

CURRICULUM VITAE

ARMIN SOROOSHIAN

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CHRONOLOGY OF EDUCATION

California Institute of Technology	Chemical Engineering	Ph.D. 2008
California Institute of Technology	Chemical Engineering	M.S. 2005
Univ. of Arizona (Summa Cum Laude, Honors)	Chemical Engineering	B.S. 2003

CHRONOLOGY OF EMPLOYMENT

Professor, University Distinguished Scholar, da Vinci Fellow, Department of Chemical and Environmental Engineering (Courtesy Appointments in Hydrology and Atmospheric Sciences, College of Optical Sciences, College of Public Health), University of Arizona (2018-present)

Associate Professor and University Distinguished Scholar, Department of Chemical and Environmental Engineering (Courtesy Appointments in Hydrology and Atmospheric Sciences, and the College of Public Health), University of Arizona (2015-2018)

Assistant Professor, Department of Chemical and Environmental Engineering (Courtesy Appointments in Atmospheric Sciences and Public Health), University of Arizona (2009-2015)

Postdoctoral Scholar, Cooperative Institute for Research in the Atmosphere (CIRA), Colorado State University and National Oceanic and Atmospheric Administration (2008–2009)

Undergraduate Researcher, Department of Chemical and Environmental Engineering, University of Arizona (1999-2003)

Internship, Intel Corporation. Santa Clara, CA (Summer 2003)

Internship, Intel Corporation. Chandler, AZ (Summer 2002)

Internship, Hitachi Chemical Corporation. Ibaraki, Japan (Summer 2001)

HONORS

- NASA Group Achievement Award for CAMP²Ex Mission (2020)
- AGU Atmospheric Sciences Ascent Award (2019)
- AGU Research Spotlight: Mardi et al., *Journal of Geophysical Research-Atmospheres* (2018)
- Academic Champion (University of Arizona Provost's Office, 2018)
- da Vinci Circle Fellowship (University of Arizona, College of Engineering, 2018)
- Editors' Citation for Excellence in Refereeing for *Journal of Geophysical Research-Atmospheres* (2017)
- Spirit of Inquiry Alumnus Award and Honor's College Commencement Keynote Speaker (University of Arizona, Honor's College, 2017)
- Spirit of ASEMS Award (University of Arizona, Arizona's Science, Engineering, and Math Scholars (ASEMS) program, 2017)
- Faculty Fellows Program (University of Arizona, 2016-present)
- Distinguished Scholar Award (University of Arizona, 2016)
- Editors' Citation for Excellence in Refereeing for *Journal of Geophysical Research-Atmospheres* (2016)
- Invitee and speaker: National Academy of Science's Symposium on Climate Change (Nice, France; 2015)

- Five Star Faculty Award Finalist (1 of 5) awarded by the University of Arizona Honors College (2014-2015)
- Award for Excellence at the Student Interface (2010-2011, 2012-2013, 2014-2015, 2015-2016, 2016-2017, 2017-2018; Dept. of Chemical and Environmental Engineering)
- Co-Organizer and Speaker: 2015 US-Iran Symposium on Climate Change: Impacts and Mitigation, National Academy of Sciences, Beckman Center, Irvine California (March 2015)
- NASA Group Achievement Award for SEAC⁴RS Mission (2015)
- 2014 NASA Earth and Space Science Fellowship (Student: Taylor Shingler)
- Invitee: National Academy of Science's Symposium on Sustainable, Resilient Cities (Irvine, CA; 2014)
- Invitee: 2013 National Academy of Engineering Frontiers of Engineering Education Symposium (Irvine, CA; 2013)
- Invitee: National Academy of Science's US-Iran Symposium on Air Pollution in Megacities (Irvine, CA; 2013)
- Recognition for Reviewing Excellence for *Atmospheric Environment* (2012-2013)
- Editors' Citation for Excellence in Refereeing for *Journal of Geophysical Research-Atmospheres* (2012)
- College of Engineering Education Faculty Fellow (2012-2014)
- Invitee and Co-Chair: National Academy of Engineering's 2012 U.S. Frontiers of Engineering Symposium (Warren, Michigan; 2012)
- Invitee: National Academy of Engineering's 2011 U.S. Frontiers of Engineering Symposium (Mountain View, California; 2011)
- Admitted to and attended the 2011 ASEE National Effective Teaching Institute (Vancouver, Canada)
- AGU Research Spotlight: Sorooshian et al., *J. Geophys. Res.* (2010)
- Office of Naval Research Young Investigator Program Award (2010)
- Invitee to 8th Annual NCAR Early Career Scientist Assembly (ECSA) Junior Faculty Forum (2010)
- ACCESS invitee (Atmospheric Chemistry Colloquium for Emerging Senior Scientists; 2009)
- Outstanding Poster Presentation (Boulder Laboratories Postdoctoral Poster Symposium, 2009)
- Cooperative Institute for Research in the Atmosphere (CIRA) Postdoctoral Fellowship (2008-2009, Colorado State University)
- American Meteorological Society Public Policy Colloquium Fellow (2008)
- Outstanding Achievement in Doctoral Education Award and the Golestani Family Award – (Association of Professors and Scholars of Iranian Heritage, 2008)
- Cornelius J. Pings Graduate Fellowship (Betty and Gordon Moore Foundation, 2003-2007, California Institute of Technology)
- Outstanding Senior - Department of Chemical & Environmental Engineering (U. of Arizona, 2003)
- Outstanding Senior - College of Engineering and Mines (U. of Arizona, 2003)
- Second place – American Institute for Chemical Engineers (AIChE) National Conference Student Poster Contest (Indianapolis, Indiana), 2002
- Air & Waste Management Association Best Student Paper Award (Phoenix, Arizona), 2001

- Second place – American Institute for Chemical Engineers (AIChE) National Conference Student Poster Contest (Reno, Nevada), 2001

FIELD EXPERIMENT PARTICIPATION

- (Mission PI) ACTIVATE: Aerosol Cloud meTeorology Interactions oVer the western ATLantic Experiment (2019-2023; \$30M NASA Earth Venture Suborbital mission)
- (Mission PI) MONARC: MONterey Aerosol Research Campaign, Monterey, CA (2019)
- (Instrument PI) CAMP²EX: Cloud and Aerosol Monsoonal Processes-Philippines Experiment, Philippines (2019)
- (Mission PI) MACAWS: Marine Aerosol Cloud and Wildfire Study, Monterey, CA (2018)
- (Mission PI) FASE: Fog and Stratocumulus Evolution Experiment, Monterey, CA (2016)
- (Mission PI) BOAS: Biological Ocean Atmospheric Study, Monterey, CA (2015)
- (Instrument PI) SEAC⁴RS: Studies of Emissions and Atmospheric Composition, Clouds and Climate Coupling by Regional Surveys (2013)
- (Mission PI) NICE: Nucleation in California Experiment (2013)
- (Instrument PI) DC-3: Deep Convective Clouds and Chemistry Experiment, United States (2012)
- (Mission PI) E-PEACE: Eastern Pacific Emited Aerosol Cloud Experiment, Monterey, CA (2011)
- (Instrument PI) CalNex: California Nexus, Los Angeles, CA (2010)
- MASE II: Marine Stratus/Stratocumulus Experiment, Monterey, CA (Flight scientist) (2007)
- GoMACCS/TexAQS: Gulf of Mexico Atmospheric Composition and Climate Study/Texas Air Quality Study, Houston, TX (Flight scientist) (2006)
- MASE I: Marine Stratus/Stratocumulus Experiment, Monterey, CA (2005)
- ICARTT: International Consortium for Atmospheric Research on Transport and Transformation, Cleveland, OH (2004)

REVIEWER ROLES

NASA (4 panels), EPA (2 panels), NSF (1 panel; 15 proposals), Department of Homeland Security (1 proposal), American Chemical Society Petroleum Research Fund (1 proposal), German Research Foundation (1 proposal), Qatar National Research Fund (3 proposals), European Research Council (1 proposal), Canadian Space Agency (2 proposals), Netherlands Organisation for Scientific Research (1 proposal), City University of New York internal grant competition (1 proposal), Book Chapters (2), Textbook (1), > 100 Articles for Various Peer-Review Journals including: *Nature Geoscience*, *Nature Communications*, *Reviews of Geophysics*, *Chemical Reviews*, *Aerosol Science and Technology*, *Environmental Science and Technology*, *Geophysical Research Letters*, *Journal of Geophysical Research*, *Atmospheric Chemistry and Physics*, *Physical Chemistry Chemical Physics*, *Atmospheric Environment*, *Journal of Advances in Modeling Earth Systems*, *Journal of Atmospheric and Oceanic Technology*, *Atmospheric Measurement Techniques*, *Atmospheric Research*, *Journal of Environmental Quality*, *Environmental Science and Pollution Research*, *Journal of Applied Meteorology and Climatology*, *Entropy*, *Environmental Science: Processes & Impacts*, *Geomatics*, *Natural Hazards and Risk*, *Climatic Change*, *Air Quality*, *Atmosphere & Health*, *International Journal of Climatology*, *Scientia Iranica*, *Ecotoxicology and Environmental Safety*,

