

# Fernando Z Sierra

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2322425/publications.pdf>

Version: 2024-02-01

50  
papers

503  
citations

623734

14  
h-index

713466

21  
g-index

50  
all docs

50  
docs citations

50  
times ranked

449  
citing authors

#	ARTICLE	IF	CITATIONS
1	A study of air flow and heat transfer in building-wind tower passive cooling systems applied to arid and semi-arid regions of Mexico. <i>Energy and Buildings</i> , 2013, 66, 211-221.	6.7	36
2	Simulation of velocity profiles in a laboratory electrolyser using computational fluid dynamics. <i>Electrochimica Acta</i> , 2010, 55, 3437-3445.	5.2	33
3	Concept on thermoeconomic evaluation of steam turbines. <i>Applied Thermal Engineering</i> , 2007, 27, 457-466.	6.0	29
4	Failure analysis of the 350MW steam turbine blade root. <i>Engineering Failure Analysis</i> , 2009, 16, 1270-1281.	4.0	28
5	Experiments on an absorption refrigeration system powered by a solar pond. <i>Heat Recovery Systems &amp; CHP</i> , 1993, 13, 401-408.	0.3	24
6	Turbulent flow in a 90° pipe junction. <i>Computers and Fluids</i> , 2000, 29, 215-233.	2.5	24
7	Turbulent flow in a 90° pipe junction. <i>Computers and Fluids</i> , 2000, 29, 197-213.	2.5	24
8	Experimental study of dynamic porosity and its effects on simulation of the coffee beans roasting. <i>Journal of Food Engineering</i> , 2017, 199, 100-112.	5.2	24
9	Failure analysis of steam turbine last stage blade tenon and shroud. <i>Engineering Failure Analysis</i> , 2007, 14, 1476-1487.	4.0	23
10	CFD evaluation of internal manifold effects on mass transport distribution in a laboratory filter-press flow cell. <i>Journal of Applied Electrochemistry</i> , 2013, 43, 453-465.	2.9	23
11	Flow field obtained by PIV technique for a scaled building-wind tower model in a wind tunnel. <i>Energy and Buildings</i> , 2015, 107, 424-433.	6.7	23
12	Fenton Process Coupled to Ultrasound and UV Light Irradiation for the Oxidation of a Model Pollutant. <i>Journal of Chemistry</i> , 2016, 2016, 1-7.	1.9	20
13	Prediction of mass transport profiles in a laboratory filter-press electrolyser by computational fluid dynamics modelling. <i>Electrochimica Acta</i> , 2010, 55, 3446-3453.	5.2	18
14	Steady natural convection in a cylindrical cavity. <i>International Communications in Heat and Mass Transfer</i> , 2002, 29, 213-221.	5.6	14
15	Temperature distribution in an oscillatory flow with a sinusoidal wall temperature. <i>International Journal of Heat and Mass Transfer</i> , 2004, 47, 4929-4938.	4.8	13
16	Vibration failure in admission pipe of a steam turbine due to flow instability. <i>Engineering Failure Analysis</i> , 2013, 27, 30-40.	4.0	12
17	Experimental data and numerical predictions of a single-phase flow in a batch square stirred tank reactor with a rotating cylinder agitator. <i>Heat and Mass Transfer</i> , 2017, 53, 2933-2949.	2.1	12
18	Modeling and Validation of Heat and Mass Transfer in Individual Coffee Beans during the Coffee Roasting Process Using Computational Fluid Dynamics (CFD). <i>Chimia</i> , 2013, 67, 291.	0.6	11

