

# Hua Zhao

## List of Publications by Year in descending order

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79  
papers

2,206  
citations

361413  
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289244  
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79  
docs citations

79  
times ranked

2176  
citing authors

#	ARTICLE	IF	CITATIONS
1	Metabolic strategies for microbial glycerol overproduction. <i>Journal of Chemical Technology and Biotechnology</i> , 2018, 93, 624-628.	3.2	6
2	Metabolic engineering of <i>Escherichia coli</i> for acetaldehyde overproduction using pyruvate decarboxylase from <i>Zymomonas mobilis</i> . <i>Enzyme and Microbial Technology</i> , 2018, 109, 58-65.	3.2	16
3	Exploring the mid-load potential of ethanol-diesel dual-fuel combustion with and without EGR. <i>Applied Energy</i> , 2017, 193, 263-275.	10.1	55
4	In silico design of anaerobic growth-coupled product formation in <i>Escherichia coli</i> : experimental validation using a simple polyol, glycerol. <i>Bioprocess and Biosystems Engineering</i> , 2017, 40, 361-372.	3.4	4
5	Investigations into the Influence of Dimethyl Ether Micro Flame Ignition on the Combustion and Cyclic Variation Characteristics of Flame Propagation/Auto-Ignition Hybrid Combustion in an Optical Engine. <i>Combustion Science and Technology</i> , 2017, 189, 453-477.	2.3	13
6	Experimental Comparison between Stratified Flame Ignition and Micro Flame Ignition in a Gasoline SI-CAI Hybrid Combustion Engine. , 2017, , .		3
7	Engine Downsizing through Two-Stroke Operation in a Four-Valve GDI Engine. , 2016, , .		6
8	Effects of Oxygen Content of Fuels on Combustion and Emissions of Diesel Engines. <i>Energies</i> , 2016, 9, 28.	3.1	56
9	Start-of-injection-based software optimization for consistency between the cylinders in common-rail diesel engines. <i>Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering</i> , 2016, 230, 709-720.	1.9	5
10	Performance and economic analysis of a direct injection spark ignition engine fueled with wet ethanol. <i>Applied Energy</i> , 2016, 169, 230-239.	10.1	64
11	Transcriptomic Analysis of 3-Hydroxypropanoic Acid Stress in <i>Escherichia coli</i> . <i>Applied Biochemistry and Biotechnology</i> , 2016, 178, 527-543.	2.9	7
12	A comparison of butanol and ethanol flame development in an optical spark ignition engine. <i>Fuel</i> , 2016, 170, 27-38.	6.4	23
13	Effect of dilution strategies and direct injection ratios on stratified flame ignition (SFI) hybrid combustion in a PFI/DI gasoline engine. <i>Applied Energy</i> , 2016, 165, 801-814.	10.1	16
14	Experimental analysis of ethanol dual-fuel combustion in a heavy-duty diesel engine: An optimisation at low load. <i>Applied Energy</i> , 2016, 165, 166-182.	10.1	78
15	Furfural and hydroxymethylfurfural tolerance in <i>Escherichia coli</i> $\hat{\Gamma}$ regulatory mutants. <i>Biotechnology and Applied Biochemistry</i> , 2015, 62, 32-36.	3.1	8
16	Comparison of Performance, Efficiency and Emissions between Gasoline and E85 in a Two-Stroke Poppet Valve Engine with Lean Boost CAI Operation. , 2015, , .		3
17	Effect of piston shapes and fuel injection strategies on stoichiometric stratified flame ignition (SFI) hybrid combustion in a PFI/DI gasoline engine by numerical simulations. <i>Energy Conversion and Management</i> , 2015, 98, 387-400.	9.2	39
18	Comparison of combustion characteristics of n-butanol/ethanol-gasoline blends in a HCCI engine. <i>Energy Conversion and Management</i> , 2015, 95, 101-109.	9.2	71

