# Gavin McMeeking

List of Publications by Year
in descending order



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|---|---|---|---|
| 71 papers | 6,492 citations | 66234 42 h-index | 88477 70 g-index |
| 90 all docs | 90 docs citations | 90 times ranked | 5812 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Emissions of trace gases and aerosols during the open combustion of biomass in the laboratory. Journal of Geophysical Research, 2009, 114, . | 3.3 | 336 |
| 2 | Chemical and physical transformations of organic aerosol from the photo-oxidation of open biomass burning emissions in an environmental chamber. Atmospheric Chemistry and Physics, 2011, 11, 7669-7686. | 1.9 | 329 |
| 3 | Sea spray aerosol as a unique source of ice nucleating particles. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5797-5803. | 3.3 | 323 |
| 4 | Integrating laboratory and field data to quantify the immersion freezing ice nucleation activity of mineral dust particles. Atmospheric Chemistry and Physics, 2015, 15, 393-409. | 1.9 | 315 |
| 5 | Evolution of trace gases and particles emitted by a chaparral fire in California. Atmospheric Chemistry and Physics, 2012, 12, 1397-1421. | 1.9 | 300 |
| 6 | Absorptivity of brown carbon in fresh and photo-chemically aged biomass-burning emissions. Atmospheric Chemistry and Physics, 2013, 13, 7683-7693. | 1.9 | 297 |
| 7 | General overview: European Integrated project on Aerosol Cloud Climate and Air Quality interactions (EUCAARI) â€“ integrating aerosol research from nano to global scales. Atmospheric Chemistry and Physics, 2011, 11, 13061-13143. | 1.9 | 278 |
| 8 | Towards closing the gap between hygroscopic growth and activation for secondary organic aerosol: Part 1 â€“ Evidence from measurements. Atmospheric Chemistry and Physics, 2009, 9, 3987-3997. | 1.9 | 191 |
| 9 | A method for smoke marker measurements and its potential application for determining the contribution of biomass burning from wildfires and prescribed fires to ambient PM<sub>2.5</sub> organic carbon. Journal of Geophysical Research, 2008, 113, . | 3.3 | 186 |
| 10 | Characterizing elemental, equivalent black, and refractory black carbon aerosol particles: a review of techniques, their limitations and uncertainties. Analytical and Bioanalytical Chemistry, 2014, 406, 99-122. | 1.9 | 186 |
| 11 | Airborne measurements of the spatial distribution of aerosol chemical composition across Europe and evolution of the organic fraction. Atmospheric Chemistry and Physics, 2010, 10, 4065-4083. | 1.9 | 184 |
| 12 | Measurements of reactive trace gases and variable O<sub>3</sub> formation rates in some South Carolina biomass burning plumes. Atmospheric Chemistry and Physics, 2013, 13, 1141-1165. | 1.9 | 170 |
| 13 | Black carbon measurements in the boundary layer over western and northern Europe. Atmospheric Chemistry and Physics, 2010, 10, 9393-9414. | 1.9 | 155 |
| 14 | Biomass burning smoke aerosol properties measured during Fire Laboratory at Missoula Experiments (FLAME). Journal of Geophysical Research, 2010, 115, . | 3.3 | 150 |
| 15 | Towards closing the gap between hygroscopic growth and activation for secondary organic aerosol â€“ Part 2: Theoretical approaches. Atmospheric Chemistry and Physics, 2009, 9, 3999-4009. | 1.9 | 130 |
| 16 | Ice nuclei emissions from biomass burning. Journal of Geophysical Research, 2009, 114, . | 3.3 | 125 |
| 17 | South East Pacific atmospheric composition and variability sampled along 20Â° S during VOCALS-REx. Atmospheric Chemistry and Physics, 2011, 11, 5237-5262. | 1.9 | 119 |
| 18 | Aerosol emissions from prescribed fires in the United States: A synthesis of laboratory and aircraft measurements. Journal of Geophysical Research D: Atmospheres, 2014, 119, 11,826-11,849. | 1.2 | 116 |

