

# Nobuhiro Moteki

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

87  
papers

4,010  
citations

30  
h-index

62  
g-index

99  
ext. papers

4,495  
ext. citations

4.7  
avg, IF

5.24  
L-index

| #  | Paper  | IF  | Citations |
|----|--|-----|-----------|
| 87 | Estimates of mass absorption cross sections of black carbon for filter-based absorption photometers in the Arctic. <i>Atmospheric Measurement Techniques</i> , <b>2021</b> , 14, 6723-6748   | 4   | 2         |
| 86 | Arctic black carbon during PAMARCMiP 2018 and previous aircraft experiments in spring. <i>Atmospheric Chemistry and Physics</i> , <b>2021</b> , 21, 15861-15881  | 6.8 | 0         |
| 85 | Corrigendum to Capabilities and limitations of the single-particle extinction and scattering method for estimating the complex refractive index and size-distribution of spherical and non-spherical submicron particles [JQSRT 243 (2020) 106811]. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , <b>2021</b> , 243, 107551 | 2.1 | 0         |
| 84 | Compositions and mixing states of aerosol particles by aircraft observations in the Arctic springtime, 2018. <i>Atmospheric Chemistry and Physics</i> , <b>2021</b> , 21, 3607-3626  | 6.8 | 5         |
| 83 | Measuring the complex forward-scattering amplitude of single particles by self-reference interferometry: CAS-v1 protocol. <i>Optics Express</i> , <b>2021</b> , 29, 20688-20714  | 3.3 | 3         |
| 82 | Seasonal Variation of Wet Deposition of Black Carbon at Ny-Lesund, Svalbard. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2021</b> , 126, e2020JD034110  | 4.4 | 2         |
| 81 | Studies on Arctic aerosols and clouds during the ArCS project. <i>Polar Science</i> , <b>2021</b> , 27, 100621   | 2.3 | 2         |
| 80 | How emissions uncertainty influences the distribution and radiative impacts of smoke from fires in North America. <i>Atmospheric Chemistry and Physics</i> , <b>2020</b> , 20, 2073-2097   | 6.8 | 31        |
| 79 | Changes in black carbon and PM in Tokyo in 2003-2017. <i>Proceedings of the Japan Academy Series B: Physical and Biological Sciences</i> , <b>2020</b> , 96, 122-129   | 4   | 3         |
| 78 | Abundances and Microphysical Properties of Light-Absorbing Iron Oxide and Black Carbon Aerosols Over East Asia and the Arctic. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2020</b> , 125, e2019JD032301  | 4.4 | 7         |
| 77 | Capabilities and limitations of the single-particle extinction and scattering method for estimating the complex refractive index and size-distribution of spherical and non-spherical submicron particles. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , <b>2020</b> , 243, 106811  | 2.1 | 6         |
| 76 | Concentrations and Size Distributions of Black Carbon in the Surface Snow of Eastern Antarctica in 2011. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2020</b> , 125, e2019JD030737  | 4.4 | 11        |
| 75 | Seasonal Trends of Atmospheric Ice Nucleating Particles Over Tokyo. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2020</b> , 125, e2020JD033658   | 4.4 | 7         |
| 74 | Seasonal Variation of Wet Deposition of Black Carbon in Arctic Alaska. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2020</b> , 125, e2019JD032240  | 4.4 | 10        |
| 73 | High Sensitivity of Arctic Black Carbon Radiative Effects to Subgrid Vertical Velocity in Aerosol Activation. <i>Geophysical Research Letters</i> , <b>2020</b> , 47, e2020GL088978  | 4.9 | 8         |
| 72 | Enhanced New Particle Formation Above the Marine Boundary Layer Over the Yellow Sea: Potential Impacts on Cloud Condensation Nuclei. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2020</b> , 125, e2019JD031448  | 4.4 | 9         |
| 71 | Accuracy of black carbon measurements by a filter-based absorption photometer with a heated inlet. <i>Aerosol Science and Technology</i> , <b>2019</b> , 53, 1079-1091   | 3.4 | 20        |

