

Aamer Iqbal Bhatti

List of Publications by Year in descending order

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1,021
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430843

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84
docs citations

84
times ranked

861
citing authors

#	ARTICLE	IF	CITATIONS
1	Data-Driven Modeling and Design of Multivariable Dynamic Sliding Mode Control for the Underground Coal Gasification Project Thar. IEEE Transactions on Control Systems Technology, 2022, 30, 153-165.	5.2	7
2	Neuro-adaptive sliding mode control for underground coal gasification energy conversion process. International Journal of Control, 2022, 95, 2337-2348.	1.9	4
3	Eco-driving control of electric vehicle with battery dynamic model and multiple traffic signals. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2022, 236, 1133-1143.	1.9	3
4	Robust p53 recovery using chattering free sliding mode control and a gain-scheduled modified Utkin observer. Journal of Theoretical Biology, 2022, 532, 110914.	1.7	2
5	Design and implementation of multi-variable H_∞ robust control for the underground coal gasification project Thar. Energy, 2021, 216, 119000.	8.8	11
6	A Linear Parameter Varying Strategy Based Integral Sliding Mode Control Protocol Development and Its Implementation on Ball and Beam Balancer. IEEE Access, 2021, 9, 74437-74445.	4.2	5
7	Robust multi-objective control design for underground coal gasification energy conversion process. International Journal of Control, 2020, 93, 328-335.	1.9	8
8	Robust Backstepping Sliding Mode Control Design for a Class of Underactuated Electro-Mechanical Nonlinear Systems. Journal of Electrical Engineering and Technology, 2020, 15, 1821-1828.	2.0	24
9	A Novel Roll and Pitch Estimation Approach for a Ground Vehicle Stability Improvement Using a Low Cost IMU. Sensors, 2020, 20, 340.	3.8	15
10	H_∞ Optimization-based robust decoupling control algorithm in linear parameter varying systems using Hadamard weighting. Transactions of the Institute of Measurement and Control, 2019, 41, 1833-1848.	1.7	1
11	Cyclic torque imbalance detection in gasoline engines using a uniform second-order sliding mode observer. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2019, 233, 3515-3527.	1.9	7
12	Trajectory Planning and Control for Lane-Change of Autonomous Vehicle. , 2019, , .		13
13	Marine Natural Products and Drug Resistance in Latent Tuberculosis. Marine Drugs, 2019, 17, 549.	4.6	13
14	A Novel Filter Extracted Equivalent Control Based Fixed Frequency Sliding Mode Approach for Power Electronic Converters. Energies, 2019, 12, 853.	3.1	10
15	Fixed frequency sliding mode control of renewable energy resources in DC micro grid. Asian Journal of Control, 2019, 21, 2074-2086.	3.0	11
16	Prediction and parametric analysis of cavity growth for the underground coal gasification project Thar. Energy, 2019, 172, 1277-1290.	8.8	16
17	Sliding mode controller-observer pair for p53 pathway. IET Systems Biology, 2019, 13, 204-211.	1.5	5
18	Cooperative Adaptive Cruise Control with Fuel Efficiency Using PMP Technique. , 2019, , .		5

