Tushar Jain

List of Publications by Year
in descending order

64 papers	311 citations	1040056 9 h-index	940533 16 g-index
64 all docs	64 docs citations	64 times ranked	312 citing authors

#	Article	IF	Citations
1	Human Spermatozoa Quantitative Proteomic Signature Classifies Normo- and Asthenozoospermia. Molecular and Cellular Proteomics, 2017, 16, 57-72.	3.8	69
2	A Novel Approach to Real-Time Fault Accommodation in NREL's 5-MW Wind Turbine Systems. IEEE Transactions on Sustainable Energy, 2013, 4, 1082-1090.	8.8	29
3	Fault-Tolerant Economic Model Predictive Control for Wind Turbines. IEEE Transactions on Sustainable Energy, 2019, 10, 1696-1704.	8.8	24
4	Model-free reconfiguration mechanism for fault tolerance. International Journal of Applied Mathematics and Computer Science, 2012, 22, 125-137.	1.5	20
5	Synergy of evolutionary algorithm and socio-political process for global optimization. Expert Systems With Applications, 2010, 37, 3706-3713.	7.6	16
6	A hybrid genetically-bacterial foraging algorithm converged by particle swarm optimisation for global optimisation. International Journal of Bio-Inspired Computation, 2010, 2, 340.	0.9	12
7	Synergy of canonical control and unfalsified control concept to achieve fault tolerance. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 14832-14837.	0.4	10
8	On implementing on-line designed controller for smooth interconnection in the behavioral framework. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 424-429.	0.4	10
9	An online controller redesign based fault-tolerant strategy for thermal comfort in a multi-zone building. , 2015, , .		10
10	Bacterial Foraging Optimized Hybrid Fuzzy Precompensated PD Control of Two Link Rigid-Flexible Manipulator. International Journal of Computational Intelligence Systems, 2009, 2, 51-59.	2.7	9
11	Hybrid bacterial foraging and particle swarm optimisation for fuzzy precompensated control of flexible manipulator. International Journal of Automation and Control, 2010, 4, 234.	0.5	9
12	Bilinear model-based diagnosis of lock-in-place failures of variable-air-volume HVAC systems of multizone buildings. Journal of Building Engineering, 2020, 28, 101023.	3.4	9
13	Bacterial Foraging Optimized Hybrid Fuzzy Precompensated PD Control of Two Link Rigid-Flexible Manipulator. International Journal of Computational Intelligence Systems, 2009, 2, 51.	2.7	8
14	Computation of Linear Quadratic Regulator using Krotov Sufficient Conditions. , 2019, , .		7
15	Trajectory-based real-time control of an electrical circuit against unknown faults. Journal of the Franklin Institute, 2014, 351, 986-1000.	3.4	6
16	Fault Diagnosis for Open-Circuited Faults in 3-Phase Uncontrolled Rectifier of Wind Energy Power Conversion Systems. , 2018, , .		5
17	Fault Tolerant Economic Model Predictive Control for Energy Efficiency in a Multi-Zone Building. , 2018, , .		5
18	Nonlinear Observer-based Fault Diagnosis for a Multi-Zone Building. IFAC-PapersOnLine, 2018, 51, 544-549.	0.9	5

#	ARTICLE	IF	CITATIONS
19	Health-aware fault-tolerant receding horizon control of wind turbines. Control Engineering Practice, 2020, 95, 104236.	5.5	5
20	Computation of Non-iterative Optimal Linear Quadratic Controllers using Krotov's Sufficient Conditions. , 2019, , .		4
21	Some Insights on Synthesizing Optimal Linear Quadratic Controllers Using Krotov Sufficient Conditions. , 2020, 4, 486-491.		4
22	Integrated methodology for state and parameter estimation of spark-ignition engines. International Journal of Systems Science, 2021, 52, 2375-2396.	5.5	4
23	Spectral analysisâ€based fault diagnosis algorithm for 3â€phase passive rectifiers in renewable energy systems. IET Power Electronics, 2020, 13, 3818-3829.	2.1	4
24	A real-time projection-based approach for fault accommodation in NREL's 5MW Wind Turbine systems. , 2013, , .		3
25	Optimality Condition Decomposition Approach to Distributed Model Predictive Control. , 2019, , .		3
26	Geneticallyâ€bacterial swarm optimization. International Journal of Intelligent Computing and Cybernetics, 2010, 3, 463-494.	2.7	2
27	A model based 2-DOF fault tolerant control strategy. , 2010, , .		2
28	Actuator and Sensor Fault Diagnosis for Wind Energy Conversion Systems. , 2018, , .		2
29	Linear Quadratic Optimal Control Design: A Novel Approach Based on Krotov Conditions. Mathematical Problems in Engineering, 2019, 2019, 1-17.	1.1	2
30	State and Parameter Estimation for Spark Ignition Engine with Parameter Uncertainty. , 2020, , .		2
31	Implementation of PID controlled SIMO process on FPGA using bacterial foraging for optimal performance. , 2009, , .		1
32	Role of Performance Evaluator in data-driven Fault Tolerant Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 192-197.	0.4	1
33	Time-trajectory based Active Fault-Tolerant Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 690-694.	0.4	1
34	Case study on behavioral approach to fault-tolerant control: Application to an electric circuit. , 2012, , .		1
35	A novel trajectory-based online controller design approach to fault accommodation in NRELâ€™s 5MW wind turbine systems. Control Theory and Technology, 2014, 12, 122-131.	1.6	1
36	Synthesis and application of a realâ€time modelâ€free behavioral controller with bumpless switching mechanism. International Journal of Adaptive Control and Signal Processing, 2016, 30, 736-749.	4.1	1