SERVICE POSITIONS HELD

- Editorial Board: *Atmosphere* (2015-present)
- Editorial Board: *Geomatics, Natural Hazards and Risk* (2015-present)
- Editorial Board: *Atmospheric Chemistry and Physics* (2015-present)
- Board of Directors (2017-present), Division Board Member (2011-present); AIChE Environmental Division
- Science Advisory Group for NASA's Aerosols and Cloud-Convection Precipitation (A-CCP) Study (2019-present)

REFEREED JOURNAL PUBLICATIONS

(PI's Graduate Student = ⁺; PI's Undergraduate Student = ⁺⁺)

154. Crosbie, E., Shook, M. A., Ziembka, L. D., Anderson, B. E., ⁺Braun, R. A., Brown, M. D., Jordan, C. E., ⁺MacDonald, A. B., Moore, R. H., Nowak, J. B., Robinson, C. E., Shingler, T., Sorooshian, A., ⁺Stahl, C., Thornhill, K. L., Wiggins, E. B., and Winstead, E. (2020), Coupling an online ion conductivity measurement with the particle-into-liquid sampler: Evaluation and modeling using laboratory and field aerosol data, *Aerosol Science and Technology*, 1-14, doi:10.1080/02786826.2020.1795499.
153. ⁺MacDonald, A. B., ⁺A. H. Mardi, ⁺H. Dadashazar, ⁺M. A. Aghdam, E. Crosbie, H. H. Jonsson, R. C. Flagan, J. H. Seinfeld, and A. Sorooshian (2020), On the relationship between cloud water composition and cloud droplet number concentration, *Atmos Chem Phys*, 20(13), 7645-7665, doi:10.5194/acp-20-7645-2020.
152. ⁺Hilario, M. R. A., et al. (2020), Characterizing Weekly Cycles of Particulate Matter in a Coastal Megacity: The Importance of a Seasonal, Size-Resolved, and Chemically Speciated Analysis, *J Geophys Res-Atmos*, 125(13), doi:10.1029/2020JD032614.
151. Schulze, B. C., Charan, S. M., Kenseth, C. M., Kong, W., Bates, K. H., Williams, W., Metcalf, A. R., Jonsson, H. H., Woods, R., Sorooshian, A., Flagan, R. C., and Seinfeld, J. H. (2020), Characterization of Aerosol Hygroscopicity Over the Northeast Pacific Ocean: Impacts on Prediction of CCN and Stratocumulus Cloud Droplet Number Concentrations, *Earth Space Sci*, 7(7), doi:10.1029/2020EA001098.
150. Miller, D. C., Beamer, P., Billheimer, D., Subbian, V., Sorooshian, A., Campbell, B. S., and Mosier, J. M.: Aerosol risk with noninvasive respiratory support in patients with COVID-19, *Journal of the American College of Emergency Physicians Open*, n/a, 10.1002/emp2.12152.
149. ⁺Schlosser, J. S., ⁺H. Dadashazar, ⁺E. L. Edwards, ⁺A. H. Mardi, G. Prabhakar, ⁺C. Stahl, H. H. Jonsson, and A. Sorooshian (2020), Relationships Between Supmicrometer Sea Salt Aerosol and Marine Boundary Layer Conditions: Insights From Repeated Identical Flight Patterns, *J Geophys Res-Atmos*, 125(12), doi:10.1029/2019JD032346.
148. Baghani, A. N., A. Sorooshian, M. Delikhoon, R. Nabizadeh, S. Nazmara, and R. Bakhtiari (2020), Pollution characteristics and noncarcinogenic risk assessment of fungal bioaerosol in different processing units of waste paper and cardboard recycling factory, *Toxin Rev*, doi:10.1080/15569543.2020.1769135.
147. Gholami, H., A. Mohamadifar, A. Sorooshian, and J. D. Jansen (2020), Machine-learning algorithms for predicting land susceptibility to dust emissions: The case of the Jazmurian

- Basin, Iran, Atmospheric Pollution Research, 11(8), 1303-1315,
doi:<https://doi.org/10.1016/j.apr.2020.05.009>.
146. Moradian, N., Ochs, H. D., Sedikies, C., Hamblin, M. R., Camargo, C. A., Martinez, J. A., Biamonte, J. D., Abdollahi, M., Torres, P. J., Nieto, J. J., Ogino, S., Seymour, J. F., Abraham, A., Cauda, V., Gupta, S., Ramakrishna, S., Sellke, F. W., Sorooshian, A., Wallace Hayes, A., Martinez-Urbistondo, M., Gupta, M., Azadbakht, L., Esmaillzadeh, A., Kelishadi, R., Esteghamati, A., Emam-Djomeh, Z., Majdzadeh, R., Palit, P., Badali, H., Rao, I., Saboury, A. A., Jagan Mohan Rao, L., Ahmadieh, H., Montazeri, A., Fadini, G. P., Pauly, D., Thomas, S., Moosavi-Movahed, A. A., Aghamohammadi, A., Behmanesh, M., Rahimi-Movaghar, V., Ghavami, S., Mehran, R., Uddin, L. Q., Von Herrath, M., Mobasher, B., and Rezaei, N.: The urgent need for integrated science to fight COVID-19 pandemic and beyond, Journal of Translational Medicine, 18, 205, 10.1186/s12967-020-02364-2, 2020.
145. Baghani, A.N., Bahmani, Z., Sorooshian, A., Farzadkia, M., Nabizadeh, R., Delikhoon, M., Barkhordari, A., Kalantary, R.R., Golbaz, S., Kermani, M., Ashournejad, Q., Shahsavani, A., 2020. Characterization of polycyclic aromatic hydrocarbons associated with PM₁₀ emitted from the largest composting facility in the Middle East. *Toxin Rev.*, doi: 10.1080/15569543.2020.1737823.
144. Moradi, Q., Mirzaei, R., Alipour, M., Bay, A., Ghaderpoori, M., Asadi, A., Fakhri, Y., Sorooshian, A., Khaneghah, A.M., 2020. The concentration, characteristics, and probabilistic health risk assessment of potentially toxic elements (PTEs) in street dust: a case study of Kashan, Iran. *Toxin Rev.*, doi: 10.1080/15569543.2020.1728336.
143. ⁺Aldhaif, A., ⁺Lopez, D. ⁺Dadashazar, H., and Sorooshian, A. (2020), Sources, frequency, and chemical nature of dust events impacting the United States East Coast, *Atmos. Env.*, 231, doi:10.1016/j.atmosenv.2020.117456.
142. ⁺Stahl, C., Cruz, M., Bañaga, P., Betito, G., ⁺Braun, R., ⁺Aghdam, M., Cambaliza, M., Lorenzo, G., ⁺MacDonald, A., Pabroa, P., Yee, J., Simpas, J., and Sorooshian, A. (2020), An annual time series of weekly size-resolved aerosol properties in the megacity of Metro Manila, Philippines, *Sci. Data.*, 7(1), doi:10.1038/s41597-020-0466-y.
141. ⁺Dadashazar, H., Crosbie, E., Majdi, M. S., Panahi, M., ⁺Moghaddam, M. A., Behrang, A., Brunke, M., Zeng, X., Jonsson, H. H., and Sorooshian, A. (2020), Stratocumulus Cloud Clearings: Statistics from Satellites, Reanalysis Models, and Airborne Measurements, *Atmos. Chem. Phys.*, <https://doi.org/10.5194/acp-2019-1113>.
140. Goudarzi, G., Sorooshian, A. and Maleki, H. (2020), Local and Long-Range Transport Dust Storms Over the City of Ahvaz: A Survey Based on Spatiotemporal and Geometrical Properties. *Pure Appl. Geophys.* <https://doi.org/10.1007/s00024-020-02458-4>
139. Sheikhi, R., Mahvi, A. H., Baghani, A. N., Hadi, M., Sorooshian, A., Delikhoon, M., Golbaz, S., Dalvand, A., Johar, F., and Ghalhari, M. R. (2020), Reducing free residual chlorine using four simple physical methods in drinking water: effect of different parameters, monitoring microbial regrowth of culturable heterotrophic bacteria, and kinetic and thermodynamic studies. *Toxin Reviews*, 1-14.
138. ⁺Braun, R. A., ⁺Aghdam, M. A., Bañaga, P. A., Betito, G., Cambaliza, M. O., Cruz, M. T., Lorenzo, G. R., ⁺MacDonald, A. B., Simpas, J. B., ⁺Stahl, C., and Sorooshian, A. (2020), Long-range aerosol transport and impacts on size-resolved aerosol composition in Metro Manila, Philippines. *Atmos. Chem. Phys.* **20**, 2387-2405.
137. Abootalebi Jahromi, F., Moore, F., Keshavarzi, B., Mohebbi-Nozar, S. L., Mohammadi, Z., Sorooshian, A., and Abbasi, S. (2020), Bisphenol A (BPA) and polycyclic aromatic