#	ARTICLE	IF	CITATIONS
19	Robust gain-scheduled linear parameter-varying control algorithm for a lab helicopter: A linear matrix inequality-based approach. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2018, 232, 558-571.	1.0	9
20	A method for multimodal optimization with application to signal processing. , 2018, , .		0
21	Mathematical modeling and stability analysis of DC microgrid using SM hysteresis controller. International Journal of Electrical Power and Energy Systems, 2018, 95, 507-522.	5.5	30
22	First principle based control oriented model of a gasoline engine including multi-cylinder dynamics. Control Engineering Practice, 2018, 70, 63-76.	5.5	13
23	Fixed Frequency Sliding Mode Control of Power Converters for Improved Dynamic Response in DC Micro-Grids. Energies, 2018, 11, 2799.	3.1	18
24	Integral Sliding Mode Control and Gain-Scheduled Modified Utkin Observer for an Underground Coal Gasification Energy Conversion Process. , 2018, , .		7
25	Energy Management Strategy for Atkinson Cycle Engine Based Parallel Hybrid Electric Vehicle. IEEE Access, 2018, 6, 28008-28018.	4.2	12
26	Model-based Selective Cylinder Deactivation Strategies in an Inline Four Cylinder Gasoline Engine. , 2018, , .		1
27	Higher-order sliding mode based lateral guidance for unmanned aerial vehicles. Transactions of the Institute of Measurement and Control, 2017, 39, 715-727.	1.7	10
28	On p53 revival using system oriented drug dosage design. Journal of Theoretical Biology, 2017, 415, 53-57.	1.7	8
29	State feedback based intervention design in Wnt and cell cycle network. , 2017, , .		1
30	Landing control of unmanned aerial vehicle using continuous model predictive control. , 2017, , .		7
31	High fidelity engine model for a unified control, diagnostic and condition monitoring framework. , 2017, , .		2
32	Cut Locus and Optimal Synthesis in Sub-Riemannian Problem on the Lie Group SH(2). Journal of Dynamical and Control Systems, 2017, 23, 155-195.	0.8	19
33	Robust stabilization of underactuated nonlinear systems: A fast terminal sliding mode approach. ISA Transactions, 2017, 66, 241-248.	5.7	39
34	Air-to-fuel ratio control of gasoline engines using smooth sliding mode algorithm. , 2017, , .		7
35	Chattering and stability analysis of the sliding mode control using inverse hyperbolic function. International Journal of Control, Automation and Systems, 2017, 15, 2608-2618.	2.7	13
36	Constructive mechanism of Lead/Lag design for a class of linear systems. , 2016, , .		0

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37	Robust vehicle localization with GPS dropouts. , 2016, , .		3
38	Sliding mode control for efficient utilization of renewable energy sources in DC micro grid: A comparison with a linear PID controller. , 2016, , .		2
39	Exponential stabilization of kinematic nonholonomic systems using adaptive backstepping. , 2016, , .		1
40	Higher order sliding mode based control scheme for air path of diesel engine. , 2016, , .		5
41	Robustness and performance parameterization of smooth second order sliding mode control. International Journal of Control, Automation and Systems, 2016, 14, 681-690.	2.7	14
42	Maxwell Strata and Conjugate Points in the Sub-Riemannian Problem on the Lie Group SH(2). Journal of Dynamical and Control Systems, 2016, 22, 747-770.	0.8	7
43	Lateral guidance and control of UAVs using second-order sliding modes. Aerospace Science and Technology, 2016, 49, 88-100.	4.8	25
44	Integrability by quadratures in optimal control of a unicycle on hyperbolic plane. , 2015, , .		2
45	A smooth integral sliding mode controller and disturbance estimator design. International Journal of Control, Automation and Systems, 2015, 13, 1326-1336.	2.7	13
46	Optimization and control of one dimensional packed bed model of underground coal gasification. Journal of Process Control, 2015, 35, 11-20.	3.3	16
47	Robust stabilization of underactuated systems via fast terminal sliding mode. , 2015, , .		1
48	Robust integrated lateral guidance and control of UAVs. , 2015, , .		2
49	Guidance of Air Vehicles: A Sliding Mode Approach. IEEE Transactions on Control Systems Technology, 2015, 23, 231-244.	5.2	50
50	Lateral track control of UAVs using the sliding mode approach: from design to flight testing. Transactions of the Institute of Measurement and Control, 2015, 37, 457-474.	1.7	17
51	Dynamic Sliding Mode Control Design Based on an Integral Manifold for Nonlinear Uncertain Systems. Journal of Nonlinear Dynamics, 2014, 2014, 1-10.	0.2	6
52	Dynamical Adaptive Integral Sliding Backstepping Control of Nonlinear Nontriangular Uncertain Systems. Mathematical Problems in Engineering, 2014, 2014, 1-14.	1.1	9
53	Robust nonlinear control design for scaled Yak-54 Unmanned Aerial Vehicle. , 2014, , .		0
54	Control oriented modeling and optimization of one dimensional packed bed model of underground coal gasification. Journal of Process Control, 2014, 24, 269-277.	3.3	37

