Yan Shi

List of Publications by Year
in descending order

115 papers	1,492 citations	361296 20 h-index	414303 32 g-index
115 all docs	115 docs citations	115 times ranked	1061 citing authors

#	Article	IF	Citations
1	Theory and Application of Magnetic Flux Leakage Pipeline Detection. Sensors, 2015, 15, 31036-31055.	2.1	236
2	Detection of sputum by interpreting the time-frequency distribution of respiratory sound signal using image processing techniques. Bioinformatics, 2018, 34, 820-827.	1.8	42
3	A Lung Sound Category Recognition Method Based on Wavelet Decomposition and BP Neural Network. International Journal of Biological Sciences, 2019, 15, 195-207.	2.6	40
4	Manufacturing cost estimation based on a deep-learning method. Journal of Manufacturing Systems, 2020, 54, 186-195.	7.6	40
5	Self-correcting PWM control for dynamic performance preservation in high speed on/off valve. Mechatronics, 2018, 55, 141-150.	2.0	39
6	Working characteristics of two kinds of air-driven boosters. Energy Conversion and Management, 2011, 52, 3399-3407.	4.4	38
7	Energy conversion characteristics of a hydropneumatic transformer in a sustainable-energy vehicle. Applied Energy, 2016, 171, 77-85.	5.1	37
8	Theory and Application of Audio-Based Assessment of Cough. Journal of Sensors, 2018, 2018, 1-10.	0.6	37
9	Manufacturing cost estimation based on the machining process and deep-learning method. Journal of Manufacturing Systems, 2020, 56, 11-22.	7.6	34
10	An aviation oxygen supply system based on a mechanical ventilation model. Chinese Journal of Aeronautics, 2018, 31, 197-204.	2.8	31
11	Dynamic heat transfer model for temperature drop analysis and heat exchange system design of the air-powered engine system. Energy, 2014, 68, 877-885.	4.5	30
12	Influence of bronchial diameter change on the airflow dynamics based on a pressure‐controlled ventilation system. International Journal for Numerical Methods in Biomedical Engineering, 2018, 34, e2929.	1.0	28
13	Detection of Respiratory Sounds Based on Wavelet Coefficients and Machine Learning. IEEE Access, 2020, 8, 155710-155720.	2.6	27
14	Methods to Evaluate and Measure Power of Pneumatic System and Their Applications. Chinese Journal of Mechanical Engineering (English Edition), 2019, 32, .	1.9	26
15	Numerical Analysis of Airway Mucus Clearance Effectiveness Using Assisted Coughing Techniques. Scientific Reports, 2020, 10, 2030.	1.6	26
16	Numerical simulation of volume‐controlled mechanical ventilated respiratory system with 2 different lungs. International Journal for Numerical Methods in Biomedical Engineering, 2017, 33, e2852.	1.0	24
17	A kind of integrated serial algorithms for noise reduction and characteristics expanding in respiratory sound. International Journal of Biological Sciences, 2019, 15, 1921-1932.	2.6	22
18	Power characteristics of a new kind of air-powered vehicle. International Journal of Energy Research, 2016, 40, 1112-1121.	2.2	21

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19	Study on air flow dynamic characteristic of mechanical ventilation of a lung simulator. Science China Technological Sciences, 2017, 60, 243-250.	2.0	21
20	Influence of Airway Secretion on Airflow Dynamics of Mechanical Ventilated Respiratory System. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2018, 15, 1660-1668.	1.9	21
21	Coupling Effect of Double Lungs on a VCV Ventilator with Automatic Secretion Clearance Function. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2019, 16, 1280-1287.	1.9	21
22	Predictive control of air-fuel ratio in aircraft engine on fuel-powered unmanned aerial vehicle using fuzzy-RBF neural network. Journal of the Franklin Institute, 2020, 357, 8342-8363.	1.9	21
23	Review of fluid and control technology of hydraulic wind turbines. Frontiers of Mechanical Engineering, 2017, 12, 312-320.	2.5	20
24	Optimization of air–fuel ratio control of fuel-powered UAV engine using adaptive fuzzy-PID. Journal of the Franklin Institute, 2018, 355, 8554-8575.	1.9	20
25	An Improved Method of Handling Missing Values in the Analysis of Sample Entropy for Continuous Monitoring of Physiological Signals. Entropy, 2019, 21, 274.	1.1	18
26	Dimensionless Study on Output Flow Characteristics of Expansion Energy Used Pneumatic Pressure Booster. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2013, 135, .	0.9	17
27	Pressure Dynamic Characteristics of Pressure Controlled Ventilation System of a Lung Simulator. Computational and Mathematical Methods in Medicine, 2014, 2014, 1-10.	0.7	17
28	Classification of Sputum Sounds Using Artificial Neural Network and Wavelet Transform. International Journal of Biological Sciences, 2018, 14, 938-945.	2.6	17
29	Entropy change of biological dynamics in COPD. International Journal of COPD, 2017, Volume 12, 2997-3005.	0.9	16
30	Energy conversion characteristics of reciprocating piston quasi-isothermal compression systems using water sprays. Science China Technological Sciences, 2018, 61, 285-298.	2.0	16
31	Dimensionless Study on Efficiency and Speed Characteristics of a Compressed Air Engine. Journal of Energy Resources Technology, Transactions of the ASME, 2015, 137, .	1.4	15
32	Fuzzy logic speed control for the engine of an air-powered vehicle. Advances in Mechanical Engineering, 2016, 8, 168781401664183.	0.8	15
33	High-precision diameter detector and three-dimensional reconstruction method for oil and gas pipelines. Journal of Petroleum Science and Engineering, 2018, 165, 842-849.	2.1	15
34	Technologies and application of pipeline centerline and bending strain of In-line inspection based on inertial navigation. Transactions of the Institute of Measurement and Control, 2018, 40, 1554-1567.	1.1	15
35	The Research Progress of Electrical Impedance Tomography for Lung Monitoring. Frontiers in Bioengineering and Biotechnology, 2021, 9, 726652.	2.0	15
36	Research Progress of Related Technologies of Electric-Pneumatic Pressure Proportional Valves. Applied Sciences (Switzerland), 2017, 7, 1074.	1.3	14

