Josh A Pihl

List of Publications by Year
in descending order

57 papers	1,464 citations	331670 21 h-index	377865 34 g-index
57 all docs	57 docs citations	57 times ranked	1168 citing authors

#	Article	IF	Citations
1	Production, fuel properties and combustion testing of an iso-olefins blendstock for modern vehicles. Fuel, 2022, 310, 122314.	6.4	13
2	Measurement and Modeling of the effects of exhaust composition and hydrothermal aging on the ammonia storage capacity of a commercial Cu-SSZ-13 catalyst. Applied Catalysis B: Environmental, 2022, 303, 120898.	20.2	9
3	O2 dosage as a descriptor of TWC performance under lean/rich dithering in stoichiometric natural gas engines. Catalysis Today, 2021, 360, 294-304.	4.4	19
4	What fuel properties enable higher thermal efficiency in spark-ignited engines?. Progress in Energy and Combustion Science, 2021, 82, 100876.	31.2	110
5	The effects of ceria loading on three-way catalysts for passive SCR operation. Catalysis Communications, 2021, 156, 106308.	3.3	6
6	Investigation of NO adsorption and desorption phenomena on a Pd/ZSM-5 passive NOx adsorber. Applied Catalysis B: Environmental, 2021, 298, 120561.	20.2	20
7	Integration of an Oxidation Catalyst with Pd/Zeolite-Based Passive NOx Adsorbers: Impacts on Degradation Resistance and Desorption Characteristics. Industrial & Engineering Chemistry Research, 2021, 60, 6455-6464.	3.7	16
8	PGM based catalysts for exhaust-gas after-treatment under typical diesel, gasoline and gas engine conditions with focus on methane and formaldehyde oxidation. Applied Catalysis B: Environmental, 2020, 265, 118571.	20.2	56
9	Condition-Dependent Pd Speciation and NO Adsorption in Pd/Zeolites. ACS Catalysis, 2020, 10, 12801-12818.	11.2	74
10	Nanoarray-Based Monolithic Adsorbers for SO2 Removal. Emission Control Science and Technology, 2020, 6, 315-323.	1.5	3
11	Nonuniform Oxidation Behavior of Loaded Gasoline Particulate Filters. Emission Control Science and Technology, 2020, 6, 301-314.	1.5	5
12	Impact of Selected High-Performance Fuel Blends on Three-Way Catalyst Light Off under Synthetic Spark-Ignition Engine-Exhaust Conditions. Energy & Fuels, 2020, 34, 12900-12910.	5.1	11
13	Passive SCR Performance Under Pseudo-Transient Cycle: Challenges and Opportunities for Meeting Tier 3 Emissions. Emission Control Science and Technology, 2019, 5, 253-262.	1.5	7
14	Co-optimization of Heavy-Duty Fuels and Engines: Cost Benefit Analysis and Implications. Environmental Science & Technology, 2019, 53, 12904-12913.	10.0	14
15	Reactivity of novel high-performance fuels on commercial three-way catalysts for control of emissions from spark-ignition engines. Applied Energy, 2019, 255, 113640.	10.1	21
16	Aftertreatment Protocols for Catalyst Characterization and Performance Evaluation: Low-Temperature Oxidation, Storage, Three-Way, and NH3-SCR Catalyst Test Protocols. Emission Control Science and Technology, 2019, 5, 183-214.	1.5	46
17	Catalytic Exhaust Gas Recirculation-Loop Reforming for High Efficiency in a Stoichiometric Spark-Ignited Engine through Thermochemical Recuperation and Dilution Limit Extension, Part 2: Engine Performance. Energy & Fuels, 2018, 32, 2257-2266.	5.1	21
18	Catalytic Steam and Partial Oxidation Reforming of Liquid Fuels for Application in Improving the Efficiency of Internal Combustion Engines. Energy & Fuels, 2018, 32, 2267-2281.	5.1	24

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19	Catalytic Exhaust Gas Recirculation-Loop Reforming for High Efficiency in a Stoichiometric Spark-Ignited Engine through Thermochemical Recuperation and Dilution Limit Extension, Part 1: Catalyst Performance. Energy & Fuels, 2018, 32, 2245-2256.	5.1	17
20	2017 DOE-Crosscut Lean/Low-Temperature Exhaust Emissions Reduction Simulation (CLEERS) Workshop. Emission Control Science and Technology, 2018, 4, 135-135.	1.5	0
21	Response Characteristics of a Stable Mixed Potential Ammonia Sensor in Simulated Diesel Exhaust. Journal of the Electrochemical Society, 2017, 164, B448-B455.	2.9	23
22	Response Characteristics of Stable Mixed-Potential NH3 Sensors in Diesel Engine Exhaust. Emission Control Science and Technology, 2017, 3, 112-121.	1.5	8
23	Development of a Global Kinetic Model for a Commercial Lean NOx Trap Automotive Catalyst Based on Laboratory Measurements. Emission Control Science and Technology, 2017, 3, 73-92.	1.5	6
24	Lean NOx reduction over Ag/alumina catalysts via ethanol-SCR using ethanol/gasoline blends. Applied Catalysis B: Environmental, 2017, 202, 42-50.	20.2	35
25	The selective catalytic reduction of NO over Ag/Al2O3 with isobutanol as the reductant. Catalysis Today, 2016, 267, 65-75.	4.4	7
26	Evolution and Enabling Capabilities of Spatially Resolved Techniques for the Characterization of Heterogeneously Catalyzed Reactions. ACS Catalysis, 2016, 6, 1356-1381.	11.2	70
27	Passive SCR for lean gasoline NOX control: Engine-based strategies to minimize fuel penalty associated with catalytic NH3 generation. Catalysis Today, 2016, 267, 202-209.	4.4	28
28	A SCR Model Calibration Approach with Spatially Resolved Measurements and NH3 Storage Distributions. Emission Control Science and Technology, 2015, 1, 98-107.	1.5	6
29	Progression of Soot Cake Layer Properties During the Systematic Regeneration of Diesel Particulate Filters Measured with Neutron Tomography. Emission Control Science and Technology, 2015, 1, 24-31.	1.5	11
30	Kinetic modeling of NH3-SCR over a supported Cu zeolite catalyst using axial species distribution measurements. Applied Catalysis B: Environmental, 2015, 163, 393-403.	20.2	35
31	Selective catalytic reduction of nitric oxide with ethanol/gasoline blends over a silver/alumina catalyst. Catalysis Today, 2014, 231, 46-55.	4.4	15
32	New insights on N2O formation pathways during lean/rich cycling of a commercial lean NO trap catalyst. Catalysis Today, 2014, 231, 145-154.	4.4	36
33	Passive-ammonia selective catalytic reduction (SCR): Understanding NH3 formation over close-coupled three way catalysts (TWC). Catalysis Today, 2014, 231, 33-45.	4.4	57
34	NH3 formation over a lean NOX trap (LNT) system: Effects of lean/rich cycle timing and temperature. Applied Catalysis B: Environmental, 2014, 147, 698-710.	20.2	50
35	Lean NOx Trap Chemistry Under Lean-Gasoline Exhaust Conditions: Impact of High NOx Concentrations and High Temperature. Topics in Catalysis, 2013, 56, 89-93.	2.8	7
36	Development of a Surface Area Dependent Rate Expression for Soot Oxidation in Diesel Particulate Filters. Topics in Catalysis, 2013, 56, 499-503.	2.8	2

