

Fethi Aloui

List of Publications by Year in descending order

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99
papers

948
citations

430843

18
h-index

477281

29
g-index

100
all docs

100
docs citations

100
times ranked

813
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental analysis of biofuel as an alternative fuel for diesel engines. <i>Applied Energy</i> , 2012, 94, 224-231.	10.1	103
2	Technological challenges and optimization efforts of the Stirling machine: A review. <i>Energy Conversion and Management</i> , 2018, 171, 1365-1387.	9.2	103
3	Determination of adequate regenerator for a Gamma-type Stirling engine. <i>Applied Energy</i> , 2015, 139, 272-280.	10.1	61
4	Effects of biofuel from fish oil industrial residue " Diesel blends in diesel engine. <i>Energy</i> , 2012, 44, 955-963.	8.8	53
5	Effect of higher and lower order alcohol blending with gasoline on performance, emission and combustion characteristics of SI engine. <i>Fuel</i> , 2019, 256, 115806.	6.4	48
6	Effect of hydroxyl (OH) group position in alcohol on performance, emission and combustion characteristics of SI engine. <i>Energy Conversion and Management</i> , 2019, 189, 195-201.	9.2	46
7	Investigations in an external-loop airlift photobioreactor with annular light chambers and swirling flow. <i>Chemical Engineering Research and Design</i> , 2011, 89, 164-171.	5.6	37
8	Assessment of liquid fuel (bio-oil) production from waste fish fat and utilization in diesel engine. <i>Applied Energy</i> , 2012, 100, 249-257.	10.1	36
9	Experimental analysis to reduce CO2 and other emissions of CRDI CI engine using low viscous biofuels. <i>Fuel</i> , 2021, 283, 118829.	6.4	33
10	Numerical characterization of a β -Stirling engine considering losses and interaction between functioning parameters. <i>Energy Conversion and Management</i> , 2015, 96, 532-543.	9.2	32
11	Experimental investigations on the production and testing of azolla methyl esters from <i>Azolla microphylla</i> in a compression ignition engine. <i>Fuel</i> , 2021, 287, 119448.	6.4	31
12	Study of the regenerator constituting material influence on a gamma type Stirling engine. <i>Journal of Mechanical Science and Technology</i> , 2012, 26, 1251-1255.	1.5	29
13	Optimization of an air-filled Beta type Stirling refrigerator. <i>International Journal of Refrigeration</i> , 2017, 76, 296-312.	3.4	29
14	NOx-smoke trade-off characteristics of minor vegetable oil blends synergy with oxygenate in a commercial CI engine. <i>Environmental Science and Pollution Research</i> , 2018, 25, 35715-35724.	5.3	28
15	Study of engine performance, emission and combustion characteristics fueled with diesel-like fuel produced from waste engine oil and waste plastics. <i>Frontiers of Environmental Science and Engineering</i> , 2018, 12, 1.	6.0	27
16	Comparative analysis of various techniques to improve the performance of novel wheat germ oil " an experimental study. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 5745-5756.	7.1	22
17	Experimental Study of Flow Control on Bluff Body using Piezoelectric Actuators. <i>Journal of Applied Fluid Mechanics</i> , 2016, 9, 827-838.	0.2	21
18	Determination of the slip layer thickness for a wet foam flow. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2004, 246, 21-29.	4.7	19