- hydrocarbons (PAHs) in the surface sediment and bivalves from Hormozgan Province coastline in the Northern Persian Gulf: A focus on source apportionment. *Marine Pollution Bulletin*, 152, 110941.
136. Sorooshian, A., Corral, A. F., [†]Braun, R. A., Cairns, B., Crosbie, E., Ferrare, R., Hair, J., Kleb, M. M., [†]Hossein Mardi, A., Maring, H., McComiskey, A., Moore, R., Painemal, D., Scarino, A. J., [†]Schlosser, J., Shingler, T., Shook, M., Wang, H., Zeng, X., Ziembka, L., and Zuidema, P. (2020), Atmospheric Research Over the Western North Atlantic Ocean Region and North American East Coast: A Review of Past Work and Challenges Ahead. *Journal of Geophysical Research: Atmospheres*, 125, doi:10.1029/2019JD031626.
135. Chegini, F.M., Baghani, A.N., Hassanvand, M.S., Sorooshian, A., Golbaz, S., Bakhtiari, R., Ashouri, A., Joubani, M.N., Alimohammadi, M. (2020), Indoor and outdoor airborne bacterial and fungal air quality in kindergartens: seasonal distribution, genera, levels, and factors influencing their concentration. *Build. Environ.*, 175, doi: 10.1016/j.buildenv.2020.106690.
134. Parvizimehr, A., Baghani, A.N., Hoseini, M., Sorooshian, A., Cuevas-Robles, A., Fararouei, M., Dehghani, M., Delikhoon, M., Barkhordari, A., Shahsavani, S., and Badeenezhad, A. (2020), On the nature of heavy metals in PM10 for an urban desert city in the Middle East: Shiraz, Iran. *Microchem. J.*, 154, doi: 10.1016/j.microc.2020.104596.
133. Nabizadeh, R., A. Sorooshian, M. Delikhoon, A. N. Baghani, S. Golbaz, M. Aghaei, and A. Barkhordari (2020), Characteristics and health effects of volatile organic compound emissions during paper and cardboard recycling, *Sustain. Cities Soc.*, 56, doi: 10.1016/j.scs.2019.102005.
132. Mehr, M. R., Keshavarzi, B., Moore, F., Fooladivanda, S., Sorooshian, A., and Biester, H. (2020), Spatial distribution, environmental risk and sources of heavy metals and polycyclic aromatic hydrocarbons (PAHs) in surface sediments-northwest of Persian Gulf. *Cont. Shelf Res.*, 193, 104036.
131. Ahmady-Birgani, H., Ravan, P., [†]Schlosser, J.S., [†]Cuevas-Robles, A., [†]AzadiAghdam, M., and Sorooshian, A. (2020), On the chemical nature of wet deposition over a major desiccated lake: Case study for Lake Urmia basin. *Atmos. Res.*, 234, 104762.
130. Nabizadeh, R., Sorooshian, A., Baghani, A.N., and Ashournejad, Q. (2020), On the nature of airborne aldehydes in a middle eastern megacity: Tehran, Iran. *Sustain. Cities Soc.*, 53, 101895.
129. Nazmara, S., Sorooshian, A., Delikhoon, M., Baghani, A. N., Ashournejad, Q., Barkhordari, A., Basmehchi, N., and Kasraee, M. (2020), Characteristics and health risk assessment of polycyclic aromatic hydrocarbons associated with dust in household evaporative coolers. *Environ. Pollut.*, 256, <https://doi.org/10.1016/j.envpol.2019.113379>.
128. Mojarrad, H., Fouladi Fard, R., Rezaali, M., Heidari, H., Izanloo, H., Mohammadbeigi, A., Mohammadi, A., and Sorooshian, A. (2019), Spatial trends, health risk assessment and ozone formation potential linked to BTEX. *Hum. Ecol. Risk Assess.*, 1-22.
127. Javadian, M., Behrangi, A., and Sorooshian, A. (2019), Impact of drought on dust storms: case study over Southwest Iran. *Environ. Res. Lett.*, 14, 124029.
126. [†]Mardi, A., [†]Dadashazar, H., [†]MacDonald, A. B., Crosbie, E., Coggon, M. M., [†]Azadi Aghdam, M., Woods, R. K., Jonsson, H. H., Flagan, R. C., Seinfeld, J. H., and Sorooshian, A. (2019), Effects of Biomass Burning on Stratocumulus Droplet Characteristics, Drizzle Rate, and Composition. *J. Geophys. Res. – Atmos.*, 10.1029/2019JD031159.

125. Takdastan, A., Sadeghi, H., Dobaradaran, S., Ma, L., Sorooshian, A., Ravanbakhsh, M., and Hazrati Niari, M. (2019), Synthesis and Characterization of Gamma- Fe_2O_3 Encapsulated Nay Zeolites as Solid Adsorbent for Degradation of Ceftriaxone through Heterogeneous Catalytic Advanced Oxidation Processes. *J. Iran. Chem. Soc.*, doi:10.1007/s13738-019-01809-w
124. Brunke, M. A., Ma, P.L., Eyre, J. E., Rasch, P. J., Sorooshian, A., and Zeng, X. B. (2019), Subtropical Marine Low Stratiform Cloud Deck Spatial Errors in the E3SMv1 Atmosphere Model. *Geophys Res Lett.*, 46, doi:10.1029/2019GL084747.
123. Rad, H.D., Assarehzadegan, M. A., Goudarzi, G., Sorooshian, A., Birgani, Y. T., Maleki, H., Jahantab, S., Idani, E., Babaei, A. A., and Neisi, A. (2019), Do *Conocarpus erectus* airborne pollen grains exacerbate autumnal thunderstorm asthma attacks in Ahvaz, Iran? *Atmos. Environ.*, 213, 311-325.
122. ⁺AzadiAghdam, M., ⁺Braun, R. A., ⁺Edwards, E. -L., Bañaga, P. A., Cruz, M. T., Betito, G., Cambaliza, M. O., ⁺Dadashazar, H., Lorenzo, G. R., ⁺Ma, L., ⁺MacDonald, A. B., Nguyen, P., Simpas, J. B., ⁺Stahl, C., and Sorooshian, A. (2019), On the nature of sea salt aerosol at a coastal megacity: Insights from Manila, Philippines in Southeast Asia. *Atmos. Environ.*, 216, 116922.
121. Abbasi, S., Keshavarzi, B., Moore, F., Shojaei, N., Sorooshian, A., Soltani, N., and Delshab, H. (2019), Geochemistry and environmental effects of potentially toxic elements, polycyclic aromatic hydrocarbons and microplastics in coastal sediments of the Persian Gulf. *Environ. Earth Sci.*, 78, doi:10.1007/s12665-019-8420-z.
120. Cruz, M.T., Banaga, P.A., Betito, G., ⁺Braun, R. A., ⁺Stahl, C., ⁺Aghdam, M. A., Cambaliza, M. O., ⁺Dadashazar, H., Hilario, M. R., Lorenzo, G. R., ⁺Ma, L., ⁺MacDonald, A. B., Pabroa, P. C., Yee, J. R., Simpas, J.B., and Sorooshian, A. (2019), Size-resolved composition and morphology of particulate matter during the southwest monsoon in Metro Manila, Philippines. *Atmos. Chem. Phys.*, 19, 10675-10696.
119. Maleki, H., Sorooshian, A., Goudarzi, G., Baboli, Z., Birgani, Y.T., Rahmati, M. (2019), Air pollution prediction by using an artificial neural network model. *Clean Technol. Envir.*, 21, 1341-1352.
118. Juliano, T.W., Coggon, M.M., Thompson, G., Rahn, D.A., Seinfeld, J.H., Sorooshian, A., and Lebo, Z. J. (2019), Marine Boundary Layer Clouds Associated with Coastally Trapped Disturbances: Observations and Model Simulations. *J. Atmos. Sci.*, 76, 2963-2993.
117. Nasir, J., Zeb, B., Sorooshian, A., Mansha, M., Alam, K., Ahmad, I., Rizvi, H.H., Shafiq, M. (2019), Spatio-temporal variations of absorbing aerosols and their relationship with meteorology over four high altitude sites in glaciated region of Pakistan. *J. Atmos. Sol.-Terr. Phy.*, 190, 84-95.
- *116. Sorooshian, A., Anderson, B., Bauer, S.E., ⁺Braun, R.A., Cairns, B., Crosbie, E., ⁺Dadashazar, H., Diskin, G., Ferrare, R., Flagan, R.C., Hair, J., Hostetler, C., Jonsson, H.H., Kleb, M.M., Liu, H.Y., ⁺MacDonald, A.B., McComiskey, A., Moore, R., Painemal, D., Russell, L.M., Seinfeld, J.H., Shook, M., Smith, W.L., Thornhill, K., Tselioudis, G., Wang, H.L., Zeng, X.B., Zhang, B., Ziembka, L., Zuidema, P. (2019), Aerosol-Cloud-Meteorology Interaction Airborne Field Investigations: Using Lessons Learned from the US West Coast in the Design of ACTIVATE off the US East Coast. *B. Am. Meteorol. Soc.*, 100, 1511-1528.
- *Cover Story
115. Mehr, M. R., Keshavarzi, B., and Sorooshian, A. (2019), Influence of natural and urban emissions on rainwater chemistry at a southwestern Iran coastal site, *Sci. Total Environ.*, 668, 1213-1221, <https://doi.org/10.1016/j.scitotenv.2019.03.082>.

