Sanjay P Bhat

List of Publications by Year
in descending order

39 papers	8,462 citations	471509 17 h-index	526287 27 g-index
40 all docs	40 docs citations	40 times ranked	3590 citing authors

#	Article	IF	Citations
1	Finite-Time Stability of Continuous Autonomous Systems. SIAM Journal on Control and Optimization, 2000, 38, 751-766.	2.1	3,907
2	Continuous finite-time stabilization of the translational and rotational double integrators. IEEE Transactions on Automatic Control, 1998, 43, 678-682.	5.7	1,360
3	Geometric homogeneity with applications to finite-time stability. Mathematics of Control, Signals, and Systems, 2005, 17, 101-127.	2.3	1,290
4	A topological obstruction to continuous global stabilization of rotational motion and the unwinding phenomenon. Systems and Control Letters, 2000, 39, 63-70.	2.3	666
5	Finite-Time Semistability and Consensus for Nonlinear Dynamical Networks. IEEE Transactions on Automatic Control, 2008, 53, 1887-1900.	5.7	274
6	Modeling and analysis of mass-action kinetics. IEEE Control Systems, 2009, 29, 60-78.	0.8	167
7	Semistability, Finite-Time Stability, Differential Inclusions, and Discontinuous Dynamical Systems Having a Continuum of Equilibria. IEEE Transactions on Automatic Control, 2009, 54, 2465-2470.	5.7	122
8	Nontangency-Based Lyapunov Tests for Convergence and Stability in Systems Having a Continuum of Equilibria. SIAM Journal on Control and Optimization, 2003, 42, 1745-1775.	2.1	117
9	An invariance principle for nonlinear hybrid and impulsive dynamical systems. Nonlinear Analysis: Theory, Methods & Applications, 2003, 53, 527-550.	1.1	89
10	Controllability of nonlinear time-varying systems: applications to spacecraft attitude control using magnetic actuation. IEEE Transactions on Automatic Control, 2005, 50, 1725-1735.	5.7	80
11	Controllability of Spacecraft Attitude Using Control Moment Gyroscopes. IEEE Transactions on Automatic Control, 2009, 54, 585-590.	5.7	80
12	Finite-time semistability, Filippov systems, and consensus protocols for nonlinear dynamical networks with switching topologies. Nonlinear Analysis: Hybrid Systems, 2010, 4, 557-573.	3.5	50
13	Arc-length-based Lyapunov tests for convergence and stability with applications to systems having a continuum of equilibria. Mathematics of Control, Signals, and Systems, 2010, 22, 155-184.	2.3	42
14	On robust control algorithms for nonlinear network consensus protocols. International Journal of Robust and Nonlinear Control, 2010, 20, 269-284.	3.7	25
15	Finite-Time Semistability Theory with Applications to Consensus Protocols in Dynamical Networks. Proceedings of the American Control Conference, 2007, , .	0.0	20
16	Second-Order Systems with Singular Mass Matrix and an Extension of Guyan Reduction. SIAM Journal on Matrix Analysis and Applications, 1996, 17, 649-657.	1.4	19
17	Topological properties of asymptotically stable sets. Nonlinear Analysis: Theory, Methods & Applications, 2010, 73, 1093-1097.	1.1	19
18	Semistability theory for differential inclusions with applications to consensus problems in dynamical networks with switching topology. , 2008, , .		18

#	ARTICLE	IF	CITATIONS
19	Output-feedback semiglobal stabilization of stall dynamics for preventing hysteresis and surge in axial-flow compressors. IEEE Transactions on Control Systems Technology, 2006, 14, 301-307.	5.2	16
20	Concentration bounds for empirical conditional value-at-risk: The unbounded case. Operations Research Letters, 2019, 47, 16-20.	0.7	14
21	Feedback stabilization of snap-through buckling in a preloaded two-bar linkage with hysteresis. International Journal of Non-Linear Mechanics, 2008, 43, 277-291.	2.6	13
22	Semistability for time-varying discontinuous dynamical systems with application to agreement problems in switching networks. , 2008, , .		12
23	Example of indeterminacy in classical dynamics. International Journal of Theoretical Physics, 1997, 36, 545-550.	1.2	8
24	Asymptotic and Finite-Time Semistability for Nonlinear Discrete-Time Systems With Application to Network Consensus. IEEE Transactions on Automatic Control, 2023, 68, 766-781.	5.7	8
25	Optimal Planar Turns Under Acceleration Constraints. , 2006, , .		6
26	Average-preserving symmetries and energy equipartition in linear Hamiltonian systems. Mathematics of Control, Signals, and Systems, 2009, 21, 127-146.	2.3	6
27	Optimal Planar Turns Under Acceleration Constraints. IEEE Transactions on Automatic Control, 2009, 54, 1654-1660.	5.7	6
28	Small-Time Local Controllability and Stabilizability of Spacecraft Attitude Dynamics under CMG Actuation. SIAM Journal on Control and Optimization, 2014, 52, 797-820.	2.1	5
29	Asymptotic and Finite Time Semistability for Nonlinear Discrete-Time Systems. , 2021, , .		5
30	On robust control algorithms for nonlinear network consensus protocols. , 2008, , .		4
31	Semi-global Practical Stability of Periodic Time-Varying Systems via Averaging: A Lyapunov Approach. , 2006, , .		3
32	Explicit formulas for optimal hedging strategies for European contingent claims. , 2013, , .		3
33	Closed Rotation Sequences. Discrete and Computational Geometry, 2015, 53, 366-396.	0.6	3
34	Time-Optimal Attitude Reorientation at Constant Angular Velocity Magnitude with Bounded Angular Acceleration. , 2006, , .		2
35	Lyapunov and converse Lyapunov theorems for semistability. , 2007, , .		2
36	Boundedness of orbits and stability of closed sets. Nonlinear Analysis: Theory, Methods & Applications, 2009, 71, 5332-5343.	1.1	1

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37	State dependent communication topology for two satellites seeking angular velocity consensus. , 2008, , .		0
38	Rolling Cones, Closed Attitude Trajectories, and Attitude Reconstruction. Journal of the Astronautical Sciences, 2018, 65, 261-290.	1.5	0
39	Sparse Recurrent Mixture Density Networks for Forecasting High Variability Time Series with Confidence Estimates. Lecture Notes in Computer Science, 2019, , 422-433.	1.3	0