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19	Liquid hydrocarbon fuels from fish oil industrial residues by catalytic cracking. International Journal of Energy Research, 2013, 37, 1036-1043.	4.5	18
20	Experimental investigations of a gamma Stirling engine. International Journal of Energy Research, 2012, 36, 1175-1182.	4.5	17
21	Prediction of performance of Stirling engine using least squares support machine technique. Mechanics and Industry, 2016, 17, 506.	1.3	16
22	A comparative analysis of different methods to improve the performance of rubber seed oil fuelled compression ignition engine. Fuel, 2020, 280, 118644.	6.4	16
23	Comparison Based on Exergetic Analyses of Two Hot Air Engines: A Gamma Type Stirling Engine and an Open Joule Cycle Ericsson Engine. Entropy, 2015, 17, 7331-7348.	2.2	10
24	Experimental analysis of fuel from fish processing industry waste in a diesel engine. Clean Technologies and Environmental Policy, 2017, 19, 1099-1108.	4.1	10
25	4.6 Stirling Engines. , 2018, , 169-208.		8
26	Optimization of Stirling engine performance based on an experimental design approach. International Journal of Energy Research, 2013, 37, 1519-1528.	4.5	7
27	Experimental validation and critical analysis of inverse method in mass transfer using electrochemical sensor. Experimental Thermal and Fluid Science, 2013, 44, 253-263.	2.7	7
28	3D tomographic PIV, POD and vortex identification of turbulent slot jet flow impinging on a flat plate. Journal of Mechanical Science and Technology, 2017, 31, 5347-5357.	1.5	7
29	CO2 reduction in a common rail direct injection engine using the combined effect of low carbon biofuels, hydrogen and a post combustion carbon capture system. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 0, , 1-20.	2.3	7
30	Effect of Port Premixed Liquefied Petroleum Gas on the Engine Characteristics. Journal of Energy Resources Technology, Transactions of the ASME, 2019, 141, .	2.3	6
31	Experimental Investigations of Transfer Phenomena in a Confined Plane Turbulent Impinging Water Jet. Journal of Fluids Engineering, Transactions of the ASME, 2011, 133, .	1.5	5
32	Vortices' Characteristics to Explain the Flange Height Effects on the Aerodynamic Performances of a Diffuser Augmented Wind Turbine. Journal of Solar Energy Engineering, Transactions of the ASME, 2016, 138, .	1.8	5
33	Theoretical and numerical study of Couette-Taylor flow with an axial flow using lattice Boltzmann method. International Journal for Numerical Methods in Fluids, 2019, 90, 427-441.	1.6	5
34	Analysis of Inverse Method Applied on Sandwich Probes. Journal of Fluids Engineering, Transactions of the ASME, 2013, 135, .	1.5	4
35	Predicting the different engine parameters of a rubber seed oil-ethanol dual fuel engine using artificial neural networks. International Journal of Global Warming, 2018, 16, 485.	0.5	4
36	Inverse method for the dynamical analysis of wall shear rates using three-segment probes in parallel plate rheometer. Chemical Engineering Science, 2011, 66, 3969-3978.	3.8	3

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37	Thermodynamic Analysis of the Irreversibilities in Solar Absorption Refrigerators. Entropy, 2016, 18, 107.	2.2	3
38	Study of the Regenerator Porosity Influence on Gamma Type Stirling Engine Performances. , 2011, , .		2
39	Optimization of a Stirling Engine Performances: A Study Based on Experiments Design Approach. , 2012, , .		2
40	Hierarchical Decomposition Thermodynamic Approach for the Study of Solar Absorption Refrigerator Performance. Entropy, 2016, 18, 82.	2.2	2
41	Experimental Study of the Operation Conditions of Stability on a Gamma Stirling Engine. , 2016, , .		2
42	Energetic and exergetic investigations of an innovative heat recovery exhaust system using a double acting type Stirling engine based on theoretical analysis. International Journal of Exergy, 2019, 28, 273.	0.4	2
43	Energetic valorisation of waste tyres by pyrolysis: catalyst effect on tyres derived oil and gases. International Journal of Global Warming, 2020, 20, 187.	0.5	2
44	Theoretical investigations of Stirling engine performances for different filling gas properties. International Journal of Energy Research, 2022, 46, 20462-20479.	4.5	2
45	Numerical Investigations of Passive Scalar Transport in Turbulent Taylor-Couette Flows: Code Validation. , 2010, , .		1
46	Lattice Boltzmann Method Used to Simulate an Unsteady Flow Around an Obstacle in Laminar Regime. , 2011, , .		1
47	Use of Lattice-Boltzmann Method in Mass Transfer for the Wall Shear Stress Calculation in an Unsteady Laminar Flow Downstream of a Cylinder Located in a 2D Rectangular Channel. , 2012, , .		1
48	On the Stability of Taylor - Couette Flow With Axial Flow. , 2012, , .		1
49	Use of the POD and the Coherent Structure Detection Criteria to Study the Flow Dynamics Downstream a Confined Square Obstacle. , 2013, , .		1
50	Experimental Study on Oscillatory Couette-Taylor Flows Behaviour. , 2013, , .		1
51	Flow Behaviour Around Square and Circular Obstacles in 2D and 3D Configurations Using Lattice Boltzmann Method. , 2014, , .		1
52	Dynamic Behavior of Printed-Circuits Plasma Actuator Based on DC Electrical Discharge: Application in Aerodynamics. IEEE Transactions on Plasma Science, 2014, 42, 1854-1860.	1.3	1
53	Experimental Investigations of Couette-Taylor-Poiseuille Flows Using the Electro-Diffusional Technique. , 2016, , .		1
54	Numerical and experimental study on the flow history effects of axial flow on the Couette-Taylor flow. Acta Mechanica, 2016, 227, 1999-2010.	2.1	1