114. Ma, L. et al. (2019), Size-resolved Characteristics of Water-Soluble Particulate Elements in a Coastal Area: Source Identification, Influence of Wildfires, and Diurnal Variability, *Atmospheric Environment*, <https://doi.org/10.1016/j.atmosenv.2019.02.045>.
113. Alam et al., Temporal Characteristics of Aerosol Optical Properties over the Glacier Region of Northern Pakistan, *Journal of Atmospheric and Solar-Terrestrial Physics*
112. Soltani et al. (2019), Potentially toxic elements (PTEs) and polycyclic aromatic hydrocarbons (PAHs) in fish and prawn in the Persian Gulf, Iran. *Ecotoxicology and Environmental Safety*, in press.
111. Baghani., A. B., et al. (2019), A Case Study of BTEX Characteristics and Health Effects by Major Point Sources of Pollution during Winter in Iran. *Environmental Pollution*, 247, 607-617, <https://doi.org/10.1016/j.envpol.2019.01.070>.
110. Karimi, N., Namdari, S., Sorooshian, A., Bilal, M., and Heidary, P. (2019). Evaluation and modification of SARA high-resolution AOD retrieval algorithm during high dust loading conditions over bright desert surfaces. *Atmosph. Pollut. Res.*, <https://doi.org/10.1016/j.apr.2019.01.008>.
109. Golkhorshidi, F., Sorooshian, A., Jafari, A. J., Baghani, A. N., Kermani, M., Kalantary, R. R., Ashournejad, Q., and Delikhoon, M. (2019), On the nature and health impacts of BTEX in a populated middle eastern city: Tehran, Iran. *Atmosph. Pollut. Res.*, <https://doi.org/10.1016/j.apr.2018.12.020>.
108. Ervens, B., Sorooshian, A., [†]Aldhaif, A.M., Shingler, T., Crosbie, E., Ziembra, L., Campuzano-Jost, P., Jimenez, J.L., and Wisthaler, A. (2018), Is there an aerosol signature of chemical cloud processing? *Atmos Chem Phys* 18, 16099-16119.
107. [†]Braun, R. A., [†]Dadashazar, H., [†]MacDonald, A. B., Crosbie, E., Jonsson, H. H., Woods, R. K., Flagan, R. C., Seinfeld, J. H., and Sorooshian, A. (2018). Cloud Adiabaticity and its relationship to marine stratocumulus characteristics over the Northeast Pacific Ocean. *J. Geophys. Res. Atmos.*, 123. <https://doi.org/10.1029/2018JD029287>
- *106. [†]Mardi, A. H., [†]Dadashazar, H., [†]MacDonald, A. B., [†]Braun, R. A., Crosbie, E., Xian, P., Thorsen, T. J., Coggon, M. M., Fenn, M. A., Ferrare, R. A., Hair, J. W., Woods, R. K., Jonsson, H. H., Flagan, R. C., Seinfeld, J. H., and Sorooshian, A. (2018), Biomass Burning Plumes in the Vicinity of the California Coast: Airborne Characterization of Physicochemical Properties, Heating Rates, and Spatiotemporal Features, *J. Geophys. Res.-Atmos.*, 123. <https://doi.org/10.1029/2018JD029134>.
- *American Geophysical Union Research Spotlight Article*
105. [†]Dadashazar, H., [†]Ma, L., and Sorooshian, A. (2019), Sources of pollution and interrelationships between aerosol and precipitation chemistry at a central California site, *Sci. Total Environ.*, 651, 1776-1787, <https://doi.org/10.1016/j.scitotenv.2018.10.086>.
104. Dehghani, M., Sorooshian, A., Ghorbani, M., Fazlzadeh, M., Miri, M., Badiee, P., Parvizi, A., Ansari, M., Baghani, A., and Delikhoon, M. (2018), Seasonal variation of culturable bioaerosols in a wastewater treatment plant, *Aerosol Air Qual. Res.*, doi: 10.4209/aaqr.2017.11.0466
103. Crosbie, E., Brown, M. D., Shook, M., Ziembra, L., Moore, R. H., Shingler, T., Winstead, E., Thornhill, K. L., Robinson, C., [†]MacDonald, A. B., [†]Dadashazar, H., Sorooshian, A., Beyersdorf, A., Eugene, A., Collett Jr., J., Straub, D., and Anderson, B. (2018), Development and characterization of a high-efficiency, aircraft-based axial cyclone cloud water collector, *Atmos. Meas. Tech.*, 11, 5025-5048, <https://doi.org/10.5194/amt-11-5025-2018>.

102. Dehghani, M., Sorooshian, A. Nazmara, S., Baghani, N., and Delikhoon, M. (2018), Concentration and type of bioaerosols before and after conventional disinfection and sterilization procedures inside hospital operating rooms, *Ecotoxicology and Environmental Safety*, 164, 277-282, <https://doi.org/10.1016/j.ecoenv.2018.08.034>.
101. Brune, W. H., Ren, X., Zhang, L., Mao, J., Miller, D. O., Anderson, B. E., Blake, D. R., Cohen, R. C., Diskin, G. S., Hall, S. R., Hanisco, T. F., Huey, L. G., Nault, B. A., Peischl, J., Pollack, I., Ryerson, T. B., [†]Shingler, T., Sorooshian, A., Ullmann, K., Wisthaler, A., and Wooldridge, P. J. (2018), Atmospheric oxidation in the presence of clouds during the Deep Convective Clouds and Chemistry (DC3) Study, *Atmos. Chem. Phys.*, <https://doi.org/10.5194/acp-2018-120>.
100. Naimabadi, A., Shirmardi, M., Maleki, H., Teymour, P., Goudarzi, G., Shahsavani, A., Sorooshian, A., Babaei, A.A., Mehrabi, N., Baneshi, M.M., Zarei, M.R., Lababpou, A., and Ghzikali, M.G., 2018. On the chemical nature of precipitation in a populated Middle Eastern Region (Ahvaz, Iran) with diverse sources. *Ecotox. Environ. Safe.*, 163, 558-566.
99. Delikhoon, M., Fazlzadeh, M., Sorooshian, A., Baghani, A. N., Golaki, M., Ashournejad, Q., and Barkhordari, A. (2018), Characteristics and health effects of formaldehyde and acetaldehyde in an urban area in Iran, *Environmental Pollution*, 242, 938-951.
98. Keshavarzi, B., Abbasi, S., Moore, F., Mehravar, S., Sorooshian, A., Soltani, N., and Najmeddin, A. (2018), Contamination level, source identification and risk assessment of potentially toxic elements (PTEs) and polycyclic aromatic hydrocarbons (PAHs) in street dust of an important commercial center in Iran, *Environmental Management*, <https://doi.org/10.1007/s00267-018-1079-5>.
97. [†]Aldhaif, A. M., [†]Stahl, C., [†]Braun, R.A., [†]Moghaddam, M.A., Shingler, T., Crosbie, E., Sawamura, P., [†]Dadashazar, H., Ziomba, L., Jimenez, J.L., Campuzano-Jost, P., and Sorooshian, A. (2018), Characterization of the real part of dry aerosol refractive index over North America from the surface to 12 km, *J. Geophys. Res.-Atmos.*, 123, 8283-8300.
96. Farsani, M. H., Shirmardi, M., Alavi, N., Maleki, H., Sorooshian, A., Babaei, A., Asgharnia, H., Marzouni, M. B., and Goudarzi, G., (2018), Evaluation of the relationship between PM₁₀ concentrations and heavy metals during normal and dusty days in Ahvaz, Iran, *Aeolian Research*, 33, 12-22, <https://doi.org/10.1016/j.aeolia.2018.04.001>.
95. Zeb, B., Alam, K., Sorooshian, A., Blaschke, T., Ahmad, I., and Shahid, I. (2018), On the morphology and composition of particulate matter in an urban environment. *Aerosol Air Qual. Res.*, doi:10.4209/aaqr.2017.09.0340.
94. Alam, K., Khan, R., Sorooshian, A., Blaschke, T., Bibi, S., and Bibi, H. (2018), Analysis of aerosol optical properties due to a haze episode in the Himalayan foothills: Implications for climate forcing. *Aerosol Air Qual. Res.*, doi:10.4209/aaqr.2017.06.0222.
93. Weiss-Penzias, P., Sorooshian, A., Coale, K., Heim, W., Crosbie, E., [†]Dadashazar, H., [†]MacDonald, A. B., [†]Wang, Z., and Jonsson, H. (2018), Aircraft measurements of total mercury and monomethyl mercury in summertime marine stratus cloudwater from Coastal California. USA, *Environ. Sci. Technol.*, 52 (5), 2527-2537, doi:10.1021/acs.est.7b05395.
92. [†]Mardi, A.H., [†]Khaghani, A., [†]MacDonald, A.B., Nguyen, P., Karimi, N., Heidary, P., Karimi, N., Saemian, P., Sehatkashani, S., Tajrishy, M., and Sorooshian, A. (2018). The Lake Urmia environmental disaster in Iran: A look at aerosol pollution. *Sci. Total Environ.*, 633, 42-49, <https://doi.org/10.1016/j.scitotenv.2018.03.148>.
91. [†]MacDonald, A. B., [†]Dadashazar, H., Chuang, P. Y., Crosbie, E., Wang, H., [†]Wang, Z., Jonsson, H. H., Flagan, R. C., Seinfeld, J. H., and Sorooshian A. (2018), Characteristic