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| 70 | Observational constraint of in-cloud supersaturation for simulations of aerosol rainout in atmospheric models. <i>Npj Climate and Atmospheric Science</i> , <b>2019</b> , 2,   | 8    | 17 |
| 69 | Black Carbon and Inorganic Aerosols in Arctic Snowpack. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2019</b> , 124, 13325-13356   | 4.4  | 18 |
| 68 | Anthropogenic combustion iron as a complex climate forcer. <i>Nature Communications</i> , <b>2018</b> , 9, 1593  | 17.4 | 48 |
| 67 | Seasonal Progression of the Deposition of Black Carbon by Snowfall at Ny-Åesund, Spitsbergen. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2018</b> , 123, 997-1016  | 4.4  | 16 |
| 66 | Abundance of Light-Absorbing Anthropogenic Iron Oxide Aerosols in the Urban Atmosphere and Their Emission Sources. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2018</b> , 123, 8115                                       | 4.4  | 8  |
| 65 | Estimating Source Region Influences on Black Carbon Abundance, Microphysics, and Radiative Effect Observed Over South Korea. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2018</b> , 123, 13,527                           | 4.4  | 20 |
| 64 | Abundance and Emission Flux of the Anthropogenic Iron Oxide Aerosols From the East Asian Continental Outflow. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2018</b> , 123, 11,194-11,209                                   | 4.4  | 14 |
| 63 | Evaluation of ground-based black carbon measurements by filter-based photometers at two Arctic sites. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2017</b> , 122, 3544-3572   | 4.4  | 41 |
| 62 | Anthropogenic iron oxide aerosols enhance atmospheric heating. <i>Nature Communications</i> , <b>2017</b> , 8, 15329   | 7.4  | 43 |
| 61 | A key process controlling the wet removal of aerosols: new observational evidence. <i>Scientific Reports</i> , <b>2016</b> , 6, 34113  | 4.9  | 35 |
| 60 | Mixing states of light-absorbing particles measured using a transmission electron microscope and a single-particle soot photometer in Tokyo, Japan. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2016</b> , 121, 9153-9164 | 4.4  | 30 |
| 59 | Discrete dipole approximation for black carbon-containing aerosols in arbitrary mixing state: A hybrid discretization scheme. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , <b>2016</b> , 178, 306-314            | 2.1  | 14 |
| 58 | Detection of light-absorbing iron oxide particles using a modified single-particle soot photometer. <i>Aerosol Science and Technology</i> , <b>2016</b> , 50, 1-4  | 3.4  | 18 |
| 57 | Emission Regulations Altered the Concentrations, Origin, and Formation of Carbonaceous Aerosols in the Tokyo Metropolitan Area. <i>Aerosol and Air Quality Research</i> , <b>2016</b> , 16, 1603-1614                                    | 4.6  | 3  |
| 56 | Effects of wet deposition on the abundance and size distribution of black carbon in East Asia. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2016</b> , 121, 4691-4712  | 4.4  | 27 |
| 55 | Improved technique for measuring the size distribution of black carbon particles in liquid water. <i>Aerosol Science and Technology</i> , <b>2016</b> , 50, 242-254  | 3.4  | 29 |
| 54 | Hygroscopicity of materials internally mixed with black carbon measured in Tokyo. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2016</b> , 121, 362-381   | 4.4  | 15 |
| 53 | Theoretical analysis of a method to measure size distributions of solid particles in water by aerosolization. <i>Journal of Aerosol Science</i> , <b>2015</b> , 83, 25-31  | 4.3  | 6  |

