

# Daniel Zelazo

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3799242/publications.pdf>

Version: 2024-02-01

80  
papers

2,213  
citations

430874

18  
h-index

345221

36  
g-index

81  
all docs

81  
docs citations

81  
times ranked

1079  
citing authors

#	ARTICLE	IF	CITATIONS
1	Bearing Rigidity and Almost Global Bearing-Only Formation Stabilization. IEEE Transactions on Automatic Control, 2016, 61, 1255-1268.	5.7	297
2	Translational and Scaling Formation Maneuver Control via a Bearing-Based Approach. IEEE Transactions on Control of Network Systems, 2017, 4, 429-438.	3.7	171
3	Edge Agreement: Graph-Theoretic Performance Bounds and Passivity Analysis. IEEE Transactions on Automatic Control, 2011, 56, 544-555.	5.7	158
4	Localizability and distributed protocols for bearing-based network localization in arbitrary dimensions. Automatica, 2016, 69, 334-341.	5.0	133
5	Decentralized rigidity maintenance control with range measurements for multi-robot systems. International Journal of Robotics Research, 2015, 34, 105-128.	8.5	125
6	Bearing Rigidity Theory and Its Applications for Control and Estimation of Network Systems: Life Beyond Distance Rigidity. IEEE Control Systems, 2019, 39, 66-83.	0.8	97
7	On the Robustness of Uncertain Consensus Networks. IEEE Transactions on Control of Network Systems, 2017, 4, 170-178.	3.7	83
8	Duality and network theory in passivity-based cooperative control. Automatica, 2014, 50, 2051-2061.	5.0	79
9	Performance and design of cycles in consensus networks. Systems and Control Letters, 2013, 62, 85-96.	2.3	67
10	Finite-Time Bearing-Only Formation Control via Distributed Global Orientation Estimation. IEEE Transactions on Control of Network Systems, 2019, 6, 702-712.	3.7	57
11	A Distributed Control Approach to Formation Balancing and Maneuvering of Multiple Multirotor UAVs. IEEE Transactions on Robotics, 2018, 34, 870-882.	10.3	52
12	Agreement via the edge laplacian. , 2007, , .		48
13	On the definiteness of the weighted Laplacian and its connection to effective resistance. , 2014, , .		48
14	Economic dispatch of a single micro-gas turbine under CHP operation. Applied Energy, 2017, 200, 1-18.	10.1	47
15	A rigidity-based decentralized bearing formation controller for groups of quadrotor UAVs. , 2016, , .		45
16	Rigidity Maintenance Control for Multi-Robot Systems. , 0, , .		44
17	Bearing-only formation control using an SE(2) rigidity theory. , 2015, , .		43
18	Bearing-Based Formation Control of A Group of Agents with Leader-First Follower Structure. IEEE Transactions on Automatic Control, 2018, , 1-1.	5.7	42

#	ARTICLE	IF	CITATIONS
19	Rigidity theory in SE(2) for unscaled relative position estimation using only bearing measurements. , 2014, , .		33
20	A proportional-integral controller for distance-based formation tracking. , 2015, , .		30
21	Bearing-based distributed control and estimation of multi-agent systems. , 2015, , .		29
22	Hierarchical Clustering of Dynamical Networks Using a Saddle-Point Analysis. IEEE Transactions on Automatic Control, 2013, 58, 113-124.	5.7	27
23	Bearing-based formation stabilization with directed interaction topologies. , 2015, , .		27
24	Formations on directed cycles with bearing-only measurements. International Journal of Robust and Nonlinear Control, 2018, 28, 1074-1096.	3.7	27
25	Graph-Theoretic Analysis and Synthesis of Relative Sensing Networks. IEEE Transactions on Automatic Control, 2011, 56, 971-982.	5.7	26
26	Bearing-based formation maneuvering. , 2015, , .		26
27	An energy management system for off-grid power systems. Energy Systems, 2012, 3, 153-179.	3.0	24
28	On the observability properties of homogeneous and heterogeneous networked dynamic systems. , 2008, , .		21
29	Robustness of Consensus over Weighted Digraphs. IEEE Transactions on Network Science and Engineering, 2019, 6, 657-670.	6.4	20
30	On the zeros of consensus networks. , 2011, , .		18
31	Analysis and Synthesis of MIMO Multi-Agent Systems Using Network Optimization. IEEE Transactions on Automatic Control, 2019, 64, 4512-4524.	5.7	18
32	Growing optimally rigid formations. , 2012, , .		15
33	Laman graphs are generically bearing rigid in arbitrary dimensions. , 2017, , .		15
34	A Network Optimization Approach to Cooperative Control Synthesis. , 2017, 1, 86-91.		15
35	Network Feedback Passivation of Passivity-Short Multi-Agent Systems. , 2019, 3, 607-612.		13
36	Decentralized formation control via the edge Laplacian. , 2008, , .		12

