	181
213	Robust Controller Interpolation via Parameterization. , 2008, , .		15
214	An Analysis Framework for Evaluating Dropout Compensation Strategies in Wireless Servo Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2008, 130, .	1.6	8
215	Optimizing Learning Convergence Speed and Converged Error for Precision Motion Control. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2008, 130, .	1.6	8
216	Moving-Boundary Heat Exchanger Models With Variable Outlet Phase. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2008, 130, .	1.6	38

#	ARTICLE	IF	CITATIONS
217	An anti-windup technique for LMI regions with applications to a fluid power system. , 2008, , .		0
218	Norm optimal Cross-Coupled Iterative Learning Control. , 2008, , .		22
219	High bandwidth control of precision motion instrumentation. Review of Scientific Instruments, 2008, 79, 103704.	1.3	16
220	Design of a linear time-varying cross-coupled Iterative Learning Controller. , 2008, , .		0
221	Iterative Learning Control for robotic deposition using machine vision. , 2008, , .		19
222	A switched system model for heat exchangers using a moving boundary method. , 2008, , .		2
223	An Improved Method for Calculating Iterative Learning Control Convergence Rate. , 2008, , .		0
224	Portable Pneumatic Power-Harvesting Ankle-Foot-Orthosis. , 2008, , .		1
225	Feedback Frameworks for Active Suspensions With Electrohydraulic Actuator Dynamics. , 2008, , .		0
226	OPTIMIZATION OF A PASSENGER HYDRAULIC HYBRID VEHICLE TO IMPROVE FUEL ECONOMY. Proceedings of the JFPS International Symposium on Fluid Power, 2008, 2008, 143-148.	0.1	15
227	Decentralized Feedback Structures of a Vapor Compression Cycle System. , 2008, , .		4
228	Advances in Energy Systems Modeling and Control. Proceedings of the American Control Conference, 2007, , .	0.0	11
229	Cross-Coupled ILC for Improved Precision Motion Control: Design and Implementation. , 2007, , .		10
230	A Robust Controller Interpolation Design Technique. Proceedings of the American Control Conference, 2007, , .	0.0	1
231	Robust wireless servo control using a discrete-time uncertain Markovian jump linear model. Proceedings of the American Control Conference, 2007, , .	0.0	1
232	Feedback Structures for Vapor Compression Cycle Systems. Proceedings of the American Control Conference, 2007, , .	0.0	8
233	A Time-Varying Q-Filter Design for Iterative Learning Control. Proceedings of the American Control Conference, 2007, , .	0.0	3
234	A KYP Lemma for LMI Regions. IEEE Transactions on Automatic Control, 2007, 52, 1926-1930.	5.7	19

#	ARTICLE	IF	CITATIONS
235	High-resolution electrohydrodynamic jet printing. <i>Nature Materials</i> , 2007, 6, 782-789.	27.5	1,231
236	A High Precision Motion Control System With Application to Microscale Robotic Deposition. <i>IEEE Transactions on Control Systems Technology</i> , 2006, 14, 1008-1020.	5.2	66
237	A Static Anti-Windup Compensator Design Technique for Robust Regional Pole Placement. , 2006, , 75.		4
238	Improving Energy Efficiency in Automotive Vapor Compression Cycles through Advanced Control Design. , 2006, , .		4
239	Scaled vehicle tire characteristics: dimensionless analysis. <i>Vehicle System Dynamics</i> , 2006, 44, 87-105.	3.7	10
240	Optimal Time-Varying ILC Design to Monotonically Minimize Converged Error. , 2005, , 3.		0
241	Stable Gain Scheduling Through Bumpless Transfer. , 2005, , 93.		0
242	Parametric Sensitivity Analysis and Model Tuning Applied to Vapor Compression Systems. , 2005, , 1203.		1
243	A hybrid control strategy for active vibration isolation with electrohydraulic actuators. <i>Control Engineering Practice</i> , 2005, 13, 279-289.	5.5	34
244	Mechanism for stamp collapse in soft lithography. <i>Applied Physics Letters</i> , 2005, 87, 251925.	3.3	59
245	Vapor Compression Cycles: Control-Oriented Modeling and Validation. , 2005, , 1213.		4
246	Dynamic Emulation Using an Indirect Control Input. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2005, 127, 114-124.	1.6	21
247	Generalized Multivariable Gain Scheduling With Robust Stability Analysis. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2005, 127, 668-687.	1.6	12
248	Discussion on: "Development and Experimental Verification of a Mobile Client-Centric Networked Controlled System" European Journal of Control, 2005, 11, 252-254.	2.6	0
249	Model-driven system identification of transcritical vapor compression systems. <i>IEEE Transactions on Control Systems Technology</i> , 2005, 13, 444-451.	5.2	55
250	A practical and effective approach to active suspension control. <i>Vehicle System Dynamics</i> , 2005, 43, 305-330.	3.7	49
251	Stamp Collapse in Soft Lithography. <i>Langmuir</i> , 2005, 21, 8058-8068.	3.5	201
252	Dimensionless robust control with application to vehicles. <i>IEEE Transactions on Control Systems Technology</i> , 2005, 13, 624-630.	5.2	21

