

Hilkka Timonen, ORCID: 0000-0002-7987-7985

A. Peer-reviewed scientific articles

1. Teinilä, K., **Timonen**, H., Aurela, M., Kuula, J., Rönkkö, T., Hellèn, H., Loukkola, K., Kousa, A., Niemi, J.V. and Saarikoski, S.: Characterization of Particle Sources and Comparison of Different Particle Metrics in an Urban Detached Housing Area, Finland. *Atmospheric Environment*, 118939, 2022. <https://doi.org/10.1016/j.atmosenv.2022.118939>.
2. Lepistö, T., Kuuluvainen, H., Lintusaari, H., Kuittinen, N., Salo, L., Helin, A., Niemi, J.V., Manninen, H. E., **Timonen**, H., Jalava, P., Saarikoski, S., Rönkkö, T.: Connection between Lung Deposited Surface Area (LDSA) and Black Carbon (BC) Concentrations in Road Traffic and Harbour Environments.” *Atmospheric Environment* 272, 2022. <https://doi.org/10.1016/j.atmosenv.2021.118931>.
3. Fung, P. L., Zaidan, M. A., Niemi, J. V., Saukko, E., **Timonen**, H., Kousa, A., Kuula, J., Rönkkö, T., Karppinen, A., Tarkoma, S., Kulmala, M., Petäjä, T., and Hussein, T.: Input-adaptive linear mixed-effects model for estimating alveolar Lung Deposited Surface Area (LDSA) using multipollutant datasets, Accepted to *Atmos. Chem. Phys.* <https://doi.org/10.5194/acp-2021-427>, 2022.
4. Aakko-Saksa, P.; Kuittinen, N., Murtonen, T., Koponen, P., Aurela, M., Järvinen, A., Teinilä, K., Saarikoski, S., Barreira, L.M.F., Salo, L., Karjalainen, P., Ortega, I.K., Delhaye, D., Lehtoranta, K., Vesala, H., Jalava, P., Rönkkö, T., **Timonen**, H.: Suitability of Different Methods for Measuring Black Carbon Emissions from Marine Engines, *Atmosphere*, 13, 2022. <https://doi.org/10.3390/atmos13010031>.
5. Rebeiro-Hargrave, A., Fung Pak L., Varjonen S., Huertas A., Sillanpää S., Luoma K., Hussein T., Petäjä T., **Timonen** H., Limo J., Nousiainen V., Tarkoma S.: City Wide Participatory Sensing of Air Quality, *Frontiers in Environmental Science* 9, 773778. <https://doi.org/10.3389/fenvs.2021.773778>.
6. Aurela, M., Mylläri, F., Konist, A., Saarikoski, S., Olin, M., Simonen, P., Bloss, M., Nešumajev, D., Salo, L., Maasikmets, M., Sipilä, M., DalMaso, M., Keskinen, J., **Timonen**, H., Rönkkö, T.: Chemical and Physical Characterization of Oil Shale Combustion Emissions in Estonia, *Atmospheric Environment: X* 12, 100139. <https://doi.org/10.1016/j.aeaoa.2021.100139>, 2021.
7. Karhu, J., Kuula, J., Virkkula, A., **Timonen**, H., Vainio, M., Hieta, T. Cantilever-Enhanced Photoacoustic Measurement of Light-Absorbing Aerosols. *Aerosol Science and Technology*, 1–9, 2021. <https://doi.org/10.1080/02786826.2021.1998338>.

8. Karjalainen, P., Teinilä, K., Kuittinen, N., Aakko-Saksa, P., Bloss, M., Vesala, H., Pettinen, R., Saarikoski, S., Jalkanen, J.-P., and **Timonen, H.**: Real-world particle emissions and secondary particle formation from a diesel oxidation catalyst and scrubber equipped ship operating with two fuels in a SECA area, *Environmental Pollution*, 118278, <https://doi.org/10.1016/j.envpol.2021.118278>, 2021.
9. Petäjä, T., Ovaska, A., Fung, P.L., Poutanen, P., Yli-Ojanperä, J., Suikkola, J., Laakso, M., Mäkelä, T., Niemi, J.V., Keskinen, J., Järvinen, A., Kuula, J., Kurppa, M., Hussein, T., Tarkoma, S., Kulmala, M., Karppinen, A., Manninen, H.E., **Timonen, H.**; Added value of Vaisala AQT530 sensors as a part of a sensor network for comprehensive air quality monitoring, *Frontiers in Environmental Science*, 9. doi: 10.3389/fenvs.2021.719567, 2021.
10. Saarikoski, S., Niemi, J. V., Aurela, M., Pirjola, L., Kousa, A., Rönkkö, T., and **Timonen, H.**: Sources of black carbon at residential and traffic environments, *Atmos. Chem. Phys.*, <https://doi.org/10.5194/acp-2021-231>, 2021.
11. Sokhi, R. S., Singh, V., Querol, X., Finardi, S., Targino, A. C., Andrade, M. de F., Pavlovic, R., Garland, R. M., Massagué, J., Kong, S., Baklanov, A., Ren, L., Tarasova, O., Carmichael, G., Peuch, V.-H., Anand, V., Arbilla, G., Badali, K., Beig, G., Belalcazar, L. C., Bolignano, A., Brimblecombe, P., Camacho, P., Casallas, A., Charland, J.-P., Choi, J., Chourdakis, E., Coll, I., Collins, M., Cyrus, J., da Silva, C. M., Di Giosa, A. D., Di Leo, A., Ferro, C., Gavidia-Calderon, M., Gayen, A., Ginzburg, A., Godefroy, F., Gonzalez, Y. A., Guevara-Luna, M., Haque, Sk. M., Havenga, H., Herod, D., Hörrak, U., Hussein, T., Ibarra, S., Jaimes, M., Kaasik, M., Khaiwal, R., Kim, J., Kousa, A., Kukkonen, J., Kulmala, M., Kuula, J., La Violette, N., Lanzani, G., Liu, X., MacDougall, S., Manseau, P. M., Marchegiani, G., McDonald, B., Mishra, S. V., Molina, L. T., Mooibroek, D., Mor, S., Moussiopoulos, N., Murena, F., Niemi, J. V., Noe, S., Nogueira, T., Norman, M., Pérez-Camaño, J. L., Petäjä, T., Piketh, S., Rathod, A., Reid, K., Retama, A., Rivera, O., Rojas, N. Y., Rojas-Quincho, J. P., San José, R., Sánchez, O., Seguel, R. J., Sillanpää, S., Su, Y., Tapper, N., Terrazas, A., **Timonen, H.**, Toscano, D., Tsegas, G., Velders, G. J. M., Vlachokostas, C., von Schneidmesser, E., Vpm, R., Yadav, R., Zalakeviciute, R., and Zavala, M.: A global observational analysis to understand changes in air quality during exceptionally low anthropogenic emission conditions, *Environment International*, 157, 106818, <https://doi.org/10.1016/j.envint.2021.106818>, 2021.
12. Reyes, F., Ahumada, S., Rojas, F., Oyola, P., Vásquez, Y., Aguilera, C., Henriquez, A.R., Gramsch, E., Kang, C.M., Saarikoski, S., Teinilä, K., Aurela, M., and **Timonen, H.**, Impact of biomass burning on air quality in Temuco city, Chile, *Aerosol and air quality research*, <https://doi.org/10.4209/aaqr.210110>, 2021.
13. Okuljar, M., Kuuluvainen, H., Kontkanen, J., Garmash, O., Olin, M., Niemi, J. V., **Timonen, H.**, Kangasluoma, J., Tham, Y. J., Baalbaki, R., Sipilä, M., Salo, L., Lintusaari, H., Portin, H., Teinilä, K., Aurela, M., Dal Maso, M., Rönkkö, T., Petäjä, T., and Paasonen, P.: Measurement report: The influence of traffic

- and new particle formation on the size distribution of 1–800 nm particles in Helsinki – a street canyon and an urban background station comparison, *Atmos. Chem. Phys.*, 21, 9931–9953, <https://doi.org/10.5194/acp-21-9931-2021>, 2021.
14. **Timonen, H.**, Mylläri, F., Simonen, P., Aurela, M., Maasikmets, M., Bloss, M., Kupri, H.-L., Vainumäe, K., Lepistö, T., Salo, L., Niemelä, V., Seppälä, S., Jalava, P. I., Teinmaa, E., Saarikoski, S., and Rönkkö, T.: Household solid waste combustion with wood increases particulate trace metal and lung deposited surface area emissions, *Journal of Environmental Management*, 293, 112793, <https://doi.org/10.1016/j.jenvman.2021.112793>, 2021.
 15. Helin A. Virkkula, A., Backman, J., Pirjola, L., Sippula, O., Aakko-Saksa, P., Väätäinen, S., Mylläri, F., Järvinen, A., Bloss, M., Aurela, M., Jakobi, G., Karjalainen, P., Zimmermann, R., Jokiniemi, J., Saarikoski, S., Tissari, J., Rönkkö, T., Niemi, J.V., **Timonen, H.**: Variation of Absorption Ångström Exponent in Aerosols from Different Emission Sources, *Journal of Geophysical Research- Atmospheres*, <https://doi.org/10.1029/2020JD034094Helin>.
 16. Freney, E., Sellegri, K., Nicosia, A., Trueblood, J. T., Rinaldi, M., Williams, L. R., Prévôt, A. S. H., Thyssen, M., Grégori, G., Haëntjens, N., Dinasquet, J., Obernosterer, I., Van-Wambeke, F., Engel, A., Zäncker, B., Desboeufs, K., Asmi, E., **Timonen, H.**, and Guieu, C.: Mediterranean nascent sea spray organic aerosol and relationships with seawater biogeochemistry, accepted to *Atmos. Chem. Phys.*, <https://doi.org/10.5194/acp-2020-406>, 2021.
 17. Salo, L., Rönkkö, T., Saarikoski, S., Teinilä, K., Kuula, J., Alanen, J., Arffman, A., **Timonen, H.**, Keskinen, J. (2021). Concentrations and Size Distributions of Particle Lung-deposited Surface Area (LDSA) in an Underground Mine. *Aerosol Air Qual. Res.* <https://doi.org/10.4209/aaqr.200660>.
 18. Salo; L., Hyvärinen, A., Jalava, P., Teinilä, K., Hooda, R.K., Datta, A., Saarikoski, S., Lintusaari, H., Lepistö, T., Martikainen, S., Rostedt, A., Sharma, V.P., Rahman, Md.H., Subudhi, S., Asmi, E., Niemi, J.V., Lihavainen, H., Lal, B., Keskinen, J., Kuuluvainen, H., **Timonen, H.**, Rönkkö, T.: The characteristics and size of lung-depositing particles vary significantly between high and low pollution traffic environments, *Atmospheric Environment*, <https://doi.org/10.1016/j.atmosenv.2021.118421>, 2021.
 19. Thaler, K. M., Gilardi, L., Weber, M., Vohburger, A., Toumasatos, Z., Kontses, A., Samaras, Z., Kalliokoski, J., Simonen, P., **Timonen, H.**, Aurela, M., Saarikoski, S., Martikainen, S., Karjalainen, P., Dal Maso, M., Keskinen, J., Niessner, R., Pang, G.A, and Haisch, C.. “HELIOS/SICRIT/Mass Spectrometry for Analysis of Aerosols in Engine Exhaust.” *Aerosol Science and Technology*, March 31, 2021, 1–15. <https://doi.org/10.1080/02786826.2021.1909699>.
 20. Barreira, L. M. F., Helin, A., Aurela, M., Teinilä, K., Friman, M., Kangas, L., Niemi, J. V., Portin, H., Kousa, A., Pirjola, L., Rönkkö, T., Saarikoski, S., and Timonen, H.: In-depth characterization of submicron particulate matter inter-annual variations at a street canyon site in northern Europe, *Atmos. Chem. Phys.*, 21, 6297–6314, <https://doi.org/10.5194/acp-21-6297-2021>, 2021.

