

List of Rolf Sander's Publications

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— 2017 —

96. Derstroff, B., Hüser, I., Bourtsoukidis, E., Crowley, J. N., Fischer, H., Gromov, S., Harder, H., Janssen, R. H. H., Kesselmeier, J., Lelieveld, J., Mallik, C., Martinez, M., Novelli, A., Parchatka, U., Phillips, G. J., Sander, R., Sauvage, C., Schuladen, J., Stönnner, C., Tomsche, L., & Williams, J.: *Volatile organic compounds (VOCs) in photochemically aged air from the eastern and western Mediterranean*, *Atmos. Chem. Phys.*, 17, 9547–9566, doi: 10.5194/acp-17-9547-2017, <https://doi.org/10.5194/acp-17-9547-2017> (2017)
95. Keßel, S., Cabrera-Perez, D., Horowitz, A., Veres, P. R., Sander, R., Taraborrelli, D., Tucceri, M., Crowley, J. N., Pozzer, A., Stönnner, C., Vereecken, L., Lelieveld, J., & Williams, J.: *Atmospheric chemistry, sources, and sinks of carbon suboxide, C₃O₂*, *Atmos. Chem. Phys.*, 17, 8789–8804, doi: 10.5194/acp-17-8789-2017, <https://doi.org/10.5194/acp-17-8789-2017> (2017)

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94. Cabrera-Perez, D., Taraborrelli, D., Sander, R., & Pozzer, A.: *Global atmospheric budget of simple monocyclic aromatic compounds*, *Atmos. Chem. Phys.*, 16, 6931–6947, doi: 10.5194/acp-16-6931-2016, <http://www.atmos-chem-phys.net/16/6931> (2016)
93. Sukhodolov, T., Rozanov, E., Ball, W., Bais, A., Tourpali, K., Shapiro, A., Telford, P., Smyshlyaev, S., Fomin, B., Sander, R., Bossay, S., Chipperfield, M., Dhomse, S., Haigh, J., Peter, T., & Schmutz, W.: *Evaluation of simulated photolysis rates and their response to solar irradiance variability*, *J. Geophys. Res. Atmos.*, 121, doi: 10.1002/2015JD024277 (2016)
92. Jöckel, P., Tost, H., Pozzer, A., Kunze, M., Kirner, O., Brenninkmeijer, C. A. M., Brinkop, S., Cai, D. S., Dyroff, C., Eckstein, J., Frank, F., Garny, H., Gottschaldt, K.-D., Graf, P., Grewe, V., Kerkweg, A., Kern, B., Matthes, S., Mertens, M., Meul, S., Neumaier, M., Nützel, M., Oberländer-Hayn, S., Ruhnke, R., Runde, T., Sander, R., Scharffe, D., & Zahn, A.: *Earth System Chemistry integrated Modelling (ESCiMo) with the Modular Earth Submodel System (MESSy, version 2.51)*, *Geosci. Model Dev.*, 9, 1153–1200, doi: 10.5194/gmd-9-1153-2016, <http://www.geosci-model-dev.net/9/1153> (2016)
91. Baumgaertner, A. J. G., Jöckel, P., Kerkweg, A., Sander, R., & Tost, H.: *Implementation of the Community Earth System Model (CESM1, version 1.2.1) as a new base model into version 2.50 of the MESSy framework*, *Geosci. Model Dev.*, 9, 125–135, doi: 10.5194/gmd-9-125-2016, <http://www.geosci-model-dev.net/9/125> (2016)

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90. Sander, R.: *Compilation of Henry's law constants (version 4.0) for water as solvent*, *Atmos. Chem. Phys.*, 15, 4399–4981, doi: 10.5194/acp-15-4399-2015, <http://www.atmos-chem-phys.net/15/4399> (2015)
89. Jordan, C. E., Pszenny, A. A. P., Keene, W. C., Cooper, O. R., Deegan, B., Maben, J., Routhier, M., Sander, R., & Young, A. H.: *Origins of aerosol chlorine during winter over north central Colorado, USA*, *J. Geophys. Res. Atmos.*, 120, 678–694, doi: 10.1002/2014JD022294 (2015)

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88. Sander, R., Jöckel, P., Kirner, O., Kunert, A. T., Landgraf, J., & Pozzer, A.: *The photolysis module JVAL-14, compatible with the MESSy standard, and the JVal PreProcessor (JVPP)*, *Geosci. Model Dev.*, 7, 2653–2662, <http://www.geosci-model-dev.net/7/2653> (2014)
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84. Adame, J. A., Martínez, M., Sorribas, M., Hidalgo, P. J., Harder, H., Diesch, J.-M., Drewnick, F., Song, W., Williams, J., Sinha, V., Hernández-Ceballos, M. A., Vilà-Guerau de Arellano, J., Sander, R., Hosaynali-Beygi, Z., Fischer, H., Lelieveld, J., & De la Morena, B.: *Meteorology during the DOMINO campaign and its connection with trace gases and aerosols*, Atmos. Chem. Phys., 14, 2325–2342, <http://www.atmos-chem-phys.net/14/2325> (2014)