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|---|---|---|---|
| 19 | Hygroscopic growth behavior of a carbon-dominated aerosol in Yosemite National Park. Atmospheric Environment, 2005, 39, 1393-1404. | 1.9 | 113 |
| 20 | Enhancement of the aerosol direct radiative effect by semi-volatile aerosol components: airborne measurements in North-Western Europe. Atmospheric Chemistry and Physics, 2010, 10, 8151-8171. | 1.9 | 105 |
| 21 | Water uptake and chemical composition of fresh aerosols generated in open burning of biomass. Atmospheric Chemistry and Physics, 2010, 10, 5165-5178. | 1.9 | 104 |
| 22 | Influences on the fraction of hydrophobic and hydrophilic black carbon in the atmosphere. Atmospheric Chemistry and Physics, 2011, 11, 5099-5112. | 1.9 | 101 |
| 23 | Light Absorption by Ambient Black and Brown Carbon and its Dependence on Black Carbon Coating State for Two California, USA, Cities in Winter and Summer. Journal of Geophysical Research D: Atmospheres, 2019, 124, 1550-1577. | 1.2 | 99 |
| 24 | The mass and number size distributions of black carbon aerosol over Europe. Atmospheric Chemistry and Physics, 2013, 13, 4917-4939. | 1.9 | 96 |
| 25 | Investigating the links between ozone and organic aerosol chemistry in a biomass burning plume from a prescribed fire in California chaparral. Atmospheric Chemistry and Physics, 2015, 15, 6667-6688. | 1.9 | 96 |
| 26 | Airborne observations of regional variation in fluorescent aerosol across the United States. Journal of Geophysical Research D: Atmospheres, 2015, 120, 1153-1170. | 1.2 | 93 |
| 27 | Strong impact of wildfires on the abundance and aging of black carbon in the lowermost stratosphere. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E11595-E11603. | 3.3 | 89 |
| 28 | Black carbon aerosol mixing state, organic aerosols and aerosol optical properties over the United Kingdom. Atmospheric Chemistry and Physics, 2011, 11, 9037-9052. | 1.9 | 86 |
| 29 | High Relative Humidity as a Trigger for Widespread Release of Ice Nuclei. Aerosol Science and Technology, 2014, 48, i-v. | 1.5 | 80 |
| 30 | Overview of the synoptic and pollution situation over Europe during the EUCAARI-LONGREX field campaign. Atmospheric Chemistry and Physics, 2011, 11, 1065-1082. | 1.9 | 79 |
| 31 | Observations and analysis of organic aerosol evolution in some prescribed fire smoke plumes. Atmospheric Chemistry and Physics, 2015, 15, 6323-6335. | 1.9 | 78 |
| 32 | Characteristics of atmospheric ice nucleating particles associated with biomass burning in the US: Prescribed burns and wildfires. Journal of Geophysical Research D: Atmospheres, 2014, 119, 10458-10470. | 1.2 | 73 |
| 33 | Revisiting particle dry deposition and its role in radiative effect estimates. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 26076-26082. | 3.3 | 73 |
| 34 | Deposition of reactive nitrogen during the Rocky Mountain Airborne Nitrogen and Sulfur (RoMANS) study. Environmental Pollution, 2010, 158, 862-872. | 3.7 | 71 |
| 35 | Intercomparison and closure calculations using measurements of aerosol species and optical properties during the Yosemite Aerosol Characterization Study. Journal of Geophysical Research, 2005, 110, n/a-n/a. | 3.3 | 69 |
| 36 | Impacts of nonrefractory material on light absorption by aerosols emitted from biomass burning. Journal of Geophysical Research D: Atmospheres, 2014, 119, 12,272. | 1.2 | 69 |

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|---|---|---|---|
| 37 | Hygroscopic properties of an organic-laden aerosol. Atmospheric Environment, 2005, 39, 4969-4982. | 1.9 | 62 |
| 38 | Studies of propane flame soot acting as heterogeneous ice nuclei in conjunction with single particle soot photometer measurements. Atmospheric Chemistry and Physics, 2011, 11, 9549-9561. | 1.9 | 58 |
| 39 | Smoke-impacted regional haze in California during the summer of 2002. Agricultural and Forest Meteorology, 2006, 137, 25-42. | 1.9 | 55 |
| 40 | Abundance of fluorescent biological aerosol particles at temperatures conducive to the formation of mixed-phase and cirrus clouds. Atmospheric Chemistry and Physics, 2016, 16, 8205-8225. | 1.9 | 50 |
| 41 | Airborne characterization of smoke marker ratios from prescribed burning. Atmospheric Chemistry and Physics, 2014, 14, 10535-10545. | 1.9 | 47 |
| 42 | Optical closure experiments for biomass smoke aerosols. Atmospheric Chemistry and Physics, 2010, 10, 9017-9026. | 1.9 | 45 |
| 43 | Seasonal and diurnal trends in black carbon properties and co-pollutants in Mexico City. Atmospheric Chemistry and Physics, 2015, 15, 9693-9709. | 1.9 | 45 |
| 44 | In situ measurements of trace gases, PM, and aerosol optical properties during the 2017 NW US wildfire smoke event. Atmospheric Chemistry and Physics, 2019, 19, 3905-3926. | 1.9 | 45 |
| 45 | Airborne measurements of trace gases and aerosols over the London metropolitan region. Atmospheric Chemistry and Physics, 2012, 12, 5163-5187. | 1.9 | 43 |
| 46 | Iceâ€nucleating particle emissions from biomass combustion and the potential importance of soot aerosol. Journal of Geophysical Research D: Atmospheres, 2016, 121, 5888-5903. | 1.2 | 42 |
| 47 | Observations of smoke-influenced aerosol during the Yosemite Aerosol Characterization Study: Size distributions and chemical composition. Journal of Geophysical Research, 2005, 110, . | 3.3 | 40 |
| 48 | Inter-comparison of black carbon measurement methods for simulated open biomass burning emissions. Atmospheric Environment, 2019, 206, 156-169. | 1.9 | 34 |
| 49 | Measured and modeled humidification factors of fresh smoke particles from biomass burning: role of inorganic constituents. Atmospheric Chemistry and Physics, 2010, 10, 6179-6194. | 1.9 | 33 |
| 50 | Organic aerosol emission ratios from the laboratory combustion of biomass fuels. Journal of Geophysical Research D: Atmospheres, 2014, 119, 12,850. | 1.2 | 31 |
| 51 | Measurements of Ice Nucleating Particles in Beijing, China. Journal of Geophysical Research D: Atmospheres, 2019, 124, 8065-8075. | 1.2 | 31 |
| 52 | Measurements of the impact of atmospheric aging on physical and optical properties of ambient black carbon particles in Los Angeles. Atmospheric Environment, 2016, 142, 496-504. | 1.9 | 30 |
| 53 | Aerosol physical, chemical and optical properties during the Rocky Mountain Airborne Nitrogen and Sulfur study. Atmospheric Environment, 2009, 43, 1932-1939. | 1.9 | 28 |
| 54 | Rapidly evolving ultrafine and fine mode biomass smoke physical properties: Comparing laboratory and field results. Journal of Geophysical Research D: Atmospheres, 2016, 121, 5750-5768. | 1.2 | 27 |

