

Andrew G Alleyne

List of Publications by Year in descending order

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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 | High-resolution electrohydrodynamic jet printing. <i>Nature Materials</i> , 2007, 6, 782-789. | 27.5 | 1,231 |
| 2 | Nonlinear adaptive control of active suspensions. <i>IEEE Transactions on Control Systems Technology</i> , 1995, 3, 94-101. | 5.2 | 467 |
| 3 | Mechanisms, Capabilities, and Applications of High-Resolution Electrohydrodynamic Jet Printing. <i>Small</i> , 2015, 11, 4237-4266. | 10.0 | 437 |
| 4 | A simplified approach to force control for electro-hydraulic systems. <i>Control Engineering Practice</i> , 2000, 8, 1347-1356. | 5.5 | 246 |
| 5 | Stamp Collapse in Soft Lithography. <i>Langmuir</i> , 2005, 21, 8058-8068. | 3.5 | 201 |
| 6 | High-speed and drop-on-demand printing with a pulsed electrohydrodynamic jet. <i>Journal of Micromechanics and Microengineering</i> , 2010, 20, 095026. | 2.6 | 198 |
| 7 | A Cross-Coupled Iterative Learning Control Design for Precision Motion Control. <i>IEEE Transactions on Control Systems Technology</i> , 2008, 16, 1218-1231. | 5.2 | 181 |
| 8 | Hierarchical patterns of three-dimensional block-copolymer films formed by electrohydrodynamic jet printing and self-assembly. <i>Nature Nanotechnology</i> , 2013, 8, 667-675. | 31.5 | 157 |
| 9 | An advanced nonlinear switched heat exchanger model for vapor compression cycles using the moving-boundary method. <i>International Journal of Refrigeration</i> , 2008, 31, 1253-1264. | 3.4 | 139 |
| 10 | A dynamic model of a vapor compression cycle with shut-down and start-up operations. <i>International Journal of Refrigeration</i> , 2010, 33, 538-552. | 3.4 | 136 |
| 11 | A Norm Optimal Approach to Time-Varying ILC With Application to a Multi-Axis Robotic Testbed. <i>IEEE Transactions on Control Systems Technology</i> , 2011, 19, 166-180. | 5.2 | 130 |
| 12 | Nanoscale, Electrified Liquid Jets for High-Resolution Printing of Charge. <i>Nano Letters</i> , 2010, 10, 584-591. | 9.1 | 120 |
| 13 | Autonomous Vehicle Control: A Nonconvex Approach for Obstacle Avoidance. <i>IEEE Transactions on Control Systems Technology</i> , 2017, 25, 469-484. | 5.2 | 115 |
| 14 | 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 |
| 15 | Control-Oriented Modeling of Transcritical Vapor Compression Systems. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2004, 126, 54-64. | 1.6 | 101 |
| 16 | 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 |
| 17 | Basis Task Approach to Iterative Learning Control With Applications to Micro-Robotic Deposition. <i>IEEE Transactions on Control Systems Technology</i> , 2011, 19, 1138-1148. | 5.2 | 94 |
| 18 | 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 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | 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 |
| 20 | Improved Vehicle Performance Using Combined Suspension and Braking Forces. Vehicle System Dynamics, 1997, 27, 235-265. | 3.7 | 74 |
| 21 | A multimaterial electrohydrodynamic jet (E-jet) printing system. Journal of Micromechanics and Microengineering, 2012, 22, 045008. | 2.6 | 74 |
| 22 | A desktop electrohydrodynamic jet printing system. Mechatronics, 2010, 20, 611-616. | 3.3 | 73 |
| 23 | Combined H_{∞} -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 |
| 24 | Application of Nonlinear Control Theory to Electronically Controlled Suspensions. Vehicle System Dynamics, 1993, 22, 309-320. | 3.7 | 71 |
| 25 | Control of high-resolution electrohydrodynamic jet printing. Control Engineering Practice, 2011, 19, 1266-1273. | 5.5 | 71 |
| 26 | A High Precision Motion Control System With Application to Microscale Robotic Deposition. IEEE Transactions on Control Systems Technology, 2006, 14, 1008-1020. | 5.2 | 66 |
| 27 | Nonlinear Force/Pressure Tracking of an Electro-Hydraulic Actuator ¹ . Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2000, 122, 232-236. | 1.6 | 66 |
| 28 | Functional Protein Microarrays by Electrohydrodynamic Jet Printing. Analytical Chemistry, 2012, 84, 10012-10018. | 6.5 | 64 |
| 29 | Optimal subcooling in vapor compression systems via extremum seeking control: Theory and experiments. International Journal of Refrigeration, 2014, 43, 14-25. | 3.4 | 61 |
| 30 | Mechanism for stamp collapse in soft lithography. Applied Physics Letters, 2005, 87, 251925. | 3.3 | 59 |
| 31 | Model-driven system identification of transcritical vapor compression systems. IEEE Transactions on Control Systems Technology, 2005, 13, 444-451. | 5.2 | 55 |
