

A Review on Diesel Soot Emission, its Effect and Control

Bulletin of Chemical Reaction Engineering and Catalysis
5, 69-86

DOI: [10.9767/bcrec.5.2.794.69-86](https://doi.org/10.9767/bcrec.5.2.794.69-86)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Applications and Preparation Methods of Copper Chromite Catalysts: A Review. Bulletin of Chemical Reaction Engineering and Catalysis, 2011, 6, 63-113.	0.5	54
2	Experimental Study the Influence of EP Antiwear Additive on Particle Emissions in Diesel Engines. , 0, , .		6
3	Research Progress on Control Technology of Diesel Engine NO _x and PM Emissions. Advanced Materials Research, 2014, 1008-1009, 1016-1021.	0.3	2
4	A Radical Rethink on Soot Containment from Auto-Rickshaw Exhausts. Advanced Materials Research, 0, 911, 383-387.	0.3	0
5	Experimental study on filtration and continuous regeneration of a particulate filter system for heavy-duty diesel engines. Journal of Environmental Sciences, 2014, 26, 2434-2439.	3.2	45
6	The role of non-thermal plasma technique in NO _x treatment: A review. Renewable and Sustainable Energy Reviews, 2014, 40, 886-901.	8.2	133
7	Review of the state-of-the-art of exhaust particulate filter technology in internal combustion engines. Journal of Environmental Management, 2015, 154, 225-258.	3.8	337
8	Atomic layer deposition of cerium oxide for potential use in diesel soot combustion. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2016, 34, .	0.9	9
9	Correlations between physicochemical properties of emitted diesel particulate matter and its reactivity. Combustion and Flame, 2016, 167, 39-51.	2.8	60
10	In Situ Generation of Radical Coke and the Role of Coke-Catalyst Contact on Coke Oxidation. Industrial & Engineering Chemistry Research, 2016, 55, 5271-5278.	1.8	19
11	Formation and Oxidation/Gasification of Carbonaceous Deposits: A Review. Industrial & Engineering Chemistry Research, 2016, 55, 9760-9818.	1.8	82
12	Effect of injection strategy on smoothness, emissions and soot characteristics of PCCI-conventional diesel mode transition. Applied Thermal Engineering, 2016, 93, 1033-1042.	3.0	45
13	Laccase oxidation and removal of toxicants released during combustion processes. Chemosphere, 2016, 144, 652-660.	4.2	14
14	The effect of combustion management on diesel engine emissions fueled with biodiesel-diesel blends. Renewable and Sustainable Energy Reviews, 2017, 73, 307-331.	8.2	101
15	Comparative analysis of soot formation processes of diesel and ABE (Acetone-Butanol-Ethanol) based on CFD coupling with phenomenological soot model. Fuel, 2017, 203, 380-392.	3.4	13
16	Investigation of microalgae HTL fuel effects on diesel engine performance and exhaust emissions using surrogate fuels. Energy Conversion and Management, 2017, 152, 186-200.	4.4	45
17	3DOM SiO ₂ -Supported Different Alkali Metals-Modified MnO _x Catalysts: Preparation and Catalytic Performance for Soot combustion. ChemistrySelect, 2017, 2, 10176-10185.	0.7	17
18	Performance of biomorphic Silicon Carbide as particulate filter in diesel boilers. Journal of Environmental Management, 2017, 203, 907-919.	3.8	22

