

AOM-Systems list of publications (05/2021)

1. Schäfer, W. ; Tropea, C. ; Wigger, G. ; Eierhoff, D. (2021)
Spray measurements with the time-shift technique. In Measurement Science and Technology
[Link](#)
 2. Lingxi, L. & Tropea, C. (2021)
Geometric optics applied to drops passing through a focused Gaussian beam. In Applied Optics [Link](#)
 3. Lingxi, L.; Stegmann, P. G.; Rosenkranz, S.; Schäfer, W. & Tropea, C. (2019)
Simulation of light scattering from a colloidal droplet using a polarized Monte Carlo method: application to the time-shift technique [Link](#)
 4. Lingxi, L.; Rosenkranz, S.; Schäfer, W. & Tropea, C. (2019)
Light scattering from a drop with an embedded particle and its exploitation in the time-shift technique [Link](#)
 5. Lingxi, L.; Rosenkranz, S.; Schäfer, W. & Tropea, C. (2018)
Sensitivity of the Time-Shift Technique in Characterizing Non-spherical Drops
In 19th International Symposium on the Application of Laser and Imaging Techniques to Fluid Mechanics Lisbon, Portugal [Link](#)
 6. Lingxi, L.; Rosenkranz W.; Schäfer, W. & Tropea, C. (2018)
Light scattering form a drop with an embedded spherical particle for the time-shift technique.
In 12th Laser-light and Interactions with Particles (LIP) Texas, USA [Link](#)
 7. Rosenkranz, S. , Tropea, C. , Zoubir, A. M. (2016).
Detection of drops measured by the time shift technique for spray characterization.
In IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) IEEE.
[Link](#)
 8. Rosenkranz, S. , Schäfer, W. , Tropea, C. , Zoubir, A. M. (2016a).
Concentration measurement of suspension droplets by using the time-shift technique.
Proc. 18th International Symposium on Applications of Laser and Imaging Techniques to fluid Mechanics Lisbon, Portugal.
 9. Rosenkranz, S. ; Schäfer, W. ; Tropea, C. ; Zoubir, A. M. (2016b).
Modeling photon transport in turbid media for measuring colloidal concentration in drops using the time-shift technique. In Applied Optics.
 10. Schäfer, W., Rosenkranz, S., Brinckmann, F., & Tropea, C. (2016). Analysis of pneumatic atomizer spray profiles. Particuology. [Link](#)
 11. Rosenkranz, S., Tropea, C., & Zoubir, A. M. (2015). Bias Correction for Characterizing Transparent Particles using the Time Shift Technique. In ICLASS 2015, 13th Triennial International Conference on Liquid Atomization and Spray Systems, Tainan, Taiwan (pp. 1–7).
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12. Schäfer, W., & Tropea, C. (2015). Characterization of atomization processes in suspension / emulsion sprays. In ICLASS 2015, 13th Triennial International Conference on Liquid Atomization and Spray Systems, Tainan, Taiwan (pp. 1–7).
13. Schäfer, W., Rosenkranz, S., & Tropea, C. (2015). Validation of the Time-Shift Technique for Spray Characterization. In ILASS Americas 27th Annual Conference on Liquid Atomization and Spray Systems, Raleigh, NC.
14. Hahn, J., Rosenkranz, S., & Zoubir, A. M. (2014). Adaptive Compressed Classification for Hyperspectral Imagery. In Proc. ICASSP 2014, 39th IEEE Int. Conference on Acoustics, Speech and Signal Processing, Florence, Italy
15. Schäfer, W., & Tropea, C. (2014a). The time-shift technique for measurement size of non-transparent spherical particles. Proc. SPIE, 92320H. [Link](#)
16. Schäfer, W., & Tropea, C. (2014b). Time-shift technique for simultaneous measurement of size, velocity, and relative refractive index of transparent droplets or particles in a flow. Applied Optics, 53(4), 588. [Link](#)
17. Schäfer, W. (2013). Time-shift technique for particle characterization in sprays. Technische Universität Darmstadt.
18. Schäfer, W., & Tropea, C. (2013). Zeitverschiebungsverfahren zur Charakterisierung von transparenten Partikeln. In Fachtagung “Lasermethoden in der Strömungsmesstechnik” , München.
19. Tropea, C., & Schäfer, W. (2013). The Time-shift technique for characterization of non-transparent, spherical particles. In ILASS – Europe 2013, 25th European Conference on Liquid Atomization and Spray Systems, Chania, Greece (pp. 1–4).
20. Schäfer, W., & Tropea, C. (2012). Time-Shift Technique for Characterization of Transparent Particles in Sprays. In 16th Int Symp on Applications of Laser Techniques to Fluid Mechanics in Lisbon, Portugal.
21. Tropea, C., & Schäfer, W. (2011). The Time-Shift Technique for Measurement of Size and Velocity of Particles. In ILASS – Europe 2011, 24th European Conference on Liquid Atomization and Spray Systems, Estoril, Portugal.
22. Schäfer, W., Tropea, C., & Elsässer, W. (2010). Determination of size and refractive index of a single water droplet by using a light source with short coherence length (LED). In 15th Int Symp on Applications of Laser Techniques to Fluid Mechanics in Lisbon, Portugal (pp. 5–8).