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37	ANSYSâ€MATLAB coâ€simulation of mucus flow distribution and clearance effectiveness of a new simulated cough device. International Journal for Numerical Methods in Biomedical Engineering, 2018, 34, e2978.	1.0	14
38	Optimization of the Energy Efficiency of a Piston Compressed Air Engine. Strojniski Vestnik/Journal of Mechanical Engineering, 2014, 60, 395-406.	0.6	13
39	A comprehensive comparison and overview of R packages for calculating sample entropy. Biology Methods and Protocols, 2019, 4, bpz016.	1.0	13
40	A Novel Method for Automatic Identification of Breathing State. Scientific Reports, 2019, 9, 103.	1.6	13
41	Quasi-Synchronization Control of Multiple Electrohydraulic Actuators With Load Disturbance and Uncertain Parameters. IEEE/ASME Transactions on Mechatronics, 2021, 26, 2048-2058.	3.7	13
42	Optimization study on a single-cylinder compressed air engine. Chinese Journal of Mechanical Engineering (English Edition), 2015, 28, 1285-1292.	1.9	12
43	Compressed air leak detection based on time delay estimation using a portable multi-sensor ultrasonic detector. Measurement Science and Technology, 2013, 24, 055102.	1.4	11
44	Working characteristics of two types of compressed air engine. Journal of Renewable and Sustainable Energy, 2016, 8, .	0.8	11
45	Dynamic Characteristics of a Mechanical Ventilation System With Spontaneous Breathing. IEEE Access, 2019, 7, 172847-172859.	2.6	11
46	Modelling and Simulation of Volume Controlled Mechanical Ventilation System. Mathematical Problems in Engineering, 2014, 2014, 1-7.	0.6	10
47	Working characteristics of a new ventilator with automatic secretion clearance function. Science China Technological Sciences, 2015, 58, 1046-1052.	2.0	10
48	Dimensionless study on dynamics of pressure controlled mechanical ventilation system. Journal of Mechanical Science and Technology, 2015, 29, 431-439.	0.7	10
49	Pipeline Bending Strain Measurement and Compensation Technology Based on Wavelet Neural Network. Journal of Sensors, 2016, 2016, 1-7.	0.6	10
50	Efficiency optimized fuel supply strategy of aircraft engine based on air-fuel ratio control. Chinese Journal of Aeronautics, 2019, 32, 489-498.	2.8	10
51	Cough Expired Volume and Cough Peak Flow Rate Estimation Based on GA-BP Method. Complexity, 2020, 2020, 1-9.	0.9	10
52	Correlation Analysis of Ground Motion Duration Indexes and Nonlinear Seismic Responses of a Long-span Continuous Rigid-Frame Bridge with High-Rise Piers. Journal of Earthquake Engineering, 2022, 26, 7011-7031.	1.4	10
53	Part machining feature recognition based on a deep learning method. Journal of Intelligent Manufacturing, 2023, 34, 809-821.	4.4	10
54	Liquid air fueled open-closed cycle Stirling engine and its exergy analysis. Energy, 2015, 90, 187-201.	4.5	9