| 32 | 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 |
| 33 | 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 |
| 34 | Block Copolymer Assembly on Nanoscale Patterns of Polymer Brushes Formed by Electrohydrodynamic Jet Printing. ACS Nano, 2014, 8, 6606-6613. | 14.6 | 52 |
| 35 | 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 |
| 36 | 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 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | A practical and effective approach to active suspension control. Vehicle System Dynamics, 2005, 43, 305-330. | 3.7 | 49 |
| 38 | A Comparison of Alternative Intervention Strategies for Unintended Roadway Departure (URD) Control. Vehicle System Dynamics, 1997, 27, 157-186. | 3.7 | 46 |
| 39 | Exergy-based optimal control of a vapor compression system. Energy Conversion and Management, 2015, 92, 353-365. | 9.2 | 46 |
| 40 | Dynamic Thermal Management for Aerospace Technology: Review and Outlook. Journal of Thermophysics and Heat Transfer, 2017, 31, 86-98. | 1.6 | 45 |
| 41 | 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 |
| 42 | The Illinois Roadway Simulator: a mechatronic testbed for vehicle dynamics and control. IEEE/ASME Transactions on Mechatronics, 2000, 5, 349-359. | 5.8 | 41 |
| 43 | Cross-coupled iterative learning control of systems with dissimilar dynamics: design and implementation. International Journal of Control, 2011, 84, 1223-1233. | 1.9 | 40 |
| 44 | 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 |
| 45 | A Robust Controller Interpolation Design Technique. IEEE Transactions on Control Systems Technology, 2010, 18, 1-10. | 5.2 | 38 |
| 46 | 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 |
| 47 | A computationally efficient norm optimal iterative learning control approach for LTV systems. Automatica, 2014, 50, 141-148. | 5.0 | 36 |
| 48 | Modeling and H ₂ /H _∞ 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 |
| 49 | Optimal on/off control of refrigerated transport systems. Control Engineering Practice, 2010, 18, 1406-1417. | 5.5 | 35 |
| 50 | A hybrid control strategy for active vibration isolation with electrohydraulic actuators. Control Engineering Practice, 2005, 13, 279-289. | 5.5 | 34 |
| 51 | 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 |
| 52 | High Precision Electrohydrodynamic Printing of Polymer Onto Microcantilever Sensors. IEEE Sensors Journal, 2011, 11, 2246-2253. | 4.7 | 33 |
| 53 | Decentralized predictive thermal control for buildings. Journal of Process Control, 2014, 24, 820-835. | 3.3 | 33 |
| 54 | Electrohydrodynamic jet printing of micro-optical devices. Manufacturing Letters, 2014, 2, 4-7. | 2.2 | 33 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 55 | Micro-robotic deposition guidelines by a design of experiments approach to maximize fabrication reliability for the bone scaffold application. <i>Acta Biomaterialia</i> , 2008, 4, 897-912. | 8.3 | 32 |
| 56 | A Comparison of Alternative Obstacle Avoidance Strategies for Vehicle Control. <i>Vehicle System Dynamics</i> , 1997, 27, 371-392. | 3.7 | 31 |
| 57 | Performance Limitations of a Class of Two-Stage Electro-Hydraulic Flow Valves. <i>International Journal of Fluid Power</i> , 2002, 3, 47-53. | 0.7 | 31 |
| 58 | Direct process feedback in extrusion-based 3D bioprinting. <i>Biofabrication</i> , 2020, 12, 015017. | 7.1 | 30 |
| 59 | Modeling and optimization of a combined cooling, heating and power plant system. , 2012, , . | | 29 |
| 60 | Fundamental Limits in Combine Harvester Header Height Control. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2013, 135, 345031-345038. | 1.6 | 28 |
| 61 | Decentralized Feedback Structures of a Vapor Compression Cycle System. <i>IEEE Transactions on Control Systems Technology</i> , 2010, 18, 185-193. | 5.2 | 27 |
| 62 | Stability of decentralized model predictive control of graph-based power flow systems via passivity. <i>Automatica</i> , 2017, 82, 29-34. | 5.0 | 27 |
| 63 | Robust Scalable Vehicle Control via Non-Dimensional Vehicle Dynamics. <i>Vehicle System Dynamics</i> , 2001, 36, 255-277. | 3.7 | 26 |
| 64 | Hierarchical Control of Aircraft Electro-Thermal Systems. <i>IEEE Transactions on Control Systems Technology</i> , 2020, 28, 1218-1232. | 5.2 | 26 |
| 65 | Model predictive control of hybrid thermal energy systems in transport refrigeration. <i>Applied Thermal Engineering</i> , 2015, 82, 264-280. | 6.0 | 24 |
| 66 | Dynamical Graph Models of Aircraft Electrical, Thermal, and Turbomachinery Components. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2018, 140, . | 1.6 | 24 |