#	ARTICLE	IF	CITATIONS
253	A Generalized Robust Control Framework Utilizing Dimensional Analysis. , 2005, , .		0
254	Design and Convergence of a Time-Varying Iterative Learning Control Law. , 2004, , 91.		5
255	Control-Oriented Modeling of Transcritical Vapor Compression Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2004, 126, 54-64.	1.6	101
256	Real-time identification of vehicle chassis dynamics using a novel reparameterization based on sensitivity invariance. International Journal of Adaptive Control and Signal Processing, 2004, 18, 103-123.	4.1	8
257	Application of a multivariable adaptive control strategy to automotive air conditioning systems. International Journal of Adaptive Control and Signal Processing, 2004, 18, 199-221.	4.1	50
258	Design of a Class of Nonlinear Controllers via State Dependent Riccati Equations. IEEE Transactions on Control Systems Technology, 2004, 12, 133-137.	5.2	85
259	Modeling and Control for Smart Mesoflap Aeroelastic Control. IEEE/ASME Transactions on Mechatronics, 2004, 9, 30-39.	5.8	19
260	Modeling and Control of an Electro-hydraulic Injection Molding Machine With Smoothed Fill-to-Pack Transition*. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2003, 125, 154-163.	2.2	20
261	Multivariable Control of an Earthmoving Vehicle Powertrain Experimentally Validated in an Emulated Working Cycle. , 2003, , 515.		8
262	A Simple Novel Approach to Active Vibration Isolation With Electrohydraulic Actuation*. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2003, 125, 125-128.	1.6	16
263	Hydraulic Control Equipment. , 2003, , 459-469.		0
264	Addendum to "systematic control of a class of nonlinear systems with application to electrohydraulic cylinder pressure control". IEEE Transactions on Control Systems Technology, 2002, 10, 756-756.	5.2	1
265	Performance Limitations of a Class of Two-Stage Electro-Hydraulic Flow Valves. International Journal of Fluid Power, 2002, 3, 47-53.	0.7	31
266	A Stability Result With Application to Nonlinear Regulation1. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2002, 124, 452-456.	1.6	21
267	Modeling and H2/H $\infty$ MIMO Control of an Earthmoving Vehicle Powertrain. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2002, 124, 625-636.	1.6	35
268	Velocity scheduled driver assisted control. International Journal of Vehicle Design, 2002, 29, 1.	0.3	16
269	Dissipative Adaptive Control for Strict Feedback Form Systems. European Journal of Control, 2002, 8, 435-444.	2.6	4
270	Dynamic Emulation Using a Resistive Control Input. , 2002, , .		8