#	ARTICLE	IF	CITATIONS
19	Effect of Thermal Conductivity of Catalytic Materials on Soot Sensing Performance Based on a Combustion-type Sensor. <i>Chemistry Letters</i> , 2017, 46, 1304-1307.	0.7	0
20	Euro 6 Unregulated Pollutant Characterization and Statistical Analysis of After-Treatment Device and Driving-Condition Impact on Recent Passenger-Car Emissions. <i>Environmental Science & Technology</i> , 2017, 51, 5847-5855.	4.6	22
21	Catalytic oxidation of solid carbon and carbon monoxide over cerium-zirconium mixed oxides. <i>AIChE Journal</i> , 2017, 63, 725-738.	1.8	23
22	Evaluating the Soot Handling Performance of Diesel Engine Oils through Optimized Engine Testing Protocol. , 0, , .		0
23	Sulfur dioxide-tolerant strontium chromate for the catalytic oxidation of diesel particulate matter. <i>Catalysis Science and Technology</i> , 2018, 8, 1712-1721.	2.1	11
24	Analysis of real driving gaseous emissions from light-duty diesel vehicles. <i>Transportation Research, Part D: Transport and Environment</i> , 2018, 65, 485-499.	3.2	37
25	Catalytic Performance of Ag ₂ O and Ag Doped CeO ₂ Prepared by Atomic Layer Deposition for Diesel Soot Oxidation. <i>Coatings</i> , 2018, 8, 237.	1.2	19
26	Effect of acetone-butanol-ethanol addition to diesel on the soot reactivity. <i>Fuel</i> , 2018, 226, 555-563.	3.4	34
27	Effects of DOC and CDPF Catalyst Composition on Emission Characteristics of Light-Duty Diesel Engine with DOC + CDPF + SCR System. , 0, , .		10
28	A comprehensive review on the environmental impacts of diesel/biodiesel additives. <i>Energy Conversion and Management</i> , 2018, 174, 579-614.	4.4	257
29	Influence of Alternate Fuels on the Performance and Emission from Internal Combustion Engines and Soot Particle Collection Using Thermophoretic Sampler: A Comprehensive Review. <i>Waste and Biomass Valorization</i> , 2019, 10, 2801-2823.	1.8	15
30	Simulation on soot deposition in in-wall and on-wall catalyzed diesel particulate filters. <i>Catalysis Today</i> , 2019, 332, 89-93.	2.2	25
31	Vibration Analysis on Palm Oil Methyl Ester Biodiesel as a Fuel with The Additional of Butanol. <i>Journal of Physics: Conference Series</i> , 2019, 1262, 012012.	0.3	2
32	Thermal analysis of nano-copper on eliminating sulfide and particulate matter from diesel engines. <i>Materials Research Express</i> , 2019, 6, 055504.	0.8	2
33	Effect of urbanization on the micronucleus frequency in birds from forest fragments. <i>Ecotoxicology and Environmental Safety</i> , 2019, 171, 631-637.	2.9	14
34	An Analysis of Turbulent Mixing Effects on the Soot Formation in High Pressure n-dodecane Sprays. <i>Flow, Turbulence and Combustion</i> , 2019, 103, 605-624.	1.4	12
35	Chemical composition of diesel particulate matter and its control. <i>Catalysis Reviews - Science and Engineering</i> , 2019, 61, 447-515.	5.7	20
36	Sensitivity of Nitrate Aerosol Production to Vehicular Emissions in an Urban Street. <i>Atmosphere</i> , 2019, 10, 212.	1.0	12