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37	Analytical Infinite-time Optimal and Sub-optimal Controllers for Scalar Nonlinear Systems using Krotov Sufficient Conditions. , 2019, , .		1
38	Output Injected Nonlinear Observer for Diagnosing Faults in Multi-zone Building. , 2019, , .		1
39	Optimal Consensus Protocol Design for Scalar Single Integrators using Krotov Conditions. IFAC-PapersOnLine, 2020, 53, 471-476.	0.9	1
40	An Alternative Method for Optimal Consensus Protocol Design for Scalar Single-integrators using Krotov Conditions. IFAC-PapersOnLine, 2020, 53, 2982-2987.	0.9	1
41	A Novel Adaptive UKF-based State Estimation Algorithm for Spark-Ignition Engines. , 2021, , .		1
42	Particle swarm optimized hybrid fuzzy precompensated trajectory control of rigid-flexible manipulator. International Journal of Knowledge-Based and Intelligent Engineering Systems, 2009, 13, 155-167.	1.0	0
43	A real time router fault accommodation. , 2010, , .		0
44	On-line redesign based approach for fault accommodation in wind turbines. , 2013, , .		0
45	A novel trajectory-based active fault-tolerant control: Application to a Wind Turbine system. , 2013, , .		0
46	On finite-time stability and frequency spectrum analysis of the trajectory-based active fault-tolerant control. , 2013, , .		0
47	A novel online controller redesign approach to fault accommodation in wind turbine systems. , 2013, , .		0
48	On real-time smooth interconnection of online synthesized controllers in the behavioral framework. Systems Science and Control Engineering, 2014, 2, 398-405.	3.1	0
49	A trajectory-based real-time controller synthesis with bumpless interconnection mechanism. , 2014, , .		0
50	Trajectory-based fault accommodation in winder turbine systems. , 2014, , .		0
51	A data-driven bumpless switching approach for energy efficiency of a multiple evaporator cooling system. , 2014, , .		0
52	A data-driven approach to real-time controller reconfiguration for fault tolerance. , 2014, , .		0
53	Data-driven fault-tolerant control for energy efficiency in a multi-zone building. , 2016, , .		0
54	Decentralized economic model predictive control for energy efficiency in a multi-zone building. , 2018, , .		0

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55	eMPC Based Fault-tolerant Control for Wind Turbine Converters. IFAC-PapersOnLine, 2018, 51, 1343-1348.	0.9	0
56	Diagnosis of Unbalanced and Open-Circuited Faults in 3-phase Uncontrolled Rectifier as a part of the Grid-tied Wind turbine. , 2019, , .		0
57	Fault tolerant pseudo-decentralized eMPC for energy efficiency in a multi-zone building. , 2019, , .		0
58	Diagnosis of Actuator Faults in VAV-HVAC system using a Bilinear Observer. , 2019, , .		0
59	Decentralized eMPC based fault tolerant control for energy efficiency in a multi-zone building. , 2019, , .		0
60	Robust adaptive fault estimation of damper faults in variable air volume boxes of a multizone building. , 2021, , .		0
61	Tuning of Type-1 Servo System Using Swarm Intelligence for SIMO Process. International Journal of Computer and Electrical Engineering, 0, , 41-44.	0.2	0
62	A Novel State and Parameter Estimation Algorithm for Spark Ignition Engine. IFAC-PapersOnLine, 2020, 53, 13964-13969.	0.9	0
63	A UKF and RLS Based State and Parameter Estimation Algorithm for Spark-Ignition Engines. , 2021, , .		0
64	State Estimation for Spark-Ignition Engines Using New Noise Adaptive Laws In Unscented Kalman Filter. , 2021, , .		0