- vertical profiles of cloud water composition in marine stratocumulus clouds and relationships with precipitation. *J. Geophys. Res.*, 123, <https://doi.org/10.1002/2017JD027900>.
90. Dehghani, M., Fazlzadeh, M., Sorooshian, A., Tabatabaei, H.R., Miri, M., Baghani, A.N., Delikhoon, M., Mahvi, A.H., and Rashidi, M., 2018. Characteristics and health effects of BTEX in a hot spot for urban pollution. *Ecotoxicol. Environ. Saf.*, 155, 133-143, <https://doi.org/10.1016/j.ecoenv.2018.02.065>.
89. Keshavarzi, B., Hassanaghaei, M., Moore, F., Mehr, M., Soltanian, S., Lahijanzadeh, A., and Sorooshian, A. (2018), Heavy metal contamination and health risk assessment in three commercial fish species in the Persian Gulf, *Mar. Pollut. Bull.*, 129, 245-252, <https://doi.org/10.1016/j.marpolbul.2018.02.032>.
88. Sorooshian, A., A. B. MacDonald, H. Dadashazar, K. H. Bates, M. M. Coggon, J. S. Craven, E. Crosbie, S. P. Hersey, N. Hodas, J. J. Lin, A. Negrón Marty, L. C. Maudlin, A. R. Metcalf, S. M. Murphy, L. T. Padró, G. Prabhakar, T. A. Rissman, T. Shingler, V. Varutbangkul, Z. Wang, R. K. Woods, P. Y. Chuang, A. Nenes, H. H. Jonsson, R. C. Flagan, and J. H. Seinfeld (2018). A multi-year data set on aerosol-cloud-precipitation-meteorology interactions for marine stratocumulus clouds. *Sci. Data*, 5:180026, doi:10.1038/sdata.2018.26.
87. ⁺Dadashazar, H., ⁺Braun, R. A., ⁺Crosbie, E., Chuang, P. Y., Woods, R. K., Jonsson, H. H., and Sorooshian, A. (2018), Aerosol Characteristics in the Entrainment Interface Layer In Relation to the Marine Boundary Layer and Free Troposphere, *Atmos. Chem. Phys.*, 18, 1495-1506, <https://doi.org/10.5194/acp-18-1495-2018>.
86. Iftikhar, M., Alam, K., Sorooshian, A., Adil Ali Syed,W., Bibi, S., and Bibi, H. (2018), Contrasting Aerosol Optical and Radiative Properties Between Dust and Urban Haze Episodes in Megacities of Pakistan, *Atmos. Environ.*, 173, 157-172.
85. Namdari, S., Karimi, K., Sorooshian, A., Mohammadi, G., and Sehatkashani, S. (2018), Impacts of climate and synoptic fluctuations on dust storm activity over the Middle East, *Atmos. Environ.*, 173, 265-276.
84. Abbasi, S., Keshavarzi, B., Moore, F., Delshab, H., Soltani, N., and Sorooshian, A. (2017), Investigation of microrubbers, microplastics and heavy metals in street dust: A study in Bushehr city, Iran, *Environ. Earth Sci.*, 76, 798. <https://doi.org/10.1007/s12665-017-7137-0>.
83. Mora, M., ⁺Braun, R. A., ⁺Shingler, T., and Sorooshian, A. (2017), Analysis of Remotely-Sensed and Surface Data of Aerosols and Meteorology for the Mexico Megalopolis Area Between 2003-2015, *J. Geophys. Res.*, 122, doi:10.1002/2017JD026739.
82. ⁺⁺Schlosser, J. S., ⁺Braun, R. A., ⁺⁺Bradley, T., ⁺Dadashazar, H., ⁺MacDonald, A. B., ⁺Aldhaif, A. M., Aghdam, M. A., ⁺Mardi, A. H., Xian, P., and Sorooshian, A. (2017), Analysis of Aerosol Composition Data for Western United States Wildfires Between 2005-2015: Dust Emissions, Chloride Depletion, and Most Enhanced Aerosol Constituents, *J. Geophys. Res.*, 122, doi:10.1002/2017JD026547.
81. ⁺Braun, R. A., ⁺Dadashazar, H., ⁺MacDonald, A. B., ⁺Aldhaif, A. M., ⁺Maudlin, L. C., ⁺Crosbie, E., Aghdam, M. A., ⁺Mardi, A. H., and Sorooshian, A. (2017), Impact of wildfire emissions on chloride and bromide depletion in marine aerosol particles, *Environ. Sci. Technol.*, 51(16), 9013-9021, doi:10.1021/acs.est.7b02039.
80. Soltani, N., Keshavarzi, B., Moore, F., Sorooshian, A., and Ahmadi, M. R. (2017), Distribution of Potentially Toxic Elements (PTEs) in Tailings, Soils, and Plants around Gol-E-Gohar Iron Mine, a Case Study in Iran, *Environ. Sci. Pollut. Res.*, 24, 18798-18816, doi:10.1007/s11356-017-9342-5.

79. Sorooshian, A., [†]Shingler, T., [†]Crosbie, E., Barth, M. C., Homeyer, C. R., Campuzano-Jost, P., Day, D. A., Jimenez, J. L., Thornhill, K. L., Ziembra, L. D., Blake, D. R., and Fried, A., (2017), Contrasting aerosol refractive index and hygroscopicity in the inflow and outflow of deep convective storms: Analysis of airborne data from DC3, *J. Geophys. Res.*, *122*, 4565–4577, doi:10.1002/2017JD026638.
78. [†]Dadashazar, D., [†]Wang, Z., Crosbie, E., Brunke, M., Zeng, X., Jonsson, H., Woods, R. K., Flagan, R. C., Seinfeld, J. H., and Sorooshian, A. (2017), Relationships between giant sea salt particles and clouds inferred from aircraft physicochemical data, *J. Geophys. Res.*, *122*, 3421–3434, doi:10.1002/2016JD026019.
77. Soltani, N., Keshavarzi, B., Sorooshian, A., Moore, F., Dunster, C., Dominguez, A. O., Kelly, F. J., Dhakal, P., Ahmadi, M. R., and Asadi, S. (2017), Oxidative potential (OP) and mineralogy of iron ore particulate matter at the Gol-E-Gohar Mining and Industrial Facility (Iran), *Environ. Geochem. Health*, doi:10.1007/s10653-017-9926-5.
76. Perring, A. E., Markovic, M. Z., Fahey, D. W., Jimenez, J. L., Campuzano-Jost, P., Palm, B. D., Wisthaler, A., Mikoviny T., Diskin, G., Sachse G., Ziembra, L., Anderson, B., [†]Shingler, T., [†]Crosbie, E., Sorooshian, A., Yokelson, R., and Gao, R. S. (2016), In-situ measurements of water uptake by black carbon - containing aerosol in wildfire plumes, *J. Geophys. Res.*, *121*, doi:10.1002/2016JD025688.
75. [†]Shingler, T., A. Sorooshian, A. Ortega, [†]E. Crosbie, A. Wonaschuetz, A. E. Perring, A. Beyersdorf, L. Ziembra, J. L. Jimenez, P. Campuzano-Jost, T. Mikoviny, A. Wisthaler, and L. M. Russell (2016), Ambient observations of hygroscopic growth factor and $f(RH)$ below 1: Case studies from surface and airborne measurements, *J. Geophys. Res.*, *121*, doi: 10.1002/2016JD025471.
74. [†]Youn, J. -S., J. Csavina, K. P. Rine, [†]T. Shingler, M. P. Taylor, A. E. Saez, E. A. Betterton, and A. Sorooshian (2016), Hygroscopic properties and respiratory system deposition behavior of particulate matter emitted by mining and smelting operations, *Environ. Sci. Technol.*, *50*, 11706-11713, doi: 10.1021/acs.est.6b03621.
73. [†]Wang, Z., M. M. Ramirez, [†]H. Dadashazar, [†]A. B. MacDonald, [†]E. Crosbie, K. H. Bates, M. M. Coggon, J. S. Craven, P. Lynch, J. R. Campbell, M. A. Aghdam, R. K. Woods, H. Jonsson, R. C. Flagan, J. H. Seinfeld, and A. Sorooshian (2016), Contrasting cloud composition between coupled and decoupled marine boundary layer clouds, *J. Geophys. Res.*, *121*, doi:10.1002/2016JD025695.
72. Jung, E., B. A. Albrecht, A. Sorooshian, P. Zuidema, and H. H. Jonsson (2016), Precipitation susceptibility in marine stratocumulus and shallow cumulus from airborne measurements, *Atmos. Chem. Phys.*, *16*, 11395-11413, doi:10.5194/acp-16-11395-2016.
71. Maleki, H., A. Sorooshian, G. Goudarzi, A. H. Nikfal, M. M. Baneshi (2016), Temporal profile of PM₁₀ and associated health effects in one of the most polluted cities of the world (Ahvaz, Iran) between 2009 and 2014, *Aeolian Res.*, *22*, 135-140.
70. Soleimani, Z., G. Goudarzi, A. Sorooshian, M. B. Marzouni, and H. Maleki (2016), Impact of middle eastern dust storms on indoor and outdoor composition of bioaerosol, *Atmos. Environ.*, *138*, 135-143, <http://dx.doi.org/10.1016/j.atmosenv.2016.05.023>.
69. [†]Shingler, T., [†]E. Crosbie, A. Ortega, M. Shiraiwa, A. Zuend, A. Beyersdorf, L. Ziembra, B. Anderson, L. Thornhill, A. E. Perring, J. P. Schwarz, P. Campuzano-Jost, D. A. Day, J. L. Jimenez, J. W. Hair, T. Mikoviny, A. Wisthaler, and A. Sorooshian (2016). Airborne Characterization of sub-saturated aerosol hygroscopicity and dry refractive index from the

