

Jr Serrano

List of Publications by Year in descending order

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43
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1,478
citations

361045

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docs citations

43
times ranked

766
citing authors

#	ARTICLE	IF	CITATIONS
1	Analysis of a novel concept of 2-stroke rod-less opposed pistons engine (2S-ROPE): Testing, modelling, and forward potential. <i>Applied Energy</i> , 2021, 282, 116135.	5.1	14
2	Theoretical and experimental evaluation of the spark-ignition premixed oxy-fuel combustion concept for future CO2 captive powerplants. <i>Energy Conversion and Management</i> , 2021, 244, 114498.	4.4	23
3	Oxy-fuel combustion feasibility of compression ignition engines using oxygen separation membranes for enabling carbon dioxide capture. <i>Energy Conversion and Management</i> , 2021, 247, 114732.	4.4	14
4	A modelling tool for engine and exhaust aftertreatment performance analysis in altitude operation. <i>Results in Engineering</i> , 2019, 4, 100054.	2.2	19
5	Internal pore diffusion and adsorption impact on the soot oxidation in wall-flow particulate filters. <i>Energy</i> , 2019, 179, 407-421.	4.5	18
6	Pre-DPF water injection technique for pressure drop control in loaded wall-flow diesel particulate filters. <i>Applied Energy</i> , 2015, 140, 234-245.	5.1	52
7	Study of the turbocharger shaft motion by means of infrared sensors. <i>Mechanical Systems and Signal Processing</i> , 2015, 56-57, 246-258.	4.4	4
8	Analysis of fluid-dynamic guidelines in diesel particulate filter sizing for fuel consumption reduction in post-turbo and pre-turbo placement. <i>Applied Energy</i> , 2014, 132, 507-523.	5.1	24
9	Application of the two-step Lax and Wendroff FCT and the CE-SE method to flow transport in wall-flow monoliths. <i>International Journal of Computer Mathematics</i> , 2014, 91, 71-84.	1.0	8
10	Study of the Effects on Turbocharger Performance Generated by the Presence of Foreign Objects at the Compressor Intake. <i>Experimental Techniques</i> , 2013, 37, 30-40.	0.9	5
11	Methodology to design a bottoming Rankine cycle, as a waste energy recovering system in vehicles. Study in a HDD engine. <i>Applied Energy</i> , 2013, 104, 758-771.	5.1	74
12	Analysis of shock capturing methods for chemical species transport in unsteady compressible flow. <i>Mathematical and Computer Modelling</i> , 2013, 57, 1751-1759.	2.0	5
13	Study of turbocharger shaft motion by means of non-invasive optical techniques: Application to the behaviour analysis in turbocharger lubrication failures. <i>Mechanical Systems and Signal Processing</i> , 2012, 32, 292-305.	4.4	13
14	Derivation of the method of characteristics for the fluid dynamic solution of flow advection along porous wall channels. <i>Applied Mathematical Modelling</i> , 2012, 36, 3134-3152.	2.2	20
15	HD Diesel engine equipped with a bottoming Rankine cycle as a waste heat recovery system. Part 2: Evaluation of alternative solutions. <i>Applied Thermal Engineering</i> , 2012, 36, 279-287.	3.0	45
16	A physically based methodology to extrapolate performance maps of radial turbines. <i>Energy Conversion and Management</i> , 2012, 55, 149-163.	4.4	56
17	Experimental and theoretical methodology for determination of inertial pressure drop distribution and pore structure properties in wall-flow diesel particulate filters (DPFs). <i>Energy</i> , 2011, 36, 6731-6744.	4.5	48
18	A fluid dynamic model for unsteady compressible flow in wall-flow diesel particulate filters. <i>Energy</i> , 2011, 36, 671-684.	4.5	75