21. Martikainen, S., Saarikoski, S., Juuti, P., **Timonen, H.**, Keskinen, J., Karjalainen, P.: Soot Particle Agglomeration Inlet (SPAI) for Enabling Online Chemical Composition Measurement of Nanoparticles with the Aerosol Mass Spectrometer. *Aerosol Air Qual. Res.* <https://doi.org/10.4209/aaqr.200638>, 2021.
22. Torkmahalleh, M. A., Akhmetvaliyeva, Z., Omran, A. D., Omran, F. D., Kazemitabar, M., Naseri, M., Naseri, M., Sharifi, H., Malekipirbazari, M., Adotey, E. K., Gorjinezhad, S., Eghtesadi, N., Sabanov, S., Alastuey, A., de Fátima, M., Buonanno, G., Carbone, S., Cárdenas-Fuentes, D. E., Cassee, F. R., Dai, Q., Henríquez, A., Hopke, P. K., Keronen, P., Khwaja, H. A., Kim, J., Kulmala, M., Kumar, P., Kushta, J., Kuula, J., Massagué, J., Mitchell, T., Mooibroek, D., Morawska, L., Niemi, J. V., Ngagine, S. H., Norman, M., Oyama, B., Oyola, P., Öztürk, F., Petäjä, T., Querol, X., Rashidi, Y., Reyes, F., Ross-Jones, M., Salthammer, T., Savvides, C., Stabile, L., Sjöberg, K., Söderlund, K., Raman, R. S., **Timonen, H.**, Umezawa, M., Viana, M., and Xie, S.: Global Air Quality and COVID-19 Pandemic: Do We Breathe Cleaner Air?, *Aerosol and Air Quality Research*, 21, 10.4209/aaqr.200567, 2021.
23. Seppälä, S., Kuula, J., Hyvärinen, A.-P., Saarikoski, S., Rönkkö, T., Keskinen, J., Jalkanen, J.-P., and **Timonen, H.**: Effects of marine fuel sulfur restrictions on particle number concentrations and size distributions in ship plumes at the Baltic Sea, *Atmos. Chem. Phys.*, <https://doi.org/10.5194/acp-2020-946>, 2021.
24. Kuittinen, N., Jalkanen, J. P., Alanen, J., Ntziachristos, L., Hannuniemi, H., Johansson, L., Karjalainen, P., Saukko, E., Isotalo, M., Aakko-Saksa, P., Lehtoranta, K., Keskinen, J., Simonen, P., Saarikoski, S., Asmi, E., Laurila, T., Hillamo, R., Mylläri, F., Lihavainen, H., **Timonen, H.**, and Rönkkö, T.: Shipping Remains a Globally Significant Source of Anthropogenic PN Emissions Even after 2020 Sulfur Regulation, *Environ Sci Technol*, 55, 129-138, [10.1021/acs.est.0c03627](https://doi.org/10.1021/acs.est.0c03627), 2021.
25. Luoma, K., Niemi, J. V., Aurela, M., Fung, P. L., Helin, A., Hussein, T., Kangas, L., Kousa, A., Rönkkö, T., Timonen, H., Virkkula, A., and Petäjä, T.: Spatiotemporal variation and trends in equivalent black carbon in the Helsinki metropolitan area in Finland, *Atmos. Chem. Phys.*, 21, 1173–1189, <https://doi.org/10.5194/acp-21-1173-2021>, 2021.
26. Kuula, J., Friman, M., Helin, A., Niemi, J. V., Aurela, M., **Timonen, H.**, and Saarikoski, S.: Utilization of scattering and absorption-based particulate matter sensors in the environment impacted by residential wood combustion, *Journal of Aerosol Science*, 150, 105671, [10.1016/j.jaerosci.2020.105671](https://doi.org/10.1016/j.jaerosci.2020.105671), 2020.
27. Aakko-Saksa, P., Koponen, P., Roslund, P., Laurikko, J., Nylund, N. O., Karjalainen, P., Rönkkö, T., and **Timonen, H.**: Comprehensive emission characterisation of exhaust from alternative fuelled cars, *Atmospheric Environment*, 236, 117643, [10.1016/j.atmosenv.2020.117643](https://doi.org/10.1016/j.atmosenv.2020.117643), 2020.

28. Kuula, J., Mäkelä, T., Aurela, M., Teinilä, K., Varjonen, S., González, Ó., and **Timonen, H.**: Laboratory evaluation of particle-size selectivity of optical low-cost particulate matter sensors, *Atmos. Meas. Tech.*, 13, 2413–2423, <https://doi.org/10.5194/amt-13-2413-2020>, 2020.
29. Martikainen, S., Karjalainen, P., Rönkkö, T., Järvinen, A., Kalliokoski, J., Keskinen, J., Ntziachristos, L., Teinilä, K., Saarikoski, S., Aurela, M., **Timonen, H.**, Saveljeff, H., and Lauren, M.: Characterization of Physical and Chemical Properties of Particulate Emissions of a Modern Diesel-Powered Tractor under Real Driving Conditions, 1, 10.4271/2020-01-2204, 2020.
30. Zaidan, M. A., Motlagh, N. H., Fung, P. L., Lu, D., **Timonen, H.**, Kuula, J., Niemi, J. V., Tarkoma, S., Petaja, T., Kulmala, M., and Hussein, T.: Intelligent Calibration and Virtual Sensing for Integrated Low-Cost Air Quality Sensors, *IEEE Sensors Journal*, 1-1, 10.1109/jsen.2020.3010316, 2020.
31. Fung, P. L., Zaidan, M. A., **Timonen, H.**, Niemi, J. V., Kousa, A., Kuula, J., Luoma, K., Tarkoma, S., and Petäjä, T.: Evaluation of white-box versus black-box machine learning models in estimating ambient black carbon concentration, Accepted to *Journal of Aerosol Science*, 2020.
32. Alanen, J., Isotalo, M., Kuittinen, N., Simonen, P., Martikainen, S., Kuuluvainen, H., Honkanen, M., Lehtoranta, K., Nyysönen, S., Vesala, H., **Timonen, H.**, Aurela, M., Keskinen, J., and Ronkko, T.: Physical Characteristics of Particle Emissions from a Medium Speed Ship Engine Fueled with Natural Gas and Low-Sulfur Liquid Fuels, *Environ Sci Technol*, 10.1021/acs.est.9b06460, 2020.
33. Lorelei de Jesus, A., Thompson, H., Knibbs, L. D., Kowalski, M., Cyrus, J., Niemi, J. V., Kousa, A., **Timonen, H.**, Luoma, K., Petäjä, T., Beddows, D., Harrison, R. M., Hopke, P., and Morawska, L.: Long-term trends in PM_{2.5} mass and particle number concentrations in urban air: The impacts of mitigation measures and extreme events due to changing climates. *Environ. Pollut.*, 263, 114500, 2020. doi:10.1016/j.envpol.2020.114500.
34. Kurppa, M., Roldin, P., Strömberg, J., Balling, A., Karttunen, S., Kuuluvainen, H., Niemi, J. V., Pirjola, L., Rönkkö, T., **Timonen, H.**, Hellsten, A., and Järvi, L.: Sensitivity of spatial aerosol particle distributions to the boundary conditions in the PALM model system 6.0, *Geosci. Model Dev.*, 13, 5663–5685, <https://doi.org/10.5194/gmd-13-5663-2020>, 2020.
35. Fung, P.L.; Zaidan, M.A.; Sillanpää, S.; Kousa, A.; Niemi, J.V.; **Timonen, H.**; Kuula, J.; Saukko, E.; Luoma, K.; Petäjä, T.; Tarkoma, S.; Kulmala, M.; Hussein, T. Input-Adaptive Proxy for Black Carbon as a Virtual Sensor. *Sensors*, 20, 182, 2020.
36. Rivas, I., Green, D., Niemi, J.V. Perez, N., Järvi, L., Hopke, P., Kelly, F., Fuller, G., Kulmala, M., **Timonen, H.**, Harrison, R., Aurela, M., Alastuey, A., Amato, F., Beddows, D.C.S., Querol, X., Hueglin, C., Reche, C: Source apportionment of particle number size distribution in urban background and traffic stations in

- four European cities, *Environment International*, 135, 105345, 10.1016/j.envint.2019.105345, 2020.
37. Olin, M., Kuuluvainen, H., Aurela, M., Kalliokoski, J., Kuittinen, N., Isotalo, M., **Timonen, H. J.**, Niemi, J. V., Rönkkö, T., and Dal Maso, M.: Traffic-originated nanocluster emission exceeds H₂SO₄-driven photochemical new particle formation in an urban area, *Atmos. Chem. Phys.*, 20, 1–13, <https://doi.org/10.5194/acp-20-1-2020>, 2020.
 38. Saarikoski, S., Salo, L., Bloss, M., Alanen, J., Teinilä, K., Reyes, F., Vázquez, Y., Keskinen, J., Oyola, P., Rönkkö, T., **Timonen, H.** Sources and Characteristics of Particulate Matter at Five Locations in an Underground Mine. *Aerosol Air Qual. Res.* 19: 2613–2624, 2019.
 39. **Timonen, H.**, Karjalainen, P., Aalto, P., Saarikoski, S., Mylläri, F., Karvosenoja, N., Jalava, P., Asmi, E., Aakko-Saksa, P., Saukkonen, N., Laine, L., Saarnio, K., Niemelä, N., Enroth, J., Väkevä, M., Oyola, P., Pagels, J., Ntziachristos, L., Cordero, R., Kuittinen, N., Niemi, J. V., and Rönkkö, T.: Adaptation of Black Carbon Footprint concept would accelerate mitigation of global warming *Environmental science and technology*, 10.1021/acs.est.9b05586, 2019.
 40. Kuula, J., Kuuluvainen, H., Niemi, J.V., Saukko, E., Portin, H., Kousa, A., Aurela, M., Rönkkö, T., **Timonen, H.**: Long-term sensor measurements of lung deposited surface area of particulate matter emitted from local vehicular and residential wood combustion sources, *Aerosol Science and Technology*, DOI: 10.1080/02786826.2019.1668909, 2019.
 41. Simonen, P., Kalliokoski, J., Karjalainen, P., Rönkkö, T., **Timonen, H.**, Saarikoski, S., Aurela, M., Bloss, M., Triantafyllopoulos, G., Kontses, A., Amanatidis, S., Dimaratos, A.M., Samaras, Z. Ntziachristos, L.: Characterization of laboratory and real driving emissions of individual Euro 6 light-duty vehicles – fresh particles and secondary aerosol formation, accepted to *Environmental Pollution*, 2019.
 42. Karjalainen, P., Rönkkö, T., Simonen, P., Ntziachristos, L., Juuti, P., **Timonen, H.**, Teinilä, K., Saarikoski, S., Saveljeff, H., Lauren, M., Happonen, M., Matilainen, P., Maunula, T., Nuottimäki, J., Keskinen, J.: On the strategies to diminish the emissions of particles and secondary aerosol formation from diesel engines, Accepted to *Environmental Science and Technology*, 2019
 43. Teinilä K., Aurela M., Niemi J., Kousa A., Petäjä T., Järvi L., Hillamo R., Kangas L., Saarikoski S., and **Timonen H.** 2019 Concentration variation of gaseous and particulate pollutants in the Helsinki city centre — observations from a two-year campaign from 2013–2015. *Boreal Env. Res.* 24: 115–136, 2019.
 44. Pirjola, L., Kuuluvainen, H., **Timonen, H.**, Saarikoski, S., Teinilä, K., Salo, L., Datta, A., Simonen, P., Karjalainen, P., Kulmala, K., and Rönkkö, T.: Potential