| 67 | Experimental Validation of Graph-Based Hierarchical Control for Thermal Management. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2018, 140, . | 1.6 | 24 |
| 68 | Nanostructured jumping-droplet thermal rectifier. <i>Physical Review E</i> , 2021, 103, 023110. | 2.1 | 24 |
| 69 | Physical insights on passivity-based TORA control designs. <i>IEEE Transactions on Control Systems Technology</i> , 1998, 6, 436-439. | 5.2 | 23 |
| 70 | Optimal Energy Use in a Light Weight Hydraulic Hybrid Passenger Vehicle. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2012, 134, . | 1.6 | 23 |
| 71 | Optimal Partitioning for the Decentralized Thermal Control of Buildings. <i>IEEE Transactions on Control Systems Technology</i> , 2013, 21, 1756-1770. | 5.2 | 23 |
| 72 | Norm optimal Cross-Coupled Iterative Learning Control. , 2008, , . | | 22 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 73 | A numerical method for determining monotonicity and convergence rate in iterative learning control. <i>International Journal of Control</i> , 2010, 83, 219-226. | 1.9 | 22 |
| 74 | Partially decentralized control of large-scale variable-refrigerant-flow systems in buildings. <i>Journal of Process Control</i> , 2014, 24, 798-819. | 3.3 | 22 |
| 75 | 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 |
| 76 | A Stability Result With Application to Nonlinear Regulation1. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2002, 124, 452-456. | 1.6 | 21 |
| 77 | 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 |
| 78 | Dimensionless robust control with application to vehicles. <i>IEEE Transactions on Control Systems Technology</i> , 2005, 13, 624-630. | 5.2 | 21 |
| 79 | Modeling and Control of an Electro-hydraulic Injection Molding Machine With Smoothed Fill-to-Pack Transition*. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2003, 125, 154-163. | 2.2 | 20 |
| 80 | Iterative Learning Identification for Linear Time-Varying Systems. <i>IEEE Transactions on Control Systems Technology</i> , 2016, 24, 310-317. | 5.2 | 20 |
| 81 | Feedback shape control for deployable mesh reflectors using gain scheduling method. <i>Acta Astronautica</i> , 2016, 121, 241-255. | 3.2 | 20 |
| 82 | An Improved Approach to Iterative Learning Control for Uncertain Systems. <i>IEEE Transactions on Control Systems Technology</i> , 2021, 29, 546-555. | 5.2 | 20 |
| 83 | Process monitoring and control strategies in extrusion-based bioprinting to fabricate spatially graded structures. <i>Bioprinting</i> , 2021, 21, e00126. | 5.8 | 20 |
| 84 | Modeling and Control for Smart Mesoflap Aeroelastic Control. <i>IEEE/ASME Transactions on Mechatronics</i> , 2004, 9, 30-39. | 5.8 | 19 |
| 85 | A KYP Lemma for LMI Regions. <i>IEEE Transactions on Automatic Control</i> , 2007, 52, 1926-1930. | 5.7 | 19 |
| 86 | Iterative Learning Control for robotic deposition using machine vision. , 2008, , . | | 19 |
| 87 | Refrigerant mass migration modeling and simulation for air conditioning systems. <i>Applied Thermal Engineering</i> , 2011, 31, 1770-1779. | 6.0 | 19 |
| 88 | A framework for the optimization of integrated energy systems. <i>Applied Thermal Engineering</i> , 2012, 48, 495-505. | 6.0 | 19 |
| 89 | Bumpless Transfer Filter for Exogenous Feedforward Signals. <i>IEEE Transactions on Control Systems Technology</i> , 2014, 22, 1581-1588. | 5.2 | 19 |
| 90 | A semi-continuous Roll-to-Roll (R2R) electrohydrodynamic jet printing system. <i>Mechatronics</i> , 2015, 31, 243-254. | 3.3 | 19 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 91 | Experimental Validation of Graph-Based Modeling for Thermal Fluid Power Flow Systems. , 2016, , . | | 19 |
| 92 | A model predictive control approach for a parallel hydraulic hybrid powertrain. , 2011, , . | | 17 |
| 93 | A Dynamic Modeling Toolbox for Air Vehicle Vapor Cycle Systems. , 2012, , . | | 17 |
| 94 | Photonic crystal enhancement of a homogeneous fluorescent assay using submicron fluid channels fabricated by Eâ€jet patterning. Journal of Biophotonics, 2014, 7, 266-275. | 2.3 | 17 |
| 95 | Velocity scheduled driver assisted control. International Journal of Vehicle Design, 2002, 29, 1. | 0.3 | 16 |
| 96 | High bandwidth control of precision motion instrumentation. Review of Scientific Instruments, 2008, 79, 103704. | 1.3 | 16 |
| 97 | An anti-windup technique for LMI regions. Automatica, 2009, 45, 2344-2349. | 5.0 | 16 |
| 98 | Net shape fabrication of calcium phosphate scaffolds with multiple material domains. Biofabrication, 2016, 8, 015005. | 7.1 | 16 |