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| 52 | An empirical correction factor for filter-based photo-absorption black carbon measurements. <i>Journal of Aerosol Science</i> , <b>2015</b> , 80, 86-97  | 4-3 | 6   |
| 51 | Analysis of the mixing state of airborne particles using a tandem combination of laser-induced fluorescence and incandescence techniques. <i>Journal of Aerosol Science</i> , <b>2015</b> , 87, 102-110  | 4-3 | 2   |
| 50 | Case study of absorption aerosol optical depth closure of black carbon over the East China Sea. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2014</b> , 119, 122-136   | 4-4 | 15  |
| 49 | Identification by single-particle soot photometer of black carbon particles attached to other particles: Laboratory experiments and ground observations in Tokyo. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2014</b> , 119, 1031-1043             | 4-4 | 39  |
| 48 | Global budget and radiative forcing of black carbon aerosol: Constraints from pole-to-pole (HIPPO) observations across the Pacific. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2014</b> , 119, 195-206   | 4-4 | 153 |
| 47 | Modelled black carbon radiative forcing and atmospheric lifetime in AeroCom Phase II constrained by aircraft observations. <i>Atmospheric Chemistry and Physics</i> , <b>2014</b> , 14, 12465-12477  | 6.8 | 135 |
| 46 | Wet deposition of black carbon at a remote site in the East China Sea. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2014</b> , 119, 10485-10498  | 4-4 | 22  |
| 45 | Variability of aerosol particle number concentrations observed over the western Pacific in the spring of 2009. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2014</b> , 119, 13,474-13,488  | 4-4 | 9   |
| 44 | Corona-Imaging Colorimetric Method for Accurate Measurement of the Size of Water Droplets in an Expansion Chamber. <i>Aerosol Science and Technology</i> , <b>2013</b> , 47, 1134-1143   | 3-4 |     |
| 43 | Evaluation of a Method to Measure Black Carbon Particles Suspended in Rainwater and Snow Samples. <i>Aerosol Science and Technology</i> , <b>2013</b> , 47, 1073-1082  | 3-4 | 27  |
| 42 | Measurement of fluorescence spectra from atmospheric single submicron particle using laser-induced fluorescence technique. <i>Journal of Aerosol Science</i> , <b>2013</b> , 58, 1-8   | 4-3 | 23  |
| 41 | Condensation Particle Counters Combined with a Low-Pressure Impactor for Fast Measurement of Mode-Segregated Aerosol Number Concentration. <i>Aerosol Science and Technology</i> , <b>2013</b> , 47, 1059-1065   | 3-4 | 7   |
| 40 | Evaluation of a Heated-Inlet for Calibration of the SP2. <i>Aerosol Science and Technology</i> , <b>2013</b> , 47, 895-905   | 3-4 | 7   |
| 39 | Vertical transport mechanisms of black carbon over East Asia in spring during the A-FORCE aircraft campaign. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2013</b> , 118, 13,175-13,198  | 4-4 | 28  |
| 38 | Seasonal variations of Asian black carbon outflow to the Pacific: Contribution from anthropogenic sources in China and biomass burning sources in Siberia and Southeast Asia. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2013</b> , 118, 9948-9967 | 4-4 | 24  |
| 37 | A new theoretical method for calculating temperature and water vapor saturation ratio in an expansion cloud chamber. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2013</b> , 118, 6633-6642  | 4-4 | 2   |
| 36 | Development and validation of a black carbon mixing state resolved three-dimensional model: Aging processes and radiative impact. <i>Journal of Geophysical Research D: Atmospheres</i> , <b>2013</b> , 118, 2304-2326   | 4-4 | 84  |
| 35 | Emission characteristics of black carbon in anthropogenic and biomass burning plumes over California during ARCTAS-CARB 2008. <i>Journal of Geophysical Research</i> , <b>2012</b> , 117, n/a-n/a  |     | 60  |

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| 34 | Wet removal of black carbon in Asian outflow: Aerosol Radiative Forcing in East Asia (A-FORCE) aircraft campaign. <i>Journal of Geophysical Research</i> , <b>2012</b> , 117, n/a-n/a  |     | 97  |
| 33 | Measurements of regional-scale aerosol impacts on cloud microphysics over the East China Sea: Possible influences of warm sea surface temperature over the Kuroshio ocean current. <i>Journal of Geophysical Research</i> , <b>2012</b> , 117, n/a-n/a |     | 25  |
| 32 | Size dependence of wet removal of black carbon aerosols during transport from the boundary layer to the free troposphere. <i>Geophysical Research Letters</i> , <b>2012</b> , 39, n/a-n/a  | 4-9 | 74  |
| 31 | Seasonal variation of the transport of black carbon aerosol from the Asian continent to the Arctic during the ARCTAS aircraft campaign. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,  |     | 88  |
| 30 | Emissions of black carbon, organic, and inorganic aerosols from biomass burning in North America and Asia in 2008. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,   |     | 166 |
| 29 | Emissions of black carbon in East Asia estimated from observations at a remote site in the East China Sea. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,   |     | 73  |
| 28 | Absorbing aerosol in the troposphere of the Western Arctic during the 2008 ARCTAS/ARCPAC airborne field campaigns. <i>Atmospheric Chemistry and Physics</i> , <b>2011</b> , 11, 7561-7582  | 6.8 | 60  |
| 27 | Accumulation-mode aerosol number concentrations in the Arctic during the ARCTAS aircraft campaign: Long-range transport of polluted and clean air from the Asian continent. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,                |     | 18  |
| 26 | Consistency and Traceability of Black Carbon Measurements Made by Laser-Induced Incandescence, Thermal-Optical Transmittance, and Filter-Based Photo-Absorption Techniques. <i>Aerosol Science and Technology</i> , <b>2011</b> , 45, 295-312          | 3-4 | 166 |
| 25 | Multiangle Polarimetry of Thermal Emission and Light Scattering by Individual Particles in Airflow. <i>Aerosol Science and Technology</i> , <b>2011</b> , 45, 1184-1198  | 3-4 | 4   |
| 24 | Evaluation of a Method for Measurement of the Concentration and Size Distribution of Black Carbon Particles Suspended in Rainwater. <i>Aerosol Science and Technology</i> , <b>2011</b> , 45, 1326-1336  | 3-4 | 28  |
| 23 | Dependence of Laser-Induced Incandescence on Physical Properties of Black Carbon Aerosols: Measurements and Theoretical Interpretation. <i>Aerosol Science and Technology</i> , <b>2010</b> , 44, 663-675  | 3-4 | 200 |
| 22 | Size-dependent correction factors for absorption measurements using filter-based photometers: PSAP and COSMOS. <i>Journal of Aerosol Science</i> , <b>2010</b> , 41, 333-343   | 4-3 | 49  |
| 21 | Radiative transfer modeling of filter-based measurements of light absorption by particles: Importance of particle size dependent penetration depth. <i>Journal of Aerosol Science</i> , <b>2010</b> , 41, 401-412                                      | 4-3 | 21  |
| 20 | Method to measure refractive indices of small nonspherical particles: Application to black carbon particles. <i>Journal of Aerosol Science</i> , <b>2010</b> , 41, 513-521   | 4-3 | 112 |
| 19 | Corrigendum to "Evaluation of black carbon estimations in global aerosol models" published in <i>Atmos. Chem. Phys.</i> , 9, 9001-9026, 2009. <i>Atmospheric Chemistry and Physics</i> , <b>2010</b> , 10, 79-81                                       | 6.8 | 16  |
| 18 | Measurements of aerosol optical properties in central Tokyo during summertime using cavity ring-down spectroscopy: Comparison with conventional techniques. <i>Atmospheric Environment</i> , <b>2010</b> , 44, 3034-3042                               | 5-3 | 29  |
| 17 | Stabilization of the Mass Absorption Cross Section of Black Carbon for Filter-Based Absorption Photometry by the use of a Heated Inlet. <i>Aerosol Science and Technology</i> , <b>2009</b> , 43, 741-756  | 3-4 | 99  |