- of renewable fuel to reduce diesel exhaust particle emissions, *Applied Energy*, 254, 113636, 10.1016/j.apenergy.2019.113636, 2019.
45. Rönkkö, T. and **Timonen, H.** Overview of sources and characteristics of nanoparticles in urban traffic-influenced areas, *Journal of Alzheimer's Disease*, vol. 72, 15-28, 10.3233/JAD-190170, 2019.
 46. Saarikoski, S., Williams, L. R., Spielman, S. R., Lewis, G. S., Eiguren-Fernandez, A., Aurela, M., Hering, S. V., Teinilä, K., Croteau, P., Jayne, J. T., Hohaus, T., Worsnop, D. R., **Timonen, H.** (2019). Laboratory and field evaluation of the Aerosol Dynamics Inc. concentrator (ADic) for aerosol mass spectrometry. *Atmos. Meas. Tech.* 12, 3907–3920, 2019.
 47. Kangasniemi, O., Kuuluvainen, H. Heikkilä, J. Pirjola, L., Niemi, J. V., **Timonen, H.**, Saarikoski, S., Rönkkö, T. and Dal Maso, M.: Dispersion of a Traffic Related Nanocluster Aerosol Near a Major Road, *Atmosphere*, 10(6), 309, doi:10.3390/atmos10060309, 2019.
 48. Lorelei de Jesus, A., Rahman, M. M., Thompson, H., Knibbs, L., Jeong, C.-H., Evans, G., Nie, W., Ding, A., Qiao, L., Li, L., Portin, H., Niemi, J.V., **Timonen, H.**, Luoma, K., Petäjä, T., Kulmala, M., Kowalski, M., Peters, A., Cyrus, J., Ferrero, L., Manigrasso, M., Avino, P., Buonanno, G., Reche, C., Querol, X., Beddows, D., Harrison, R., Sowlat, M.H., Sioutas, C., Morawska, L.: Ultrafine particles and PM_{2.5} in the air of cities around the world: are they representative of each other?, *Environ Int*, 129, 118-135, 10.1016/j.envint.2019.05.021, 2019.
 49. Järvinen, A., **Timonen, H.**, Karjalainen, P., Bloss, M., Simonen, P., Saarikoski, S., Kuuluvainen, H., Kalliokoski, J., Dal Maso, M., Niemi, J. V., Keskinen, J., and Rönkkö, T.: Particle emissions of Euro VI, EEV and retrofitted EEV city buses in real traffic, *Environmental pollution*, 250, 708-716, 10.1016/j.envpol.2019.04.033, 2019.
 50. Salo, L., Mylläri, F., Maasikmets, M., Niemelä, V., Konist, A., Vainumäe, K., Kupri, H.-L., Titova, R., Simonen, P., Aurela, M., Bloss, M., Keskinen, J., **Timonen, H.**, Rönkkö, T.: Emission measurements with gravimetric impactors and electrical devices: An aerosol instrument comparison, *Aerosol Science and Technology*, DOI: 10.1080/02786826.2019.1578858, 2019.
 51. Kuula, J., Kuuluvainen, H., Rönkkö, T., Niemi, J. V., Saukko, E., Portin, H., Aurela, M., Saarikoski, S., Rostedt, A., Hillamo, R., and **Timonen, H.**: Applicability of Optical and Diffusion Charging-Based Particulate Matter Sensors to Urban Air Quality Measurements, *Aerosol and Air Quality Research*, 10.4209/aaqr.2018.04.0143, 2019.
 52. Lehtoranta, K., Aakko-Saksa, P., Murtonen, T., Vesala, H., Ntziachristos, L., Rönkkö, T., Karjalainen, P., Kuittinen, N., and **Timonen, H.**: Particulate Mass and Nonvolatile Particle Number Emissions from Marine Engines Using Low-Sulfur Fuels, Natural Gas, or Scrubbers, *Environmental Science & Technology*, 10.1021/acs.est.8b05555, 2019.

53. Carbone, S., **Timonen, H.**, Rostedt, A., Happonen, M., Rönkkö, T., Keskinen, J., Ristimäki, J., Korpi, H., Artaxo, P., Canagaratna, M., Worsnop, D., Canonaco, F., Prévôt, A.S.H., Hillamo R., and Saarikoski, S. Distinguishing fuel and lubricating oil combustion products in diesel engine exhaust particles, *Aerosol Science and Technology*, DOI: 10.1080/02786826.2019.1584389, 2019.
54. Saarikoski, S., Reyes, F., Vázquez, Y., Tagle, M., **Timonen, H.**, Aurela, M., Carbone, S., Worsnop, D. R., Hillamo, R., and Oyola, P.: Characterization of submicron aerosol chemical composition and sources in the coastal area of Central Chile, *Atmospheric Environment*, 199, 391-401, 10.1016/j.atmosenv.2018.11.040, 2019.
55. Aakko-Saksa, P., Koponen, P., Aurela, M., Vesala, H., Piimakorpi, P., Murtonen, T., Sippula, O., Koponen, H., Karjalainen, P., Kuittinen, N., Panteliadis, P., Rönkkö, T., **Timonen, H.**: Considerations in analysing elemental carbon from marine engine exhaust using residual, distillate and biofuels, *Journal of Aerosol Science*, <https://doi.org/10.1016/j.jaerosci.2018.09.005>, 2018.
56. Helin, A., Niemi, J.V., Virkkula, A., Pirjola, L., Teinilä, K., Backman, J., Aurela, M., Saarikoski, S., Rönkkö, T., Asmi, E., **Timonen, H.**: Characteristics and source apportionment of black carbon in the Helsinki metropolitan area, Finland, *Atmospheric Environment*, 190, 87–98, 2018, doi: 10.1016/j.atmosenv.2018.07.022.
57. Hietikko, R., Kuuluvainen, H., Harrison, R. M., Portin, H., **Timonen, H.**, Niemi, J. V., and Rönkkö, T.: Diurnal variation of nanocluster aerosol concentrations and emission factors in a street canyon, *Atmospheric Environment*, doi: 10.1016/j.atmosenv.2018.06.031, 2018. 2018.
58. Kuuluvainen, H., Poikkimäki, M., Järvinen, A., Kuula, J., Irjala, M., Dal Maso, M., Keskinen, J., **Timonen, H.**, Niemi, J. V., and Rönkkö, T.: Vertical profiles of lung deposited surface area concentration of particulate matter measured with a drone in a street canyon, *Environmental pollution*, 241, 96-105, 2018.
59. Tagle, M., Reyes, F., Vázquez, Y., Carbone, S., Saarikoski, S., **Timonen, H.**, Gramsch, E., and Oyola, P.: Spatiotemporal variation in composition of submicron particles in Santiago Metropolitan Region, Chile, *Frontiers of Environmental Science*, doi: 10.3389/fenvs.2018.00027 2018. 2018.
60. **Timonen, H.**, Teinilä, K., Aurela, M., Reyes, F., Vázquez, Y., Bloss, M., Oyola, P., Hillamo, R., Asmi, E., and Saarikoski, S.: Sources and composition of particulate matter in boreal arctic environment next to an active mining area, *Boreal Environ Res*, 23, 105-125, 2018.
61. Kuula, J., Mäkelä, T., Hillamo, R., and **Timonen, H.**: Response Characterization of an Inexpensive Aerosol Sensor, *Sensors*, 17, 2915, 10.3390/s17122915, 2017.

62. Amanatidis, S., Ntziachristos, L., Karjalainen, P., Saukko, E., Simonen, P., Kuittinen, N., Aakko-Saksa, P., **Timonen, H.**, Rönkkö, T. and Keskinen, J.: Comparative performance of a thermal denuder and a catalytic stripper in sampling laboratory and marine exhaust aerosols, AST-MS-2017-153.R1.
63. Saarikoski, S., Teinilä, K., **Timonen, H.**, Aurela, M., Laaksovirta, T., Reyes, F., Vásques, Y., Oyola, P., Artaxo, P., Pennanen, A., Junntila, S., Linnainmaa, M., Salonen, R., Hillamo, R. Particulate matter characteristics, dynamics and sources in an underground mine. *Aerosol Sci. Technol.*, 2017, DOI: 10.1080/02786826.2017.1384788.
64. Rönkkö, T., Kuuluvainen, H., Karjalainen, P., Keskinen, J., Hillamo, R., Niemi, J. V., Pirjola, L., **Timonen, H.J.**, Saarikoski, S., Saukko, E., Järvinen, A., Silvennoinen, H., Rostedt, A., Olin, M., Yli-Ojanperä, J., Nousiainen, P., Kousa, A., and Dal Maso, M.: Traffic is a major source of atmospheric nanocluster aerosol, *Proceedings of the National Academy of Sciences*, 201700830, 10.1073/pnas.1700830114, 2017.
65. Alanen, J., Simonen, P., Saarikoski, S., **Timonen, H.**, Kangasniemi, O., Saukko, E., Hillamo, R., Lehtoranta, K., Murtonen, T., Vesala, H., Keskinen, J., and Rönkkö, T.: Comparison of primary and secondary particle formation from natural gas engine exhaust and of their volatility characteristics, *Atmos. Chem. Phys.*, 17, 8739-8755, <https://doi.org/10.5194/acp-17-8739-2017>, 2017
66. Saarikoski, S., **Timonen, H.**, Carbone, S., Kuuluvainen, H., Niemi, J. V., Kousa, A., Rönkkö, T., Worsnop, D., Hillamo, R., and Pirjola, L. Investigating the chemical species in submicron particles emitted by city buses, *Aerosol Science and Technology*, 51:3, 317-329, DOI:10.1080/02786826.2016.1261992, 2017.
67. Lehtoranta, K., Murtonen, T., Vesala, H., Koponen, P., Alanen, J., Simonen, P., Rönkkö, T., **Timonen, H.**, Saarikoski, S., Maunula, T., Kallinen, K., and Korhonen, S.: Natural Gas Engine Emission Reduction by Catalysts, *Emission Control Science and Technology*, 10.1007/s40825-016-0057-8, 2016.
68. Simonen, P., Saukko, E., Karjalainen, P., **Timonen, H.**, Bloss, M., Aakko-Saksa, P., Rönkkö, T., Keskinen, J., and Dal Maso, M.: A New Oxidation Flow Reactor for Measuring Secondary Aerosol Formation of Rapidly Changing Emission Sources, *Atmos. Meas. Tech.*, 10, 1519-1537, <https://doi.org/10.5194/amt-10-1519-2017>, 2017.
69. **Timonen, H.**, Karjalainen, P., Saukko, E., Saarikoski, S., Aakko-Saksa, P., Simonen, P., Murtonen, T., Dal Maso, M., Kuuluvainen, H., Ahlberg, E., Svenningsson, B., Pagels, J., Brune, W. H., Keskinen, J., Worsnop, D. R., Hillamo, R., and Rönkkö, T.: Influence of fuel ethanol content on primary emissions and secondary aerosol formation potential for a modern flex-fuel gasoline vehicle, *Atmos. Chem. Phys.*, 17, 5311-5329, <https://doi.org/10.5194/acp-17-5311-2017>, 2017.
70. Ntziachristos, L., Saukko, E., Lehtoranta, K., Rönkkö, T., **Timonen, H.**, Simonen, P., Karjalainen, P., Keskinen, J.: Particle Emissions Characterization

from a Medium-Speed Marine Diesel Engine with two Fuels at Different Sampling Conditions, *Fuel*, 186, 456-465, 2016., DOI: 10.1016/j.fuel.2016.08.091.