#	ARTICLE	IF	CITATIONS
37	Network Identification: A Passivity and Network Optimization Approach. , 2018, , .		11
38	Pointing Consensus and Bearing-Based Solutions to the Fermat-Weber Location Problem. IEEE Transactions on Automatic Control, 2020, 65, 2339-2354.	5.7	11
39	H <sub>2</sub> analysis and synthesis of networked dynamic systems. , 2009, , .		10
40	Network clustering: A dynamical systems and saddle-point perspective. , 2011, , .		10
41	Consensus of Higher Order Agents: Robustness and Heterogeneity. IEEE Transactions on Control of Network Systems, 2019, 6, 1323-1333.	3.7	10
42	Regularization and Feedback Passivation in Cooperative Control of Passivity-Short Systems: A Network Optimization Perspective. , 2018, 2, 731-736.		9
43	Geometric Method for Passivation and Cooperative Control of Equilibrium-Independent Passive-Short Systems. IEEE Transactions on Automatic Control, 2021, 66, 5877-5892.	5.7	9
44	Model-Free Practical Cooperative Control for Diffusively Coupled Systems. IEEE Transactions on Automatic Control, 2022, 67, 754-766.	5.7	9
45	Convergence Analysis of Signed Nonlinear Networks. IEEE Transactions on Control of Network Systems, 2020, 7, 189-200.	3.7	8
46	Consensus over weighted digraphs: A robustness perspective. , 2016, , .		7
47	Fekete Points, Formation Control, and the Balancing Problem. IEEE Transactions on Automatic Control, 2017, 62, 5069-5081.	5.7	6
48	Finite-time bearing-only formation control. , 2017, , .		6
49	On Sampled-Data Consensus: Divide and Concur. , 2022, 6, 343-348.		6
50	A Unified Dissertation on Bearing Rigidity Theory. IEEE Transactions on Control of Network Systems, 2021, , 1-1.	3.7	6
51	Graph Theory in Systems and Controls. , 2018, , .		5
52	Bearing-Only Formation Control with Limited Visual Sensing: Two Agent Case. IFAC-PapersOnLine, 2018, 51, 28-33.	0.9	5
53	Economic dispatch of a single micro gas turbine under CHP operation with uncertain demands. Applied Energy, 2022, 309, 118391.	10.1	5
54	H <sub>2</sub> performance of agreement protocol with noise: An edge based approach. , 2009, , .		4

#	ARTICLE	IF	CITATIONS
55	Pointing consensus for rooted out-branching graphs. , 2018, , .		4
56	H <sub>2</sub> performance and robust topology design of relative sensing networks. , 2010, , .		3
57	On the Steady-State Inverse-Optimality of Passivity-based Cooperative Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 138-143.	0.4	3
58	Symmetry-Induced Clustering in Multi-Agent Systems using Network Optimization and Passivity. , 2019, , .		3
59	Temporal Circular Formation Control with Bounded Trajectories in a Uniform Flowfield. , 2019, , .		3
60	An Improved Distributed Consensus Kalman Filter Design Approach. , 2021, , .		3
61	Design of sparse relative sensing networks. , 2012, , .		2
62	Cycles and sparse design of consensus networks. , 2012, , .		2
63	Graph-Based Model Reduction of the Controlled Consensus Protocol * *The work presented here has been supported by the Israel Science Foundation (grant No. 1490/13). IFAC-PapersOnLine, 2017, 50, 9456-9461.	0.9	2
64	Planar Bearing-only Cyclic Pursuit for Target Capture. IFAC-PapersOnLine, 2017, 50, 10136-10141.	0.9	2
65	Maximum Hands-Off Distributed Bearing-Based Formation Control. , 2019, , .		2
66	Graph-Theoretic Methods for Networked Dynamic Systems: Heterogeneity and H <sub>2</sub> Performance. , 2010, , 219-249.		2
67	Optimisation with Zeroth-Order Oracles in Formation. , 2020, , .		2
68	Secure Consensus via Objective Coding: Robustness Analysis to Channel Tampering. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2022, 52, 7885-7897.	9.3	2
69	H <sub>2</sub> Performance of Relative Sensing Networks: Analysis and Synthesis. , 2009, , .		1
70	A Distributed Real-Time Algorithm for Preference-Based Agreement. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 8933-8938.	0.4	1
71	Combinatorial insights and robustness analysis for clustering in dynamical networks. , 2012, , .		1
72	A Finite-Time Dual Method for Negotiation between Dynamical Systems. SIAM Journal on Control and Optimization, 2013, 51, 172-194.	2.1	1

#	ARTICLE	IF	CITATIONS
73	Monitoring Link Faults in Nonlinear Diffusively Coupled Networks. IEEE Transactions on Automatic Control, 2022, 67, 2857-2872.	5.7	1
74	Robust design of sparse relative sensing networks. , 2013, , .		1
75	Heterogeneous Formation Control: a Bearing Rigidity Approach. , 2021, , .		1
76	Cooperative Manipulation via Internal Force Regulation: A Rigidity Theory Perspective. IEEE Transactions on Control of Network Systems, 2023, 10, 1222-1233.	3.7	1
77	Boundary filter design for biorthogonal filter banks. , 0, , .		0
78	Eulerian consensus networks. , 2012, , .		0
79	Edge-matching graph contractions and their interlacing properties. Linear Algebra and Its Applications, 2021, 612, 289-317.	0.9	0
80	Bearing-based Autonomous Communication Relay Positioning under $\mathcal{H}_\infty$ Constraints. Advanced Control for Applications, 0, , .	1.7	0