- surface to 6.5 km during the SEAC⁴RS campaign, *J. Geophys. Res.*, 121, doi:10.1002/2015JD024498.
68. Sanchez, K. J., L. M. Russell, R. L. Modini, A. A. Frossard, L. Ahlm, C. E. Corrigan, G. C. Roberts, L. N. Hawkins, J. C. Schroder, A. K. Bertram, R. Zhao, A. K. Y. Lee, J. J. Lin, A. Nenes, ⁺Z. Wang, ⁺A. Wonaschütz, A. Sorooshian, K. J. Noone, H. Jonsson, D. Toom, A. M. Macdonald, W. R. Leaitch, and J. H. Seinfeld (2016). Meteorological and aerosol effects on marine cloud microphysical properties, *J. Geophys. Res.*, 121, doi:10.1002/2015JD024595.
67. Raman, A., A. F. Arellano, and A. Sorooshian (2016). Decreasing aerosol loading in the North American Monsoon region, *Atmosphere*, 7, 24.
66. ⁺⁺Lopez, D. H., ⁺⁺M. R. Rabbani, ⁺E. Crosbie, A. Raman, A. F. Arellano, and A. Sorooshian (2016). Frequency and character of Extreme Aerosol Events in the Southwestern United States: A Case Study Analysis in Arizona, *Atmosphere*, 7, 1.
65. ⁺Crosbie, E., ⁺Z. Wang, A. Sorooshian, P. Y. Chuang, J. S. Craven, M. M. Coggon, M. Brunke, X. Zeng, H. Jonsson, R. K. Woods, R. C. Flagan, and J. H. Seinfeld (2016). Stratocumulus cloud clearings and notable thermodynamic and aerosol contrasts across the clear-cloudy interface, *J. Atmos. Sci.*, 73, 1083–1099, doi:10.1175/JAS-D-15-0137.1.
64. Asa-Awuku, A.A. Sorooshian, R. Flagan, J. H. Seinfeld, and A. Nenes (2015). CCN properties of organic aerosol collected below and within marine stratocumulus clouds near Monterey California, *Atmosphere*, 6, 1590-1607, doi:10.3390/atmos6111590.
63. ⁺Youn, J. –S., ⁺E. Crosbie, ⁺L. C. Maudlin, ⁺Z. Wang, and A. Sorooshian (2015). Dimethylamine as a major alkyl amine species in particles and cloud water: observations in semi-arid and coastal regions, *Atmos. Environ.*, 122, 250-258, doi:10.1016/j.atmosenv.2015.09.061.
62. Zhang, X., N. F. Dalleska, D. D. Huang, K. H. Bates, A. Sorooshian, R. C. Flagan, and J. H. Seinfeld (2015). Time-resolved molecular characterization of organic aerosols by PILS + UPLC/ESI-Q-TOFMS, *Atmos. Environ.*, <http://dx.doi.org/10.1016/j.atmosenv.2015.08.049>.
61. ⁺Maudlin, L. C., ⁺Z. Wang, H. H. Jonsson, and A. Sorooshian (2015). Impact of wildfires on size-resolved aerosol composition at a coastal California site, *Atmos. Environ.*, 119, 59-68, doi:10.1016/j.atmosenv.2015.08.039.
60. Sorooshian, A., ⁺E. Crosbie, ⁺L. C. Maudlin, ⁺J. –S. Youn, ⁺Z. Wang, ⁺T. Shingler, A. M. Ortega, S. Hersey, and R. K. Woods (2015). Surface and airborne measurements of organosulfur and methanesulfonate over the western United States and coastal areas, *J. Geophys. Res.*, 120, doi:10.1002/2015JD023822.
59. ⁺Crosbie, E., ⁺J. –S. Youn, ⁺⁺B. Balch, A. Wonaschuetz, ⁺T. Shingler, ⁺Z. Wang, W. C. Conant, E. A. Betterton, and A. Sorooshian (2015). On the competition among aerosol number, size and composition in predicting CCN variability: a multi-annual field study in an urbanized desert, *Atmos. Chem. Phys.*, 15, 6943–6958, doi:10.5194/acp-15-6943-2015.
58. Jung, E., B. A. Albrecht, H. H. Jonsson, Y. –C. Chen, J. H. Seinfeld, A. Sorooshian, A. R. Metcalf, S. Song, M. Fang, and L. M. Russell (2015). Precipitation effects of giant cloud condensation nuclei artificially introduced into stratocumulus clouds, *Atmos. Chem. Phys.*, 15, 5645-5658, doi:10.5194/acp-15-5645-2015.
57. Modini, R. L., A. A. Frossard, L. Ahlm, L. M. Russell, C. E. Corrigan, G. C. Roberts, L. N. Hawkin , J. C. Schroder, A. K. Bertram, R. Zhao, A. K. Y. Lee, J. P. D. Abbatt, J. Lin, A. Nenes, ⁺Z. Wang, ⁺A. Wonaschütz, A. Sorooshian, K. J. Noone, H. Jonsson, J. H. Seinfeld, D. Toom-Sauntry, A. M. Macdonald, and W. R. Leaitch (2015), Primary marine aerosol-

- cloud interactions off the coast of California, *J. Geophys. Res.*, 120, doi:10.1002/2014JD022963.
56. Hersey, S. P., R. M. Garland, ⁺E. Crosbie, ⁺T. Shingler, A. Sorooshian, S. Piketh, and R. Burger (2015). An overview of regional and local characteristics of aerosols in South Africa using satellite, ground, and modeling data, *Atmos. Chem. Phys.*, 15, 4259–4278.
55. Sorooshian, A., G. ⁺Prabhakar, H. Jonsson, R. K. Woods, R. C. Flagan, and J. H. Seinfeld (2015). On the presence of giant particles downwind of ships in the marine boundary layer, *Geophys. Res. Lett.*, 42, doi:10.1002/2015GL063179.
54. ⁺Prabhakar, G., B. Ervens, ⁺Z. Wang, ⁺L. C. Maudlin, M. M. Coggon, H. H. Jonsson, J. H. Seinfeld, and A. Sorooshian (2014). Sources of nitrate in stratocumulus cloud water: Airborne measurements during the 2011 E-PEACE and 2013 NiCE studies, *Atmos. Environ.*, 97, 166–173, doi:10.1016/j.atmosenv.2014.08.019.
53. Coggon, M. M., A. Sorooshian, ⁺Z. Wang, J. S. Craven, A. R. Metcalf, J. J. Lin, A. Nenes, H. H. Jonsson, R. C. Flagan, and J. H. Seinfeld (2014). Observations of continental biogenic impacts on marine aerosol and clouds off the coast of California, *J. Geophys. Res.*, 119, doi:10.1002/2013JD021228.
52. ⁺Prabhakar, G., A. Sorooshian, ⁺⁺E. Toffol, A. F. Arellano, and E. A. Betterton (2014). Spatiotemporal distribution of airborne particulate metals and metalloids in a populated arid region, *Atmos. Environ.*, 92, 339–347, 10.1016/j.atmosenv.2014.04.044.
51. ⁺Crosbie, E., A. Sorooshian, ⁺⁺⁺N. A. Monfared, ⁺T. Shingler, and O. Esmaili (2014). A multi-year aerosol characterization for the greater Tehran Area using satellite, surface, and modeling data, *Atmosphere*, 5, 178–197.
50. Ervens, B., A. Sorooshian, Y. B. Lim, and B. J. Turpin (2014). Key parameters controlling OH-initiated formation of secondary organic aerosol in the aqueous phase (aqSOA), *J. Geophys. Res. Atmos.*, 119, doi:10.1002/2013JD021021.
49. ⁺Wang, Z., A. Sorooshian, ⁺G. Prabhakar, M. M. Coggon, and H. H. Jonsson (2014). Impact of emissions from shipping, land, and the ocean on stratocumulus cloud water elemental composition during the 2011 E-PEACE Field Campaign, *Atmos. Environ.*, 89, 570–580, doi.org/10.1016/j.atmosenv.2014.01.020.
48. Craven, J. S., A. R. Metcalf, R. Bahreini, A. Middlebrook, P. L. Hayes, ⁺H. T. Duong, A. Sorooshian, J. L. Jimenez, R. C. Flagan, and J. H. Seinfeld (2013). Los Angeles Basin airborne organic aerosol characterization during CalNex, *J. Geophys. Res. Atmos.*, 118, doi:10.1002/jgrd.50853.
47. Feingold, G., A. McComiskey, D. Rosenfeld, and A. Sorooshian (2013). On the relationship between cloud contact time and precipitation susceptibility to aerosol, *J. Geophys. Res.*, 118, 10,544–10,554, doi:10.1002/jgrd.50819.
46. Sorooshian, A. ⁺Z. Wang, M. M. Coggon, H. H. Jonsson, and B. Ervens (2013). Observations of sharp oxalate reductions in stratocumulus clouds at variable altitudes: organic acid and metal measurements during the 2011 E-PEACE campaign, *Environ. Sci. Technol.*, 47, 7747–7756, doi:10.1021/es4012383.
45. Youn, J. –S., ⁺Z. Wang, ⁺A. Wonaschütz, A. Arellano, E. A. Betterton, and A. Sorooshian (2013). Evidence of aqueous secondary organic aerosol formation from biogenic emissions in the North American Sonoran Desert, *Geophys. Res. Lett.*, 40, doi:10.1002/grl.50644.
44. Sorooshian, A., ⁺Z. Wang, G. Feingold, and T. S. L'Ecuyer (2013). A satellite perspective on cloud water to rain water conversion rates and relationships with environmental conditions, *J. Geophys. Res.*, 118, 6643–6650, doi:10.1002/jgrd.50523.

