Hao Zhang

List of Publications by Year
in descending order

32 papers	1,086 citations	516215 16 h-index	433756 31 g-index
32 all docs	32 docs citations	32 times ranked	545 citing authors

#	Article	IF	Citations
1	Dynamic analysis and modeling of a novel fractional-order hydro-turbine-generator unit. Nonlinear Dynamics, 2015, 81, 1263-1274.	2.7	134
2	Hamiltonian modeling of multi-hydro-turbine governing systems with sharing common penstock and dynamic analyses under shock load. Energy Conversion and Management, 2016, 108, 478-487.	4.4	114
3	Nonlinear modeling and dynamic analysis of hydro-turbine governing system in the process of load rejection transient. Energy Conversion and Management, 2015, 90, 128-137.	4.4	102
4	Hamiltonian analysis of a hydro-energy generation system in the transient of sudden load increasing. Applied Energy, 2017, 185, 244-253.	5.1	98
5	Modeling and stability analysis of a fractional-order Francis hydro-turbine governing system. Chaos, Solitons and Fractals, 2015, 75, 50-61.	2.5	85
6	Nonlinear modeling and dynamic analysis of a hydro-turbine governing system in the process of sudden load increase transient. Mechanical Systems and Signal Processing, 2016, 80, 414-428.	4.4	83
7	Dynamic modeling and dynamical analysis of pump-turbines in S-shaped regions during runaway operation. Energy Conversion and Management, 2017, 138, 375-382.	4.4	79
8	Dynamics analysis of the fast-slow hydro-turbine governing system with different time-scale coupling. Communications in Nonlinear Science and Numerical Simulation, 2018, 54, 136-147.	1.7	49
9	Nonlinear dynamics of a novel fractional-order Francis hydro-turbine governing system with time delay. Chaos, Solitons and Fractals, 2016, 91, 329-338.	2.5	45
10	Hamiltonian model and dynamic analyses for a hydro-turbine governing system with fractional item and time-lag. Communications in Nonlinear Science and Numerical Simulation, 2017, 47, 35-47.	1.7	39
11	Dynamic analysis of a pumped-storage hydropower plant with random power load. Mechanical Systems and Signal Processing, 2018, 100, 524-533.	4.4	39
12	The slow-fast dynamical behaviors of a hydro-turbine governing system under periodic excitations. Nonlinear Dynamics, 2017, 87, 2519-2528.	2.7	32
13	A novel surface-cluster approach towards transient modeling of hydro-turbine governing systems in the start-up process. Energy Conversion and Management, 2018, 165, 861-868.	4.4	31
14	Shaft mis-alignment induced vibration of a hydraulic turbine generating system considering parametric uncertainties. Journal of Sound and Vibration, 2018, 435, 74-90.	2.1	31
15	The modeling of the fractional-order shafting system for a water jet mixed-flow pump during the startup process. Communications in Nonlinear Science and Numerical Simulation, 2015, 29, 12-24.	1.7	18
16	Transient analysis of a multi-unit pumped storage system during load rejection process. Renewable Energy, 2020, 152, 34-43.	4.3	18
17	Dynamic characteristics of a hydroâ€turbine governing system considering draft tube pressure pulsation. IET Renewable Power Generation, 2020, 14, 1210-1218.	1.7	14
18	Nonlinear Modal Analysis of Transient Behavior in Cascade DCâ€“DC Boost Converters. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2017, 27, 1750140.	0.7	12

#	Article	IF	Citations
19	Stochastic dynamic modeling and simulation of a pump-turbine in load-rejection process. Journal of Energy Storage, 2021, 35, 102196.	3.9	11
20	Fractional-Order Modeling and Dynamical Analysis of a Francis Hydro-Turbine Governing System with Complex Penstocks. Transactions of Tianjin University, 2018, 24, 32-44.	3.3	7
21	Nonlinear fastâ€“slow dynamics of a coupled fractional order hydropower generation system. Chinese Physics B, 2018, 27, 128202.	0.7	7
22	Fastâ€“slow dynamic behaviors of a hydraulic generating system with multi-timescales. JVC/Journal of Vibration and Control, 2019, 25, 2863-2874.	1.5	7
23	Transient dynamic analysis of a pump-turbine with hysteresis effect. Modern Physics Letters B, 2020, 34, 2050125.	1.0	7
24	Bursting oscillations in a hydro-turbine governing system with two time scales. Chinese Physics B, 2017, 26, 128202.	0.7	6
25	Transient stability of a hydro-turbine governing system with different tailrace tunnels. Journal of Hydraulic Research/De Recherches Hydrauliques, 2020, 58, 60-69.	0.7	5
26	Controllability of fractional-order Chuaâ€™s circuit. Chinese Physics B, 2015, 24, 030203.	0.7	4
27	Switched Model and Dynamic Analysis of a Hydroturbine Governing System in the Process of Load Rejection Transient. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2017, 139, .	0.9	2
28	No-Load Stability Analysis of Pump Turbine at Startup-Grid Integration Process. Journal of Fluids Engineering, Transactions of the ASME, 2019, 141, .	0.8	2
29	Stability of multi-hydro-turbine governing time-delay systems with sharing tailrace surge tank. Journal of Vibroengineering, 2018, 20, 2734-2744.	0.5	2
30	Dynamical assessment of a PTGS with time delay. IET Renewable Power Generation, 2019, 13, 2594-2603.	1.7	2
31	Dynamic Analysis of Hydro-Turbine Governing System with Multistochastic Factors. Journal of Computational and Nonlinear Dynamics, 2019, 14, .	0.7	1
32	Bifurcation Analysis of Charged Particles Moving on a Rough Surface Under Different Damping Effects. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2017, 27, 1750069.	0.7	0