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55	Model Identification and Human-robot Coupling Control of Lower Limb Exoskeleton with Biogeography-based Learning Particle Swarm Optimization. International Journal of Control, Automation and Systems, 2022, 20, 589-600.	1.6	9
56	Research on the dynamic characteristics of pneumatic proportional regulator in pneumatic-loading system and design of fuzzy adaptive controller. Science China Technological Sciences, 2022, 65, 956-965.	2.0	9
57	Output dynamic control of a late model sustainable energy automobile system with nonlinearity. Advances in Mechanical Engineering, 2016, 8, 168781401667278.	0.8	8
58	Modelling and study on the output flow characteristics of expansion energy used hydropneumatic transformer. Journal of Mechanical Science and Technology, 2016, 30, 1163-1170.	0.7	8
59	Study of Fuel-Controlled Aircraft Engine for Fuel-Powered Unmanned Aerial Vehicle: Energy Conversion Analysis and Optimization. IEEE Access, 2019, 7, 109246-109258.	2.6	8
60	Modeling and Simulation of an Invasive Mild Hypothermic Blood Cooling System. Chinese Journal of Mechanical Engineering (English Edition), 2021, 34, .	1.9	8
61	New advances in EMG control methods of anthropomorphic prosthetic hand. Science China Technological Sciences, 2017, 60, 1978-1979.	2.0	7
62	New advances in in-situ thermal desorption technology for contaminated soil. Science China Technological Sciences, 2019, 62, 2075-2076.	2.0	7
63	Various realization methods of machine-part classification based on deep learning. Journal of Intelligent Manufacturing, 2020, 31, 2019-2032.	4.4	7
64	Flow characteristics of expansion energy used pneumatic booster. Chinese Journal of Mechanical Engineering (English Edition), 2012, 25, 889-896.	1.9	6
65	Working Characteristics of a Mechanical Insufflation-Exsufflation Device. Mathematical Problems in Engineering, 2014, 2014, 1-9.	0.6	6
66	Temperature effect compensation for fast differential pressure decay testing. Measurement Science and Technology, 2014, 25, 065003.	1.4	6
67	Water-Spray-Cooled Quasi-Isothermal Compression Method: Water-Spray Flow Improvement. Entropy, 2021, 23, 724.	1.1	6
68	Influence of cough airflow characteristics on respiratory mucus clearance. Physics of Fluids, 2022, 34, .	1.6	6
69	Liquid air fueled open–closed cycle Stirling engine. Energy Conversion and Management, 2015, 94, 210-220.	4.4	5
70	Mechanism and Optimization of a Novel Automobile Pneumatic Suspension Based on Dynamic Analysis. Electronics (Switzerland), 2021, 10, 2232.	1.8	5
71	A Method for Aero-Engine Gas Path Anomaly Detection Based on Markov Transition Field and Multi-LSTM. Aerospace, 2021, 8, 374.	1.1	5
72	Synchronous control of multiple electrohydraulic actuators under distributed switching topologies with lumped uncertainty. Journal of the Franklin Institute, 2022, 359, 4288-4306.	1.9	5

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73	COMSOL Modeling of Heat Transfer in SVE Process. Environments - MDPI, 2022, 9, 58.	1.5	5
74	Study on the Dynamics of Local Pressure Boosting Pneumatic System. Mathematical Problems in Engineering, 2015, 2015, 1-11.	0.6	4
75	New advances in monitoring and triggering of mechanical ventilation. Science China Technological Sciences, 2016, 59, 1791-1792.	2.0	4
76	Parametric adaptive control of electro-hydraulic system driving two-DOF robotic arm. , 2017, , .		4
77	Optimization Study on Expansion Energy Used Air-Powered Vehicle with Pneumatic-Hydraulic Transmission. Chinese Journal of Mechanical Engineering (English Edition), 2018, 31, .	1.9	4
78	Depth Vision Guided Human Activity Recognition in Surgical Procedure using Wearable Multisensor. , 2020, , .		4
79	Mechanical ventilation strategy for pulmonary rehabilitation based on patient-ventilator interaction. Science China Technological Sciences, 2021, 64, 869-878.	2.0	4
80	Seismic Analysis of Isolated Continuous Bridge considering Influence of Seawater and Site Condition. Shock and Vibration, 2021, 2021, 1-17.	0.3	4
81	Dimensionless study on outlet flow characteristics of an air-driven booster. Journal of Zhejiang University: Science A, 2012, 13, 481-490.	1.3	3
82	DIMENSIONLESS OPTIMIZATION STUDY ON A VENTILATOR WITH SECRETION CLEARANCE FUNCTION. Journal of Mechanics in Medicine and Biology, 2015, 15, 1550032.	0.3	3
83	Dynamic Characteristics of Mechanical Ventilation System of Double Lungs with Bi-Level Positive Airway Pressure Model. Computational and Mathematical Methods in Medicine, 2016, 2016, 1-13.	0.7	3
84	Research on RBF neural network prediction of oil and gas pipe dent depth. , 2016, , .		3
85	Study on the effect of tilting-rotor structure on the lift of small tilt rotor aircraft. , 2017, , .		3
86	High-intensity versus low-intensity noninvasive positive pressure ventilation in patients with acute exacerbation of chronic obstructive pulmonary disease (HAPPEN): study protocol for a multicenter randomized controlled trial. Trials, 2018, 19, 645.	0.7	3
87	Theoretical study on the application of isothermal compression technology in vapor€compression refrigeration systems with an isothermal piston. Energy Science and Engineering, 2021, 9, 2321-2332.	1.9	3
88	Notice of Retraction: Study on efficiency and flow characteristics of two kinds of pneumatic booster valves. , 2010, , .		2
89	Study on the temperature compensation technology of air-powered engine. Journal of Renewable and Sustainable Energy, 2015, 7, 023112.	0.8	2
90	Coupling Effects of Double Lungs on Dynamic Characteristics of Volume-Controlled Mechanical Insufflation-Exsufflation Secretion Clearance System. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2018, 140, .	0.9	2