#	ARTICLE	IF	CITATIONS
37	Technical barriers and their solutions for deployment of HCCI engine technologies – a review. International Journal of Ambient Energy, 2021, 42, 1922-1935.	1.4	10
38	Recycling of hazardous diesel soot particles into a high performance solar evaporation device. Applied Surface Science, 2019, 487, 951-961.	3.1	22
39	Synthesis, morphological, structural and topological characteristics of carbon nanosphere derived from Iraqi diesel. Journal of Physics: Conference Series, 2019, 1294, 052069.	0.3	2
40	The effect of advancing injection timing on combustion characteristics using stationary diesel engine with 30% water in diesel emulsion fuel. , 2019, , .		1
42	A kinetic model for SCR coated particulate filters – Effect of ammonia-soot interactions. Applied Catalysis B: Environmental, 2019, 241, 66-80.	10.8	14
43	Highly porous hybrid particle-fibre ceramic composite materials for use as diesel particulate filters. Journal of the European Ceramic Society, 2020, 40, 542-551.	2.8	12
44	Cement-based diesel exhaust emission soot coatings for the removal of organic pollutants from water. Construction and Building Materials, 2020, 234, 117377.	3.2	15
45	Study on emission and particulate matter characteristics from diesel engine fueled with n-pentanol/Fischer-Tropsch diesel. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 0, , 1-17.	1.2	4
46	The Permeability of Novel Hybrid Fiber Composite Material for Use as Diesel Particulate Filters. Advanced Engineering Materials, 2020, 22, 2000562.	1.6	1
47	Review of the regulations and techniques to eliminate toxic emissions from diesel engine cars. Science of the Total Environment, 2020, 748, 141249.	3.9	53
48	Experimental Analysis and Energy Balance on Thermal Barrier-Coated Piston Diesel Engine Using Biodiesel. Journal of the Institution of Engineers (India): Series C, 2020, 101, 1015-1026.	0.7	3
49	Pollutant Emissions and Combustion Efficiency Assessment of Engines Using Biodiesel. Applied Sciences (Switzerland), 2020, 10, 8646.	1.3	7
50	New biomorphic filters to face upcoming particulate emissions policies: A review of the FIL-BIO-DIESEL project. Energy, 2020, 201, 117577.	4.5	5
51	Comprehensive Review of the Impact of 2,5-Dimethylfuran and 2-Methylfuran on Soot Emissions: Experiments in Diesel Engines and at Laboratory-Scale. Energy & Fuels, 2020, 34, 6598-6623.	2.5	21
52	Synthesis and Characterization of Bismuth-Cerium Oxides for the Catalytic Oxidation of Diesel Soot. Materials, 2020, 13, 1369.	1.3	9
53	A novel technique for production of paint from the diesel exhaust soot. AIP Conference Proceedings, 2020, , .	0.3	0
54	Real-world gaseous and particulate emissions from Euro IV to VI medium duty diesel trucks. Science of the Total Environment, 2020, 731, 139137.	3.9	23
55	Enhancement of the Hydrothermal Stability of $\text{WO}_3/\text{Ce}_{0.68}\text{Zr}_{0.32}\text{O}_2$ Catalyst by Silica Modification for NH_3 -SCR. ACS Applied Energy Materials, 2020, 3, 1161-1170.	2.5	19

#	ARTICLE	IF	CITATIONS
56	Elucidating the chemical pathways responsible for the sooting tendency of 1 and 2-phenylethanol. Proceedings of the Combustion Institute, 2021, 38, 1327-1334.	2.4	7
57	Hexanol: A renewable low reactivity fuel for RCCI combustion. Fuel, 2021, 286, 119294.	3.4	8
58	Ce-Mn oxides synthesized with citric acid on ceramic papers used as diesel particulate filters. Catalysis Today, 2022, 383, 277-286.	2.2	15
59	Applying the handprint approach to assess the air pollutant reduction potential of paraffinic renewable diesel fuel in the car fleet of the city of Helsinki. Journal of Cleaner Production, 2021, 290, 125786.	4.6	7
60	Chemical synthesis and evaluation of Co ₃ O ₄ /Ce _{0.9} Zr _{0.05} Y _{0.05} O _{2-δ} mixed oxides for the catalytic-assisted combustion of soot. Chemical Engineering Science, 2021, 234, 116443.	1.9	5
61	Experimental study of a string-based counterflow wet electrostatic precipitator for collection of fine and ultrafine particles. Journal of the Air and Waste Management Association, 2021, 71, 851-865.	0.9	19
62	Critical insights into the effects of plastic pyrolysis oil on emission and performance characteristics of CI engine. Environmental Science and Pollution Research, 2021, 28, 44598-44621.	2.7	13
63	A Review on the Impact of SO ₂ on the Oxidation of NO, Hydrocarbons, and CO in Diesel Emission Control Catalysis. ACS Catalysis, 2021, 11, 12446-12468.	5.5	36
64	Experimental Study on Diesel Engine Emission Characteristics Based on Different Exhaust Pipe Coating Schemes. Micromachines, 2021, 12, 1155.	1.4	0
65	Oxidation of soot over supported RuRe nanoparticles prepared by the microwave-polyol method. Reaction Kinetics, Mechanisms and Catalysis, 2021, 134, 221-242.	0.8	3
66	Turning a negative into a positive: Trends, guidelines and challenges of developing multifunctional non-wettable coatings based on industrial soot wastes. Fuel, 2021, 301, 121068.	3.4	13
67	Comparative analysis of non-exhaust airborne particles from electric and internal combustion engine vehicles. Journal of Hazardous Materials, 2021, 420, 126626.	6.5	31
68	Role of Diesel Particulate Filter to Meet Bharat Stage-VI Emission Norms in India. Energy, Environment, and Sustainability, 2020, , 215-228.	0.6	3
69	Isotopic study of the La _{0.7} Ag _{0.3} MnO ₃ perovskite-catalyzed soot oxidation in presence of NO. Applied Catalysis A: General, 2020, 599, 117611.	2.2	13
70	New Experiment of Diesel Exhaust Treatment by Atmospheric Pressure Plasma-Wood Fiber Combination. Catalysts, 2020, 10, 577.	1.6	6
71	Combustion and Emission Characteristics of a Diesel Engine Operating with Varying Equivalence Ratio and Compression Ratio - A CFD Simulation. , 2020, 01, 101-110.		1
72	Phy-chemical Attributes of Nano-scale V ₂ O ₅ /TiO ₂ Catalyst and Its™ Effect on Soot Oxidation. Bulletin of Chemical Reaction Engineering and Catalysis, 2016, 11, 161.	0.5	2
73	Research on the liquid thermal conductivity of three alternative fuels: Tetrahydrofuran, 2-methylfuran and 2,5- dimethylfuran. Fluid Phase Equilibria, 2022, 551, 113288.	1.4	2

