

Peer-reviewed Journal Papers of Prof. Marc Avila

1. D. Feldmann, D. Borrero-Echeverry, M.J. Burin, K. Avila and **M. Avila**. Routes to turbulence in Taylor–Couette flow. *Philos. Trans. Royal Soc. A*, 38:20220114 (2023).
2. T. Schikarski, H. Trzenschiok, **M. Avila** and W. Peukert. Impact of solvent properties on the precipitation of active pharmaceutical ingredients. *Pow. Tech.*, 415:118032, 2023.
3. **M. Avila**, D. Barkley and B. Hof. Transition to turbulence in pipe flow. *Annu. Rev. Fluid Mech.*, 55:575–602, 2023.
4. A. Vela-Martín and **M. Avila**. Memoryless drop breakup in turbulence. *Sci. Adv.*, 8:abp9561, 2022.
5. D. Morón, D. Feldmann and **M. Avila**. Effect of waveform on turbulence transition in pulsatile pipe flow *J. Fluid Mech.*, 948:A20, 2022.
6. S.C. Endres, **M. Avila** and L. Mädler. A discrete differential geometric formulation of multiphase surface interfaces for scalable multiphysics equilibrium simulations. *Chem. Eng. Sci.*, 257:117681, 2022.
7. H. Li, A. Fischer, **M. Avila** and D. Xu. Measurement error of tracer-based velocimetry in single-phase turbulent flows with inhomogeneous refractive indices. *Exp. Therm. Fluid Sci.*, 136:110681, 2022.
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15. J. Tielke, M. Maas, M. Castillo, K. Rezwan and **M. Avila**. Statistical analysis of thermal conductivity experimentally measured in water-based nanofluids. *Proc. R. Soc. A*, 477:20210222, 2021.
16. C. Verseux, C. Heinicke, T. P. Ramalho, J. Determann, M. Duckhorn, M. Smagin and **M. Avila**. A low-pressure, N₂/CO₂ atmosphere is suitable for cyanobacterium-based life-support systems on Mars. *Front. Microbiol.*, 12:611798, 2021.

17. D. Feldmann, D. Morón and **M. Avila**. Spatiotemporal intermittency in pulsatile pipe flow. *Entropy*, 23:46, 2021.
18. D. Xu, B. Song and **M. Avila**. Non-modal transient growth of disturbances in pulsatile and oscillatory pipe flows. *J. Fluid Mech.*, 907:R5, 2021.
19. D. Xu, M. Heil, T. Seeböck and **M. Avila**. Resonances in pulsatile channel flow with an elastic wall. *Phys. Rev. Lett.*, 125:254501, 2020.
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