43. ⁺Wonaschütz, A., M. Coggon, A. Sorooshian, R. Modini, A. A. Frossard, L. Ahlm, J. Mülmenstädt, G. C. Roberts, L. M. Russell, S. Dey, F. J. Brechtel, and J. H. Seinfeld (2013). Hygroscopic properties of organic aerosol particles emitted in the marine atmosphere, *Atmos. Chem. Phys.*, *13*, 9819–9835, doi:10.5194/acp-13-9819-2013.
42. Sorooshian, A., ⁺T. Shingler, A. Harpold, ⁺⁺C. W. Feagles, T. Meixner, and P. D. Brooks (2013). Aerosol and precipitation chemistry in the southwestern United States: spatiotemporal trends and interrelationships, *Atmos. Chem. Phys.*, *13*, 7361–7379, doi:10.5194/acp-13-7361-2013.
41. Ryerson, T. B., A. E. Andrews, W. M. Angevine, T. S. Bates, C. A. Brock, B. Cairns, R. C. Cohen, O. R. Cooper, J. A. de Gouw, F. C. Fehsenfeld, R. A. Ferrare, M. L. Fischer, R. C. Flagan, A. H. Goldstein, J. W. Hair, R. M. Hardesty, C. A. Hostetler, J. L. Jimenez, A. O. Langford, E. McCauley, S. A. McKeen, L. T. Molina, A. Nenes, S. J. Oltmans, D. D. Parrish, J. R. Pederson, R. B. Pierce, K. Prather, P. K. Quinn, J. H. Seinfeld, C. J. Senff, A. Sorooshian, J. Stutz, J. D. Surratt, M. Trainer, R. Volkamer, E. J. Williams, and S. C. Wofsy (2013). The 2010 California Research at the Nexus of Air Quality and Climate Change (CalNex) field study. *J. Geophys. Res.*, *118*, 5830-5866.
40. Hersey, S. P., J. S. Craven, A. R. Metcalf, J. Lin, T. Lathem, K. J. Suski, J. F. Cahill, ⁺H. T. Duong, A. Sorooshian, H. H. Jonsson , M. Shiraiwa, A. Zuend, A. Nenes, K. A. Prather, R. C. Flagan , J. H. Seinfeld (2013). Composition and Hygroscopicity of the Los Angeles Aerosol: CalNex, *J. Geophys. Res.*, *118*, doi:10.1002/jgrd.50307.
39. Russell, L. M., A. Sorooshian, J. H. Seinfeld, B. A. Albrecht, A., Nenes, L. Ahlm, Y. -C., Chen, M. M. Coggon, J. S. Craven, R. C. Flagan, A. A. Frossard, H. Jonsson, E. Jung, J. J. Lin, A. R. Metcalf, R. Modini, J. Mulmenstadt, G. C. Roberts, ⁺T. Shingler, S. Song, ⁺Z. Wang, and ⁺A. Wonaschutz (2013). Eastern Pacific Emitted Aerosol Cloud Experiment (E-PEACE), *Bull. Amer. Meteor. Soc.*, *94*, 709–729, doi: <http://dx.doi.org/10.1175/BAMS-D-12-00015.1>.
38. Coggon, M. M., A. Sorooshian, ⁺Z. Wang, A. R. Metcalf, A. A. Frossard, J. J. Lin, J. S. Craven, A. Nenes, H. H. Jonsson, L. M. Russell, R. C. Flagan, and J. H. Seinfeld (2012). Ship impacts on the marine atmosphere: Insights into the contribution of shipping emissions to the properties of marine aerosol and clouds, *Atmos. Chem. Phys.*, *12*, 8439-8458.
37. ⁺Wonaschuetz, A., A. Sorooshian, B. Ervens, P. Y. Chuang, G. Feingold, S. M. Murphy, J. de Gouw, C. Warneke, H. H. Jonsson (2012). Aerosol and gas re-distribution by shallow cumulus clouds: an investigation using airborne measurements, *J. Geophys. Res.*, *117*, D17202, doi:10.1029/2012JD018089.
36. Sorooshian, A., J. Csavina, ⁺T. Shingler, S. Dey, F. Brechtel, E. Sáez, and E. A. Betterton (2012). Hygroscopic and chemical properties of aerosols collected near a copper smelter: Implications for public and environmental health, *Environ. Sci. Technol.*, *46*, 9473-9480.
35. Chen, Y.-C., M. W. Christensen, L. Xue, A. Sorooshian, G. L. Stephens, R. M. Rasmussen, and J. H. Seinfeld (2012). Occurrence of lower cloud albedo in ship tracks, *Atmos. Chem. Phys.*, *12*, 8223–8235.
34. ⁺Shingler, T., S. Dey, A. Sorooshian, F. J. Brechtel, ⁺Z. Wang, A. Metcalf, M. Coggon, J. Mülmenstädt, L. M. Russell, H. H. Jonsson, and J. H. Seinfeld (2012). Characterisation and airborne deployment of a new counterflow virtual impactor inlet, *Atmos. Meas. Tech.*, *5*, 1259–1269.

33. Metcalf, A. R., J. S. Craven, J. J. Ensberg, A. Sorooshian, ⁺H. T. Duong, H. Jonsson, R. C. Flagan, and J. H. Seinfeld (2012). Black carbon aerosol over the Los Angeles Basin during CalNex, *J. Geophys. Res.*, *117*, D00V13, doi:10.1029/2011JD017255.
32. Partridge, D. G., J. A. Vrugt, P. Tunved, A. M. L. Ekman, H. Struthers, and A. Sorooshian (2012). Inverse modeling of cloud-aerosol interactions – Part 2: Sensitivity tests on liquid phase clouds using a Markov Chain Monte Carlo based simulation approach, *Atmos. Chem. Phys.*, *12*, 2823–2847.
31. ⁺Duong, H. T., A. Sorooshian, J. S. Craven, S. P. Hersey, A. R. Metcalf, X. Zhang, R. J. Weber, H. Jonsson, R. C. Flagan, and J. H. Seinfeld (2011). Water-soluble organic aerosol in the Los Angeles Basin and outflow regions: Airborne and ground measurements during the 2010 CalNex field campaign, *J. Geophys. Res.*, *116*, D00V04, doi:10.1029/2011JD016674.
30. ⁺Wonaschütz, A., S. Hersey, A. Sorooshian, J. Craven, A. R. Metcalf, R. C. Flagan, and J. H. Seinfeld (2011). Impact of a large wildfire on water-soluble organic aerosol in a major urban setting: the 2009 Station Fire in Los Angeles County, *Atmos. Chem. Phys.*, *11*, 8257–8270.
29. Sorooshian, A., ⁺A. Wonaschütz, ⁺E. G. Jarjour, ⁺⁺B. I. Hashimoto, B. A. Schichtel, and E. A. Betterton (2011). An aerosol climatology for a rapidly growing arid region (Southern Arizona): Major aerosol species and remotely-sensed aerosol properties, *J. Geophys. Res.*, *116*, D19205, doi:10.1029/2011JD016197.
28. Partridge, D. G., J. A. Vrugt, P. Tunved, A. M. L. Ekman, D. Gorea, and A. Sorooshian (2011). Inverse modeling of cloud-aerosol interactions—Part 1: Detailed response surface analysis, *Atmos. Chem. Phys.*, *11*, 7269–7287.
27. Hersey, S. P., J. S. Craven, K. A. Schilling, A. R. Metcalf, A. Sorooshian, M. N. Chan, R. C. Flagan, and J. H. Seinfeld (2011). The Pasadena Aerosol Characterization Observatory (PACO): chemical and physical analysis of the Western Los Angeles Basin aerosol, *Atmos. Chem. Phys.*, *11*, 7417–7443.
26. ⁺Duong, H. T., A. Sorooshian, and G. Feingold (2011). Investigating potential biases in observed and modeled metrics of aerosol-cloud-precipitation interactions, *Atmos. Chem. Phys.*, *11*, 4027–4037.
25. Sorooshian, A., S. M. Murphy, S. Hersey, R. Bahreini, H. Jonsson, R. C. Flagan, and J. H. Seinfeld (2010). Constraining the contribution of organic acids and AMS *m/z* 44 to the organic aerosol budget: On the importance of meteorology, aerosol hygroscopicity, and region, *Geophys. Res. Lett.*, *37*, L21807, doi:10.1029/2010GL044951.
24. Jiang, H. L., G. Feingold, and A. Sorooshian (2010). Effect of aerosol on the susceptibility and efficiency of precipitation in trade cumulus clouds, *J. Atmos. Sci.*, *67*, 3525–3540.
23. (*Invited Submission*) Sorooshian, A., and ⁺H. Duong (2010). Ocean emission effects on aerosol-cloud interactions: Insights from two case studies, *Advances in Meteorology*, doi:10.1155/2010/301395.
- *22. Sorooshian, A., G. Feingold, M. D. Lebsack, H. Jiang, and G. Stephens (2010). Deconstructing the precipitation susceptibility construct: Improving methodology for aerosol-cloud-precipitation studies, *J. Geophys. Res.*, *115*, D17201, doi:10.1029/2009JD013426.
- *American Geophysical Union Research Spotlight Article
21. Lu, M. -L., A. Sorooshian, H. H. Jonsson, G. Feingold, R. C. Flagan, and J. H. Seinfeld (2009). Marine stratocumulus aerosol-cloud relationships in the MASE-II experiment: Precipitation susceptibility in eastern Pacific marine stratocumulus, *J. Geophys. Res.*, *114*, D24203, doi:10.1029/2009JD012774.