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19	Experimental studies of the air hybrid engine charging operation. International Journal of Engine Research, 2015, 16, 925-934.	2.3	2
20	Effect of air dilution and effective compression ratio on the combustion characteristics of a HCCI (homogeneous charge compression ignition) engine fuelled with n-butanol. Energy, 2015, 85, 296-303.	8.8	49
21	Turbulent flame boundary and structure detection in an optical DISI engine using tracer-based two-line PLIF technique. Experimental Thermal and Fluid Science, 2015, 68, 545-558.	2.7	6
22	High load performance and combustion analysis of a four-valve direct injection gasoline engine running in the two-stroke cycle. Applied Energy, 2015, 159, 117-131.	10.1	28
23	Computational study of the influence of in-cylinder flow on spark ignition-controlled auto-ignition hybrid combustion in a gasoline engine. International Journal of Engine Research, 2015, 16, 795-809.	2.3	16
24	Thermal and chemical effects of fuel direct injection on kinetically controlled combustion of alcohol and gasoline fuels. International Journal of Engine Research, 2015, 16, 982-993.	2.3	3
25	Excision of Unstable Artificial Gene-Specific Inverted Repeats Mediates Scar-Free Gene Deletions in Escherichia coli. Applied Biochemistry and Biotechnology, 2015, 175, 1858-1867.	2.9	4
26	Analysis of cyclic variations during mode switching between spark ignition and controlled auto-ignition combustion operations. International Journal of Engine Research, 2015, 16, 356-365.	2.3	17
27	Optimisation of boosting strategy for controlled auto-ignition combustion in a four-valve camless gasoline direct injection engine running in two-stroke cycle. International Journal of Engine Research, 2014, 15, 850-861.	2.3	6
28	The effects of dual-coil ignition and axial swirl on spark-assisted controlled autoignition. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2014, 228, 991-1002.	1.9	3
29	Experimental investigation of direct injection charge cooling in optical GDI engine using tracer-based PLIF technique. Experimental Thermal and Fluid Science, 2014, 59, 96-108.	2.7	21
30	Combustion and emission characteristics of a n-butanol HCCI engine. Fuel, 2014, 115, 758-764.	6.4	72
31	Application of a hybrid breakup model for the spray simulation of a multi-hole injector used for a DISI gasoline engine. Applied Thermal Engineering, 2014, 65, 282-292.	6.0	28
32	Low-Temperature Combustion Characteristics of a <i>n</i> -Butanol/Isooctane HCCI Engine. Energy & Fuels, 2014, 28, 4183-4192.	5.1	14
33	Investigation on gasoline homogeneous charge compression ignition (HCCI) combustion implemented by residual gas trapping combined with intake preheating through waste heat recovery. Energy Conversion and Management, 2014, 86, 8-19.	9.2	29
34	Accumulated lipids rather than the rigid cell walls impede the extraction of genetic materials for effective colony PCRs in Chlorella vulgaris. Microbial Cell Factories, 2013, 12, 106.	4.0	14
35	Combustion and emission characteristics of a HCCI engine fuelled with n-butanol-gasoline blends. Fuel, 2013, 108, 668-674.	6.4	97
36	A study of mechanical variable valve operation with gasoline-alcohol fuels in a spark ignition engine. Fuel, 2013, 106, 802-813.	6.4	36

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37	Inert-droplet and combustion effects on turbulence in a diluted diffusion flame. <i>Combustion and Flame</i> , 2013, 160, 366-383.	5.2	12
38	Improved acid tolerance of <i>Lactobacillus pentosus</i> by error-prone whole genome amplification. <i>Bioresource Technology</i> , 2013, 135, 459-463.	9.6	38
39	Effect of the thermal stratification on SI-CAI hybrid combustion in a gasoline engine. <i>Applied Thermal Engineering</i> , 2013, 61, 451-460.	6.0	16
40	An Extremely Simple and Effective Colony PCR Procedure for Bacteria, Yeasts, and Microalgae. <i>Applied Biochemistry and Biotechnology</i> , 2013, 169, 695-700.	2.9	48
41	Combustion and emission characteristics of alcohol fuels in a CAI engine. <i>Fuel</i> , 2013, 104, 386-397.	6.4	14
42	A simple and efficient mild air hybrid engine concept and its performance analysis. <i>Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering</i> , 2013, 227, 120-136.	1.9	7
43	Size Of Gene Specific Inverted Repeat - Dependent Gene Deletion In <i>Saccharomyces cerevisiae</i> . <i>PLoS ONE</i> , 2013, 8, e72137.	2.5	5
44	Screened Butanol-Tolerant <i>Enterococcus faecium</i> Capable of Butanol Production. <i>Applied Biochemistry and Biotechnology</i> , 2012, 168, 1672-1680.	2.9	23
45	2-Stroke CAI Combustion Operation in a GDI Engine with Poppet Valves. , 2012, , .		10
46	Performance and emissions of a 4-cylinder gasoline engine with Controlled Auto-Ignition. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , 2012, 34, 436-440.	1.6	4
47	Alcohol tolerance of <i>Escherichia coli</i> <i>acrR</i> and <i>marR</i> regulatory mutants. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2012, 76, 89-93.	1.8	12
48	Increase of ethanol tolerance of <i>Saccharomyces cerevisiae</i> by error-prone whole genome amplification. <i>Biotechnology Letters</i> , 2011, 33, 1007-1011.	2.2	15
49	Cloning, overexpression, purification, and site-directed mutagenesis of xylitol-2-dehydrogenase from <i>Candida albicans</i> . <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2010, 62, 40-45.	1.8	7
50	Engineering of small sized DNAs by error-prone multiply-primed rolling circle amplification for introduction of random point mutations. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2010, 67, 92-97.	1.8	3
51	The Performance Characteristics of an Production Oriented Air Hybrid Powertrain. <i>SAE International Journal of Engines</i> , 2010, 3, 609-619.	0.4	6
52	DNA assembler, an in vivo genetic method for rapid construction of biochemical pathways. <i>Nucleic Acids Research</i> , 2009, 37, e16-e16.	14.5	568
53	In-cylinder Studies of Fuel Injection and Combustion from a Narrow Cone Fuel Injector in a High Speed Single Cylinder Optical Engine. , 2008, , .		7
54	Studies of the Control of In-cylinder Inhomogeneities in a 4VVAS Gasoline Engine. , 2008, , .		3

