

# Randy L Vander Wal

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9815235/publications.pdf>

Version: 2024-02-01

32  
papers

1,563  
citations

567281

15  
h-index

454955

30  
g-index

32  
all docs

32  
docs citations

32  
times ranked

1390  
citing authors

#	ARTICLE	IF	CITATIONS
1	Soot oxidation. <i>Combustion and Flame</i> , 2003, 134, 1-9.	5.2	435
2	Soot nanostructure: dependence upon synthesis conditions. <i>Combustion and Flame</i> , 2004, 136, 129-140.	5.2	344
3	Fingerprinting soot (towards source identification): Physical structure and chemical composition. <i>Journal of Aerosol Science</i> , 2010, 41, 108-117.	3.8	120
4	XPS Analysis of Combustion Aerosols for Chemical Composition, Surface Chemistry, and Carbon Chemical State. <i>Analytical Chemistry</i> , 2011, 83, 1924-1930.	6.5	113
5	Carbon Nanostructure Examined by Lattice Fringe Analysis of High-Resolution Transmission Electron Microscopy Images. <i>Applied Spectroscopy</i> , 2004, 58, 230-237.	2.2	99
6	A Laboratory Comparison of Emission Factors, Number Size Distributions, and Morphology of Ultrafine Particles from 11 Different Household Cookstove-Fuel Systems. <i>Environmental Science &amp; Technology</i> , 2017, 51, 6522-6532.	10.0	59
7	Reconciliation of carbon oxidation rates and activation energies based on changing nanostructure. <i>Carbon</i> , 2016, 98, 545-556.	10.3	58
8	Impact of rail pressure and biodiesel fueling on the particulate morphology and soot nanostructures from a common-rail turbocharged direct injection diesel engine. <i>International Journal of Engine Research</i> , 2016, 17, 193-208.	2.3	35
9	Effect of Soot Structure Evolution from Commercial Jet Engine Burning Petroleum Based JP-8 and Synthetic HRJ and FT Fuels. <i>Energy &amp; Fuels</i> , 2013, 27, 4946-4958.	5.1	32
10	Impact of Biofuel Blends on Black Carbon Emissions from a Gas Turbine Engine. <i>Energy &amp; Fuels</i> , 2020, 34, 4958-4966.	5.1	30
11	Pulsed laser annealing of carbon black. <i>Carbon</i> , 2017, 124, 380-390.	10.3	26
12	Characterization of emissions and residues from simulations of the Deepwater Horizon surface oil burns. <i>Marine Pollution Bulletin</i> , 2017, 117, 392-405.	5.0	25
13	NO <sub>2</sub> Oxidation Reactivity and Burning Mode of Diesel Particulates. <i>Topics in Catalysis</i> , 2016, 59, 686-694.	2.8	23
14	Predictive Model Development for Aviation Black Carbon Mass Emissions from Alternative and Conventional Fuels at Ground and Cruise. <i>Environmental Science &amp; Technology</i> , 2016, 50, 12048-12055.	10.0	22
15	Nanostructure changes in diesel soot during NO <sub>2</sub> → O <sub>2</sub> oxidation under diesel particulate filter-like conditions toward filter regeneration. <i>International Journal of Engine Research</i> , 2019, 20, 953-966.	2.3	19
16	Characterization of the particulate emissions from the BP Deepwater Horizon surface oil burns. <i>Marine Pollution Bulletin</i> , 2016, 107, 216-223.	5.0	16
17	Nanocarbon nanofluids: morphology and nanostructure comparisons. <i>Nanotechnology</i> , 2009, 20, 105702.	2.6	13
18	The role of fuel chemistry in dictating nanostructure evolution of soot toward source identification. <i>Aerosol Science and Technology</i> , 2020, 54, 66-78.	3.1	11

#	ARTICLE	IF	CITATIONS
19	Identification of Toxicity Parameters Associated with Combustion Produced Soot Surface Chemistry and Particle Structure by in Vitro Assays. <i>Biomedicines</i> , 2020, 8, 345.	3.2	11
20	An Investigation of Micro-Hollow Cathode Glow Discharge Generated Optical Emission Spectroscopy for Hydrocarbon Detection and Differentiation. <i>Applied Spectroscopy</i> , 2014, 68, 649-656.	2.2	9
21	Informing TiRe-LII assumptions for soot nanostructure and optical properties for estimation of soot primary particle diameter. <i>Applied Physics B: Lasers and Optics</i> , 2018, 124, 1.	2.2	9
22	Microwave-Driven Plasma-Mediated Methane Cracking: Product Carbon Characterization. <i>Journal of Carbon Research</i> , 2018, 4, 61.	2.7	8
23	Application and validation of a line-source dispersion model to estimate small scale traffic-related particulate matter concentrations across the conterminous US. <i>Air Quality, Atmosphere and Health</i> , 2018, 11, 741-754.	3.3	7
24	Effect of Fuel Composition on Carbon Black Formation Pathways. <i>Applied Sciences (Switzerland)</i> , 2022, 12, 2569.	2.5	7
25	Experimental Studies of High Efficiency Combustion With Fumigation of Dimethyl Ether and Propane Into Diesel Engine Intake Air. <i>Journal of Engineering for Gas Turbines and Power</i> , 2015, 137, .	1.1	6
26	Soot differentiation by laser derivatization. <i>Aerosol Science and Technology</i> , 2019, 53, 207-229.	3.1	6
27	Characterization and Hazard Identification of Respirable Cement and Concrete Dust from Construction Activities. <i>International Journal of Environmental Research and Public Health</i> , 2021, 18, 10126.	2.6	6
28	Spectroscopic characterization and comparison between biologics, organics and mineral compounds using pulsed micro-hollow glow discharge. <i>Journal of Analytical Atomic Spectrometry</i> , 2014, 29, 1791-1798.	3.0	5
29	Microwave Plasma Formation of Nanographene and Graphitic Carbon Black. <i>Journal of Carbon Research</i> , 2020, 6, 70.	2.7	4
30	Role of Estrogen on Alveolar Macrophage Polarization in Response to Particulate Matter Exposure. <i>FASEB Journal</i> , 2019, 33, 735.2.	0.5	3
31	Investigation of subsequent deposit growth on pre-existing lubricant deposits: a substitutional growth model. <i>Lubrication Science</i> , 2016, 28, 267-280.	2.1	1
32	Carbon Composites—Graphene-Oxide-Catalyzed Sugar Graphitization. <i>Journal of Carbon Research</i> , 2022, 8, 15.	2.7	1