71. **Timonen, H.**, Cubison, M., Aurela, M., Brus, D., Lihavainen, H., Hillamo, R., Canagaratna, M., Nekat, B., Weller, R., Worsnop, D., and Saarikoski, S.: Applications and limitations of constrained high-resolution peak fitting on low resolving power mass spectra from the ToF-ACSM, *Atmos. Meas. Tech.*, 9, 3263-3281, doi:10.5194/amt-9-3263-2016, 2016.
72. Petäjä, T., O'Connor, E., Moisseev, D., Sinclair, V.A., Manninen, A.J, Väänänen, R., von Lerber, A., Thornton, J., Nicoll, K., Petersen, W., Chandrasekar, V., Smith, J., Winkler, P., Krüger, O., Hakola, H., **Timonen, H.**, Brus, D., Laurila, T., Asmi, E., Riekkola, M-L., Mona, L., Massoli, P., Engelmann, R., Komppula, M., Wang, J., Kuang, C., Bäck, J., Virtanen, A., Levula, J., Ritsche, M. and Hickmon, N.: BAEECC A field campaign to elucidate the impact of Biogenic Aerosols on Clouds and Climate", *Bulletin of the American Meteorological Society*, BAMS-D-14-00199, 2016.
73. Karjalainen, P., **Timonen, H.**, Saukko, E., Kuuluvainen, H., Saarikoski, S., Aakko-Saksa, P., Murtonen, T., Bloss, M., Dal Maso, M., Simonen, P., Ahlberg, E., Svenningsson, B., Brune, W. H., Hillamo, R., Keskinen, J., and Rönkkö, T.: Time-resolved characterization of primary particle emissions and secondary particle formation from a modern gasoline passenger car, *Atmos. Chem. Phys.*, 16, 8559-8570, doi:10.5194/acp-16-8559-2016, 2016.
74. Carbone, S., Onasch, T., Saarikoski, S., **Timonen, H.**, Saarnio, K., Sueper, D., Rönkkö, T., Pirjola, L., Häyrynen, A., Worsnop, D., and Hillamo, R.: Characterization of trace metals on soot aerosol particles with the SP-AMS: detection and quantification, *Atmos. Meas. Tech.*, 8, 4803-4815, 2016.
75. Pirjola, L., Dittrich, A., Niemi, J.V., Saarikoski, S., **Timonen, H.**, Kuuluvainen, H., Kousa, A., Rönkkö, T. and Hillamo, R. Physical and chemical characterization of real-world particle number and mass emissions from city buses in Finland, accepted to EST, 2015.
76. Alanen, J., Saukko, E., Lehtoranta, L., Murtonen, T., **Timonen, H.**, Hillamo, R., Karjalainen, P., Kuuluvainen, H., Harra, J., Keskinen, J., Rönkkö, T.: The formation and physical properties of the particle emissions from a natural gas engine, *Fuel*, 162, 155-161, doi:10.1016/j.fuel.2015.09.003.
77. **Timonen, H.**, Aurela, M., Carbone, S., Saarnio, K., Frey, A., Saarikoski, S., Teinilä, K., Kulmala, M. and Hillamo, R. 2014, Seasonal and diurnal changes in inorganic ions, carbonaceous matter and mass in ambient aerosol particles at an urban, background area. *Boreal Env. Res.* 19 (suppl. B): 71–86.
78. Saarnio, K., Frey, A., Niemi, J.V., **Timonen, H.**, Rönkkö, T., Karjalainen, P., Vestenius, M., Teinilä, K., Pirjola, L., Niemelä, V., Keskinen, J., Häyrynen, A., and Hillamo R. (2014) Chemical composition and size of particles in emissions

- of a coal-fired power plant with flue gas desulfurization. *J. Aerosol Sci.*, 73, 14-26, 10.1016/j.jaerosci.2014.03.004.
79. Carbone S., Aurela M., Saarnio K., Saarikoski S., **Timonen H.**, Frey A., Sueper D., Ulbrich I.M., Jimenez J.L., Kulmala M., Worsnop D.R., Hillamo R.E. (2014), Wintertime Aerosol Chemistry in Sub-Arctic Urban Air, *Aerosol Science and Technology*, 48(3), 313-323, doi:10.1080/02786826.2013.875115.
80. **Timonen, H.**, Ambrose, J. L., and Jaffe, D. A.: Oxidation of elemental Hg in anthropogenic and marine airmasses, *Atmos. Chem. Phys.*, 13, 2827-2836, doi:10.5194/acp-13-2827-2013, 2013.
81. **Timonen, H.**, Wigder, N., and Jaffe, D. A.: Influence of background particulate matter (PM) on urban air quality in the Pacific Northwest, *J. Environ. Manage.*, 129, 333-340, 2013.
82. Smith, D. J., **Timonen, H.J.**, Jaffe, D.A., Griffin, D.W., Birmele, M.N., Perry, K.D., Ward, P.D., Roberts, M.S.: Intercontinental Dispersal of Bacteria and Archaea in Transpacific Winds. *Appl. Environ. Microb.*, 79, 1134-1139, DOI:10.1128/AEM.03029-12, 2013.
83. **Timonen, H.**, Carbone, S., Aurela, M., Saarnio, K., Saarikoski, S., Ng., N.L., Canagaratna, M., Kulmala, M., Kerminen, V.-M., Worsnop, D., and Hillamo, R. 2013. Characteristics, sources and water-solubility of ambient submicron organic aerosol in springtime in Helsinki, Finland, *J. Aerosol Sci.*, 51, 61-77. <http://dx.doi.org/10.1016/j.jaerosci.2012.06.005>.
84. Saarnio K., Niemi J.V., Saarikoski S., Aurela M., **Timonen H.**, Teinilä K., Myllynen M., Frey A., Lamberg H., Jokiniemi J., and Hillamo R. (2012) Using monosaccharide anhydrides to estimate the impact of wood combustion on fine particles in the Helsinki Metropolitan Area. *Boreal Env. Res.* 17, 163–183
85. Saarnio K., Teinilä K., Saarikoski S., Carbone S., Gilardoni S., **Timonen H.**, Aurela M., and Hillamo R. (2013) Online determination of levoglucosan in ambient aerosols with particle-into-liquid sampler – high-performance anion-exchange chromatography – mass spectrometry (PILS–HPAEC–MS). *Atmos. Meas. Tech.* 6, 2839–2849, doi:10.5194/amt-6-2839-2013
86. Kerminen, V.-M., Niemi, J. V., **Timonen, H.**, Aurela, M., Frey, A., Carbone, S., Saarikoski, S., Teinilä, K., Hakkarainen, J., Tamminen, J., Vira, J., Prank, M., Sofiev, M., and Hillamo, R. 2011: Characterization of a volcanic ash episode in southern Finland caused by the Grimsvötn eruption in Iceland in May 2011, *Atmos. Chem. Phys.*, 11, 12227-12239.
87. Aurela, M., Saarikoski, S., **Timonen, H.**, Aalto, P., Keronen, P., Saarnio, K., Teinilä, K., Kulmala, M. and Hillamo, R. 2011: Carbonaceous aerosol at a forested and an urban background sites in Southern Finland, *Atmos. Environ.*, Vol. 45, 7, 1394-1401.

88. **Timonen, H.**, Aurela, M., Carbone, S., Saarnio, K., Saarikoski, S., Mäkelä, T., Worsnop, D. R., Kulmala, M., Kerminen, V. -M. and Hillamo, R. 2010: Chemical characterization of the water-soluble fraction of ambient aerosols measured with two high-resolution devices PILS-TOC-IC and AMS, *Atmos. Meas. Tech.*, 3, 1-12.
89. Saarnio, K., Teinilä, K., Aurela, M., **Timonen, H.**, Hillamo, R. (2010): High-performance anion-exchange chromatography–mass spectrometry method for determination of levoglucosan, mannosan, and galactosan in atmospheric fine particulate matter, *Anal. Bioanal. Chem.* 398, 2253-2264. DOI: 10.1007/s00216-010-4151-4.
90. Saarnio, K., Aurela, M., **Timonen, H.**, Saarikoski, S., Teinilä, K., Mäkelä, T., Sofiev, M., Koskinen, J., Aalto, P., Kulmala, M. and Hillamo R. 2010: Fine particles in fresh smoke plumes from boreal forest-fires, *Sci. Tot. Environ.*, 408, 12, 2527-2542.
91. Asmi, E., Frey, A., Virkkula, A., Ehn, M., Manninen, H. E., **Timonen, H.**, Tolonen-Kivimäki, O., Aurela, M., Hillamo, R., and Kulmala, M. 2010: Hygroscopicity and chemical composition of Antarctic sub-micrometre aerosol particles and observations of new particle formation, *Atmos. Chem. Phys.*, 10, 4253-4271.
92. Frey, A. K., Tissari, J., Saarnio, K. M., **Timonen, H. J.**, Tolonen-Kivimäki, O., Aurela, M. A., Saarikoski, S. K., Makkonen, U., Hytönen, K., Jokiniemi, J., Salonen, R. O. & Hillamo, R. E. J. 2009: Chemical composition and mass size distribution of fine particulate matter emitted by a small masonry heater, *Boreal Env. Res.* 14, 255–271.
93. **Timonen, H. J.**, Saarikoski, S. K., Aurela, M. A., Saarnio, K. M. and Hillamo, R. E. J. 2008: Water-soluble organic carbon in urban aerosol: concentrations, size distributions and contribution to particulate matter, *Boreal Env. Res.* 13, 335–346.
94. **Timonen, H.**, Saarikoski, S., Tolonen-Kivimäki, O., Aurela, M., Saarnio, K., Petäjä, T., Aalto, P.P., Kulmala, M., Pakkanen, T., and Hillamo, R. 2008: Size distributions, sources and source areas of water-soluble organic carbon in urban background air, *Atmos. Chem. Phys.*, 8, 5635–5647.
95. Saarikoski, S., **Timonen, H.**, Saarnio, K., Aurela, M., Järvi, L., Keronen, P., Kerminen, V.-M., and Hillamo, R. 2008: Sources of organic carbon in fine particulate matter in northern European urban air, *Atmos. Chem. Phys.*, 8, 6281-6295.
96. Saarikoski, S., Sillanpää, M., Sofiev, M., **Timonen, H.**, Saarnio, K., Teinilä, K., Karppinen, A., Kukkonen, J., Hillamo, R. 2007: Chemical composition of aerosols during a major biomass burning episode over northern Europe in spring 2006: Experimental and modeling assessments, *Atmos. Environ.* 41, 3577-3589.