| 99 | Hardware-in-the-Loop Validation of Advanced Fuel Thermal Management Control. Journal of Thermophysics and Heat Transfer, 2017, 31, 901-909. | 1.6 | 16 |
| 100 | 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 |
| 101 | Robust Controller Interpolation via Parameterization. , 2008, , . | | 15 |
| 102 | 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 |
| 103 | Design and Manufacture of Combinatorial Calcium Phosphate Bone Scaffolds. Journal of Biomechanical Engineering, 2011, 133, 101001. | 1.3 | 15 |
| 104 | Iterative Learning Identification Applied to Automated Off-Highway Vehicle. IEEE Transactions on Control Systems Technology, 2014, 22, 331-337. | 5.2 | 15 |
| 105 | Optimal Flow Control and Single Split Architecture Exploration for Fluid-Based Thermal Management. Journal of Mechanical Design, Transactions of the ASME, 2019, 141, . | 2.9 | 15 |
| 106 | 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 |
| 107 | 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 |
| 108 | Polarized quantum dot emission in electrohydrodynamic jet printed photonic crystals. Applied Physics Letters, 2015, 107, . | 3.3 | 13 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 109 | Generalized Multivariable Gain Scheduling With Robust Stability Analysis. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2005, 127, 668-687. | 1.6 | 12 |
| 110 | Predictive control of complex hydronic systems. , 2010, , . | | 12 |
| 111 | Comparison of wind turbine operating transitions through the use of iterative learning control. , 2011, , . | | 12 |
| 112 | Modeling and Control Design of a Powertrain Simulation Testbed for Earthmoving Vehicles. , 1999, , . | | 12 |
| 113 | Advances in Energy Systems Modeling and Control. Proceedings of the American Control Conference, 2007, , . | 0.0 | 11 |
| 114 | A Switched, Controls-Oriented SCR Catalyst Model Using On-Line Eigenvalue Estimation. , 2009, , . | | 11 |
| 115 | Predictive Energy Management for Parallel Hydraulic Hybrid Passenger Vehicle. , 2010, , . | | 11 |
| 116 | Passivity and Decentralized MPC of Switched Graph-Based Power Flow Systems. , 2018, , . | | 11 |
| 117 | Robust hierarchical model predictive control of graph-based power flow systems. Automatica, 2018, 96, 127-133. | 5.0 | 11 |
| 118 | Scaled vehicle tire characteristics: dimensionless analysis. Vehicle System Dynamics, 2006, 44, 87-105. | 3.7 | 10 |
| 119 | Cross-Coupled ILC for Improved Precision Motion Control: Design and Implementation. , 2007, , . | | 10 |
| 120 | Optimal control architecture selection for thermal control of buildings. , 2011, , . | | 10 |
| 121 | Model Accuracy of Variable Fidelity Vapor Cycle System Simulations. , 2014, , . | | 10 |
| 122 | Learning-Based Precool Algorithms for Exploiting Foodstuff as Thermal Energy Reserve. IEEE Transactions on Control Systems Technology, 2015, 23, 557-569. | 5.2 | 10 |
| 123 | Hierarchical model-based predictive controller for a hybrid UAV powertrain. Control Engineering Practice, 2021, 115, 104883. | 5.5 | 10 |
| 124 | Reachability of Chaotic Dynamic Systems. Physical Review Letters, 1998, 80, 3751-3754. | 7.8 | 9 |
| 125 | Precision coordination and motion control of multiple systems via iterative learning control. , 2010, , . | | 9 |
| 126 | Optimal on-off control of an air conditioning and refrigeration system. , 2010, , . | | 9 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 127 | Decoupled feedforward control for an air-conditioning and refrigeration system. , 2010, , . | | 9 |
| 128 | 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 |
| 129 | Selective Autonomous Molecular Transport and Collection by Hydrogelâ€Embedded Supramolecular Chemical Gradients. Angewandte Chemie - International Edition, 2019, 58, 18165-18170. | 13.8 | 9 |
| 130 | A Novel Framework for Simultaneous Topology and Sizing Optimization of Complex, Multi-Domain Systems-of-Systems. Journal of Mechanical Design, Transactions of the ASME, 2020, 142, . | 2.9 | 9 |
| 131 | Multivariable Control of an Earthmoving Vehicle Powertrain Experimentally Validated in an Emulated Working Cycle. , 2003, , 515. | | 8 |
| 132 | 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 |
| 133 | Feedback Structures for Vapor Compression Cycle Systems. Proceedings of the American Control Conference, 2007, , . | 0.0 | 8 |
| 134 | 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 |
| 135 | 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 |
| 136 | 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 |
| 137 | Hierarchical Control of Multi-Domain Power Flow in Mobile Systems: Part I â€ Framework Development and Demonstration. , 2015, , . | | 8 |