20. Sorooshian, A., L. T. Padró, A. Nenes, G. Feingold, A. McComiskey, S. P. Hersey, H. Gates, H. H. Jonsson, S. D. Miller, G. L. Stephens, R. C. Flagan, and J. H. Seinfeld (2009). On the link between ocean biota emissions, aerosol, and maritime clouds: airborne, ground, and satellite measurements off the coast of California, *Global Biogeochem. Cycles*, 23, GB4007, doi:10.1029/2009GB003464.
19. Sorooshian, A., G. Feingold, M. D. Lebsack, H. Jiang, and G. Stephens (2009). On the precipitation susceptibility of clouds to aerosol perturbations, *Geophys. Res. Lett.*, 36, L13803, doi:10.1029/2009GL038993.
18. Lance, S., A. Nenes, C. Mazzoleni, M. Dubey, H. Gates, T. A. Rissman, S. M. Murphy, A. Sorooshian, R. C. Flagan, J. H. Seinfeld, G. Feingold, and H. H. Jonsson (2009). Cloud condensation nuclei activity, closure, and droplet growth kinetics of Houston aerosol during the Gulf of Mexico Atmospheric Composition and Climate Study (GoMACCS), *J. Geophys. Res.*, 114, D00F15, doi:10.1029/2008JD011699.
17. Murphy, S. M., H. Agrawal, A. Sorooshian, L. T. Padró, H. Gates, S. Hersey, W. A. Welch, H. Jung, J. W. Miller, D. R. Cocker, A. Nenes, H. H. Jonsson, R. C. Flagan, and J. H. Seinfeld (2009). Comprehensive simultaneous shipboard and airborne characterization of exhaust from a modern container ship at sea, *Environ. Sci. Technol.*, 43, 4626-4640.
16. Hersey, S. P., A. Sorooshian, S. M. Murphy, R. C. Flagan, and J. H. Seinfeld (2009). Aerosol hygroscopicity in the marine atmosphere: a closure study using high-resolution, size-resolved AMS and multiple-RH DASH-SP data, *Atmos. Chem. Phys.*, 9, 2543–2554.
15. Sorooshian, A., S. Hersey, F. J. Brechtel, A. Corless, R. C. Flagan, and J. H. Seinfeld (2008). Rapid size-resolved aerosol hygroscopic growth measurements: differential aerosol sizing and hygroscopicity spectrometer probe (DASH-SP), *Aerosol Sci. Tech.*, 42, 445–464.
14. Sorooshian, A., S. M. Murphy, S. Hersey, H. Gates, L. T. Padró, A. Nenes, F. J. Brechtel, H. Jonsson, R. C. Flagan, and J. H. Seinfeld (2008). Comprehensive airborne characterization of aerosol from a major bovine source, *Atmos. Chem. Phys.*, 8, 5489-5520.
13. Moore, R. H., E. Ingall, A. Sorooshian, and A. Nenes (2008). Molar mass, surface tension, and droplet growth kinetics of marine organics from measurements of CCN activity, *Geophys. Res. Lett.*, 35, L07801, doi:10.1029/2008GL033350.
12. Ng, N. L., A. J. Kwan, J. D. Surratt, A. W. H. Chan, P. S. Chhabra, A. Sorooshian, H. O. T. Pye, J. D. Crounse, P. O. Wennberg, R. C. Flagan, and J. H. Seinfeld (2008). Secondary Organic Aerosol (SOA) Formation from Reaction of Isoprene with Nitrate Radicals (NO_3), *Atmos. Chem. Phys.*, 8, 4117-4140.
11. Ng, N. L., P. S. Chhabra, A. W. H. Chan, J. D. Surratt, J. H. Kroll, A. J. Kwan, D. C. McCabe, P. O. Wennberg, A. Sorooshian, S. M. Murphy, N. F. Dalleska, R. C. Flagan, and J. H. Seinfeld (2007). Effect of NO_x level on secondary organic aerosol (SOA) formation from the photooxidation of terpenes, *Atmos. Chem. Phys.*, 7, 5159-5174.
10. Gilardoni, S., L. M. Russell, A. Sorooshian, R. C. Flagan, J. H. Seinfeld, T. S. Bates, P. K. Quinn, J. D. Allan, B. Williams, A. H. Goldstein, T. B. Onasch, and D.R. Worsnop (2007). Regional variation of organic functional groups in aerosol particles on four U.S. East Coast platforms during ICARTT 2004, *J. Geophys. Res.* 112, D10S27, doi:10.1029/2006JD007737.
9. Murphy, S. M., A. Sorooshian, J. H. Kroll, N. L. Ng, P. Chhabra, C. Tong, J. D. Surratt, E. Knipping, R. C. Flagan, and J. H. Seinfeld (2007). Secondary aerosol formation from atmospheric reactions of aliphatic amines, *Atmos. Chem. Phys.*, 7, 2313–2337.
8. Szmigielski, R., J. D. Surratt, R. Vermeylen, K. Szmigielski, J. H. Kroll, N. L. Ng, S. M. Murphy, A. Sorooshian, J. H. Seinfeld, and M. Claeys (2007). Characterization of 2-

- methylglyceric acid oligomers in secondary organic aerosol formed from the photooxidation of isoprene using trimethylsilylation and gas chromatography/ion trap mass spectrometry, *J. Mass. Spectrom.*, 42, 101-116.
7. Surratt, J. D., J. H. Kroll, T. E. Kleindienst, E. O. Edney, M. Claeys, A. Sorooshian, N. L. Ng, J. H. Offenberg, M. Lewandowski, M. Jaoui, R. C. Flagan, and J. H. Seinfeld (2007). Evidence for organosulfates in secondary organic aerosol, *Environ. Sci. Technol.*, 41, 517-527.
 6. Fountoukis, C., A. Nenes, N. Meskhidze, R. Bahreini, W. C. Conant, H. Jonsson, S. M. Murphy, A. Sorooshian, V. Varutbangkul, F. J. Brechtel, R. C. Flagan, and J. H. Seinfeld (2007). Aerosol-cloud drop concentration closure for clouds sampled during the International Consortium for Atmospheric Research on Transport and Transformation 2004 campaign, *J. Geophys. Res.*, 112, D10S30, doi:10.1029/2006JD007272.
 5. Sorooshian, A., M. -L. Lu, F. J. Brechtel, H. Jonsson, G. Feingold, R. C. Flagan, and J. H. Seinfeld (2007). On the source of organic acid aerosol layers above clouds, *Environ. Sci. Technol.*, 41, 4647-4654.
 4. Sorooshian, A., N. L. Ng, A. W. H. Chan, G. Feingold, R. C. Flagan, and J. H. Seinfeld (2007). Particulate organic acids and overall water-soluble aerosol composition measurements from the 2006 Gulf of Mexico Atmospheric Composition and Climate Study (GoMACCS), *J. Geophys. Res.*, 112, D13201, doi:10.1029/2007JD008537.
 3. Surratt, J. D., S. M. Murphy, J. H. Kroll, N. L. Ng, L. Hildebrandt, A. Sorooshian, R. Szmigielski, R. Vermeylen, W. Maenhaut, M. Claeys, R. C. Flagan, and J. H. Seinfeld (2006). Chemical composition of secondary organic aerosol formed from the photooxidation of isoprene, *J. Phys. Chem. A*, 110, 9665-9690.
 2. Sorooshian, A., V. Varutbangkul, F. J. Brechtel, B. Ervens, G. Feingold, R. Bahreini, S. M. Murphy, J. S. Holloway, E. L. Atlas, G. Buzorius, H. Jonsson, R. C. Flagan, and J. H. Seinfeld (2006). Oxalic acid in clear and cloudy atmospheres: Analysis of data from International Consortium for Atmospheric Research on Transport and Transformation 2004, *J. Geophys. Res.* 111, D23S45, doi:10.1029/2005JD006880.
 1. Sorooshian, A., F. J. Brechtel, Y. L. Ma, R. J. Weber, A. Corless, R. C. Flagan, and J. H. Seinfeld (2006). Modeling and characterization of a particle-into-liquid sampler (PILS), *Aerosol Sci. Tech.*, 40, 396-409.

BOOKS

1. *Atmospheric Composition Observations*, edited by A. Sorooshian, pp. 322, MDPI. 2016.

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