97. **Holopainen, H.**, Alvila, L., Pakkanen T. T. 2003: Determination of the formaldehyde-to-phenol molar ratios of resol resins by infrared spectroscopy and multivariate analysis, *J Appl Polym Sci*, 89, 3582-3586.

B. Non-refereed scientific articles

1. Mehdi Amouei Torkmahalleh, Zarina Akhmetvaliyeva, Ali Darvishi Omran, Faezeh Darvish Omran, Mohadeseh Kazemitabar, Mahtab Naseri, Motahareh Naseri, Hamed Sharifi, Milad Malekipirbazari, Enoch Kwasi Adotey, Soudabeh Gorjinezhad, Neda Eghtesadi, Sergei Sabanov, Andrés Alastuey, María de Fátima Andrade, Giorgio Buonanno, Samara Carbone, Diego Ernesto Cárdenas-Fuentes, Flemming R. Cassee, Qili Dai, Andrés Henríquez, Philip K. Hopke, Petri Keronen, Haider Abbas Khwaja, Jong Kim, Markku Kulmala, Prashant Kumar, Jonilda Kushta, Joel Kuula, Jordi Massagué, Tamsin Mitchell, Dennis Mooibroek, Lidia Morawska, Jarkko V. Niemi, Soulemane Halif Ngagine, Michael Norman, Beatriz Oyama, Pedro Oyola, Fatma Öztürk, Tuukka Petäjä, Xavier Querol, Yousef Rashidi, Felipe Reyes, Matthew Ross-Jones, Tunga Salthammer, Chrysanthos Savvides, Luca Stabile, Karin Sjöberg, Karin Söderlund, Ramya Sunder Raman, **Hilkka Timonen**, Masakazu Umezawa, Mar Viana, Shanju Xie: Global Air Quality and COVID-19 Pandemic: Do We Breathe Cleaner Air?, European Aerosol Conference, Birmingham (Online), 2021.
2. S. D. Seppälä, S. Saarikoski, J. Kuula, A. Helin, M. Aurela, J. Niemi, T. Rönkkö, **H. Timonen**: Size distributions of particles emitted from different sources at a residential area, European Aerosol Conference, Birmingham (Online), 2021.
3. **H. Timonen**, F. Mylläri, P. Simonen, M. Aurela, M. Maasikmets, M. Bloss, H-L, Kupri, K. Vainumäe, T. Lepistö, L. Salo, V. Niemelä, S. Seppälä, P.I. Jalava, E. Teinmaa, S. Saarikoski and T. Rönkkö: Household solid waste combustion increases particulate emissions, European Aerosol Conference, Birmingham (Online), 2021.
4. Mylläri, F., Niemelä, N., Kuittinen, N., Aurela, M., Teinilä, K., **Timonen, H.**, Rönkkö, T.,: Black carbon and fine particle formation in a 100 MW heating plant, European Aerosol Conference, Birmingham (Online), 2021.
5. Luis M. F. Barreira, Aku Helin, Minna Aurela, Kimmo Teinilä, Milla Friman, Leena Kangas, Jarkko V. Niemi, Harri Portin, Anu Kousa, Liisa Pirjola, Topi Rönkkö, Sanna Saarikoski, **Hilkka Timonen**: In-depth characterization of particulate matter at a street canyon site in Northern Europe, Nordic Society for Aerosol (NOSA) symposium, 15-17.3.2021 (online).
6. Kimmo Teinilä, **Hilkka Timonen**, Minna Aurela, Joel Kuula, Topi Rönkkö, Heidi Hellèn, Kati Loukkola, Jarkko Niemi, Sanna Saarikoski: Particulate sources in residential area in Helsinki, Nordic Society for Aerosol (NOSA) symposium, 15-17.3.2021 (online).
7. Milla Friman, Joel Kuula, Aku Helin, Jarkko V. Niemi, Minna Aurela, **Hilkka Timonen**, Sanna Saarikoski: Utilization of scattering and absorption-based particulate matter sensors in the environment impacted by residential wood combustion, Nordic Society for Aerosol (NOSA) symposium, 15-17.3.2021 (online).

8. Rojas. F, Ahumada. S, Reyes. F, Oyola. P, Saarikoski, S, Aurela. M, and **Timonen. H.**, Impact of biomass burning in Temuco and Padre Las Casas, Araucanía region, Chile, European Aerosol Conference, 31.8-4.9, Aachen, Germany.
9. L.M.F. Barreira, A. Helin¹, M. Aurela¹, J. V. Niemi², K. Teinilä¹, S. Saarikoski¹ and **H. Timonen**, In-depth characterization of particulate matter at an urban site in Northern Europe, European Aerosol Conference, 31.8-4.9, Aachen, Germany.
10. Helin¹, A. Virkkula¹, J. Backman¹, L. Pirjola^{2,3}, O. Sippula^{4,5}, P. Aakko-Saksa⁶, S. Väätäinen⁴, F. Mylläri⁷, A. Järvinen⁷, M. Bloss¹, M. Aurela¹, G. Jakobi^{8,9}, P. Karjalainen⁷, R. Zimmermann^{8,9,10}, J. Jokiniemi⁴, S. Saarikoski¹, J. Tissari⁴, T. Rönkkö⁷, J.V. Niemi¹¹, and H. Timonen¹, Investigation of absorption Ångström exponents for different emission sources, European Aerosol Conference, 31.8-4.9, Aachen, Germany.
11. S. Saarikoski¹, J. Niemi², H. Hellén¹, M. Aurela¹, T. Rönkkö³ and H. Timonen¹, Characterization of submicron organic aerosol and VOCs sources at an urban location in Helsinki, Finland. European Aerosol Conference, 31.8-4.9, Aachen, Germany.
12. Saarikoski S, Pirjola L, Niemi J, Kuuluvainen H, Rönkkö T, Timonen H. Emissions from city busses operated by alternative fuels; ethanol, compressed natural gas and dieselelectric, Proceedings of 8th Transport Research Arena TRA 2020, April 27-30, 2020, Helsinki, Finland 2020.
13. Luoma, K.H., Niemi, J., Helin, A., Aurela, A., **Timonen, H.**, Virkkula, A., Rönkkö, T., Kousa, A., Fung, P.L. Hussein, T., Petäjä, T., Spatiotemporal variation of black carbon in southern Finland, European Aerosol Conference, 31.8-4.9.2020, Aachen, Germany.
14. Okuljar, M., Kuuluvainen, H., **Timonen, H.**, Niemi, J.V., Kangasluoma, J., Kontkanen, J., Paasonen, P., Garmash, O., Sipilä, M., Kulmala, M., Dal Maso, M., Olin, M., Salo, L., Lintusaari, H., Keskinen, J., Teinila, K., Aurela, M., Saarikoski, S., Portin, H., Rönkkö, T., Petäjä, T., Influence of traffic and new particle formation on 1-1000 nm particle size distribution in Helsinki: two supersites comparison, European Aerosol Conference, 31.8-4.9.2020, Aachen, Germany.
15. J. Vanhanen, J. Enroth, L. Salo, N. Kuittinen, S. Martikainen, **H. Timonen**, M. Väkevä and T. Rönkkö, Characterization and first tests of a new nanoparticle sampling device designed for full fine particle range starting from 1nm in diameter, European Aerosol Conference, 31.8-4.9.2020, Aachen, Germany.
16. Olin, M., Kuuluvainen, H., Aurela, M., Kalliokoski, J., Kuittinen, N., Isotalo, M., **Timonen, H.**, Niemi, J.V. Rönkkö, T., Dal Maso, M. Distinguishing the effects of traffic and photochemistry on urban sulfuric acid and nanocluster formation, European Aerosol Conference, 31.8-4.9.2020, Aachen, Germany.
17. Kuittinen, N; Mylläri, F, Karjalainen, P., Simonen, P., Aakko-Saksa, P., **Timonen, H.**, Rönkkö, T., Effect of fuel on the hygroscopicity of particles emitted from 1.6MW marine engine, European Aerosol Conference, 31.8-4.9.2020, Aachen, Germany.
18. Kangasluoma, J., Yusheng, W., Runlong, C., Kuula, J. **Timonen, H.**, Aalto, P.P., Kulmala, M., Petäjä, T. Supervised regression learning for predictions of aerosol particle size distributions from PM_{2.5}, total particle number and meteorological