| 138 | 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 |
| 139 | Electro-Thermal Graph-Based Modeling for Hierarchical Control with Application to an Electric Vehicle. , 2018, , . | | 8 |
| 140 | Hierarchical Control for Electro-Thermal Power Management of an Electric Vehicle Powertrain. , 2018, , . | | 8 |
| 141 | Directed Molecular Collection by Eâ€Jet Printed Microscale Chemical Potential Wells in Hydrogel Films. Advanced Materials, 2018, 30, 1803140. | 21.0 | 8 |
| 142 | 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 |
| 143 | Optimal Sensor Placement Methods in Active High Power Density Electronic Systems With Experimental Validation. Journal of Mechanical Design, Transactions of the ASME, 2020, 142, . | 2.9 | 8 |
| 144 | Dynamic Emulation Using a Resistive Control Input. , 2002, , . | | 8 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 145 | Header Height Control of a Combine Harvester System. , 2010, , . | | 7 |
| 146 | Bumpless transfer for a flexible adaptation of Iterative Learning Control. , 2011, , . | | 7 |
| 147 | Decentralized controller analysis and design for multi-evaporator vapor compression systems. , 2013, , . | | 7 |
| 148 | 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 |
| 149 | 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 |
| 150 | 20x-Real time modeling and simulation of more electric aircraft thermally integrated electrical power systems. , 2016, , . | | 7 |
| 151 | Two-Level Hierarchical Mission-Based Model Predictive Control. , 2018, , . | | 7 |
| 152 | Model-based temperature estimation of power electronics systems. Control Engineering Practice, 2019, 85, 206-215. | 5.5 | 7 |
| 153 | Hierarchical Hybrid MPC for Management of Distributed Phase Change Thermal Energy Storage. , 2020, , . | | 7 |
| 154 | Framework for integrated plant and control optimization of electro-thermal systems: An energy storage system case study. Energy, 2022, 258, 124855. | 8.8 | 7 |
| 155 | A Urea Decomposition Modeling Framework for SCR Systems. SAE International Journal of Fuels and Lubricants, 0, 2, 612-626. | 0.2 | 6 |
| 156 | Norm optimal ILC with time-varying weighting matrices. , 2009, , . | | 6 |
| 157 | Decentralized architectures for thermal control of buildings. , 2012, , . | | 6 |
| 158 | Printing: Mechanisms, Capabilities, and Applications of High-Resolution Electrohydrodynamic Jet Printing (Small 34/2015). Small, 2015, 11, 4412-4412. | 10.0 | 6 |
| 159 | PowerFlow: A Toolbox for Modeling and Simulation of Aircraft Systems. , 2015, , . | | 6 |
| 160 | Selective Autonomous Molecular Transport and Collection by Hydrogel-Embedded Supramolecular Chemical Gradients. Angewandte Chemie, 2019, 131, 18333-18338. | 2.0 | 6 |
| 161 | Extremum seeking control of battery powered vapor compression systems for commercial vehicles. International Journal of Refrigeration, 2020, 115, 63-72. | 3.4 | 6 |
| 162 | A lateral position sensing system for automated vehicle following. IEEE/ASME Transactions on Mechatronics, 1998, 3, 218-224. | 5.8 | 5 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 163 | Design and Convergence of a Time-Varying Iterative Learning Control Law. , 2004, , 91. | | 5 |
| 164 | A full dynamic model of a HVAC vapor compression cycle interacting with a dynamic environment. , 2009, , . | | 5 |
| 165 | Iterative Learning Control using a basis signal library. , 2009, , . | | 5 |
| 166 | Control of high-resolution Electrohydrodynamic jet printing. , 2010, , . | | 5 |
| 167 | Robust gain-scheduled control. , 2010, , . | | 5 |
| 168 | An energy management strategy for a hydraulic hybrid vehicle. , 2012, , . | | 5 |
| 169 | Learning/repetitive control for building systems with nearly periodic disturbances. , 2013, , . | | 5 |
| 170 | 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 |
| 171 | HVAC System Modeling and Control: Vapor Compression System Modeling and Control. Advances in Industrial Control, 2018, , 73-103. | 0.5 | 5 |
| 172 | Optimal Flow Control and Single Split Architecture Exploration for Fluid-Based Thermal Management. , 2018, , . | | 5 |
| 173 | Experimental Model and Controller Validation for a Series Hybrid Unmanned Aerial Vehicle. , 2020, , . | | 5 |
| 174 | Graph-Based Dynamic Modeling of Two-Phase Heat Exchangers in Vapor Compression Systems. International Journal of Refrigeration, 2022, 137, 244-256. | 3.4 | 5 |
| 175 | A variable structure gradient adaptive algorithm for a class of dynamical systems. Systems and Control Letters, 1998, 33, 171-186. | 2.3 | 4 |