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| 16 | Directional dependence of thermal emission from nonspherical carbon particles. <i>Journal of Aerosol Science</i> , <b>2009</b> , 40, 790-801   | 4-3 | 24  |
| 15 | Aging of black carbon in outflow from anthropogenic sources using a mixing state resolved model: Model development and evaluation. <i>Journal of Geophysical Research</i> , <b>2009</b> , 114, |     | 56  |
| 14 | Evaluation of black carbon estimations in global aerosol models. <i>Atmospheric Chemistry and Physics</i> , <b>2009</b> , 9, 9001-9026   | 6.8 | 510 |
| 13 | Method to measure time-dependent scattering cross sections of particles evaporating in a laser beam. <i>Journal of Aerosol Science</i> , <b>2008</b> , 39, 348-364                             | 4-3 | 44  |
| 12 | Radiative impact of mixing state of black carbon aerosol in Asian outflow. <i>Journal of Geophysical Research</i> , <b>2008</b> , 113,   |     | 106 |
| 11 | Effects of Mixing State on Black Carbon Measurements by Laser-Induced Incandescence. <i>Aerosol Science and Technology</i> , <b>2007</b> , 41, 398-417   | 3-4 | 235 |
| 10 | Evolution of mixing state of black carbon particles: Aircraft measurements over the western Pacific in March 2004. <i>Geophysical Research Letters</i> , <b>2007</b> , 34,                     | 4-9 | 171 |
| 9  | Evolution of mixing state of black carbon in polluted air from Tokyo. <i>Geophysical Research Letters</i> , <b>2007</b> , 34,  | 4-9 | 133 |
| 8  | Temporal variations of elemental carbon in Tokyo. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,  |     | 142 |
| 7  | Partitioning of HNO <sub>3</sub> and particulate nitrate over Tokyo: Effect of vertical mixing. <i>Journal of Geophysical Research</i> , <b>2006</b> , 111,                                    |     | 69  |
| 6  | Estimates of mass absorption cross sections of black carbon for filter-based absorption photometers in the Arctic  |     | 2   |
| 5  | Absorbing aerosol in the troposphere of the Western Arctic during the 2008 ARCTAS/ARCPAC airborne field campaigns  |     | 3   |
| 4  | Modeled black carbon radiative forcing and atmospheric lifetime in AeroCom Phase II constrained by aircraft observations   |     | 9   |
| 3  | Evaluation of black carbon estimations in global aerosol models  |     | 5   |
| 2  | Estimates of mass absorption cross sections of black carbon for filter-based absorption photometers in the Arctic  |     | 2   |
| 1  | Identification and particle sizing of submicron mineral dust by using complex forward-scattering amplitude data. <i>Aerosol Science and Technology</i> , 1-14                                  | 3-4 | 1   |