

BenjamÃ- n Pla

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2030345/publications.pdf>

Version: 2024-02-01

96
papers

1,522
citations

361045

20
h-index

433756

31
g-index

97
all docs

97
docs citations

97
times ranked

955
citing authors

#	ARTICLE	IF	CITATIONS
1	An analysis of the resonance attenuation in a combustion chamber. International Journal of Engine Research, 2023, 24, 1714-1723.	1.4	1
2	Simultaneous NOx and NH3 slip prediction in a SCR catalyst under real driving conditions including potential urea injection failures. International Journal of Engine Research, 2022, 23, 1213-1225.	1.4	13
3	Safe operation of dual-fuel engines using constrained stochastic control. International Journal of Engine Research, 2022, 23, 285-299.	1.4	5
4	Acoustic characterization of combustion chambers in reciprocating engines: An application for low knocking cycles recognition. International Journal of Engine Research, 2022, 23, 120-131.	1.4	10
5	Increasing knock detection sensitivity by combining knock sensor signal with a control oriented combustion model. Mechanical Systems and Signal Processing, 2022, 168, 108665.	4.4	7
6	Knock recognition based on vibration signal and Wiebe function in a heavy-duty spark ignited engine fueled with Methane. Fuel, 2022, 315, 122957.	3.4	8
7	Ammonia injection failure diagnostic and correction in engine after-treatment system by NOx and NH3 emissions observation. Fuel, 2022, 322, 123936.	3.4	4
8	Energy Management of Hybrid Electric Urban Bus by Off-Line Dynamic Programming Optimization and One-Step Look-Ahead Rollout. Applied Sciences (Switzerland), 2022, 12, 4474.	1.3	11
9	A modeling framework for predicting the effect of the operating conditions and component sizing on fuel cell degradation and performance for automotive applications. Applied Energy, 2022, 317, 119137.	5.1	14
10	Effect of dynamic and operational restrictions in the energy management strategy on fuel cell range extender electric vehicle performance and durability in driving conditions. Energy Conversion and Management, 2022, 266, 115821.	4.4	18
11	Analysis on the potential of EGR strategy to reduce fuel consumption in hybrid powertrains based on advanced gasoline engines under simulated driving cycle conditions. Energy Conversion and Management, 2022, 266, 115830.	4.4	14
12	Adaptive calibration of Diesel engine injection for minimising fuel consumption with constrained NOx emissions in actual driving missions. International Journal of Engine Research, 2021, 22, 1896-1905.	1.4	7
13	Variable smoothing of optimal diesel engine calibration for improved performance and drivability during transient operation. International Journal of Engine Research, 2021, 22, 1888-1895.	1.4	5
14	Diesel engine optimization and exhaust thermal management by means of variable valve train strategies. International Journal of Engine Research, 2021, 22, 1196-1213.	1.4	14
15	Ammonia injection optimization for selective catalytic reduction aftertreatment systems. International Journal of Engine Research, 2021, 22, 2169-2179.	1.4	11
16	NOx sensor cross sensitivity model and simultaneous prediction of NOx and NH3 slip from automotive catalytic converters under real driving conditions. International Journal of Engine Research, 2021, 22, 3209-3218.	1.4	11
17	Improving CO2 emission assessment of diesel-based powertrains in dynamic driving cycles by data fusion techniques. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2021, 235, 362-372.	1.1	1
18	Modelling three-way catalytic converter oriented to engine cold-start conditions. International Journal of Engine Research, 2021, 22, 640-651.	1.4	7