| 176 | Dissipative Adaptive Control for Strict Feedback Form Systems. European Journal of Control, 2002, 8, 435-444. | 2.6 | 4 |
| 177 | Vapor Compression Cycles: Control-Oriented Modeling and Validation. , 2005, , 1213. | | 4 |
| 178 | A Static Anti-Windup Compensator Design Technique for Robust Regional Pole Placement. , 2006, , 75. | | 4 |
| 179 | Improving Energy Efficiency in Automotive Vapor Compression Cycles through Advanced Control Design. , 2006, , . | | 4 |
| 180 | Comparison of SISO and MIMO control techniques for a diagonally dominant vapor compression system. , 2009, , . | | 4 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 181 | Thermodynamics-Based Optimization and Control of Vapor-Compression Cycle Operation: Control Synthesis. , 2011, , . | | 4 |
| 182 | Iterative learning identification for an automated off-highway vehicle. , 2011, , . | | 4 |
| 183 | Two Degrees of Freedom Control for Combine Harvester Header Height Control. , 2012, , . | | 4 |
| 184 | Norm Optimal Iterative Learning Identification for Linear Time-Varying Systems. , 2012, , . | | 4 |
| 185 | LMI Control Design for Nonlinear Vapor Compression Cycle Systems. , 2012, , . | | 4 |
| 186 | A learning based precool algorithm for utilization of foodstuff as thermal energy storage. , 2013, , . | | 4 |
| 187 | Norm Optimal Iterative Learning Control for a Roll to Roll nano/micro-manufacturing system. , 2013, , . | | 4 |
| 188 | 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 |
| 189 | Scalable model predictive control for multi-evaporator vapor compression systems. , 2014, , . | | 4 |
| 190 | A Model Predictive Framework for Thermal Management of Aircraft. , 2015, , . | | 4 |
| 191 | Switched linear control for refrigerant superheat recovery in vapor compression systems. Control Engineering Practice, 2016, 57, 142-156. | 5.5 | 4 |
| 192 | Mitigating power systems variability in more electric aircraft utilizing power electronics implemented dynamic thermal storage. , 2017, , . | | 4 |
| 193 | Graph-based hierarchical control of thermal-fluid power flow systems. , 2017, , . | | 4 |
| 194 | A Metameric Crawling Robot Enabled by Origami and Smart Materials. , 2017, , . | | 4 |
| 195 | Dynamic temperature estimation of power electronics systems. , 2017, , . | | 4 |
| 196 | A Simulation and Experimental Environment for Teaching Chemical Reaction Process Dynamics and Control. IFAC-PapersOnLine, 2017, 50, 15692-15697. | 0.9 | 4 |
| 197 | Power Density as the Key Enabler for Electrified Mobility. Polytechnica, 2018, 1, 10-18. | 2.1 | 4 |
| 198 | Graph-Based Electro-Mechanical Modeling of a Hybrid Unmanned Aerial Vehicle for Real-Time Applications. , 2019, , . | | 4 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 199 | Graphene-based electromechanical thermal switches. 2D Materials, 2021, 8, 035055. | 4.4 | 4 |
| 200 | Modeling of Complex Hydronic Systems for Energy Efficient Operation. , 2009, , . | | 4 |
| 201 | Integrated Plant and Controller Design of a Combine Harvester System. , 2011, , . | | 4 |
| 202 | Decentralized Feedback Structures of a Vapor Compression Cycle System. , 2008, , . | | 4 |
| 203 | Hierarchical Control of Multi-Domain Power Flow in Mobile Systems: Part II " Aircraft Application. , 2015, , . | | 4 |
| 204 | Multivariable Bilinear Vehicle Control Using Steering and Individual Wheel Torques. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1999, 121, 631-637. | 1.6 | 3 |
| 205 | A Time-Varying Q-Filter Design for Iterative Learning Control. Proceedings of the American Control Conference, 2007, , . | 0.0 | 3 |
| 206 | Thermodynamics-based optimization and control of vapor-compression cycle operation: Optimization criteria. , 2011, , . | | 3 |
| 207 | High Throughput Electrohydrodynamic-Jet Printing System. , 2012, , . | | 3 |
| 208 | Fault Detection and Isolation for Complex Thermal Management Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2019, 141, . | 1.6 | 3 |
| 209 | Graph-Based Design and Control Optimization of a Hybrid Electrical Energy Storage System. , 2020, , . | | 3 |
| 210 | Automotive Vapor Compression Cycles: Validation of Control- Oriented Models. , 0, , . | | 2 |
| 211 | A switched system model for heat exchangers using a moving boundary method. , 2008, , . | | 2 |
| 212 | High precision polymer deposition onto microcantilever sensors using electrohydrodynamic printing. , 2010, , . | | 2 |
| 213 | Stochastic iterative learning control design for nonrepetitive events. , 2010, , . | | 2 |
| 214 | Stability analysis for decentralized control of multi-evaporator vapor-compression cycle systems. , 2012, , . | | 2 |