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91	Seismic Design of Bridges against Near-Fault Ground Motions Using Combined Seismic Isolation and Restraining Systems of LRBs and CDRs. Shock and Vibration, 2019, 2019, 1-11.	0.3	2
92	Advances in motion control of gas pipeline detection robot. Science China Technological Sciences, 2020, 63, 877-878.	2.0	2
93	Machine Learning Driven Human Skill Transferring for Control of Anthropomorphic Manipulators. , 2020, , .		2
94	Novel assisted cough system based on simulating cough airflow dynamics. Bio-Design and Manufacturing, 2021, 4, 479-489.	3.9	2
95	Terminal sliding mode observer based–asymptotic tracking control of electro-hydraulic systems with lumped uncertainties. Transactions of the Institute of Measurement and Control, 2023, 45, 17-26.	1.1	2
96	Working Characteristics of Variable Intake Valve in Compressed Air Engine. Scientific World Journal, The, 2014, 2014, 1-9.	0.8	1
97	A Power Recovery Type Pressure Reducer in the High Pressure Pneumatic System. , 2014, , .		1
98	The Flow Dynamics of an Air-Driven Hydraulic Pump. , 2015, , .		1
99	A RESPIRATORY MECHANICAL PARAMETERS ESTIMATION TECHNOLOGY BASED ON EXTENDED LEAST SQUARES. Journal of Mechanics in Medicine and Biology, 2016, 16, 1650028.	0.3	1
100	The Identification of Sputum Situation Based on the Sound from the Respiratory Tract. , 2018, , .		1
101	A Novel Method to Evaluate Patient-Ventilator Synchrony during Mechanical Ventilation. Complexity, 2020, 2020, 1-15.	0.9	1
102	Suppression of ventral hippocampal CA1 pyramidal neuronal activities enhances water intake. American Journal of Physiology - Cell Physiology, 2021, 321, C992-C999.	2.1	1
103	Electrical impedance tomography for clinical application. Science China Technological Sciences, 0, , 1.	2.0	1
104	Feature-Based and Process-Based Manufacturing Cost Estimation. Machines, 2022, 10, 319.	1.2	1
105	A review of energy saving technologies on compressed air system. , 2013, , .		0
106	Multi-body dynamic modeling, simulation and control strategy design of a Y6 tilt rotor UAV. , 2017, , .		0
107	An Improved Method for Using Sample Entropy to Reveal Medical Information in Data from Continuously Monitored Physiological Signals. , 2018, , .		0
108	Intelligent monitoring and health management technologies for metal-roof sheathing. Science China Technological Sciences, 2019, 62, 1655-1656.	2.0	0

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109	Mechanical Ventilation Intelligent Control Technology Based on Fuzzy Adaptive PID. , 2019, , .		0
110	Lateral Seismic Response and Self-Centering Performance of a Long-Span Railway Continuous Beam-Arch Bridge. Shock and Vibration, 2020, 2020, 1-15.	0.3	0
111	Optimization of Fuel Injection Control System of Two-Stroke Aeroengine of UAV. Complexity, 2020, 2020, 1-12.	0.9	0
112	Dynamic Characteristics of Microring Driven by the Symmetrically Distributed Electrostatic Force. Complexity, 2021, 2021, 1-12.	0.9	0
113	New advances in airflow measurements applied in airflow characteristics test of pneumatic components. Science China Technological Sciences, 2021, 64, 2781-2782.	2.0	0
114	Effect of different anesthetic dose of pentobarbital on respiratory activity in rabbits. Computers in Biology and Medicine, 2022, 145, 105501.	3.9	0
115	A New Precise High Flow Oxygen Therapy System Based on Sliding Mode Control Strategy. Complexity, 2022, 2022, 1-12.	0.9	0