#	ARTICLE	IF	CITATIONS
271	Robust Scalable Vehicle Control via Non-Dimensional Vehicle Dynamics. <i>Vehicle System Dynamics</i> , 2001, 36, 255-277.	3.7	26
272	Selected Papers from AVEC 2000. <i>Vehicle System Dynamics</i> , 2001, 36, 75-76.	3.7	0
273	Modeling and coordinated control of a multi-load earthmoving vehicle powertrain. , 2001, , .		0
274	A simplified approach to force control for electro-hydraulic systems. <i>Control Engineering Practice</i> , 2000, 8, 1347-1356.	5.5	246
275	The Illinois Roadway Simulator: a mechatronic testbed for vehicle dynamics and control. <i>IEEE/ASME Transactions on Mechatronics</i> , 2000, 5, 349-359.	5.8	41
276	Systematic control of a class of nonlinear systems with application to electrohydraulic cylinder pressure control. <i>IEEE Transactions on Control Systems Technology</i> , 2000, 8, 623-634.	5.2	89
277	Nonlinear Force/Pressure Tracking of an Electro-Hydraulic Actuator <sup>1</sup> . <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2000, 122, 232-236.	1.6	66
278	On the Limitations of Force Tracking Control for Hydraulic Servosystems. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 1999, 121, 184-190.	1.6	100
279	Nonlinear control of an electrohydraulic injection molding machine via iterative adaptive learning. <i>IEEE/ASME Transactions on Mechatronics</i> , 1999, 4, 312-323.	5.8	101
280	Multivariable Bilinear Vehicle Control Using Steering and Individual Wheel Torques. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 1999, 121, 631-637.	1.6	3
281	Modeling and Control Design of a Powertrain Simulation Testbed for Earthmoving Vehicles. , 1999, , .		12
282	A variable structure gradient adaptive algorithm for a class of dynamical systems. <i>Systems and Control Letters</i> , 1998, 33, 171-186.	2.3	4
283	A lateral position sensing system for automated vehicle following. <i>IEEE/ASME Transactions on Mechatronics</i> , 1998, 3, 218-224.	5.8	5
284	Physical insights on passivity-based TORA control designs. <i>IEEE Transactions on Control Systems Technology</i> , 1998, 6, 436-439.	5.2	23
285	Reachability of Chaotic Dynamic Systems. <i>Physical Review Letters</i> , 1998, 80, 3751-3754.	7.8	9
286	A Comparison of Alternative Obstacle Avoidance Strategies for Vehicle Control. <i>Vehicle System Dynamics</i> , 1997, 27, 371-392.	3.7	31
287	A Comparison of Alternative Intervention Strategies for Unintended Roadway Departure (URD) Control. <i>Vehicle System Dynamics</i> , 1997, 27, 157-186.	3.7	46
288	Improved Vehicle Performance Using Combined Suspension and Braking Forces. <i>Vehicle System Dynamics</i> , 1997, 27, 235-265.	3.7	74

#	ARTICLE	IF	CITATIONS
289	Nonlinear adaptive control of active suspensions. IEEE Transactions on Control Systems Technology, 1995, 3, 94-101.	5.2	467
290	Application of Nonlinear Control Theory to Electronically Controlled Suspensions. Vehicle System Dynamics, 1993, 22, 309-320.	3.7	71
291	Automotive Vapor Compression Cycles: Validation of Control-Oriented Models. , 0, , .		2
292	A Urea Decomposition Modeling Framework for SCR Systems. SAE International Journal of Fuels and Lubricants, 0, 2, 612-626.	0.2	6
293	Mixture Non-Uniformity in SCR Systems: Modeling and Uniformity Index Requirements for Steady-State and Transient Operation. SAE International Journal of Fuels and Lubricants, 0, 3, 486-499.	0.2	36
294	Model Predictive Control: A Unified Approach for Urea-Based SCR Systems. SAE International Journal of Fuels and Lubricants, 0, 3, 673-689.	0.2	13
295	Evaluation of Transient Refrigerant Migration Modeling Approach on Automotive Air Conditioning Systems. SAE International Journal of Materials and Manufacturing, 0, 4, 864-874.	0.3	1