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37	Effective Model for Prediction of N2O and NH3 Formation During the Regeneration of NO x Storage Catalyst. Topics in Catalysis, 2013, 56, 118-124.	2.8	26
38	Local ammonia storage and ammonia inhibition in a monolithic copper-beta zeolite SCR catalyst. Applied Catalysis B: Environmental, 2012, 126, 144-152.	20.2	31
39	Spatiotemporal distribution of NOx storage and impact on NH3 and N2O selectivities during lean/rich cycling of a Ba-based lean NOx trap catalyst. Catalysis Today, 2012, 184, 20-26.	4.4	50
40	Thermodynamic Analysis of Alternative Approaches to Chemical Looping Combustion. Energy & Fuels, 2011, 25, 656-669.	5.1	14
41	Impact of dopants on the sulfation, desulfation and NOx reduction performance of Ba-based NOx storage-reduction catalystsâ˜†. Catalysis Today, 2011, 160, 131-136.	4.4	6
42	Pre-oxidized and nitrided stainless steel alloy foil for proton exchange membrane fuel cell bipolar plates. Part 2: Single-cell fuel cell evaluation of stamped plates. Journal of Power Sources, 2010, 195, 5619-5627.	7.8	21
43	Nature and spatial distribution of sulfur species in a sulfated barium-based commercial lean NOx trap catalyst. Catalysis Today, 2010, 151, 354-361.	4.4	22
44	Deactivation of accelerated engine-aged and field-aged Feâ€“zeolite SCR catalysts. Catalysis Today, 2010, 151, 257-265.	4.4	30
45	Study of the Theoretical Potential of Thermochemical Exhaust Heat Recuperation for Internal Combustion Engines. Energy & Fuels, 2010, 24, 1529-1537.	5.1	83
46	NOx storage and reduction in model lean NOx trap catalysts studied by in situ DRIFTS. Applied Catalysis B: Environmental, 2009, 91, 329-338.	20.2	69
47	Microkinetic modeling of lean NOx trap chemistry under reducing conditions. Catalysis Today, 2008, 136, 104-120.	4.4	33
48	Sulfur and temperature effects on the spatial distribution of reactions inside a lean NOx trap and resulting changes in global performance. Catalysis Today, 2008, 136, 173-182.	4.4	55
49	Sulfation of potassium-based lean NOx trap while cycling between lean and rich conditions. Catalysis Today, 2008, 136, 164-172.	4.4	13
50	Slow Heterogeneous Charge Transfer Kinetics for the ClO2-/ClO2Redox Couple at Platinum, Gold, and Carbon Electrodes. Evidence for Nonadiabatic Electron Transfer. Journal of Physical Chemistry A, 1999, 103, 10461-10469.	2.5	20
51	Hydrocarbon Fouling of SCR During PCCI Combustion. SAE International Journal of Engines, 0, 5, 947-957.	0.4	5
52	Ammonia Generation over TWC for Passive SCR NO_X Control for Lean Gasoline Engines. SAE International Journal of Engines, 0, 7, 1235-1243.	0.4	23
53	Negative Valve Overlap Reforming Chemistry in Low-Oxygen Environments. SAE International Journal of Engines, 0, 7, 418-433.	0.4	40
54	Selective Catalytic Reduction of Oxides of Nitrogen with Ethanol/Gasoline Blends over a Silver/Alumina Catalyst in Lean Gasoline Engine Exhaust. , 0, , .		1

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55	Ammonia Generation and Utilization in a Passive SCR (TWC+SCR) System on Lean Gasoline Engine. SAE International Journal of Engines, 0, 9, 1289-1295.	0.4	27
56	Effects of NO_X Storage Component on Ammonia Formation in TWC for Passive SCR NO_X Control inÂLean Gasoline Engines. , 0, , .		7
57	Performance Comparison of LPG and Gasoline in an Engine Configured for EGR-Loop Catalytic Reforming. , 0, , .		0