#	ARTICLE	IF	CITATIONS
19	Optimization and sizing of a fuel cell range extender vehicle for passenger car applications in driving cycle conditions. Applied Energy, 2021, 285, 116469.	5.1	23
20	Exploiting driving history for optimising the Energy Management in plug-in Hybrid Electric Vehicles. Energy Conversion and Management, 2021, 234, 113919.	4.4	33
21	Individual cylinder fuel blend estimation in a dual-fuel engine using an in-cylinder pressure based observer. Control Engineering Practice, 2021, 109, 104760.	3.2	2
22	Adaptive in-cylinder pressure model for spark ignition engine control. Fuel, 2021, 299, 120870.	3.4	7
23	Impact of fuel cell range extender powertrain design on greenhouse gases and NOX emissions in automotive applications. Applied Energy, 2021, 302, 117526.	5.1	21
24	Identification of Adequate Combustion in Turbulent Jet Ignition Engines using Machine Learning Algorithms. IFAC-PapersOnLine, 2021, 54, 102-107.	0.5	2
25	An on-board method to estimate the light-off temperature of diesel oxidation catalysts. International Journal of Engine Research, 2020, 21, 1480-1492.	1.4	12
26	Short-circuit effects on spark ignition engine after-treatment and fuel-to-air ratio control. International Journal of Engine Research, 2020, 21, 885-894.	1.4	2
27	Fuel-to-air ratio control under short-circuit conditions through UEGO sensor signal analysis. International Journal of Engine Research, 2020, 21, 1577-1583.	1.4	2
28	Closed-loop control of a dual-fuel engine working with different combustion modes using in-cylinder pressure feedback. International Journal of Engine Research, 2020, 21, 484-496.	1.4	18
29	On the potential of traffic light information availability for reducing fuel consumption and NO _x emissions of a diesel light-duty vehicle. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2020, 234, 981-991.	1.1	9
30	Cycle-to-cycle combustion variability modelling in spark ignited engines for control purposes. International Journal of Engine Research, 2020, 21, 1398-1411.	1.4	17
31	Impact of driving dynamics in RDE test on NO _x emissions dispersion. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2020, 234, 1770-1778.	1.1	19
32	EGR Transient Operations in Highly Dynamic Driving Cycles. International Journal of Automotive Technology, 2020, 21, 865-879.	0.7	2
33	A methodology to estimate mechanical losses and its distribution during a real driving cycle. Tribology International, 2020, 145, 106208.	3.0	7
34	Model-Based Ammonia Slip Observation for SCR Control and Diagnosis. IEEE/ASME Transactions on Mechatronics, 2020, 25, 1346-1353.	3.7	13
35	Optimal control of a turbocharged direct injection diesel engine by direct method optimization. International Journal of Engine Research, 2019, 20, 640-652.	1.4	7
36	Experimental determination and modelling of the diesel oxidation catalysts ageing effects. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2019, 233, 3016-3029.	1.1	4

#	ARTICLE	IF	CITATIONS
37	Integration of intermittent measurement from in-cylinder pressure resonance in a multi-sensor mass flow estimator. <i>Mechanical Systems and Signal Processing</i> , 2019, 131, 152-165.	4.4	7
38	Fuel economy optimization from the interaction between engine oil and driving conditions. <i>Tribology International</i> , 2019, 138, 263-270.	3.0	12
39	Control-oriented modelling of three-way catalytic converter for fuel-to-air ratio regulation in spark ignited engines. <i>Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering</i> , 2019, 233, 3758-3774.	1.1	2
40	Cylinder charge composition observation based on in-cylinder pressure measurement. <i>Measurement: Journal of the International Measurement Confederation</i> , 2019, 131, 559-568.	2.5	18
41	Application and benchmarking of a direct method to optimize the fuel consumption of a diesel electric locomotive. <i>Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit</i> , 2018, 232, 2272-2289.	1.3	5
42	Analytical Optimal Solution to the Energy Management Problem in Series Hybrid Electric Vehicles. <i>IEEE Transactions on Vehicular Technology</i> , 2018, 67, 6803-6813.	3.9	25
43	Fuel and Pollutant Efficient Vehicle Speed Optimization in Real Driving Conditions. <i>IFAC-PapersOnLine</i> , 2018, 51, 225-232.	0.5	4
44	Oxygen catalyst depletion strategy based on TWC control-oriented modelling. <i>IFAC-PapersOnLine</i> , 2018, 51, 355-361.	0.5	5
45	A combustion phasing control-oriented model applied to an RCCI engine. <i>IFAC-PapersOnLine</i> , 2018, 51, 119-124.	0.5	13
46	An analysis of the in-cylinder pressure resonance excitation in internal combustion engines. <i>Applied Energy</i> , 2018, 228, 1272-1279.	5.1	33
47	Optimal Control as a method for Diesel engine efficiency assessment including pressure and NO _x constraints. <i>Applied Thermal Engineering</i> , 2017, 117, 452-461.	3.0	11
48	In-cylinder pressure based model for exhaust temperature estimation in internal combustion engines. <i>Applied Thermal Engineering</i> , 2017, 115, 212-220.	3.0	26
49	Optimal heat release shaping in a reactivity controlled compression ignition (RCCI) engine. <i>Control Theory and Technology</i> , 2017, 15, 117-128.	1.0	10
50	Cycle by cycle NO _x model for diesel engine control. <i>Applied Thermal Engineering</i> , 2017, 110, 1011-1020.	3.0	42
51	Model-based passive and active diagnostics strategies for diesel oxidation catalysts. <i>Applied Thermal Engineering</i> , 2017, 110, 962-971.	3.0	18
52	Adaptive calibration for reduced fuel consumption and emissions. <i>Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering</i> , 2016, 230, 2002-2014.	1.1	16
53	Fast estimation of diesel oxidation catalysts inlet gas temperature. <i>Control Engineering Practice</i> , 2016, 56, 148-156.	3.2	8
54	Cost of ownership-efficient hybrid electric vehicle powertrain sizing for multi-scenario driving cycles. <i>Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering</i> , 2016, 230, 382-394.	1.1	14

