

Cornel Sultan

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3204773/publications.pdf>

Version: 2024-02-01

90
papers

1,589
citations

361413

20
h-index

345221

36
g-index

90
all docs

90
docs citations

90
times ranked

703
citing authors

#	ARTICLE	IF	CITATIONS
1	Decoupling of second order systems via linear time invariant transformations. Mechanical Systems and Signal Processing, 2022, 169, 108295.	8.0	1
2	Variable Horizon Model Predictive Control for Helicopter Landing on Moving Decks. Journal of Guidance, Control, and Dynamics, 2022, 45, 774-780.	2.8	8
3	Constrained Control of Moored Ocean Current Turbines With Cyclic Blade Pitch Variations. IEEE Journal of Oceanic Engineering, 2021, 46, 594-610.	3.8	7
4	Modeling and Stability of a Laser Beam-Driven Sail. , 2021, , .		2
5	Modeling and Numerical Simulation of a Buoyancy Controlled Ocean Current Turbine. International Marine Energy Journal, 2021, 4, 47-58.	0.8	12
6	Comparison of Deep Reinforcement Learning and Model Predictive Control for Real-Time Depth Optimization of a Lifting Surface Controlled Ocean Current Turbine. , 2021, , .		5
7	Infinite horizon model predictive control tracking application to helicopters. Aerospace Science and Technology, 2020, 98, 105675.	4.8	18
8	Shrinking Horizon Model Predictive Control Method for Helicopter Ship Touchdown. Journal of Guidance, Control, and Dynamics, 2020, 43, 884-900.	2.8	25
9	Model-based Wind profiling in the Lower Atmosphere with Multirotor UAS. , 2019, , .		3
10	Sensing Wind from Quadrotor Motion. Journal of Guidance, Control, and Dynamics, 2019, 42, 836-852.	2.8	49
11	In-Stream Hydrokinetic Turbine Fault Detection and Fault Tolerant Control - A Benchmark Model. , 2019, , .		10
12	Deployment of foldable tensegrity-membrane systems via transition between tensegrity configurations and tensegrity-membrane configurations. International Journal of Solids and Structures, 2019, 160, 103-119.	2.7	25
13	Aeroelastic Control-Oriented Modeling of an Airbreathing Hypersonic Vehicle. Journal of Guidance, Control, and Dynamics, 2018, 41, 1136-1149.	2.8	13
14	Close tracking of equilibrium paths. International Journal of Robust and Nonlinear Control, 2018, 28, 2209-2230.	3.7	6
15	A comparative study on the dynamics of tensegrity-membrane systems based on multiple models. International Journal of Solids and Structures, 2017, 113-114, 47-69.	2.7	8
16	Measuring Atmospheric Winds from Quadrotor Motion. , 2017, , .		16
17	State Variance-Based Approach to Flight Dynamic Constraints in Multidisciplinary Design Optimization. Journal of Guidance, Control, and Dynamics, 2017, 40, 1206-1220.	2.8	2
18	LPV control of a tensegrity-membrane system. Mechanical Systems and Signal Processing, 2017, 95, 397-424.	8.0	14