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55	Entropy Generation for Oscillatory Flow Inside Thermal-Lag Type Stirling Engine: Numerical Analysis. , 2017, , .		1
56	Fuel Production From Plastic Wastes Pyrolysis. , 2017, , .		1
57	CFD Characterization of a Wet Foam Flow Rheological Behavior. , 2018, , .		1
58	A CFD Analysis of the Air Flow Through the Stirling Engine's Singularities. Green Energy and Technology, 2018, , 271-287.	0.6	1
59	Conductimetry technique for the measurement of thin liquid film thickness between two solid surfaces in relative motion: hydrodynamic lubrication. Mechanics and Industry, 2019, 20, 601.	1.3	1
60	Structural Analysis of Couette-Taylor Flow With Periodic Oscillation of the Inner Cylinder in Different Flow Regimes. , 2021, , .		1
61	Technical and Economic Analysis of Ionic Liquid-Based Post-combustion CO2 Capture Process. Green Energy and Technology, 2018, , 1393-1411.	0.6	1
62	CFD Simulations of the Rheological Behavior of Aqueous Foam Flow Through a Half-Sudden Expansion. , 2019, , .		1
63	Experimental Investigations of Transfer Phenomena in a Confined Plane Turbulent Impinging Water Jet. , 2010, , .		0
64	Production of Liquid Hydrocarbon Fuel by Catalytic Cracking of Waste Fish Fat in Continuous Pilot System. , 2011, , .		0
65	Performance and Emissions of Diesel Engine Using Bio-Fuel Derived From Waste Fish Oil. , 2012, , .		0
66	Experimental Study of Heat Transfer Inside a Gamma Stirling Engine Regenerator During Quasi-Steady Operation. , 2013, , .		0
67	Experimental Characterization of the Separate Flow Induced by a Wall-Mounted Bump. , 2014, , .		0
68	Evaluation of the Gamma Stirling Engine Heat Transfers in its Heat Exchangers. , 2014, , .		0
69	Numerical Analysis of Flow and Heat Transfer at a Backward-Facing Step With an Obstacle Based on Lattice Boltzmann Method. , 2016, , .		0
70	Convective Flow and Heat Transfer Inside a Beta Type Stirling Engine Based on Control Volume Finite Element Method. , 2016, , .		0
71	Locations of vortices and their impacts on the aerodynamic performances of a diffuser and a DAWT. , 2016, , .		0
72	Capability Assessment of Five Different RANS-Based Turbulence Models to Simulate the Various Regions of Slot Turbulent Impingement Jet Flow. , 2017, , .		0