| 215 | Switched-fidelity modeling and optimization for multi-physics dynamical systems. , 2014, , . | | 2 |
| 216 | Dynamic Thermal Management for Aerospace Technology: A Review and Outlook. , 2015, , . | | 2 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 217 | Hybrid model predictive control of multi-compressor vapor compression systems. , 2016, , . | | 2 |
| 218 | Time-varying Newton based extremum seeking for optimization of vapor compression systems. , 2017, , . | | 2 |
| 219 | Multi-zone Temperature Modeling and Control. Advances in Industrial Control, 2018, , 139-166. | 0.5 | 2 |
| 220 | Numerical model for liquid-to-liquid heat pumps implementing switching mode. Applied Thermal Engineering, 2019, 160, 114054. | 6.0 | 2 |
| 221 | Cooperativity and Hierarchical MPC of State-Constrained Switched Power Flow Systems. , 2019, , . | | 2 |
| 222 | A Series-Hierarchical Iterative Learning Controller for Multi-Stage Systems. , 2022, 6, 914-919. | | 2 |
| 223 | Dynamic modeling of refrigerated transport systems with cooling-mode/heating-mode switch operations. HVAC and R Research, 2012, 18, 974-996. | 0.6 | 2 |
| 224 | Cross Coupled Iterative Learning Control of Dissimilar Dynamical Systems. , 2009, , . | | 2 |
| 225 | Path Following for the Soft Origami Crawling Robot. , 2019, , . | | 2 |
| 226 | Modeling and Control of Interconnected Dimensionless Dynamic Systems. , 2009, , . | | 2 |
| 227 | Variable Fidelity Modeling in Closed Loop Dynamical Systems. , 2014, , . | | 2 |
| 228 | Multilevel Hierarchical Estimation for Thermal Management Systems of Electrified Vehicles With Experimental Validation. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2020, 142, . | 1.6 | 2 |
| 229 | Robust Design and Evaluation of a Novel Modular Origami-Enabled Mobile Robot (OSCAR). Journal of Mechanisms and Robotics, 2023, 15, . | 2.2 | 2 |
| 230 | Mission and Shape Optimization of a HALE Aircraft including Transient Power and Thermal Constraints. , 2022, , . | | 2 |
| 231 | 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 |
| 232 | Parametric Sensitivity Analysis and Model Tuning Applied to Vapor Compression Systems. , 2005, , 1203. | | 1 |
| 233 | A Robust Controller Interpolation Design Technique. Proceedings of the American Control Conference, 2007, , . | 0.0 | 1 |
| 234 | Robust wireless servo control using a discrete-time uncertain Markovian jump linear model. Proceedings of the American Control Conference, 2007, , . | 0.0 | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 235 | Dimensional analysis for robust control of planar vehicle dynamics. International Journal of Robust and Nonlinear Control, 2008, 18, 587-616. | 3.7 | 1 |
| 236 | Portable Pneumatic Power-Harvesting Ankle-Foot-Orthosis. , 2008, , . | | 1 |
| 237 | Load-Predictive Temperature Control of an Air Conditioning and Refrigeration System. , 2009, , . | | 1 |
| 238 | Dimensionless Design of Variable Displacement Pumps. , 2009, , . | | 1 |
| 239 | Robust controller interpolation via convex optimization. , 2009, , . | | 1 |
| 240 | 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 |
| 241 | Fundamental limits in combine harvester header height control. , 2011, , . | | 1 |
| 242 | Model Predictive Control of an Electro-Hydraulic Powertrain With Energy Storage. , 2011, , . | | 1 |
| 243 | Micropositioning of a Multimaterial Electrohydrodynamic Jet Deposition System Using Vision Feedback. , 2011, , . | | 1 |
| 244 | Optimal Subcooling in Vapor Compression Systems via Extremum Seeking Control. , 2013, , . | | 1 |
| 245 | Time-varying norm optimal iterative learning identification. , 2013, , . | | 1 |
| 246 | Motion control for magnetic micro-scale manipulation. , 2013, , . | | 1 |
| 247 | Iterative Learning Control for image based visual servoing applications. , 2014, , . | | 1 |
| 248 | 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 |
| 249 | Switched linear control of vapor compression systems under highly transient conditions. , 2016, , . | | 1 |
| 250 | Combining self-optimizing control and extremum seeking for online optimization with application to Vapor Compression cycles. , 2016, , . | | 1 |
| 251 | A decentralized algorithm for control of autonomous agents coupled by feasibility constraints. , 2017, , . | | 1 |
| 252 | A Graph-Based Approach for Dynamic Compressor Modeling in Vapor Compression Systems. , 2017, , . | | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 253 | Optimal Sensor Placement Methods for Active Power Electronic Systems. , 2017, , . | | 1 |