#	ARTICLE	IF	CITATIONS
19	System Modeling and Simulation of In-Stream Hydrokinetic Turbines for Power Management and Control. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2017, 139, .	1.6	4
20	Model predictive control for moored ocean current turbines. , 2017, , .		6
21	Numerical simulation and dynamical response of a moored hydrokinetic turbine operating in the wake of an upstream turbine for control design. Renewable Energy, 2017, 114, 1134-1145.	8.9	6
22	Control-oriented modeling and deployment of tensegrity membrane systems. International Journal of Robust and Nonlinear Control, 2017, 27, 2722-2748.	3.7	12
23	A Data Model for Turbulence Analysis Downstream of an Ocean Current Turbine Rotor for Hydrokinetic Power Generation. , 2017, , .		0
24	Variance Constrained cyclic blade control of moored ocean current turbines. , 2016, , .		4
25	An assessment of using variable blade pitch for moored ocean current turbine flight control. International Journal of Marine Energy, 2016, 13, 16-26.	1.8	22
26	Accurate Computing of Higher Vibration Modes of Thin Flexible Structures. AIAA Journal, 2016, 54, 1704-1718.	2.6	6
27	LPV state-feedback control of a tensegrity-membrane system. , 2016, , .		0
28	Model Predictive Control for Helicopter Shipboard Operations in the Ship Airwakes. Journal of Guidance, Control, and Dynamics, 2016, 39, 574-589.	2.8	29
29	Aeroelastic Control-oriented Modeling of an Air-breathing Hypersonic Vehicle. , 2016, , .		4
30	Modeling of tensegrity-membrane systems. International Journal of Solids and Structures, 2016, 82, 125-143.	2.7	28
31	A Novel Scheme to Accurately Compute Higher Vibration Modes using the Ritz Method and a Two-point BVP Solver. , 2015, , .		1
32	Comfortable helicopter flight via passive/active morphing. IEEE Transactions on Aerospace and Electronic Systems, 2015, 51, 2876-2886.	4.7	20
33	Decoupling Transformations for Linear Systems in the Configuration Space. , 2015, , .		0
34	Advances of oscillations in Hopf bifurcation revisited. , 2015, , .		1
35	System Analysis and Control Design for a Membrane with Bimorph Actuators. AIAA Journal, 2015, 53, 2110-2120.	2.6	12
36	Methods for Modeling Tensegrity Dynamics in LEO. , 2015, , .		0

#	ARTICLE	IF	CITATIONS
37	LQR Using Second Order Vector Form for a Membrane with Bimorph Actuators. , 2015, , .		4
38	An ocean current turbine system with induction generator and power electronic control. , 2015, , .		0
39	On the Nonlinear Dynamic Stability of Prestressable Structures. , 2015, , .		1
40	LQG Control and Robustness Study for a Prestressed Membrane With Bimorph Actuators. , 2014, , .		5
41	Nonlinear Helicopter and Ship Models for Predictive Control of Ship Landing Operations. , 2014, , .		9
42	Flight Control Energy Saving via Helicopter Rotor Active Morphing. Journal of Aircraft, 2014, 51, 1784-1804.	2.4	15
43	Modeling of Four-Bar Tensegrity-Membrane Systems. , 2014, , .		1
44	Active Control of Four-Bar Tensegrity-Membrane Systems. , 2014, , .		2
45	LMI Control Design With Input Covariance Constraint for a Tensegrity Simplex Structure. , 2014, , .		4
46	Optimal Energy Harvesting from a Membrane Attached to a Tensegrity Structure. AIAA Journal, 2014, 52, 307-319.	2.6	18
47	Tensegrity deployment using infinitesimal mechanisms. International Journal of Solids and Structures, 2014, 51, 3653-3668.	2.7	41
48	Constrained predictive control of helicopters. Aircraft Engineering and Aerospace Technology, 2013, 85, 32-47.	0.8	31
49	Robustness of variance constrained controllers for complex, control oriented helicopter models. , 2013, , .		4
50	Decoupling approximation design using the peak to peak gain. Mechanical Systems and Signal Processing, 2013, 36, 582-603.	8.0	14
51	Modeling and control of a helicopter slung-load system. Aerospace Science and Technology, 2013, 29, 206-222.	4.8	47
52	Stiffness formulations and necessary and sufficient conditions for exponential stability of prestressable structures. International Journal of Solids and Structures, 2013, 50, 2180-2195.	2.7	40
53	Variance-constrained control of maneuvering helicopters with sensor failure. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2013, 227, 1845-1858.	1.3	12
54	Simultaneous Helicopter and Control-System Design. Journal of Aircraft, 2013, 50, 911-925.	2.4	26