#	ARTICLE	IF	CITATIONS
55	Estimation of trapped mass by in-cylinder pressure resonance in HCCI engines. <i>Mechanical Systems and Signal Processing</i> , 2016, 66-67, 862-874.	4.4	25
56	A Challenging Future for the IC Engine: New Technologies and the Control Role. <i>Oil and Gas Science and Technology</i> , 2015, 70, 15-30.	1.4	57
57	ECU-oriented models for NOx prediction. Part 2: adaptive estimation by using an NOx sensor. <i>Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering</i> , 2015, 229, 1345-1360.	1.1	5
58	Exhaust gas recirculation dispersion analysis using in-cylinder pressure measurements in automotive diesel engines. <i>Applied Thermal Engineering</i> , 2015, 89, 459-468.	3.0	12
59	A direct transform for determining the trapped mass on an internal combustion engine based on the in-cylinder pressure resonance phenomenon. <i>Mechanical Systems and Signal Processing</i> , 2015, 62-63, 480-489.	4.4	23
60	Switching strategy between HP (high pressure)- and LPEGR (low pressure exhaust gas recirculation) systems for reduced fuel consumption and emissions. <i>Energy</i> , 2015, 90, 1790-1798.	4.5	28
61	ECU-oriented models for NOx prediction. Part 1: a mean value engine model for NOx prediction. <i>Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering</i> , 2015, 229, 992-1015.	1.1	18
62	Control Oriented Model for Diesel Oxidation Catalyst Diagnosis. <i>IFAC-PapersOnLine</i> , 2015, 48, 427-433.	0.5	7
63	Considerations on the low-pressure exhaust gas recirculation system control in turbocharged diesel engines. <i>International Journal of Engine Research</i> , 2014, 15, 250-260.	1.4	4
64	Modelling driving behaviour and its impact on the energy management problem in hybrid electric vehicles. <i>International Journal of Computer Mathematics</i> , 2014, 91, 147-156.	1.0	27
65	A stochastic method for the energy management in hybrid electric vehicles. <i>Control Engineering Practice</i> , 2014, 29, 257-265.	3.2	38
66	Insight into the HEV/PHEV optimal control solution based on a new tuning method. <i>Control Engineering Practice</i> , 2014, 29, 247-256.	3.2	17
67	A learning algorithm concept for updating look-up tables for automotive applications. <i>Mathematical and Computer Modelling</i> , 2013, 57, 1979-1989.	2.0	34
68	A computationally efficient Kalman filter based estimator for updating look-up tables applied to NOx estimation in diesel engines. <i>Control Engineering Practice</i> , 2013, 21, 1455-1468.	3.2	46
69	On the combination of high-pressure and low-pressure exhaust gas recirculation loops for improved fuel economy and reduced emissions in high-speed direct-injection engines. <i>International Journal of Engine Research</i> , 2013, 14, 3-11.	1.4	21
70	Impact of Fischer-Tropsch and biodiesel fuels on trade-offs between pollutant emissions and combustion noise in diesel engines. <i>Biomass and Bioenergy</i> , 2013, 52, 22-33.	2.9	51
71	A bias correction method for fast fuel-to-air ratio estimation in diesel engines. <i>Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering</i> , 2013, 227, 1099-1111.	1.1	19
72	A new approach to optimally tune the control strategy for hybrid vehicles applications*. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2012, 45, 255-261.	0.4	8