- parameters at Hyytiälä SMEAR2 station, European Aerosol Conference, 31.8-4.9.2020, Aachen, Germany.
19. Kangasniemi, O., Kalliokoski, J., Timonen, H., Kuuluvainen, H., Hietikko, R., Isotalo, M., Kuittinen, N., Aurela, M., Saarikoski, S., Niemi, J.V., Keskinen, J., Riipinen, I., Rönkkö, T., Dal Maso, M. Determination of the volatility distribution of exhaust aerosol from thermodesorber data using a genetic optimization algorithm, European Aerosol Conference, 31.8-4.9.2020, Aachen, Germany.
 20. Rojas. F, Ahumada. S, Reyes. F, Oyola. P, Saarikoski, S, Aurela. M, and **Timonen. H.**, Impact of biomass burning in Temuco and Padre Las Casas, Araucanía region, Chile, European Aerosol Conference, 31.8-4.9.2020, Aachen, Germany.
 21. L.M.F. Barreira, A. Helin, M. Aurela, J.V. Niemi, K. Teinilä, S. Saarikoski and **H. Timonen**, In-depth characterization of particulate matter at an urban site in Northern Europe, European Aerosol Conference, 31.8-4.9.2020, Aachen, Germany.
 22. Helin, A. Virkkula, J. Backman, L. Pirjola, O. Sippula, P. Aakko-Saksa, S. Väätäinen, F. Mylläri, A. Järvinen, M. Bloss, M. Aurela, G. Jakobi, P. Karjalainen, R. Zimmermann, J. Jokiniemi, S. Saarikoski, J. Tissari, T. Rönkkö, J.V. Niemi, and **H. Timonen**, Investigation of absorption Ångström exponents for different emission sources, European Aerosol Conference, 31.8-4.9.2020, Aachen, Germany.
 23. S. Saarikoski, J. Niemi, H. Hellén, M. Aurela, T. Rönkkö and **H. Timonen**, Characterization of submicron organic aerosol and VOCs sources at an urban location in Helsinki, Finland. European Aerosol Conference, 31.8-4.9.2020, Aachen, Germany.
 24. S.D. Seppälä, **H. Timonen**, J. Keskinen, A.-P. Hyvärinen, S. Saarikoski, Effects of marine fuel sulphur restrictions on particle properties of ship plumes in atmospheric environment at the Baltic Sea European Aerosol Conference, 31.8-4.9.2020, Aachen, Germany.
 25. Kuula, J., Heino Kuuluvainen, Topi Rönkkö, Jarkko Niemi, Erkkka Saukko, Harri Portin, Minna Aurela, Sanna Saarikoski, Rostedt Antti, **Hilkka Timonen**, Applicability of Different Type Particulate Matter Sensors to Urban Air Quality Measurements, AAAR conference, Oregon 14-18.10.2019.
 26. Aakko-Saksa P, Koponen P, Laurikko J, Nylund N.-O., Karjalainen P, Rönkkö T, **Timonen H**: Comprehensive Emission Characterisation of Exhaust from Alternative Fuelled Cars, 23rd Transport and Air Pollution Conference, Thessaloniki 2019
 27. **Timonen H**, Saarikoski S, Williams L, Eiguren-Fernandez A, Hering S, Teinilä K, Niemi J, Aurela M, Field evaluation of the ADIc concentrator with Aerosol Chemical Speciation Monitor, European Aerosol Conference, 24-29.8.2019, Gothenburg, Sweden. 2019
 28. Saarikoski, S., Aurela, M., Niemi, J., Helin A., Pirjola, L. and **Timonen, H.**, Comparison of biomass burning related black carbon measured with AE33 and SP-AMS. European Aerosol Conference, 24-29.8.2019, Gothenburg, Sweden. 2019.
 29. Salo, L, Mylläri, F., Maasikmets, M., Niemelä, V., Konist, A., Vainumäe, K., Kupri, H.-L., Titova, R., Simonen, P., Aurela, M., Bloss, M., Keskinen, J., **Timonen, H.**, and Rönkkö, T. Comparison of instruments in particle emission measurements, European Aerosol Conference, 24-29.8.2019, Gothenburg, Sweden. 2019.

30. Kuuluvainen, H., Rönkkö, T., Karjalainen, P., Keskinen, J., Hillamo, R., Niemi, J., Pirjola, L., **Timonen, H.**, Saarikoski, S., Saukko, E., Järvinen, A., Silvennoinen, H., Rostedt, A., Olin, M., Yli-Ojanperä, J., Nousiainen, P, Kousa, A., Dal Maso, M., Atmospheric Nanocluster Aerosol Emitted from Road Traffic. International Aerosol conference, St. Luis, US, 2018.
31. Saarikoski S, Alanen J, Vesala H, Murtonen T, Isotalo M, Martikainen S, Bloss M, Aurela M, Maunula T, Kallinen K, Torrkulla J, **Timonen H**, Rönkkö T, Lehtoranta K: Characterization of secondary particulate emissions from engine operated by natural gas and propane, NOSA, Aerosol Conference, Helsinki, Finland, 26-28.3.2018, Published in:REPORT SERIES IN AEROSOL SCIENCE N:o 208 (2018); Proceedings of the NOSA-FAAR Symposium 2018, Eds. Petri Clusius, Joonas Enroth and Antti Lauri, 2018.
32. Isotalo, M., Alanen, J., Vanhanen, J., Martikainen, S., Vesala, H., Pettinen, R., Saarikoski, S., Aurela, A., Simonen, P., Kettunen, M., Väkevä, M., **Timonen, H.**, Lehtoranta, K., Keskinen, J., Rönkkö, T. Nanoparticle Emissions from a Gas Engine – Effects of Gas and Lubricant Oil Composition, International Aerosol conference, St. Luis, US, 2018.
33. De Jesus, A. L., Mahmudur Rahman, Md, Mazaheri, M., Knibbs, L, Thompson, H., Evans, G.J., Jeong, C.H. Kulmala, M., Petäjä, T., Luoma, K., **Timonen, H.**, Niemi, J. Harrison, R.M., Beddows, D., Sioutas, C., Sowlat, M. Morawska, L.: Correlation between PM2.5 and Particle Number Concentrations in Four Major Cities: Toronto, Los Angeles, Helsinki and London. International Aerosol conference, St. Luis, US, 2018.
34. Simonen, P., Kalliokoski, J., Karjalainen, P., Dal Maso, M., Rönkkö, T., Saarikoski, S., Aurela, M., Bloss, M., **Timonen, H.**, Triantafyllopoulos, G., Dimaratos, A., Ntziachristos, L., Samaras, Z., Keskinen, J. Comparing On-road and Laboratory Measurements of Primary Emissions and Secondary Aerosol Formation Potential of Individual Light-Duty Vehicles, International Aerosol conference, St. Luis, US, 2018.
35. Aurela, M., Teinilä, K., Saarikoski, S., Niemi, J., Portin, H., Aalto, P., Pirjola, L., **Timonen, H.** Influence of Traffic Emissions on Chemical Composition of Particles in Helsinki, Finland. International Aerosol conference, St. Luis, US, 2018.
36. Rivas, I. Reche, C., Beddows, D., Green, D., Järvi, L., Hueglin, C., **Timonen, H.**, Fuller, G.W., Niemi, J.V., Kulmala, M., Harrison, R.M., Alastuey, A., Querol, X., Kelly, F.J., Contribution of Primary and Secondary Particles to Mode-Segregated Aerosol Particle Number Concentrations in Four European Cities
37. **Timonen H**, Bloss M, Kuula J, Arffman A, Alanen J, Teinilä K, Aurela M, Salo L, Hillamo R, Saari, S, Oyola P, Reyes F, VÁSQUEZ J, Salonen R.O., Keskinen J, Asmi E, Saarikoski S: Composition and properties of particulate emissions from mining activities, NOSA, Aerosol Conference, Helsinki, Finland, 26-28.3.2018, Published in:REPORT SERIES IN AEROSOL SCIENCE N:o 208 (2018); Proceedings of the NOSA-FAAR Symposium 2018, Eds.Petri Clusius, Joonas Enroth and Antti Lauri, 2018.
38. Helin A, Niemi J.V, Virkkula A, Pirjola L, Teinilä K, Backman J, Aurela M, Saarikoski S, Rönkkö T, Asmi E, **Timonen H**: Characteristics and sources of black carbon in the Helsinki metropolitan area, Finland, NOSA, Aerosol Conference, Helsinki, Finland, 26-28.3.2018, Published in: REPORT SERIES IN, AEROSOL

- SCIENCE N:o 208 (2018); Proceedings of the NOSA-FAAR, Symposium 2018, Eds. Petri Clusius, Joonas Enroth and Antti Lauri, 2018.
39. Saarikoski S, Alanen J, Vesala H, Pettinen R, Isotalo M, Martikainen S, Bloss M, Aurela M, Maunula, T, Kallinen K, Torrkulla J, **Timonen H**, Rönkkö T, Lehtoranta K: Chemical characterization of particles emitted from engine operated by natural gas and propane; International Aerosol Conference, St. Louis september 2-7, 2018, USA, Abstract Number: 1252, <http://aarabstracts.com/2018IAC/viewabstract.php?pid=1252>, 2018
 40. Bloss M, Karjalainen P, Kuittinen N, Murtonen T, Vesala H, Rönkkö T, Aakko-Saksa P, **Timonen H**: Chemical composition of emissions measured in real time from a modern ship engine during a cruise; NOSA, Aerosol Conference, Helsinki, Finland, 26-28.3.2018, Published in: REPORT SERIES IN AEROSOL SCIENCE N:o 208 (2018); Proceedings of the NOSA-FAAR Symposium 2018, Eds. Petri Clusius, Joonas Enroth and Antti Lauri, 2018
 41. **Timonen H**, Kuula J, Niemi J, Julkunen A, Nousiainen T, Aurela M. Compact air quality sensor measurements in an urban street canyon during a street dust season, Air Sensors International Conference, September 12-14, 2018, Oakland, California, 2018.
 42. Aakko-Saksa K, Lehtoranta, T, Murtonen, H, Vesala, P, Koponen, P, Karjalainen, L, Ntziachristos, N, Kuittinen, J, Alanen, T, Rönkkö, J, Keskinen, M, Aurela, **H. Timonen**, Particle and gaseous emissions from a dual-fuel marine engine, Proceedings of 22nd international Transport and Air Pollution Conference, Zurich, ISBN: 978-3-905594-676, 2017.
 43. Laakia J, Teinilä K, **Timonen H**, Saarikoski S, Bloss M, Karjalainen P, Kuittinen N, Aakko-Saksa P, Vesala H, Pettinen R, Jalkanen J: First results from "ENVISUM" project: Emission measurements at sea on board at ocean going vessel. NOSA-FAAR Aerosol Symposium 2018 in Helsinki, Finland. 2018
 44. Kuula J, Mäkelä T, Hillamo R, **Timonen H**: Response characterization of an inexpensive aerosol sensor; NOSA, Aerosol Conference, Helsinki, Finland, 26-28.3.2018, Published in: REPORT SERIES IN AEROSOL SCIENCE N:o 208 (2018); Proceedings of the NOSA-FAAR Symposium 2018, Eds. Petri Clusius, Joonas Enroth and Antti Lauri, 2018.
 45. Teinilä, K, **Timonen, H.**, Saarikoski, S., Hooda, R., Bloss, M., Aurela, M., Asmi, E., Lihavainen, H., Malinen, A., Pirjola, L., Lal, B., Kuuluvainen, H., Karjalainen, P., Rönkkö, T.: Chemical characterization of diesel and gasoline emissions from passenger vehicles with different fuels and lubricant oils, NOSA 26-28.3.2018, Helsinki.
 46. Olin, M., Hietikko, R., Aurela, M., Kuuluvainen, H., Kuittinen, N., Isotalo, M., **Timonen, H.**, Niemi, J., Rönkkö, T., Dal Maso, M. Sulfuric Acid and Nanocluster Aerosol Measured in an Urban Street Canyon of Helsinki, Finland. International Aerosol conference, St. Luis, US, 2018.
 47. Päivi Aakko-Saksa, Timo Murtonen, Hannu Vesala, Päivi Koponen, **Hilkka Timonen**, Kimmo Teinilä, Minna Aurela, Panu Karjalainen, Niina Kuittinen, Harri Puustinen, Pekka Piimäkorpi, Sami Nyysönen, Jarmo Martikainen, Jarmo Kuusisto, Matti Niinistö, Tuula Pellikka, Sanna Saarikoski, Jesse Jokela, Pauli Simonen, Fanni Mylläri, Hugo Wihersaari, Topi Rönkkö, Monica Tutuianu, Liisa Pirjola, Aleks