#	ARTICLE	IF	CITATIONS
19	Hydrodynamic design of electrochemical reactors based on computational fluid dynamics. Desalination and Water Treatment, 2016, 57, 22968-22979.	1.0	10
20	Experimental study of piezoelectric polymeric film as energy harvester. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 272, 115366.	3.5	10
21	Modelling of the flow at the last stage blade tenon in a geothermal turbine using renormalization group theory turbulence model. Applied Thermal Engineering, 2000, 20, 81-101.	6.0	9
22	Numerical analysis of erosion of the rotor labyrinth seal in a geothermal turbine. Geothermics, 2002, 31, 563-577.	3.4	8
23	Prediction of temperature front in a gas turbine combustion chamber. Applied Thermal Engineering, 2005, 25, 1127-1140.	6.0	8
24	Cyclic strain rate in tyres as power source to augment automobile autonomy. International Journal of Vehicle Design, 2014, 65, 270.	0.3	8
25	Thermomechanical Stress Distributions in a Gas Turbine Blade Under the Effect of Cooling Flow Variations. Journal of Turbomachinery, 2013, 135, .	1.7	7
26	CFD prediction and experimental validation of surface cathode concentration in filter press parallel plate electrolyzers. Catalysis Today, 2016, 271, 227-234.	4.4	7
27	Thermal effectiveness of wind-tower with heated exit-wall and inlet-air humidification: Effects of winter and summertime. Building and Environment, 2021, 204, 108110.	6.9	6
28	Power characteristics of a 70/30 wt.% PVDF/PMMA film in roadway electricity generation. Sensors and Actuators A: Physical, 2021, 317, 112461.	4.1	5
29	Experimental study of inlet effects on mass transport in electrochemical filter-press parallel reactors. , 0, 73, 127-136.		5
30	Special Instrumentation and Hydraulic Turbine Flow Measurements Using a Pressure-Time Method. , 2005, , 433.		4
31	Heat Transfer and Thermal Mechanical Stress Distributions in Gas Turbine Blades. , 2009, , .		4
32	Enhanced thermal efficiency organic Rankine cycle for renewable power generation. Applied Thermal Engineering, 2021, 189, 116706.	6.0	4
33	Numerical Analysis of the Blade Forces Caused by Wake/Blade Interaction in the Last Stage of a Steam Turbine. , 2007, , 283.		3
34	Turbulent cylinder-stirred flow heat and momentum transfer research in batch operated single-phase square reactor. International Journal of Thermal Sciences, 2022, 172, 107325.	4.9	3
35	Influence of Cooling Flow Rate Variation on Gas Turbine Blade Temperature Distributions. , 2008, , .		2
36	Modeling methylene blue oxidation by means of Fenton chemistry enhanced by UV irradiation at mild conditions. Desalination and Water Treatment, 2015, 55, 3646-3652.	1.0	2

#	ARTICLE	IF	CITATIONS
37	Simulation and experimental validation of Taylor-Couette flow in square cross-section container for water treatment reactor. , 0, 73, 353-372.		2
38	Modelling of the flow at the rotor disc in a geothermal turbine of 110 MW. Applied Thermal Engineering, 2001, 21, 599-611.	6.0	1
39	Definition of the flow dynamics by numerical analysis in a filterpress reactor. International Journal of Hydrogen Energy, 2007, 32, 3126-3132.	7.1	1
40	Experimental and Numerical Study of Gap Size and Cooling Flow Rate Effects on Tip Flow of Gas Turbine Blade. International Journal of Turbo and Jet Engines, 2013, 30, .	0.7	1
41	Instabilities on Nozzle-Wake Loads due to Axial Clearance and Throat Variations in a First Stage Turbine. International Journal of Turbo and Jet Engines, 2013, 30, .	0.7	1
42	<i>E. coli</i> Inactivation Kinetics Modeling in a Taylor-Couette UV Disinfection Reactor. International Journal of Photoenergy, 2020, 2020, 1-11.	2.5	1
43	Development of a submersible shadowgraph for the study of interfaces in salt-gradient solar ponds. Solar Energy, 1989, 43, 145-151.	6.1	0
44	Rotating Effects on Heat Transfer Rate in a Cooling Air Passage of a Gas Turbine Blade. , 2004, , 237.		0
45	Measurement and Modelling of Blade Tip Cooling in Gas Turbines. , 2013, , .		0
46	Experimental study of airâ€“water up-flow in a packed column using laser Doppler anemometry. Desalination and Water Treatment, 2015, 55, 3676-3682.	1.0	0
47	Effect of the Modification of the Start-Up Sequence on the Thermal Stresses for a Microgas Turbine. International Journal of Rotating Machinery, 2016, 2016, 1-8.	0.8	0
48	Theoreticalâ€“experimental analysis of the heat transfer in a helical condenser for a heat transformer integrated to a water purification system. Desalination and Water Treatment, 2016, 57, 23132-23146.	1.0	0
49	Pressure Driven Temperature Field in a Combustion Chamber. , 2004, , .		0
50	3-Dimensional Pressure Driven Temperature Field in a Gas Turbine Combustion Chamber. , 2006, , .		0