

# Santiago A Molina

## List of Publications by Year in descending order

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54  
papers

2,068  
citations

279487

23  
h-index

288905

40  
g-index

54  
all docs

54  
docs citations

54  
times ranked

1194  
citing authors

#	ARTICLE	IF	CITATIONS
1	An investigation on RCCI combustion in a heavy duty diesel engine using in-cylinder blending of diesel and gasoline fuels. Applied Thermal Engineering, 2014, 63, 66-76.	3.0	156
2	Effects of direct injection timing and blending ratio on RCCI combustion with different low reactivity fuels. Energy Conversion and Management, 2015, 99, 193-209.	4.4	150
3	Influence of measurement errors and estimated parameters on combustion diagnosis. Applied Thermal Engineering, 2006, 26, 226-236.	3.0	146
4	Effects of low reactivity fuel characteristics and blending ratio on low load RCCI (reactivity) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 627 Td 2015, 90, 1261-1271.	4.5	122
5	Operating range extension of RCCI combustion concept from low to full load in a heavy-duty engine. Applied Energy, 2015, 143, 211-227.	5.1	101
6	Performance and engine-out emissions evaluation of the double injection strategy applied to the gasoline partially premixed compression ignition spark assisted combustion concept. Applied Energy, 2014, 134, 90-101.	5.1	86
7	Selection of a diesel fuel surrogate for the prediction of auto-ignition under HCCI engine conditions. Fuel, 2008, 87, 655-665.	3.4	76
8	A computational investigation on the influence of the use of elliptical orifices on the inner nozzle flow and cavitation development in diesel injector nozzles. Energy Conversion and Management, 2014, 79, 114-127.	4.4	76
9	Influence of Pre- and Post-Injection on the Performance and Pollutant Emissions in a HD Diesel Engine. , 2001, , .		73
10	The modification of the fuel injection rate in heavy-duty diesel engines. Part 1: Effects on engine performance and emissions. Applied Thermal Engineering, 2004, 24, 2701-2714.	3.0	71
11	Influence of the Post-Injection Pattern on Performance, Soot and NOx Emissions in a HD Diesel Engine. , 0, , .		68
12	Potential of Atkinson cycle combined with EGR for pollutant control in a HD diesel engine. Energy Conversion and Management, 2009, 50, 174-183.	4.4	60
13	The modification of the fuel injection rate in heavy-duty diesel engines. Applied Thermal Engineering, 2004, 24, 2715-2726.	3.0	56
14	Effect of advancing the closing angle of the intake valves on diffusion-controlled combustion in a HD diesel engine. Applied Thermal Engineering, 2009, 29, 1947-1954.	3.0	51
15	Conceptual model description of the double injection strategy applied to the gasoline partially premixed compression ignition combustion concept with spark assistance. Applied Energy, 2014, 129, 1-9.	5.1	51
16	Comparative global warming impact and NOx emissions of conventional and hydrogen automotive propulsion systems. Energy Conversion and Management, 2020, 221, 113137.	4.4	49
17	Evaluation of massive exhaust gas recirculation and Miller cycle strategies for mixing-controlled low temperature combustion in a heavy duty diesel engine. Energy, 2014, 71, 355-366.	4.5	45
18	Implementation of the Partially Premixed Combustion concept in a 2-stroke HSDI diesel engine fueled with gasoline. Applied Energy, 2014, 122, 94-111.	5.1	43