#	ARTICLE	IF	CITATIONS
74	DETECTION OF SOOT PARTICLES USING A RESISTIVE TRANSDUCER BASED ON THERMOPHORESIS. Environmental Engineering and Management Journal, 2014, 13, 2253-2259.	0.2	0
75	Effect of Preparation Method and Calcination Temperature on LaCoO ₃ Perovskite Catalyst for Diesel Soot Oxidation. Canadian Chemical Transactions, 0, , 95-107.	0.2	1
76	Investigation on effects of the exhaust emission characteristics of diesel engine fuelled with mahua oil methyl esters and its blends with diesel. International Journal of Automotive Engineering and Technologies, 2020, 9, 20-28.	0.3	1
77	Atmospheric Pressure Plasma for Diesel Particulate Matter Treatment: A Review. Catalysts, 2021, 11, 29.	1.6	4
78	Compression ignition engine - sources of pollution. IOP Conference Series: Materials Science and Engineering, 0, 997, 012148.	0.3	0
79	Carbon Nanomaterials Derived from Black Carbon Soot: A Review of Materials and Applications. ACS Applied Nano Materials, 2021, 4, 12825-12844.	2.4	26
80	Cerium-zirconium mixed oxide synthesized by sol-gel method and its effect on the oxygen vacancy and specific surface area. Journal of Solid State Chemistry, 2022, 307, 122752.	1.4	4
81	Multi-objective optimization of a diesel engine fueled with different fuel types containing additives using grey-based Taguchi approach. Environmental Science and Pollution Research, 2022, 29, 30277-30284.	2.7	5
82	A review on morphology, nanostructure, chemical composition, and number concentration of diesel particulate emissions. Environmental Science and Pollution Research, 2022, 29, 15432-15489.	2.7	16
83	Implementation of Sustainable Reforms in the Indian Automotive Industry: From Vehicle Emissions Perspective. Cogent Engineering, 2022, 9, .	1.1	11
84	Exhaust Gases from Skidder ECOTRAC 140 V Diesel Engine. Forests, 2022, 13, 272.	0.9	3
85	Study on the Emission Characteristics of Urban Buses at Different Emission Standards Fueled with Biodiesel Blends. ACS Omega, 2022, 7, 7213-7222.	1.6	5
86	Modeling of Regeneration Dynamics in Gasoline Particulate Filters and Sensitivity Analysis of Numerical Solutions. , 0, , .		1
87	Passive Regeneration Characteristics of a DOC/Asymmetric-CDPF System for Heavy-Duty Diesel Engines. International Journal of Automotive Technology, 2022, 23, 471-479.	0.7	3
88	Review of dual-fuel combustion in the compression-ignition engine: Spray, combustion, and emission. Energy, 2022, 250, 123778.	4.5	41
89	Plasma-Ozone Treatment of Air Supply on Performance and Emissions of Diesel Engine. IOP Conference Series: Earth and Environmental Science, 2021, 927, 012026.	0.2	1
90	Remote areas and islands power generation: A review on diesel engine performance and emission improvement techniques. Energy Conversion and Management, 2022, 260, 115614.	4.4	24
91	NUMERICAL INVESTIGATION OF DUCTED FUEL INJECTION WITH DIFFERENT DUCT SIZES. Atomization and Sprays, 2022, 32, 1-23.	0.3	3

