Kamesh Subbarao

List of Publications by Year
in descending order

102	2,107	393982	253896
papers	citations	19 h-index	43 g-index

104	104	104	1416
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Set-Membership Filter for Discrete-Time Nonlinear Systems Using State-Dependent Coefficient Parameterization. IEEE Transactions on Automatic Control, 2022, 67, 894-901.	3.6	5
2	Sensor Placement With Optimal Precision for Temperature Estimation of Battery Systems. , 2022, 6, 1082-1087.		5
3	Momentum Preserving Simulation of Cooperative Multirotors With Flexible-Cable Suspended Payload. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2022, 144, .	0.9	2
4	Robust Stability Margin of Continuous-Time Cooperative Unmanned Systems. Journal of Guidance, Control, and Dynamics, 2022, 45, 409-423.	1.6	0
5	Corrections to â€œSet-Membership Filter for Discrete-Time Nonlinear Systems Using State-Dependent Coefficient Parameterizationâ€•[Feb 22 894-901]. IEEE Transactions on Automatic Control, 2022, 67, 4386-4386.	3.6	0
6	Optimal Aggressive Constrained Trajectory Synthesis and Control for Multi-Copters. Aerospace, 2022, 9, 281.	1.1	2
7	Generalized Polynomial Chaos Expansion-based Stochastic Linear Quadratic Regulator for Multi-agent Systems. , 2021, , .		1
8	Set-Membership Filtering-Based Leaderâ€“Follower Synchronization of Discrete-Time Linear Multi-Agent Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2021, 143, .	0.9	0
9	Extremum seeking control with attenuated steady-state oscillations. Automatica, 2021, 125, 109432.	3.0	10
10	Generalized Polynomial Chaos-based Ensemble Kalman Filtering for Orbit Estimation. , 2021, , .		0
11	Nonlinear Model Predictive Control and Collision-Cone-Based Missile Guidance Algorithm. Journal of Guidance, Control, and Dynamics, 2021, 44, 1481-1497.	1.6	6
12	Nested Robust Controller Design for Interconnected Linear Parameter Varying Aerial Vehicles. Journal of Guidance, Control, and Dynamics, 2021, 44, 1454-1468.	1.6	3
13	Optimal game theoretic solution of the pursuitâ€evasion intercept problem using onâ€policy reinforcement learning. International Journal of Robust and Nonlinear Control, 2021, 31, 7886-7903.	2.1	14
14	A flight mechanics-based justification of the unique range of Strouhal numbers for avian cruising flight. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2021, 235, 1488-1506.	0.7	0
15	Generalized Polynomial Chaos Expansion Approach for Uncertainty Quantification in Small Satellite Orbital Debris Problems. Journal of the Astronautical Sciences, 2020, 67, 225-253.	0.8	9
16	Distributed backstepping based control of multiple UAV formation flight subject to time delays. IET Control Theory and Applications, 2020, 14, 1628-1638.	1.2	39
17	On the Phase Margin of Networked Dynamical Systems and Fabricated Attacks of an Intruder. , 2020, , .		6
18	A Robust Controller for Transition between Hover and Forward Flight for Hybrid Fixed Wing - Multicopters. , 2020, , .		1

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19	Robust Control Strategy for Quadcopters using Sliding Mode Control and Model Predictive Control. , 2020, , .		7
20	Nonlinear control of unmanned aerial vehicles with cable suspended payloads. Aerospace Science and Technology, 2019, 93, 105299.	2.5	27
21	Observability and sensitivity analysis of lightcurve measurement models for use in space situational awareness. Inverse Problems in Science and Engineering, 2019, 27, 1399-1424.	1.2	1
22	Semi-analytical range and endurance computation of battery-powered multi-copter unmanned aerial systems under steady wind conditions. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2019, 233, 5282-5294.	0.7	3
23	Path Planning to a Reachable State Using Minimum Control Effort Based Navigation Functions. Journal of the Astronautical Sciences, 2019, 66, 554-581.	0.8	5
24	Sensitivity Analysis of Cooperating Multi-agent Systems with Uncertain Connection Weights. , 2019, , .		6
25	Extremum Seeking and Adaptive Sampling Approaches for Plume Source Estimation using Unmanned Aerial Vehicles. , 2019, , .		1
26	Uncertainty Quantification Using Generalized Polynomial Chaos Expansion for Nonlinear Dynamical Systems With Mixed State and Parameter Uncertainties. Journal of Computational and Nonlinear Dynamics, 2019, 14, .	0.7	8
27	Study of time-dependent queuing models of the national airspace system. Computers and Industrial Engineering, 2018, 117, 108-120.	3.4	5
28	Minimum control effortâ€“based path planning and nonlinear guidance for autonomous mobile robots. International Journal of Advanced Robotic Systems, 2018, 15, 172988141881263.	1.3	8
29	A neuro-dynamic walking engine for humanoid robots. Robotics and Autonomous Systems, 2018, 110, 124-138.	3.0	5
30	Nonlinear Guidance Laws for Trajectory Tracking over a Mobile Communication Network applied to Unmanned Ground Vehicles. , 2018, , .		0
31	Mathematical Modeling and Control of an Unmanned Aerial System with a Cable Suspended Payload. , 2018, , .		1
32	Range and Endurance Characterization of a Quadcopter subject to Steady Wind. , 2018, , .		1
33	Error growth of target states utilizing a swarm of agents in GPS denied area. , 2018, , .		0
34	Augmenting Wireless Time-of-Arrival Positioning with Terrain Elevation Measurements for Navigation. Journal of Guidance, Control, and Dynamics, 2017, 40, 1726-1738.	1.6	1
35	Evaluation of extant computer vision techniques for detecting intruder sUAS. , 2017, , .		7
36	â€˜Inverse Crimeâ€™ and Model Integrity in Lightcurve Inversion applied to unresolved Space Object Identification. Journal of the Astronautical Sciences, 2017, 64, 399-413.	0.8	3