- Malinen. Black carbon emissions from a ship engine in laboratory (SEA-EFFECTS BC WP1), Report VTT-R-02075-17.
48. **Hilkka Timonen**, Päivi Aakko-Saksa, Niina Kuittinen, Panu Karjalainen, Timo Murtonen, Kati Lehtoranta, Hannu Vesala, Matthew Bloss, Sanna Saarikoski, Päivi Koponen, Pekka Piimäkorpi, Topi Rönkkö. Black carbon measurement validation onboard (SEA-EFFECTS BC WP2), Report VTT-R-04493-17 www.vtt.fi/inf/julkaisut/muut/2017/VTT-R-04493-17.pdf
 49. Aakko-Saksa, P., Aakko-Saksa P., Murtonen T, Vesala H, Nyssönen S., Puustinen H., Lehtoranta K, **Timonen H**, Teinilä K, Hillamo R, Karjalainen P, Kuittinen N, Simonen P, Rönkkö T, Keskinen J, Saukko E, Tutuianu M, Fischerleitner R, Pirjola L, Brunila O.-P., and E, H.: Black carbon measurements using different marine fuels, 28th CIMAC World Congress on Combustion Engines, At Helsinki, Finland, Volume: CIMAC (2016), Paper no. 068, 2016.
 50. Teinilä, K., Aurela, M. Niemi, J., Kousa, A., Saarikoski, S., Carbone, S., Kangas, L., Hillamo, R. and **Timonen, H.** Investigation of traffic related secondary aerosol formation in Helsinki city centre, European Aerosol conference, Zurich 2017.
 51. D. Brus, D., Lihavainen, H., Raatikainen, T., **Timonen, H.**, Aurela, M., Hillamo, R., M. Cubison, M., Schmidt, K., Nekat, B., and Weller, R. Aerosol composition and CCNactivation measured at coastal site in Antarctica, European Aerosol Conference, 4.-9.9.2016, Tours, Ranska.
 52. Lehtoranta K., Murtonen T., Vesala H., Koponen P., Alanen J., Kuittinen N., Simonen P., Rönkkö T., Saarikoski S., **Timonen H.**, Maunula T., Kallinen K., Korhonen S.: Controlling emissions of natural gas engines, A&WMA's 110th Annual Conference & Exhibition, Pittsburgh, US, 5-8.6, 2017.
 53. Simonen, P., Kalliokoski, J., Karjalainen, P., Dal Maso, M., Rönkkö, T., Saarikoski, S., **Timonen, H.**, Bloss, M., Dimaratos, A., Ntziachristos, L., Keskinen, J.: Secondary Aerosol Formation Potential of Gasoline Vehicle Exhaust Under On-road and Laboratory Conditions, AAAR-conference, Portland, Oregon, 2016.
 54. Rönkkö, T., Alanen, J., Saukko, E., Lehtoranta, K., Murtonen, T., **Timonen, H.**, Hillamo, R., Karjalainen, P., Kuuluvainen, H., Harra, J., Keskinen, J.: 5th IEES conference, Poland, 2016.
 55. Kuittinen, N. Karjalainen, P., Aakko-Saksa, P., **Timonen, H.**, Simonen, P., Mylläri, F., Wihersaari, H., Keskinen, J., Rönkkö, T.: Effect of fuel on the exhaust particle characteristics and emissions from a marine diesel engine, European Aerosol Conference, 4.-9.9.2016, Tours, Ranska.
 56. Lehtoranta, K., Alanen, J., Rönkkö, T., Simonen, P., Murtonen, T., Vesala, H., Saarikoski, S., **Timonen, H.**, Maunula, T., Kallinen, K., Korhonen, S.: Particle emissions from a natural gas engine with and without a catalyst, ETH conference, 2016.
 57. Saarikoski, S., **Timonen, H.**, Murtonen, T., Vesala, H., Alanen, J., Rönkkö, T., Hillamo, R., Maunula, T., Kallinen, K., Korhonen, S, and Lehtoranta, K: Characterization of natural gas engine emission by aerosol mass spectrometer, European Aerosol Conference, 4.-9.9.2016, Tours, Ranska.
 58. P. Karjalainen, **H. Timonen**, E. Saukko, H. Kuuluvainen, S. Saarikoski, P. Aakko-Saksa, T. Murtonen, M. Bloss, M. Dal Maso, E. Ahlberg, B. Svenningsson, W.H. Brune, R. Hillamo, J. Keskinen and T. Rönkkö, Real-time investigation of primary particle emissions and secondary particle formation from a gasoline direct injection vehicle, European Aerosol Conference, 4.-9.9.2016, Tours, Ranska.
 59. Karjalainen, P., **Timonen, H.**, Saukko, E., Kuuluvainen, H., Saarikoski, S., Aakko-Saksa, P., Murtonen, T., Dal Maso, M., Ahlberg, E., Svenningsson, B., Brune, W.

- H., Hillamo, R., Keskinen, J., and Rönkkö, T. Time-resolved characterization of secondary particle formation from a gasoline passenger car, ETH, 2016.
60. **Timonen, H.**, Saarikoski, S., Ronkko, T., Karjalainen, P., Saukko, E., Ahlberg, E., Svenningsson, B., Brune, W. H., Aakko-Saksa, P., Worsnop, D., and Hillamo, R.: High secondary organic aerosol emissions observed for the gasoline vehicles, 11th International conference on carbonaceous particles in the atmosphere, Berkley, California, 2015.
 61. **H. Timonen**, M. Aurela, D. Brus, H. Lihavainen, R. Hillamo, M. Cubison, B. Nekat, R. Weller, D. Worsnop, E. Asmi Analysis of composition of particulate matter originating from sea areas using Time-of-Flight Aerosol Chemical Speciation (ToF-ACSM) monitor, Aerosol technology conference, Tampere, Finland, June 15-17, 2015.
 62. Brus, D., Asmi, E., Aurela, M., Devoto, F., Doulgieris, K., Hatakka, J., Hillamo, R., Laurila, T., Lihavainen, H., O'Connor, E., Rouhe, E., Saarikoski, S., and **Timonen, H.**: Skyvan flights during BAEC campaign, abstracts of NOSA conference 2015, Kuopio, Finland.
 63. Hillamo, R., Teinila, K., **Timonen, H.**, Aurela, M., Saarikoski, S., Salonen, R. O., Linnainmaa, M., Reyes, F., Vasquez, Y., Oyola, P., Cubison, M. J., and Worsnop, D. R.: Online mass spectrometric composition analysis of particulate matter in mines, Aerosol Technology conference, 2015.
 64. Saarikoski, S., Carbone, S., **Timonen, H.**, Ronkko, T., Pirjola, L., Worsnop, D. R., and Hillamo, R.: The analysis of metals by using Soot Particle Aerosol Mass Spectrometer, Aerosol Technology conference, 2015.
 65. **Timonen, H.**, Saarikoski, S., Ronkko, T., Karjalainen, P., Saukko, E., Ahlberg, E., Svenningsson, B., Brune, W. H., Aakko-Saksa, P., Worsnop, D., and Hillamo, R.: Chemical characterization of primary and secondary aerosol in flexible-fuel engine emissions, Aerosol Technology conference, 2015.
 66. **Timonen, H.**, Ambrose, J., Jaffe, D.A. (2012) Transport of free tropospheric aerosol particles and ozone from the Mt. Bachelor Observatory into the continental boundary layer, abstract A43H-06, presented at 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec.
 67. Ambrose, J., **Timonen, H.**, Jaffe, D.A. Oxidation of elemental mercury in anthropogenic pollution plumes and in Pacific marine air masses observed at the Mt. Bachelor Observatory, Abstract B24B-02, presented at 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec.
 68. **Timonen, H.**, Carbone, S., Aurela, M., Saarnio, K., Saarikoski, S., Ng, N. L., Canagaratna, M. L., Kulmala, M., Worsnop, D., and Hillamo, R. 2011, Sources and behavior of submicrometer organic carbon in urban background air, American Aerosol conference.
 69. **Timonen, H.**, Carbone, S., Aurela, M., Saarnio, K., Saarikoski, S., Ng, N. L., Canagaratna, M. L., Kulmala, M., Worsnop, D., and Hillamo, R. 2011: Analysis of the behaviour of submicrometer water-soluble organic carbon in urban background air, 10th International conference on carbonaceous particles in the atmosphere, 26-29.6.2011, Vienna, Austria. Abstract 2-1.
 70. **Timonen, H.**, Aurela, M., Carbone, S., Saarnio, K., Mäkelä, T., Kulmala, M., Worsnop, D. and Hillamo R. 2009: High-time-resolution measurements of water-soluble organic carbon at an urban site in Helsinki, Finland REPORT SERIES IN AEROSOL SCIENCE N:o 102.
 71. Saarikoski, S., Carbone, S., **Timonen, H.**, Aurela, M., Saarnio, K., Mäkelä T, Worsnop D, Hillamo R. 2009: Fast observations of aerosol chemical properties with

- various online instruments, 2009 AAAR Annual Conference Abstracts (26-30 Oct 2009, Minneapolis, MN, USA), Abstract 980.
72. Hillamo, R., **Timonen, H.**, Carbone, S., Aurela, M., Saarikoski, S., Worsnop, D. 2010: Water-solubility, characteristics and sources of organic aerosol in Helsinki, Finland, International Aerosol Conference (August 29-September 3, 2010, Helsinki, Finland), 7C2 (www.iac2010.fi).
 73. Carbone, S., **Timonen, H.**, Aurela, M., Saarikoski, S., Saarnio, K., Mäkelä, T., Ng, N.L., Canagaratna, M.R., Kulmala, M., Worsnop, D., Hillamo, R. 2010: Sources of ambient fine organic particles in Helsinki during spring 2009, Proceedings of the Finnish Center of Excellence and Graduate School in 'Physics, Chemistry, Biology and Meteorology of Atmospheric Composition and Climate Change' Annual Workshop 17.-19.5.2010. Report Series in Aerosol Science 109.
 74. Saarikoski, S., Carbone, S., **Timonen, H.**, Saarnio, K., Aurela, M., Teinilä, K., Lanki, T., Salonen, R.O., Hillamo, R. 2010: Real-time chemical speciation of submicrometer particulate matter in urban environment, Air Pollution and Health Conference (22-26 Mar 2010, San Diego, CA, USA), Abstract 237.
 75. **Timonen, H.**, Aurela, M., Carbone, S., Saarnio, K., Saarikoski, S., Mäkelä, T., Worsnop, D., Kulmala, M., Kerminen, V.-M., Hillamo, R. 2010: High time-resolution measurements of water-soluble organic carbon and ions by the PILS-TOC-IC, International Aerosol Conference (August 29-September 3, 2010, Helsinki, Finland), 4B2 (www.iac2010.fi).
 76. Saarnio, K., Teinilä, K., Aurela, M., Frey, A., **Timonen, H.**, Lamberg, H., Jokiniemi, J., Hillamo, R. 2010: Determination of biomass burning tracers in aerosols with high-performance anion-exchange chromatography - mass spectrometry. Annual meeting of SYTYKE 2010 (Graduate School in Environmental Health), Abstract 8, www.uku.fi/sytyke/events/SYTYKE2010_abstracts.pdf
 77. Saarnio, K., Teinilä, K., Aurela, M., Frey, A., **Timonen, H.**, Lamberg, H., Jokiniemi, J., Hillamo, R. 2010: Determination of biomass burning tracers in aerosols with a high-performance anion-exchange chromatography - mass spectrometry (HPAEC/ESI-MS) method, International Aerosol Conference (August 29-September 3, 2010, Helsinki, Finland), P3W28 (www.iac2010.fi).
 78. Carbone, S., Aurela, M., **Timonen, H.**, Saarnio, K., Saarikoski, S., Mäkelä, T., Worsnop, D., Kulmala, M., Hillamo, R. 2010: Contribution of traffic emissions to ambient fine particles in Helsinki, Finland, International Aerosol Conference (August 29-September 3, 2010, Helsinki, Finland), 9H4 (www.iac2010.fi).
 79. Wei, S.C., Teinilä, K., Saarnio, K., Aurela, M., **Timonen, H.**, Hillamo, R., Wu, Y.L. 2010: Composition of particulate matter emitted in open rice straw burning, AAAR Air Pollution and Health Conference (22-26 Mar 2010, San Diego, CA, USA), Abstract 117.
 80. **Timonen, H.**, Aurela, M., Carbone, S., Saarnio, K., Saarikoski, S., Mäkelä, T., Kulmala, M., Kerminen, V.-M., Worsnop, D., Hillamo, R., 2010: Chemical characterization of the water-soluble fraction of ambient aerosols by using high-time resolution measurement techniques, Proceedings of the Finnish Center of Excellence and Graduate School in 'Physics, Chemistry, Biology and Meteorology of Atmospheric Composition and Climate Change' Annual Workshop 17.-19.5.2010. Report Series in Aerosol Science 109, Editors: Markku Kulmala, Jaana Bäck.
 81. Aurela, M., Laakso, L., Teinilä, K., Vakkari, V., Makkonen, U., **Timonen, H.**, Beukes, P., Pienaar, K., van Zyl, P., Hillamo, R. 2009: Atmospheric aerosol composition at savannah environment and at mining region in South Africa,