#	ARTICLE	IF	CITATIONS
19	An on-engine method for dynamic characterisation of NO concentration sensors. <i>Experimental Thermal and Fluid Science</i> , 2011, 35, 470-476.	1.5	21
20	Assessment of a methodology to mesh the spatial domain in the proximity of the boundary conditions for one-dimensional gas dynamic calculation. <i>Mathematical and Computer Modelling</i> , 2011, 54, 1747-1752.	2.0	2
21	Impact of two-stage turbocharging architectures on pumping losses of automotive engines based on an analytical model. <i>Energy Conversion and Management</i> , 2010, 51, 1958-1969.	4.4	84
22	Methodology for characterisation and simulation of turbocharged diesel engines combustion during transient operation. Part 2: Phenomenological combustion simulation. <i>Applied Thermal Engineering</i> , 2009, 29, 150-158.	3.0	41
23	1D gas dynamic modelling of mass conservation in engine duct systems with thermal contact discontinuities. <i>Mathematical and Computer Modelling</i> , 2009, 49, 1078-1088.	2.0	18
24	High-frequency response of a calculation methodology for gas dynamics based on Independent Time Discretisation. <i>Mathematical and Computer Modelling</i> , 2009, 50, 812-822.	2.0	12
25	Methodology for characterisation and simulation of turbocharged diesel engines combustion during transient operation. Part 1: Data acquisition and post-processing. <i>Applied Thermal Engineering</i> , 2009, 29, 142-149.	3.0	46
26	Analysis of an extremely fast valve opening camless system to improve transient performance in a turbocharged high speed direct injection diesel engine. <i>International Journal of Vehicle Design</i> , 2009, 49, 192.	0.1	5
27	Experiments and modelling of surge in small centrifugal compressor for automotive engines. <i>Experimental Thermal and Fluid Science</i> , 2008, 32, 818-826.	1.5	114
28	A model of turbocharger radial turbines appropriate to be used in zero- and one-dimensional gas dynamics codes for internal combustion engines modelling. <i>Energy Conversion and Management</i> , 2008, 49, 3729-3745.	4.4	88
29	Potential of flow pre-whirl at the compressor inlet of automotive engine turbochargers to enlarge surge margin and overcome packaging limitations. <i>International Journal of Heat and Fluid Flow</i> , 2007, 28, 374-387.	1.1	69
30	Time-domain computation of muffler frequency response: Comparison of different numerical schemes. <i>Journal of Sound and Vibration</i> , 2007, 305, 333-347.	2.1	34
31	Relevance of valve overlap for meeting Euro 5 soot emissions requirements during load transient process in heavy duty diesel engines. <i>International Journal of Vehicle Design</i> , 2006, 41, 343.	0.1	11
32	Description of a heat transfer model suitable to calculate transient processes of turbocharged diesel engines with one-dimensional gas-dynamic codes. <i>Applied Thermal Engineering</i> , 2006, 26, 66-76.	3.0	41
33	Procedure for engine transient cycle emissions testing in real time. <i>Experimental Thermal and Fluid Science</i> , 2006, 30, 485-496.	1.5	51
34	Surge limit definition in a specific test bench for the characterization of automotive turbochargers. <i>Experimental Thermal and Fluid Science</i> , 2006, 30, 449-462.	1.5	116
35	Combustion simulation of turbocharger HSDI Diesel engines during transient operation using neural networks. <i>Applied Thermal Engineering</i> , 2005, 25, 877-898.	3.0	60
36	Design of an exhaust manifold to improve transient performance of a high-speed turbocharged diesel engine. <i>Experimental Thermal and Fluid Science</i> , 2004, 28, 863-875.	1.5	53

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37	Analysis of numerical methods to solve one-dimensional fluid-dynamic governing equations under impulsive flow in tapered ducts. International Journal of Mechanical Sciences, 2004, 46, 981-1004.	3.6	34
38	A new iterative method for flow calculation in intake and exhaust systems of internal combustion engines. Mathematical and Computer Modelling, 2003, 38, 99-111.	2.0	4
39	Analytic-numerical approach to flow calculation in intake and exhaust systems of internal combustion engines. Mathematical and Computer Modelling, 2002, 36, 33-45.	2.0	6
40	A Model for Load Transients of Turbocharged Diesel Engines. , 1999, , .		14
41	Experimental Study of the Turbine Inlet Gas Temperature Influence on Turbocharger Performance. , 0, , .		18
42	Performance Analysis of a Turbocharged Heavy Duty Diesel Engine with a Pre-turbo Diesel Particulate Filter Configuration. SAE International Journal of Engines, 0, 4, 2559-2575.	0.4	11
43	Behavior of an IC Engine Turbocharger in Critical Conditions of Lubrication. SAE International Journal of Engines, 0, 6, 797-805.	0.4	8