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37	Computational Adaptive Optimal Control of Spacecraft Attitude Dynamics with Inertia-Matrix Identification. Journal of Guidance, Control, and Dynamics, 2017, 40, 1258-1262.	1.6	15
38	Nonlinear Model Predictive Control for Unmanned Aerial Vehicles. Aerospace, 2017, 4, 31.	1.1	47
39	Guidance, Navigation and Control of Unmanned Airships under Time-Varying Wind for Extended Surveillance. Aerospace, 2016, 3, 8.	1.1	15
40	Target Tracking in 3-D Using Estimation Based Nonlinear Control Laws for UAVs. Aerospace, 2016, 3, 5.	1.1	11
41	Computational adaptive optimal control of spacecraft attitude dynamics with inertia matrix identification. , 2016, , .		2
42	Autonomous Carrier Landing System for the A/V-8B Harrier like UAV. IFAC-PapersOnLine, 2016, 49, 290-295.	0.5	11
43	A Dynamic Neural Network with Feedback for Trajectory Generation. IFAC-PapersOnLine, 2016, 49, 367-372.	0.5	6
44	Guidance and Control of a Mobile Robot via Numerical Navigation Functions and Backstepping for Planetary Exploration Missions. , 2016, , .		1
45	Reinforcement learning based computational adaptive optimal control and system identification for linear systems. Annual Reviews in Control, 2016, 42, 319-331.	4.4	6
46	Nonlinear adaptive filtering in terrain-referenced navigation. , 2015, , .		0
47	Nonlinear adaptive filtering in terrain-referenced navigation. IEEE Transactions on Aerospace and Electronic Systems, 2015, 51, 3461-3469.	2.6	21
48	Experimental Verification of Linear and Adaptive Control Techniques for a Two Degrees-of-Freedom Helicopter. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2015, 137, .	0.9	22
49	Aspects of Intuitive Control: Stabilize, Optimize, and Identify. , 2015, , .		3
50	Autonomous Formation Flight Control System Using In-Flight Sweet-Spot Estimation. Journal of Guidance, Control, and Dynamics, 2015, 38, 1083-1096.	1.6	19
51	Nonlinear Model Predictive Control Applied to Trajectory Tracking for Unmanned Aerial Vehicles. , 2015, , .		2
52	Force Production by Wing Flapping: The Role of Stroke Angle of Attack and Local Reynolds Number. , 2015, , .		0
53	Nonlinear Guidance and Control Laws for Three-Dimensional Target Tracking Applied to Unmanned Aerial Vehicles. Journal of Aerospace Engineering, 2014, 27, 604-610.	0.8	11
54	Nonlinear Dynamics of Flapping Wing MAV Using Cycle-Averaged Force Coeffi[|#14#|]cients. , 2014, , .		0

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55	Autonomous vertical landing on a marine vessel. , 2014, , .		2
56	Implementation of an adaptive, model free, learning controller on the Atlas robot. , 2014, , .		15
57	Implementation and Testing of Adaptive Augmentation Techniques on a 2-DOF Helicopter. , 2013, , .		0
58	Formation Flight Control System for In-Flight Sweet Spot Estimation. , 2013, , .		6
59	Sensitivity Analysis of the Factors Affecting Force Generation by Wing Flapping Motion. , 2013, , .		2
60	Optimal Control of an Unmanned Lighter-Than-Air Vehicle Through Way-Point Navigation. , 2012, , .		0
61	Estimation based cooperative guidance controller for 3D target tracking with multiple UAVs. , 2012, , .		5
62	On-Board Wind Speed Estimation for UAVs. , 2011, , .		14
63	Cooperative Control of Swarms of Unmanned Aerial Vehicles. , 2011, , .		4
64	Stable Reference Trajectory Modification for Handling Actuator Saturation in Control Systems. , 2011, , .		1
65	Nonlinear Guidance and Consensus for Unmanned Vehicles with Time Varying Connection Topologies. , 2011, , .		0
66	3D target tracking by UAVs subject to measurement uncertainties. , 2011, , .		3
67	Modeling of Flight Dynamics of Morphing Wing Aircraft. Journal of Aircraft, 2011, 48, 391-402.	1.7	64
68	Modeling of Dynamic Loading of Morphing-Wing Aircraft. Journal of Aircraft, 2011, 48, 424-435.	1.7	24
69	Realizing a Humanoid Neck with Serial Chain Four-bar Mechanism. Journal of Intelligent Material Systems and Structures, 2010, 21, 1169-1191.	1.4	18
70	Backstepping based nested multi-loop control laws for a quadrotor. , 2010, , .		12
71	A constrained dynamical systems approach for attitude consensus of multiple rigid bodies. , 2010, , .		4
72	Nonlinear 3-D trajectory guidance for unmanned aerial vehicles. , 2010, , .		15