- International Aerosol Conference (August 29-September 3, 2010, Helsinki, Finland), 7C6 (www.iac2010.fi).
82. Carbone, S., Aurela, M., **Timonen, H.**, Saarikoski, S., Saarnio, K., Teinilä, K., Mäkelä, T., Ng, N.L., Canagaratna, M.R., Worsnop, D., Kulmala, M., Hillamo, R. 2010: Ambient fine particles in Helsinki during winter and spring 2009, *Eos Trans. AGU*, 91(26), Meet. Am. Suppl., Abstract A34A-01 (8-13 Aug 2010, Foz do Iguaçu, Brazil).
 83. Virkkula, A., Frey, A., Aurela, M., **Timonen, H.**, Teinilä, K., Hillamo, R., Asmi, E., Aalto, P.P., Kulmala, M., Kirkwood, S.: Atmospheric aerosol and gas measurements at the Finnish Antarctic research station Aboa in summers 2006/2007 and 2007/2008, *European Aerosol Conference 2008*, Thessaloniki, Abstract T11A002O.
 84. Aurela, M., **Timonen, H.**, Rautiainen, J., Saarikoski, S., Hillamo, R., Tiitta, P., Kortelainen, A., Raatikainen, T., Laaksonen, A., Worsnop, D. 2008: Comparison of AMS and PILS-IC at the SMEAR II -station in spring 2007, *Report Series in Aerosol Science* N:o 91, pp. 46-48.
 85. Parshintsev, J., Lespine, A., Hartonen, K., Riekkola, M.-L., **Timonen, H.**, Hillamo, R. (2006). Sampling and analysis of oxidation products of terpenes in atmospheric aerosols. Abstracts of Arctic in Changing Climate - Past, Present and Future seminar 2006, Helsinki, Finland.
 86. **Timonen, H.**, Saarikoski, S., Aurela, M., Saarnio, K., Hillamo, R. (2006). Water-soluble organic carbon size distributions at the SMEAR III station in Helsinki. Abstracts of NOSA 2006 Conference, Helsinki, Finland.
 87. Frey, A., Virkkula, A., Saarnio, K., **Timonen, H.**, Tolonen-Kivimäki, O., Aurela, M., Hillamo, R., Tissari, J., Hytönen, K., Willman, P., Jokiniemi, J., Mannila, R., Saari, H., Nääki, I. (2006). Aerosol composition in fireplace emissions. Abstracts of NOSA 2006 Conference, Helsinki, Finland.
 88. Saarikoski, S., Sillanpää, M., Saarnio, K., **Timonen, H.**, Teinilä, K., Hillamo, R. (2006). Chemical composition of fine particles in major burning episodes observed in Finland in 2006. Abstracts of NOSA 2006 Conference, Helsinki, Finland.
 89. Teinilä, K., Aurela, M., **Timonen, H.**, Kuokka, S., Saarikoski, S., Saarnio, K., Tolonen-Kivimäki, O., Hillamo, R. (2007). Ion composition in submicron aerosols in Helsinki area. *European Aerosol Conference 2007* (9–14 Sep 2007, Salzburg, Austria), Abstract T01A032.
 90. Saarikoski, S., Saarnio, K., Sillanpää, M., **Timonen, H.**, Teinilä, K., Sofiev, M., Kukkonen, J., Hillamo, R. (2007). Chemical composition of fine particles in two major biomass burning episodes observed in Helsinki, 2006. *European Aerosol Conference 2007* (9–14 Sep 2007, Salzburg, Austria), Abstract T13A155.
 91. Saarnio, K., Saarikoski, S., Frey, A., **Timonen, H.**, Aurela, M., Mäkelä, T., Sillanpää, M., Hillamo, R. (2007). Contribution of biomass burning to particulate organic carbon in Helsinki, Finland. *2007 AAAR Annual Conference Abstracts* (24–28 Sep 2007, Reno, Nevada, USA), 2S.5.
 92. Kukkonen, J., Saarikoski, S., Sillanpää, M., **Timonen, H.**, Saarnio, K., Teinilä, K., Sofiev, M., Karppinen, A., Hillamo, R., 2007. Evaluation Of The Influence Of Wild Land Fires On Air Quality In Cities – Combined Utilisation Of Ground- And Satellite-Based Observations And Modelling. In: Ranjeet S. Sokhi and Marina Neophytou (eds): *Proceedings of the 6th International Conference on Urban Air Quality*, Limassol, Cyprus, 27-29 March 2007, CD-disk: ISBN 978-1-905313-46-4, University of Hertfordshire and University of Cyprus (pp. 10-13).
 93. Hillamo, R., Saarikoski, S., **Timonen, H.**, Saarnio, K., Frey, A., Aurela, M., Järvi, L., Kulmala, M. (2007). Studies on carbon content of fine particle ambient aerosol

- in Finland. NMR Workshop “Organic particles in Nordic urban areas” (7 Nov 2007, Helsingør, Denmark), pp. 36-37.
94. Saarikoski, S., **Timonen, H.**, Saarnio, K., Aurela, M., Hillamo, R. (2007). Filter and on-line measurements of fine particle organic carbon in Helsinki, Finland. NOSA Aerosol Symposium 2007 (8–9 Nov 2007, Helsingør, Denmark), pp. 88-89.
 95. Saarnio, K., Saarikoski, S., Sillanpää, M., **Timonen, H.**, Teinilä, K., Sofiev, M., Kukkonen, J., Hillamo, R. (2007). Chemical composition of fine particles in two major biomass burning episodes observed in Helsinki, Finland in 2006. In /Abstract book of the 5th Asian Aerosol Conference, Volume I/(26–29 Aug 2007, Kaohsiung, Taiwan), pp. 51-53.
 96. Aurela, M., **Timonen, H.**, Rautiainen, J., Saarikoski, S., Hillamo, R., Tiitta, P., Kortelainen, A., Raatikainen, T., Laaksonen, A., Worsnop, D. 2007. Comparison of AMS and PILS-IC at the SMEAR II -station in spring 2007. Report series in aerosol science N:o 91, pp. 46-48.

C Scientific books (monographs)

Dimitrios Nikolis, Kostas Karatzas, Joel Kuula, Hilikka Timonen; Analysis and modelling of an optical particulate matter sensor data towards its performance improvement, in the book: Air Quality Networks - Data Analysis, Calibration & Data Fusion, edited by Saverio De Vito, Kostas Karatzas, Alena Bartonova and Grazia Fattoruso, Springer, 2021.

E Publications intended for the general public, linked to the applicant’s research

Teinilä, K., Aurela, M., Saarikoski, S., Timonen, H., Hillamo, R., Niemi, J., and Kousa, A.: Pienhiukkasten koostumus ja lähteet Helsingin vilkasliikenteisessä ydinkeskustassa, HSY:n julkaisu 7/2016, https://www.hsy.fi/sites/Esitteet/EsitteetKatalogi/Julkaisusarja/7_2016_pienhiukasten-koostumus-lahteet.pdf, 2016.

Ilmatieteen laitoksen Atmos-lehti: Pienhiukkaset vaikuttavat sekä terveyteen että ilmastonmuutokseen, <http://atmoslehti.fi/teema/pienhiukkaset-vaikuttavat-seka-terveyteen-etta-ilmastonmuutokseen/>, 14.4.2016:

Ilmatieteen laitoksen Atmos-lehti: Laivaliikenteen päästöjen tutkimus vaatii kokonaiskuvan hahmottamista, <http://atmoslehti.fi/tutkimus/laivaliikenteen-paastojen-tutkimus-vaatii-kokonaiskuvan-hahmottamista/>, 4.5.2016:

Lehdistötiedote: **Etanolipolttoaineet pienentävät autojen hiukkaspäästöjä**, Ilmatieteen laitos, 5.6.2017, <http://ilmatieteenlaitos.fi/tiedote/366920718>

Lehdistötiedote: **Ajoneuvojen pakokaasupäästöistä peräisin olevat pienhiukkaset eivät ole vähentyneet Helsingissä**, ilmatieteen laitos, 3.11.2015, <http://ilmatieteenlaitos.fi/tiedote/113768710>.

Lehdistötiedote: Puun polttaminen näkyy Helsingin ilmanlaadussa, 15.5.2013, http://ilmatieteenlaitos.fi/tiedotearkisto/-/journal_content/56/30106/658625?refererPlid=38137

Hytönen K., Jokiniemi J., Obernberger I., Brunner T., Salonen R.O., Aurela M, Bellmann B., Boman C., Bärnthaler G., Ellner-Schubert F., Forsberg B., Frey A., Friesenbichler J., Happonen M., Hartmann H., Hillamo R., Hirvonen M.-R., Jalava P., Markkanen P., Pennanen A., Petterson E., Roßmann P., Saarikoski S., Saarnio K., Sandström T., Sehlstedt M., Sillanpää M., Teinilä K., **Timonen H.**, Tissari J., Turowski P., Vallius M., Wiinikka H.: Clean biomass combustion in residential heating: particulate measurements, sampling, and physicochemical and toxicological characterisation. Report series of Department of Environmental Science, University of Kuopio 1/2008, ISSN 0786-4728.

G. Thesis

Ph.D. Thesis: Chemical Characterization of urban background aerosol using online and filter methods, Finnish Meteorological Institute Contributions NO. 89, 2011.

Pro-gradu thesis: Determination of F/P molar ratio of phenol formaldehyde resins by molecular spectroscopy, University of eastern Finland, 1999