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55	CAI Combustion with Methanol and Ethanol in an Air-Assisted Direct Injection SI Engine. , 2008, , .		11
56	Analysis of Controlled Auto-Ignition/HCCI Combustion in a Direct Injection Gasoline Engine with Single and Split Fuel Injections. Combustion Science and Technology, 2007, 180, 176-205.	2.3	15
57	Parametric Study on CAI Combustion in a GDI Engine with an Air-Assisted Injector. , 2007, , .		7
58	Study of SI-HCCI-SI Transition on a Port Fuel Injection Engine Equipped with 4VVAS. , 2007, , .		23
59	Developing a Fuel Stratification Concept on a Spark Ignition Engines. , 2007, , .		1
60	The Combustion and Emission Characteristics of Ethanol on a Port Fuel Injection HCCI Engine. , 2006, , .		22
61	Evaluating the EGR-AFR Operating Range of a HCCI Engine. , 2005, , .		40
62	A Combustion Heat Release Correlation for CAI Combustion Simulation in 4-Stroke Gasoline Engines. , 2005, , .		15
63	Investigation of the HCCI/CAI Combustion Process by 2-D PLIF Imaging of Formaldehyde. , 2004, , .		10
64	Quantitative investigation of soot distribution by laser-induced incandescence. Applied Optics, 2000, 39, 5012.	2.1	47
65	Understanding the Effects of Recycled Burnt Gases on the Controlled Autoignition (CAI) Combustion in Four-Stroke Gasoline Engines. , 0, , .		99
66	The Effect of Spark Ignition on the CAI Combustion Operation. , 0, , .		18
67	An Experimental Study on HCCI Combustion in a Four-Stroke Gasoline Engine with Reduced Valve Lift Operations. , 0, , .		8
68	Effects of Ignition Timing on CAI Combustion in a Multi-Cylinder DI Gasoline Engine. , 0, , .		6
69	Control Strategies for Steady and Transient Operation of a 4-Stroke Gasoline Engine with CAI Combustion Using a 4-Variable Valve Actuating System (4VVAS). , 0, , .		18
70	Comparison of HCCI Combustion Respectively Fueled with Gasoline, Ethanol and Methanol through the Trapped Residual Gas Strategy. , 0, , .		47
71	Effect of Injection Timing on Mixture and CAI Combustion in a GDI Engine with an Air-Assisted Injector. , 0, , .		16
72	Study on Layered Close Loop Control of 4-Stroke Gasoline HCCI Engine Equipped with 4VVAS. , 0, , .		4

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73	Direct In-cylinder CO <sub>2</sub> Measurements of Residual Gas in a GDI Engine for Model Validation and HCCI Combustion Development. , 0, , .		5
74	The Effects of Charge Homogeneity and Repeatability on Particulates Using the PLIF Technique in an Optical DISI Engine. SAE International Journal of Engines, 0, 7, 500-518.	0.4	6
75	Numerical Study of the Effect of Piston Shapes and Fuel Injection Strategies on In-Cylinder Conditions in a PFI/GDI Gasoline Engine. SAE International Journal of Engines, 0, 7, 1888-1899.	0.4	20
76	Synergy between Boost and Valve Timings in a Highly Boosted Direct Injection Gasoline Engine Operating with Miller Cycle. , 0, , .		11
77	Investigation of Early and Late Intake Valve Closure Strategies for Load Control in a Spark Ignition Ethanol Engine. SAE International Journal of Engines, 0, 10, 858-872.	0.4	18
78	Analysis of the Effect of Intake Plenum Design on the Scavenging Process in a 2-Stroke Boosted Uniflow Scavenged Direct Injection Gasoline (BUSDIG) Engine. , 0, , .		6
79	Effect of an ORC Waste Heat Recovery System on Diesel Engine Fuel Economy for Off-Highway Vehicles. , 0, , .		17