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|---|---|---|---|
| 55 | Direct Measurements of Dry and Wet Deposition of Black Carbon Over a Grassland. Journal of Geophysical Research D: Atmospheres, 2018, 123, 12,277. | 1.2 | 25 |
| 56 | Aerosol scattering and absorption during the EUCAARI-LONGREX flights of the Facility for Airborne Atmospheric Measurements (FAAM) BAe-146: can measurements and models agree?. Atmospheric Chemistry and Physics, 2012, 12, 7251-7267. | 1.9 | 24 |
| 57 | Aerosol Mass and Optical Properties, Smoke Influence on O<sub>3</sub>, and High NO<sub>3</sub> Production Rates in a Western U.S. City Impacted by Wildfires. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032791. | 1.2 | 24 |
| 58 | Nearâ€Surface Refractory Black Carbon Observations in the Atmosphere and Snow in the McMurdo Dry Valleys, Antarctica, and Potential Impacts of Foehn Winds. Journal of Geophysical Research D: Atmospheres, 2018, 123, 2877-2887. | 1.2 | 20 |
| 59 | Fates and spatial variations of accumulation mode particles in a multi-zone indoor environment during the HOMEChem campaign. Environmental Sciences: Processes and Impacts, 2021, 23, 1029-1039. | 1.7 | 20 |
| 60 | Observations of smoke-influenced aerosol during the Yosemite Aerosol Characterization Study: 2. Aerosol scattering and absorbing properties. Journal of Geophysical Research, 2005, 110, . | 3.3 | 17 |
| 61 | A New Method to Determine the Number Concentrations of Refractory Black Carbon Ice Nucleating Particles. Aerosol Science and Technology, 2014, 48, 1264-1275. | 1.5 | 14 |
| 62 | Development of a new correction algorithm applicable to any filter-based absorption photometer. Atmospheric Measurement Techniques, 2020, 13, 2865-2886. | 1.2 | 14 |
| 63 | Airborne observations of aerosol microphysical properties and particle ageing processes in the troposphere above Europe. Atmospheric Chemistry and Physics, 2012, 12, 11533-11554. | 1.9 | 13 |
| 64 | A novel inversion method to determine the mass distribution of non-refractory coatings on refractory black carbon using a centrifugal particle mass analyzer and single particle soot photometer. Aerosol Science and Technology, 2018, 52, 567-578. | 1.5 | 13 |
| 65 | Using High Time Resolution Aerosol and Number Size Distribution Measurements to Estimate Atmospheric Extinction. Journal of the Air and Waste Management Association, 2009, 59, 1049-1060. | 0.9 | 11 |
| 66 | Performance Assessment of Portable Optical Particle Spectrometer (POPS). Sensors, 2020, 20, 6294. | 2.1 | 11 |
| 67 | Characterizing the evolution of physical properties and mixing state of black carbon particles: from near a major highway to the broader urban plume in Los Angeles. Atmospheric Chemistry and Physics, 2018, 18, 11991-12010. | 1.9 | 9 |
| 68 | Quantification of online removal of refractory black carbon using laser-induced incandescence in the single particle soot photometer. Aerosol Science and Technology, 2016, 50, 679-692. | 1.5 | 6 |
| 69 | Refractory black carbon at the Whistler Peak High Elevation Research Site â€“ Measurements and simulations. Atmospheric Environment, 2018, 181, 34-46. | 1.9 | 4 |
| 70 | Open-path, closed-path, and reconstructed aerosol extinction at a rural site. Journal of the Air and Waste Management Association, 2018, 68, 824-835. | 0.9 | 2 |
| 71 | Covering science as a Mass Media Fellow. Eos, 2006, 87, 116. | 0.1 | 0 |