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55	Sliding mode-based observer design for field-oriented control of induction machine drive for applications in hybrid electric vehicles. , 2014, , .		5
56	Extremal Trajectories and Maxwell Strata in Sub-Riemannian Problem on Group of Motions of Pseudo-Euclidean Plane. Journal of Dynamical and Control Systems, 2014, 20, 341-364.	0.8	15
57	A novel anti-windup framework for cascade control systems: An application to underactuated mechanical systems. ISA Transactions, 2014, 53, 802-815.	5.7	27
58	Gasoline engine air filter health monitoring by second-order sliding modes. International Journal of Adaptive Control and Signal Processing, 2013, 27, 447-461.	4.1	6
59	Estimation of Reactivity and Average Fuel Temperature of a Pressurized Water Reactor Using Sliding Mode Differentiator Observer. IEEE Transactions on Nuclear Science, 2013, 60, 3025-3032.	2.0	11
60	Estimation of precursor density of a power reactor using uniform second order sliding mode observer. Annals of Nuclear Energy, 2013, 54, 233-239.	1.8	8
61	Lateral control of UAVs: Trajectory tracking via Higher-Order Sliding Modes. , 2013, , .		0
62	Modeling and online parameter estimation of intake manifold in gasoline engines using sliding mode observer. Simulation Modelling Practice and Theory, 2013, 32, 138-154.	3.8	24
63	Real-time Switched Model Predictive Control of a Twin Rotor System. , 2013, , .		1
64	Condition monitoring of gasoline engine air intake system using second order sliding modes. International Journal of Vehicle Design, 2013, 62, 312.	0.3	5
65	Air/Fuel Ratio Estimation of SI Engine Using Higher Order Sliding Mode. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 501-506.	0.4	1
66	Robust level flight control design for scaled Yak-54 unmanned aerial vehicle using single sliding surface.. , 2012, , .		6
67	Model development of UCG and calorific value maintenance via sliding mode control. , 2012, , .		12
68	Estimation of Reactivity in a Research Reactor by Using a Second-Order Sliding Mode Observer. Nuclear Science and Engineering, 2012, 172, 327-336.	1.1	1
69	A novel reaching law for smooth sliding mode control using inverse hyperbolic function. , 2012, , .		8
70	Robust altitude tracking of a helicopter using sliding mode control structure. , 2012, , .		3
71	Control of Air-to-Fuel ratio of spark ignited engine using super twisting algorithm. , 2012, , .		2
72	Virtual Sensors for Automotive Engine Sensors Fault Diagnosis in Second-Order Sliding Modes. IEEE Sensors Journal, 2011, 11, 1832-1840.	4.7	35

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73	Robust Parameter Estimation of Nonlinear Systems Using Sliding-Mode Differentiator Observer. IEEE Transactions on Industrial Electronics, 2011, 58, 680-689.	7.9	52
74	Hybrid Model of the Gasoline Engine for Misfire Detection. IEEE Transactions on Industrial Electronics, 2011, 58, 3680-3692.	7.9	23
75	Estimating SI Engine Efficiencies and Parameters in Second-Order Sliding Modes. IEEE Transactions on Industrial Electronics, 2011, 58, 4837-4846.	7.9	37
76	Dynamic Integral Sliding Mode Control of Nonlinear SISO Systems with States Dependent Matched and Mismatched Uncertainties. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 3932-3937.	0.4	6
77	Robust Feedback Linearization for Minimum Phase Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 11151-11156.	0.4	3
78	Load Varying Polytopic Based Robust Controller Design in LMI Framework for a 2DOF Stabilized Platform. Arabian Journal for Science and Engineering, 2011, 36, 311-327.	1.1	10
79	Dynamic integral sliding mode for MIMO uncertain nonlinear systems. International Journal of Control, Automation and Systems, 2011, 9, 151-160.	2.7	31
80	Second order sliding mode observer for estimation of SI engine Volumetric Efficiency & Throttle Discharge Coefficient. , 2010, , .		8
81	Estimation of precursor concentration in a research reactor by using second order sliding mode observer. Nuclear Engineering and Design, 2009, 239, 2134-2140.	1.7	21
82	Model validation and higher order sliding mode controller design for a research reactor. Annals of Nuclear Energy, 2009, 36, 37-45.	1.8	30
83	Estimation of Gasoline-Engine Parameters Using Higher Order Sliding Mode. IEEE Transactions on Industrial Electronics, 2008, 55, 3891-3898.	7.9	63
84	A Framework for Model Based Detection of Misfire in a Gasoline Engine with Dynamic Skip Fire. , 0, , .		1