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83. Sander, R., Pszenny, A. A. P., Keene, W. C., Crete, E., Deegan, B., Long, M. S., Maben, J. R., & Young, A. H.: *Gas phase acid, ammonia and aerosol ionic and trace element concentrations at Cape Verde during the Reactive Halogens in the Marine Boundary Layer (RHAMBLE) 2007 intensive sampling period*, Earth Syst. Sci. Data, 5, 385–392, doi: 10.5194/essd-5-385-2013, <http://www.earth-syst-sci-data.net/5/385> (2013)
82. Keller-Rudek, H., Moortgat, G. K., Sander, R., & Sörensen, R.: *The MPI-Mainz UV/VIS spectral atlas of gaseous molecules of atmospheric interest*, Earth Syst. Sci. Data, 5, 365–373, <http://www.earth-syst-sci-data.net/5/365> (2013)
81. van Eijck, A., Opatz, T., Taraborrelli, D., Sander, R., & Hoffmann, T.: *New tracer compounds for secondary organic aerosol formation from β -caryophyllene oxidation*, Atmos. Environ., 80, 122–130 (2013)
80. Regelin, E., Harder, H., Martinez, M., Kubistin, D., Tatum Ernest, C., Bozem, H., Klippel, T., Hosaynali-Beygi, Z., Fischer, H., Sander, R., Jöckel, P., Königstedt, R., & Lelieveld, J.: *HO_x measurements in the summertime upper troposphere over Europe: A comparison of observations to a box model and a 3-D model*, Atmos. Chem. Phys., 13, 10 703–10 720, <http://www.atmos-chem-phys.net/13/10703> (2013)
79. Young, A. H., Keene, W. C., Pszenny, A. A. P., Sander, R., Thornton, J. A., Riedel, T. P., & Maben, J. R.: *Phase partitioning of soluble trace gases with size-resolved aerosols in near-surface continental air over northern Colorado, USA, during winter*, J. Geophys. Res., 118, 9414–9427, doi: 10.1002/jgrd.50655 (2013)
78. Long, M. S., Keene, W. C., Easter, R., Sander, R., Kerkweg, A., Erickson, D., Liu, X., & Ghan, S.: *Implementation of the chemistry module MECCA (v2.5) in the modal aerosol version of the Community Atmosphere Model component (v3.6.33) of the Community Earth System Model*, Geosci. Model Dev., 6, 255–262, <http://www.geosci-model-dev.net/6/255> (2013)

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75. van Stratum, B. J. H., Vilà-Guerau de Arellano, J., Ouwersloot, H. G., van den Dries, K., van Laar, T. W., Martinez, M., Lelieveld, J., Diesch, J.-M., Drewnick, F., Fischer, H., Hosaynali Beygi, Z., Harder, H., Regelin, E., Sinha, V., Adame, J. A., Sörgel, M., Sander, R., Bozem, H., Song,

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74. Trebs, I., Mayol-Bracero, O. L., Pauliquevis, T., Kuhn, U., Sander, R., Ganzeveld, L., Meixner, F. X., Kesselmeier, J., Artaxo, P., & Andreae, M. O.: *Impact of the Manaus urban plume on trace gas mixing ratios near the surface in the Amazon Basin: Implications for the NO-NO₂-O₃ photostationary state and peroxy radical levels*, *J. Geophys. Res.*, 117, D05307, doi: 10.1029/2011JD016386 (2012)

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73. Hosaynali Beygi, Z., Fischer, H., Harder, H. D., Martinez, M., Sander, R., Williams, J., Brookes, D. M., Monks, P. S., & Lelieveld, J.: *Corrigendum to “Oxidation photochemistry in the Southern Atlantic boundary layer: unexpected deviations of photochemical steady state” published in Atmos. Chem. Phys.*, 11, 8497–8513, 2011, *Atmos. Chem. Phys.*, 11, 8825–8826, <http://www.atmos-chem-phys.net/11/8825> (2011b)
72. Frieß, U., Sihler, H., Sander, R., Pöhler, D., Yilmaz, S., & Platt, U.: *The vertical distribution of BrO and aerosols in the Arctic: Measurements by active and passive differential optical absorption spectroscopy*, *J. Geophys. Res.*, 116D, D00R04, doi: 10.1029/2011JD015938 (2011)
71. Zhang, H., Linford, J. C., Sandu, A., & Sander, R.: *Chemical mechanism solvers in air quality models*, *Atmos.*, 2, 510–532, <http://www.mdpi.com/2073-4433/2/3/510> (2011)
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69. Lawler, M. J., Sander, R., Carpenter, L. J., Lee, J. D., von Glasow, R., Sommariva, R., & Saltzman, E. S.: *HOCl and Cl₂ observations in marine air*, *Atmos. Chem. Phys.*, 11, 7617–7628, <http://www.atmos-chem-phys.net/11/7617> (2011)
68. Klippel, T., Fischer, H., Bozem, H., Lawrence, M. G., Butler, T., Jöckel, P., Tost, H., Martinez, M., Harder, H., Regelin, E., Sander, R., Schiller, C. L., Stickler, A., & Lelieveld, J.: *Distribution of hydrogen peroxide and formaldehyde over Central Europe during the HOOVER project*, *Atmos. Chem. Phys.*, 11, 4391–4410, <http://www.atmos-chem-phys.net/11/4391> (2011)
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65. Liao, J., Sihler, H., Huey, L. G., Neuman, J. A., Tanner, D. J., Friess, U., Platt, U., Flocke, F. M., Orlando, J. J., Shepson, P. B., Beine, H. J., Weinheimer, A. J., Sjostedt, S. J., Nowak, J. B., Knapp, D. J., Staebler, R. M., Zheng, W., Sander, R., Hall, S. R., & Ullmann, K.: *A comparison of Arctic BrO measurements by chemical ionization mass spectrometry and long path-differential optical absorption spectroscopy*, *J. Geophys. Res.*, 116D, D00R02, doi: 10.1029/2010JD014788 (2011)

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