

CURRICULUM VITAE

ARMIN SOROOSHIAN

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CHRONOLOGY OF EDUCATION

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

CHRONOLOGY OF EMPLOYMENT

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

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

- 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; 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)
- 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 (CIARA) 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

- ICARTT: International Consortium for Atmospheric Research on Transport and Transformation, Cleveland, OH (2004)
- MASE I: Marine Stratus/Stratocumulus Experiment, Monterey, CA (2005)
- SOAR: Study of Organic Aerosols at Riverside, Pasadena/Riverside, CA (2005)
- GoMACCS/TexAQS: Gulf of Mexico Atmospheric Composition and Climate Study/Texas Air Quality Study, Houston, TX (Flight scientist) (2006)
- MASE II: Marine Stratus/Stratocumulus Experiment, Monterey, CA (Flight scientist) (2007)
- PACO: Pasadena Aerosol Characterization Observatory, Pasadena, CA (2009)
- CalNex: California Nexus, Los Angeles, CA (2010)
- E-PEACE: Eastern Pacific Emitted Aerosol Cloud Experiment, Monterey, CA (2011)
- DC-3: Deep Convective Clouds and Chemistry Experiment, United States (2012)
- NICE: Nucleation in California Experiment (2013)
- SEAC⁴RS: Studies of Emissions and Atmospheric Composition, Clouds and Climate Coupling by Regional Surveys (2013)

REVIEWER ROLES

NASA (3 panels), EPA (2 panels), NSF (1 panel; 15 proposals), American Chemical Society Petroleum Research Fund (1 proposal), Qatar National Research Fund (3 proposals), Netherlands Organisation for Scientific Research (1 proposal), City University of New York internal grant

competition (1 proposal), Book Chapters (2), Textbook (1), Peer-Review Journals (*Nature Geoscience*, *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*, *Atmospheric Pollution Research*, *Scientific Reports*, *Climate Dynamics*), Graduate Research Awards committee of the Natural Hazards Focus group of the AGU

EDITORIAL ROLES

Special Issue Guest Editor (*Atmosphere* - “Atmospheric Composition Observations”)

Editorial Board of *Geomatics*, *Natural Hazards and Risk*

Editorial Board of *Atmospheric Chemistry and Physics*

REFEREED JOURNAL PUBLICATIONS (PI’s Graduate Student = ⁺; PI’s Undergraduate Student = ⁺⁺)

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.
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.
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.
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.
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.
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.
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.

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.
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.
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.
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.
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. Crouse, P. O. Wennberg, R. C. Flagan, and J. H. Seinfeld (2008). Secondary Organic Aerosol (SOA) Formation from Reaction of Isoprene with Nitrate Radicals (NO₃), *Atmos. Chem. Phys.*, *8*, 4117-4140.
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.
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.
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.
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.
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.
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.
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.

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.
 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.
 22. Sorooshian, A., G. Feingold, M. D. Lebsock, 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*
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.
 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.
 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.
 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.
 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.
 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.
 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.
 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.
 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.
 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.
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.
 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.
 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.
 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.
 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.
 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.
 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>
 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.
 41. Ryerson, T. B., and 37 coauthors (2013). The 2010 California research at the Nexus of air quality and climate change (CalNex) field study, *J. Geophys. Res.*, *118*, 5830–5866, doi:10.1002/jgrd.50331.
 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.
 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.

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.
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.
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.
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.
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.
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.
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.
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.
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.
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.
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, 10.1016/j.atmosenv.2014.08.019.
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.
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.
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.

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