#	ARTICLE	IF	CITATIONS
92	TiO ₂ Supported RuRe Nanocatalysts for Soot Oxidation: Effect of Re and the Support Nature. <i>Catalysis Letters</i> , 0, , .	1.4	0
93	Synergistic effect of swirl flow and prechamber jet on the combustion of a natural gas-diesel dual-fuel marine engine. <i>Fuel</i> , 2022, 325, 124935.	3.4	8
94	The Effect of Methanol-Dodecanol Addition on Performance and Smoke Emission in a CI Engine with Diesel Fuel. <i>International Journal of Automotive Science and Technology</i> , 2022, 6, 207-213.	0.5	5
95	An in situ exploratory analysis of diesel carsâ€™ emission: way forward on policy evaluation. <i>Environmental Science and Pollution Research</i> , 0, , .	2.7	3
96	Good and bad get together: Inactivation of SARS-CoV-2 in particulate matter pollution from different fuels. <i>Science of the Total Environment</i> , 2022, 844, 157241.	3.9	6
97	Fuel consumption by agricultural machinery: a review of pollutant emission control technologies. <i>Ciencia Rural</i> , 2023, 53, .	0.3	1
98	Research progress on preparation of 3DOM-based oxide catalysts and their catalytic performances for the combustion of diesel soot particles. <i>Applied Catalysis B: Environmental</i> , 2022, 319, 121946.	10.8	17
99	Zinc and phosphorus poisoning tolerance of Cu-SSZ-13 and Ce-Cu-SSZ-13 in the catalytic reduction of nitrogen oxides. <i>Journal of Colloid and Interface Science</i> , 2023, 629, 243-255.	5.0	11
100	Effects of different main injection timings and injection pressures on combustion and emissions of diesel-THF-ethanol blended fuel. <i>International Journal of Green Energy</i> , 2023, 20, 1352-1362.	2.1	0
101	Soot formation from n-heptane counterflow diffusion flames: Two-dimensional and oxygen effects. <i>Combustion and Flame</i> , 2022, , 112441.	2.8	4
102	The Relationship between Elemental Carbon and Volatile Organic Compounds in the Air of an Underground Metal Mine. <i>Atmosphere</i> , 2022, 13, 1935.	1.0	1
103	Manganese-Iron Mixed Oxides of Spinel Structure as Soot Combustion Catalysts. <i>Current Catalysis</i> , 2023, 12, .	0.5	0
104	Role of Ce in promoting low-temperature performance and hydrothermal stability of Ce/Cu-SSZ-13 in the selective catalytic reduction of NO _x with NH ₃ . <i>Separation and Purification Technology</i> , 2023, 315, 123679.	3.9	12
105	Impacts of particles released from vehicles on environment and health. <i>Tribology International</i> , 2023, 184, 108417.	3.0	8
106	Sooting tendency of isopropanol-butanol-ethanol (IBE)/diesel surrogate blends in laminar diffusion flames. <i>Combustion and Flame</i> , 2023, 250, 112630.	2.8	6
107	Pond Sediments Reveal the Increasing Importance of Road Runoff as a Source of Metal Contamination in Industrialized Urban Environments Downwind of Pittsburgh, Pennsylvania (USA). <i>ACS ES&T Water</i> , 2023, 3, 650-658.	2.3	0
108	Catalytic Soot Combustionâ€™ General Concepts and Alkali Promotion. <i>ACS Catalysis</i> , 2023, 13, 3395-3418.	5.5	15
109	A Review on Recent Developments of RCCI Engines Operated with Alternative Fuels. <i>Energies</i> , 2023, 16, 3192.	1.6	9

#	ARTICLE	IF	CITATIONS
---	---------	----	-----------