#	ARTICLE	IF	CITATIONS
19	Study of Basic Oxidation and Combustion Characteristics of Aluminum Nanoparticles under Engine-like Conditions. <i>Energy &amp; Fuels</i> , 2014, 28, 3430-3441.	2.5	37
20	Influence of the EGR Rate, Oxygen Concentration and Equivalent Fuel/Air Ratio on the Combustion Behaviour and Pollutant Emissions of a Heavy-Duty Diesel Engine. , 2000, , .		35
21	Miller cycle for improved efficiency, load range and emissions in a heavy-duty engine running under reactivity controlled compression ignition combustion. <i>Applied Thermal Engineering</i> , 2018, 136, 161-168.	3.0	35
22	Development of a control-oriented model to optimise fuel consumption and NOX emissions in a DI Diesel engine. <i>Applied Energy</i> , 2014, 119, 405-416.	5.1	33
23	Study of the compression cycle of a reciprocating engine through the polytropic coefficient. <i>Applied Thermal Engineering</i> , 2003, 23, 313-323.	3.0	30
24	Investigation of the Influence of Injection Rate Shaping on the Spray Characteristics in a Diesel Common Rail System Equipped with a Piston Amplifier. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2005, 127, 1102-1110.	0.8	29
25	The role of nozzle convergence in diesel combustion. <i>Fuel</i> , 2008, 87, 1849-1858.	3.4	27
26	Study on Low Temperature Combustion for Light-Duty Diesel Engines. <i>Energy &amp; Fuels</i> , 2010, 24, 355-364.	2.5	26
27	Effect of Port Injected Ethanol on Combustion Characteristics in a Dual-Fuel Light Duty Diesel Engine. , 0, , .		26
28	Design of synthetic EGR and simulation study of the effect of simplified formulations on the ignition delay of isoctane and n-heptane. <i>Energy Conversion and Management</i> , 2015, 96, 521-531.	4.4	25
29	Optimization and sizing of a fuel cell range extender vehicle for passenger car applications in driving cycle conditions. <i>Applied Energy</i> , 2021, 285, 116469.	5.1	23
30	Methodology for measuring exhaust aerosol size distributions using an engine test under transient operating conditions. <i>Measurement Science and Technology</i> , 2011, 22, 115101.	1.4	22
31	Study of Oxidation and Combustion Characteristics of Iron Nanoparticles under Idealized and Engine-like Conditions. <i>Energy &amp; Fuels</i> , 2016, 30, 4318-4330.	2.5	21
32	Effects of fuel injection parameters on premixed charge compression ignition combustion and emission characteristics in a medium-duty compression ignition diesel engine. <i>International Journal of Engine Research</i> , 2021, 22, 443-455.	1.4	21
33	Influence of Boost Pressure and Injection Pressure on Combustion Process and Exhaust Emissions in a HD Diesel Engine. , 0, , .		17
34	A Numerical Investigation on Combustion Characteristics with the use of Post Injection in DI Diesel Engines. , 0, , .		17
35	Comparison of two injection systems in an HSDI diesel engine using split injection and different injector nozzles. <i>International Journal of Automotive Technology</i> , 2010, 11, 139-146.	0.7	16
36	Theoretical development of a new procedure to predict ignition delays under transient thermodynamic conditions and validation using a Rapid Compression-Expansion Machine. <i>Energy Conversion and Management</i> , 2016, 108, 132-143.	4.4	16

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37	Influence of injection rate shaping on combustion and emissions for a medium duty diesel engine. <i>Journal of Mechanical Science and Technology</i> , 2006, 20, 1436-1448.	0.7	15
38	Validity of the Livengood & Wu correlation and theoretical development of an alternative procedure to predict ignition delays under variable thermodynamic conditions. <i>Energy Conversion and Management</i> , 2015, 105, 836-847.	4.4	15
39	The use of micro-orifice nozzles and swirl in a small HSDI engine operating at a late split-injection LTC regime. <i>Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering</i> , 2006, 220, 1807-1817.	1.1	12
40	Improving pollutant emissions in diesel engines for heavy-duty transportation using retarded intake valve closing strategies. <i>International Journal of Automotive Technology</i> , 2008, 9, 257-265.	0.7	12
41	Reduction of Pollutant Emissions in a HD Diesel Engine by Adjustment of Injection Parameters, Boost Pressure and EGR. , 0, , .		11
42	Advanced Injection Strategies to Attain Partially Premixed Combustion Process in a Heavy Duty Diesel Engine. , 2008, , .		11
43	Analysis of the potential of a new automotive two-stroke gasoline engine able to operate in spark ignition and controlled autoignition combustion modes. <i>Applied Thermal Engineering</i> , 2017, 126, 834-847.	3.0	11
44	New Combustion Modelling Approach for Methane-Hydrogen Fueled Engines Using Machine Learning and Engine Virtualization. <i>Energies</i> , 2021, 14, 6732.	1.6	9
45	Multi-objective optimization of heavy duty diesel engines under stationary conditions. <i>Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering</i> , 2005, 219, 77-87.	1.1	6
46	Study on LTC for light duty engines “ Part 2 “ Spray enhancements. <i>Fuel</i> , 2017, 193, 206-219.	3.4	6
47	Analysis of the Combustion Process in a EURO III Heavy-Duty Direct Injection Diesel Engine. <i>Journal of Engineering for Gas Turbines and Power</i> , 2002, 124, 636-644.	0.5	5
48	Optimization Towards Low-temperature Combustion in a HSDI Diesel Engine, Using Consecutive Screenings. , 0, , .		5
49	Determination of Oxidation Characteristics and Studies on the Feasibility of Metallic Nanoparticles Combustion Under ICE-Like Conditions. <i>SAE International Journal of Fuels and Lubricants</i> , 0, 4, 282-297.	0.2	5
50	Overview of HCCI diesel engines. , 2007, , 241-267e.		4
51	Analysis of the highly premixed combustion attained by a late injection strategy in an HD diesel engine. <i>International Journal of Vehicle Design</i> , 2006, 40, 327.	0.1	2
52	New 0-D methodology for predicting NO formation under continuously varying temperature and mixture composition conditions. <i>Energy Conversion and Management</i> , 2015, 91, 367-376.	4.4	2
53	Assessment of the Ignition System Requirement on Diluted Mixture Spark Engines. , 0, , .		1
54	Experimental Study of Two Air Management Strategies for Emissions Control in Heavy Duty Engines at Medium to High Loads. <i>Energy &amp; Fuels</i> , 2017, 31, 10011-10022.	2.5	0