| 254 | Integrated Modeling for Battery Electric Vehicle Transcritical Thermal Management System. , 2018, , . | | 1 |
| 255 | Control as an Enabler for Electrified Mobility. Annual Review of Control, Robotics, and Autonomous Systems, 2022, 5, . | 11.8 | 1 |
| 256 | Wiener Modeling of a Closed Loop Vapor Compression System for Extremum Seeking Controller Design. , 2015, , . | | 1 |
| 257 | A Hybrid Electro-Thermal Energy Storage System for High Ramp Rate Power Applications. , 2019, , . | | 1 |
| 258 | An Improved Iterative Learning Control for Uncertain Multi-Axis Systems. , 2020, , . | | 1 |
| 259 | Selected Papers from AVEC 2000. Vehicle System Dynamics, 2001, 36, 75-76. | 3.7 | 0 |
| 260 | Optimal Time-Varying ILC Design to Monotonically Minimize Converged Error. , 2005, , 3. | | 0 |
| 261 | Stable Gain Scheduling Through Bumpless Transfer. , 2005, , 93. | | 0 |
| 262 | 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 |
| 263 | An anti-windup technique for LMI regions with applications to a fluid power system. , 2008, , . | | 0 |
| 264 | Design of a linear time-varying cross-coupled Iterative Learning Controller. , 2008, , . | | 0 |
| 265 | An Improved Method for Calculating Iterative Learning Control Convergence Rate. , 2008, , . | | 0 |
| 266 | Feedback Frameworks for Active Suspensions With Electrohydraulic Actuator Dynamics. , 2008, , . | | 0 |
| 267 | Scheduled Feedforward Control of Superheat Through Hardware-in-the-Loop Load Emulation. , 2010, , . | | 0 |
| 268 | Semi-active Iterative Learning Control. , 2011, , . | | 0 |
| 269 | 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 |
| 270 | Sensitivity Analysis of Energy Management Strategies for Hydraulic Hybrid Vehicles. , 2012, , . | | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 271 | Near-Net Shape Structures Fabricated by Micro-Robotic Deposition Using Precision Extrusion Control. , 2012, , . | | 0 |
| 272 | A robust two degree-of-freedom controller for systems with delay. , 2013, , . | | 0 |
| 273 | Transient Thermal Systems: Dynamics and Control. Mechanical Engineering, 2014, 136, S4-S12. | 0.1 | 0 |
| 274 | High Resolution Digital Elevation Modeling With On-Vehicle Sensors. , 2014, , . | | 0 |
| 275 | Integrated design and control for header height control of combine harvesters. , 2014, , . | | 0 |
| 276 | A Cooperative Driving NLMPC for Real Time Collision Avoidance. , 2015, , . | | 0 |
| 277 | Dynamic Modeling of Heat Exchangers With Humidity and Condensation. , 2015, , . | | 0 |
| 278 | Polarization controlled output of electrohydrodynamic jet printed quantum dot embedded photonic crystals for display applications. , 2015, , . | | 0 |
| 279 | Event-based hierarchical control for power flow in vehicle systems. , 2016, , . | | 0 |
| 280 | Easy-to-Use 3D Printer for Fabrication of Biological Scaffolds. , 2017, , . | | 0 |
| 281 | An Improved Dynamic Friction Model Using a Data-Based Approach. , 2017, , . | | 0 |
| 282 | ACC tutorial session proposal thermal and HVAC control systems: Challenges and opportunities. , 2017, , . | | 0 |
| 283 | Controller Design for Two-Input Single-Output Systems Exploiting Plant/Controller Alignment. , 2018, , . | | 0 |
| 284 | Improved Cross-Coupled Iterative Learning Control for Contouring NURBS Curves. , 2018, , . | | 0 |
| 285 | Model Predictive Control of a Pumped Two-Phase Cooling System With Microchannel Heat Exchangers. , 2018, , . | | 0 |
| 286 | Innentitelbild: Selective Autonomous Molecular Transport and Collection by Hydrogelâ€ Embedded Supramolecular Chemical Gradients (Angew. Chem. 50/2019). Angewandte Chemie, 2019, 131, 18046-18046. | 2.0 | 0 |
| 287 | Modeling and coordinated control of a multi-load earthmoving vehicle powertrain. , 2001, , . | | 0 |
| 288 | Hydraulic Control Equipment. , 2003, , 459-469. | | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 289 | A Generalized Robust Control Framework Utilizing Dimensional Analysis. , 2005, , . | | 0 |
| 290 | Control of Unstable Oscillations in Flows. The Electrical Engineering Handbook, 2010, , 34-1-34-20. | 0.2 | 0 |
| 291 | Energy management in Mobile Hydraulics. Mechanical Engineering, 2013, 135, S4-S6. | 0.1 | 0 |
| 292 | Fault Detection and Isolation for Complex Thermal Management Systems. , 2018, , . | | 0 |
| 293 | Hierarchical Estimation for Complex Multi-Domain Dynamical Systems. , 2019, , . | | 0 |
| 294 | Low-Complexity Hierarchical Control for Distributed Shopping Center HVAC. IFAC-PapersOnLine, 2020, 53, 6597-6603. | 0.9 | 0 |
| 295 | Multi-Level Hierarchical Estimation for Thermal Management Systems of Electrified Vehicles. , 2020, , . | | 0 |