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73	Hybrid Genetic Algorithm Collocation Method for Trajectory Optimization. Journal of Guidance, Control, and Dynamics, 2009, 32, 1396-1403.	1.6	46
74	Extrinsic curvature-based fault isolation for multi-inputâ€"multi-output systems with non-linear fault models. Transactions of the Institute of Measurement and Control, 2009, 31, 259-274.	1.1	1
75	H-Infinity Static Output-feedback Control for Rotorcraft. Journal of Intelligent and Robotic Systems: Theory and Applications, 2009, 54, 629-646.	2.0	92
76	Backstepping Approach for Controlling a Quadrotor Using Lagrange Form Dynamics. Journal of Intelligent and Robotic Systems: Theory and Applications, 2009, 56, 127-151.	2.0	315
77	Dynamic inversion with zero-dynamics stabilisation for quadrotor control. IET Control Theory and Applications, 2009, 3, 303-314.	1.2	312
78	State observer for linear systems with piece-wise constant output delays. IET Control Theory and Applications, 2009, 3, 1017-1022.	1.2	26
79	Dynamic Neural Network-Based Robust Backstepping Control approach for Quadrotors. , 2008, , .		17
80	Trajectory design using collocation and genetic algorithms: Aircraft turning maneuver. , 2008, , .		5
81	Shape control of flexible structure using potential field method. , 2008, , .		8
82	Dynamic inversion of quadrotor with zero-dynamics stabilization. , 2008, , .		19
83	Nonlinear Control of Motion Synchronization for Satellite Proximity Operations. Journal of Guidance, Control, and Dynamics, 2008, 31, 1284-1294.	1.6	131
84	Structured H-Infinity Command and Control-Loop Design for Unmanned Helicopters. Journal of Guidance, Control, and Dynamics, 2008, 31, 1093-1102.	1.6	118
85	A state observer for LTI systems with delayed outputs: Time-varying delay. , 2008, , .		17
86	Stable adaptive reference trajectory modification for saturated control applications. , 2008, , .		6
87	Fault Isolation Using Extrinsic Curvature For Multi-Input-Multi-Output Systems With Nonlinear Fault Models. Proceedings of the American Control Conference, 2007, , .	0.0	2
88	Real-time object-based image registration using improved MRAN. , 2007, , .		0
89	A Sensor Calibration Methodology for Evidence Theoretic Unmanned Ground Vehicle Localization. , 2007, , .		3
90	Direction-Dependent Learning Approach for Radial Basis Function Networks. IEEE Transactions on Neural Networks, 2007, 18, 203-222.	4.8	27

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91	Â¿-Filter: An Evidence Theoretic Approach to Unmanned Ground Vehicle Localization. , 2007, , .		1
92	On the Application of Extended Kalman and Continuous Discrete Extended Kalman Filter for a HIL Magnetic Levitation Device. , 2007, , .		0
93	H-Infinity Static Output-Feedback Control for Rotorcraft. , 2006, , .		7
94	Fault Isolation Using Extrinsic Curvature of Nonlinear Fault Models. , 2006, , .		0
95	Mathematical Modeling for Modal Computations Concerning a Morphable Wing. Journal of Aircraft, 2006, 43, 849-853.	1.7	1
96	Adaptive Output Feedback Control for Spacecraft Rendezvous and Docking Under Measurement Uncertainty. Journal of Guidance, Control, and Dynamics, 2006, 29, 892-902.	1.6	258
97	A novel parameter projection mechanism for smooth and stable adaptive control. Systems and Control Letters, 2005, 54, 43-51.	1.3	29
98	Differentiator-Free Nonlinear Proportional-Integral Controllers for Rigid-Body Attitude Stabilization. Journal of Guidance, Control, and Dynamics, 2004, 27, 1092-1096.	1.6	45
99	Nonlinear PID-Like Controllers for Rigid-Body Attitude Stabilization. Journal of the Astronautical Sciences, 2004, 52, 61-74.	0.8	34
100	Structured Model Reference Adaptive Control for a Class of Nonlinear Systems. Journal of Guidance, Control, and Dynamics, 2003, 26, 551-557.	1.6	6
101	A novel trajectory tracking methodology using structured adaptive model inversion for uninhabited aerial vehicles. , 2000, , .		1
102	Model reference adaptive control of constrained cooperative manipulators. , 0, , .		3