#	ARTICLE	IF	CITATIONS
73	On a Stochastic Approach of the ECMS Method for Energy Management in Hybrid Electric Vehicles. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 341-348.	0.4	9
74	Representation Limits of Mean Value Engine Models. Lecture Notes in Control and Information Sciences, 2012, , 185-206.	0.6	8
75	Effects of low pressure exhaust gas recirculation on regulated and unregulated gaseous emissions during NEDC in a light-duty diesel engine. Energy, 2011, 36, 5655-5665.	4.5	52
76	Comparative study of regulated and unregulated gaseous emissions during NEDC in a light-duty diesel engine fuelled with Fischer Tropsch and biodiesel fuels. Biomass and Bioenergy, 2011, 35, 789-798.	2.9	77
77	Correlations for Wiebe function parameters for combustion simulation in two-stroke small engines. Applied Thermal Engineering, 2011, 31, 1190-1199.	3.0	31
78	Potential of Using a Nozzle at the Compressor Inlet of a High-Speed Direct-Injection Diesel Engine. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2011, 225, 178-189.	1.1	6
79	Estimation of the Extended Turbine Maps for a Radial Inflow Turbine. , 2010, , .		3
80	Effects of the Intake Charge Distribution in HSDI Engines. , 2010, , .		18
81	Comparative analysis of a DI diesel engine fuelled with biodiesel blends during the European MVEG-A cycle: Performance and emissions (II). Biomass and Bioenergy, 2009, 33, 948-956.	2.9	95
82	A procedure to reduce pollutant gases from Diesel combustion during European MVEG-A cycle by using electrical intake air-heaters. Fuel, 2008, 87, 2760-2778.	3.4	28
83	A methodology to identify the intake charge cylinder-to-cylinder distribution in turbocharged direct injection Diesel engines. Measurement Science and Technology, 2008, 19, 065401.	1.4	29
84	Transient particle emission measurement with optical techniques. Measurement Science and Technology, 2008, 19, 065404.	1.4	12
85	Acidic Condensation in Low Pressure EGR Systems using Diesel and Biodiesel Fuels. SAE International Journal of Fuels and Lubricants, 0, 2, 305-312.	0.2	16
86	Acidic Condensation in HP EGR Systems Cooled at Low Temperature Using Diesel and Biodiesel Fuels. , 0, , .		6
87	Fuel and Immission Potential of Context Aware Engine Control. , 0, , .		6
88	Assessing the Limits of Downsizing in Diesel Engines. , 0, , .		7
89	Cycle by Cycle Trapped Mass Estimation for Diagnosis and Control. SAE International Journal of Engines, 0, 7, 1523-1531.	0.4	22
90	Engine test bench feasibility for the study and research of real driving cycles: Pollutant emissions uncertainty characterization. International Journal of Engine Research, 0, , 146808742110079.	1.4	3

#	ARTICLE	IF	CITATIONS
91	On-Line Optimization of Dual-Fuel Combustion Operation by Extremum Seeking Techniques. , 0, , .		0
92	An Experimental Method to Test Twin and Double Entry Automotive Turbines in Realistic Engine Pulse Conditions. , 0, , .		5
93	Knock Analysis in the Crank Angle Domain for Low-Knocking Cycles Detection. , 0, , .		15
94	Fuel-to-Air Ratio Stimulation Suitability for Pollutant Emissions Reduction under Transient Driving Conditions. , 0, , .		1
95	Closed-Loop Combustion Control by Extremum Seeking with the Passive-Chamber Ignition Concept in SI Engines. , 0, , .		3
96	Impact of the Powertrain Sizing on Cradle-to-Grave Emissions and Fuel Cell Degradation in a FCV with a Range-Extender Architecture. , 0, , .		0