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73	Experimental Study on the Effects of Surface Roughness on the Behaviors of Hydrodynamic Instabilities of Couette-Taylor Flow. , 2017, , .		0
74	Lattice Boltzmann Model for Incompressible Axisymmetric Thermal Flows With Swirl. , 2018, , .		0
75	Experimental Investigation of Polypropylene Pyrolysis for Fuel Production. Green Energy and Technology, 2018, , 461-470.	0.6	0
76	Combustion Analysis of Biofuel Derived from Waste Fish Fat. Green Energy and Technology, 2018, , 1311-1328.	0.6	0
77	Experimental Analysis of Biofuel and Undistilled Biofuel from Waste Fish Fat in Diesel Engine. Green Energy and Technology, 2018, , 1339-1359.	0.6	0
78	Fluid dynamic investigation of particle-laden suspensions on dimpled surfaces under fouling conditions. International Journal of Multiphase Flow, 2021, 140, 103651.	3.4	0
79	Numerical Investigating of Oscillatory Flow and Heat Transfer Through Stirling Regenerator. , 2021, , .		0
80	Elementary Numerical Analysis of Wet Foam Formation and Study of Its Flow Structures and Physical Behavior. , 2021, , .		0
81	Transient Rayleigh-BÃ©nard Thermal Convection With Radiation Heat Transfer in Participating Media Using the Control Volume Finite Element Method (CVFEM) and Lattice Boltzmann Method. , 2021, , .		0
82	Inverse Method Used for the Determination of the Wall Shear Stress in a Sliding Rheometer Using Sandwich Probes. , 2010, , .		0
83	Wet Foam Flow in Horizontal Square Duct and Through Singularities. , 2013, , .		0
84	Upgrade of Corrosiveness Nature of Fish Waste Bio-Oil Using a Hybrid Catalyst (MgO/Na ₂ CO ₃) Optimization Process. , 2013, , .		0
85	Effect on Wall Shear Rates of Taylor Vortex Instabilities Induced by Progressive Variation of the Inner Cylinder. , 2015, , 891-908.		0
86	IMPROVEMENT OF A NON ENERGY-CONSUMING SYSTEM: A GAMMA STIRLING ENGINE. Environmental Engineering and Management Journal, 2016, 15, 133-141.	0.6	0
87	Spatial Resolution Correction for Electrochemical Wall-shear Stress Measurements using Rectangular Sensors. Journal of Applied Fluid Mechanics, 2016, 9, 1309-1319.	0.2	0
88	Radial Distribution of Mass Transfer and Wall Shear Instantaneous Rates in Couette-Taylor Flow. Green Energy and Technology, 2018, , 583-599.	0.6	0
89	Numerical and Dynamic Study of Flow Instabilities and Heat Transfer at a Backward-Facing Step Using the Lattice Boltzmann Method. Green Energy and Technology, 2018, , 509-526.	0.6	0
90	Experimental and Theoretical Investigation of Flows Inside a Gamma Stirling Engine Regenerator. Green Energy and Technology, 2018, , 383-395.	0.6	0

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91	Experimental Investigations of Taylor-Couette Flow Using PIV and Electrochemical Techniques. Green Energy and Technology, 2018, , 559-581.	0.6	0
92	Numerical and experimental investigation of impinging turbulent flow of twin jets against a wall. Scientia Iranica, 2018, .	0.4	0
93	PIV and POD Investigations of Coherent Vortices Downstream Circular or Rectangular Obstacles Located Between Two Parallel Plates. , 2019, , .		0
94	Influence of Surface Irregularities on Hydrodynamic Instabilities in Couette-Taylor Flow. , 2019, , .		0
95	Experimental and Numerical Investigations of Unsteady Flows Downstream Confined Rectangular Obstacles. , 2020, , .		0
96	Environmentally friendly energy solutions. International Journal of Energy Research, 2021, 45, 17027-17027.	4.5	0
97	Lattice Boltzmann Method Based on Large-Eddy Simulation (LES) Used to Investigate the Unsteady Turbulent Flow on Series of Cavities. , 2020, , .		0
98	Experimental Investigations of the Surface Groove Effect in Taylor-Couette-Poiseuille Flow. , 2020, , .		0
99	Study of circular Couette flow, Taylor vortex and wavy vortex regimes in Couette-Taylor flows with transient periodic oscillation of the inner cylinder—a computational fluid dynamics analysis. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2021, 43, 1.	1.6	0