#	ARTICLE	IF	CITATIONS
55	Modern Control Design for A Membrane with Bimorph Actuators. , 2013, , .		5
56	Modeling and Control of Tensegrity Systems Under LEO Gravitational Effects. , 2013, , .		0
57	Integrated Maneuvering Helicopter Model and Controller Design. , 2012, , .		7
58	Solution of Nonlinear Vibration Problem of a Prestressed Membrane by Adomian Decomposition. AIAA Journal, 2012, 50, 1796-1800.	2.6	9
59	Towards Flying Qualities Constraints in the Multidisciplinary Design Optimization of a Supersonic Tailless Aircraft. , 2012, , .		7
60	Model Predictive Control of Maneuvering Helicopters. , 2012, , .		6
61	Graceful Passage Through Hopf Bifurcation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 10899-10903.	0.4	8
62	On Calculus of Variations in Aircraft and Spacecraft Formation Flying Path Planning. , 2010, , .		2
63	Proportional damping approximation using the energy gain and simultaneous perturbation stochastic approximation. Mechanical Systems and Signal Processing, 2010, 24, 2210-2224.	8.0	20
64	Proportional Damping Approximation Using the Peak to Peak Gain. , 2010, , .		0
65	Calculus of variations for guaranteed optimal path planning of aircraft formations. , 2010, , .		3
66	Chapter 2 Tensegrity. Advances in Applied Mechanics, 2009, 43, 69-145.	2.3	84
67	Designing structures for dynamical properties via natural frequencies separation. Mechanical Systems and Signal Processing, 2009, 23, 1112-1122.	8.0	15
68	Design of Structures for Proportional Damping Approximation Using the Energy Gain. , 2009, , .		1
69	Applications of Calculus of Variations to Aircraft and Spacecraft Path Planning. , 2009, , .		4
70	Tensegrity motion control using internal mechanisms. , 2009, , .		8
71	Designing Structures for Proportional Damping. , 2008, , .		0
72	Simple conditions for arbitrarily close deployment and equilibrium paths and quasistationary deployment. , 2008, , .		3

#	ARTICLE	IF	CITATIONS
73	Deep Space Formation Flying Spacecraft Path Planning. International Journal of Robotics Research, 2007, 26, 405-430.	8.5	28
74	Nonlinear systems control using equilibrium paths. , 2007, , .		6
75	Tensegrity Structures Research Evolution. , 2006, , .		3
76	Energy Suboptimal Collision-Free Path Reconfiguration for Spacecraft Formation Flying. Journal of Guidance, Control, and Dynamics, 2006, 29, 190-192.	2.8	10
77	Tensegrity, Dynamic Networks, and Complex Systems Biology: Emergence in Structural and Information Networks Within Living Cells. , 2006, , 283-310.		3
78	A Computational Tensegrity Model Predicts Dynamic Rheological Behaviors in Living Cells. Annals of Biomedical Engineering, 2004, 32, 520-530.	2.5	103
79	A force and torque tensegrity sensor. Sensors and Actuators A: Physical, 2004, 112, 220-231.	4.1	39
80	Deployment of tensegrity structures. International Journal of Solids and Structures, 2003, 40, 4637-4657.	2.7	149
81	Tensegrity Structures Prestressability Investigation. International Journal of Space Structures, 2003, 18, 15-30.	1.0	14
82	Linear dynamics of tensegrity structures. Engineering Structures, 2002, 24, 671-685.	5.3	73
83	Symmetrical reconfiguration of tensegrity structures. International Journal of Solids and Structures, 2002, 39, 2215-2234.	2.7	48
84	The prestressability problem of tensegrity structures: some analytical solutions. International Journal of Solids and Structures, 2001, 38, 5223-5252.	2.7	88
85	Tensegrity Flight Simulator. Journal of Guidance, Control, and Dynamics, 2000, 23, 1055-1064.	2.8	91
86	Peak-to-peak control of an adaptive tensegrity space telescope. , 1999, 3667, 190.		20
87	<title>Tendon control deployment of tensegrity structures</title>. , 1998, , .		24
88	<title>Nonlinear robust tracking control of a tensegrity motion simulator</title>. , 1998, , .		3
89	<title>Force and torque smart tensegrity sensor</title>. , 1998, , .		9
90	<title>Controllable tensegrity: a new class of smart structures</title>. , 1997, 3039, 166.		43