

List of Publications

David Schlipf

April 19, 2022

Dissertation

- [1] D. Schlipf. “Lidar-Assisted Control Concepts for Wind Turbines”. PhD thesis. University of Stuttgart, 2015. DOI: [10.18419/opus-8796](https://doi.org/10.18419/opus-8796).

Book Chapters

- [1] J.-W. Van Wingerden, D. Schlipf, and P. Gebraad. “Long-term Research Challenges in Wind Energy - A Research Agenda by the European Academy of Wind Energy”. In: ed. by G. van Kuik and J. Peinke. Springer International Publishing, 2016. Chap. Control, pp. 27–33. ISBN: 978-3-319-46919-5. DOI: [10.1007/978-3-319-46919-5](https://doi.org/10.1007/978-3-319-46919-5).

Publications in Journals

- [21] Y. Chen, F. Guo, D. Schlipf, and P. W. Cheng. “Four-dimensional wind field generation for the aeroelastic simulation of wind turbines with lidars”. In: *Wind Energy Science* 7.2 (Mar. 2022), pp. 539–558. DOI: [10.5194/wes-7-539-2022](https://doi.org/10.5194/wes-7-539-2022).
- [20] Y. Chen, D. Schlipf, and P. W. Cheng. “Parameterization of wind evolution using lidar”. In: *Wind Energy Science* 6.1 (Jan. 2021), pp. 61–91. DOI: [10.5194/wes-6-61-2021](https://doi.org/10.5194/wes-6-61-2021).
- [19] F. Guo and D. Schlipf. “A Spectral Model of Grid Frequency for Assessing the Impact of Inertia Response on Wind Turbine Dynamics”. In: *Energies* 14.9 (Apr. 2021). DOI: [10.3390/en14092492](https://doi.org/10.3390/en14092492).
- [18] F. Lemmer, W. Yu, D. Schlipf, and P. W. Cheng. “Robust gain scheduling baseline controller for floating offshore wind turbines”. In: *Wind Energy* 23.1 (Jan. 2020), pp. 17–30. DOI: [10.1002/we.2408](https://doi.org/10.1002/we.2408).
- [17] P. A. Fleming, A. Peiffer, and D. Schlipf. “Wind turbine controller to mitigate structural loads on a floating wind turbine platform”. In: *Journal of Offshore Mechanics and Arctic Engineering* 141.6 (Mar. 2019). DOI: [10.1115/1.4042938](https://doi.org/10.1115/1.4042938).
- [16] I. Würth, L. Valdecabres, E. Simon, C. Möhrlen, B. Uzunoğlu, C. Gilbert, G. Giebel, D. Schlipf, and A. Kaifel. “Minute-scale forecasting of wind power results from the collaborative workshop of IEA wind task 32 and 36”. In: *Energies* 12.4 (Feb. 2019), p. 712. DOI: [10.3390/en12040712](https://doi.org/10.3390/en12040712).
- [15] J. Annoni, P. Fleming, A. Scholbrock, J. Roadman, S. Dana, C. Adcock, F. Porte-Agel, S. Raach, F. Haizmann, and D. Schlipf. “Analysis of control-oriented wake modeling tools using lidar field results”. In: *Wind Energy Science* 3.2 (Nov. 2018), pp. 819–831. DOI: [10.5194/wes-3-819-2018](https://doi.org/10.5194/wes-3-819-2018).
- [14] E. Simley, H. Furst, F. Haizmann, and D. Schlipf. “Optimizing lidars for wind turbine control applications results from the IEA wind task 32 workshop”. In: *Remote Sensing* 10.6 (June 2018), p. 863. DOI: [10.3390/rs10060863](https://doi.org/10.3390/rs10060863).
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- [12] A. Borraccino, D. Schlipf, F. Haizmann, and R. Wagner. “Wind field reconstruction from nacelle-mounted lidar short-range measurements”. In: *Wind Energy Science* 2.1 (May 2017), pp. 269–283. DOI: [10.5194/wes-2-269-2017](https://doi.org/10.5194/wes-2-269-2017).

- [11] S. Raach, D. Schlipf, and P. W. Cheng. “Lidar-based wake tracking for closed-loop wind farm control”. In: *Wind Energy Science* 2.1 (May 2017), pp. 257–267. DOI: [10.5194/wes-2-257-2017](https://doi.org/10.5194/wes-2-257-2017).
- [10] J. J. Trujillo, J. K. Seifert, I. Würth, D. Schlipf, and M. Kühn. “Full-field assessment of wind turbine near-wake deviation in relation to yaw misalignment”. In: *Wind Energy Science* 1.1 (Apr. 2016), pp. 41–53. DOI: [10.5194/wes-1-41-2016](https://doi.org/10.5194/wes-1-41-2016).
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- [6] A. Rettenmeier, D. Schlipf, I. Würth, and P. W. Cheng. “Power performance measurements of the NREL CART-2 wind turbine using a nacelle-based lidar scanner”. In: *Journal of Atmospheric and Oceanic Technology* 31.10 (Oct. 2014), pp. 2029–2034. DOI: [10.1175/jtech-d-13-00154.1](https://doi.org/10.1175/jtech-d-13-00154.1).
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Publications in Peer Reviewed Conference Proceedings

- [49] F. Guo and D. Schlipf. “Lidar Wind Preview Quality Estimation for Wind Turbine Control”. In: *American Control Conference*. New Orleans, LA, USA, May 2021. DOI: [10.23919/ACC50511.2021.9483442](https://doi.org/10.23919/ACC50511.2021.9483442).
- [48] D. Schlipf, F. Lemmer, and S. Raach. “Multi-Variable Feedforward Control for Floating Wind Turbines Using Lidar”. In: *International Ocean and Polar Engineering Conference*. Oct. 2020. DOI: [10.18419/opus-11067](https://doi.org/10.18419/opus-11067). URL: <https://onepetro.org/ISOPEIOPEC/proceedings-abstract/ISOPE20/A11-ISOPE20/ISOPE-I-20-1174/446367>.
- [47] D. Schlipf, F. Guo, and S. Raach. “Lidar-based Estimation of Turbulence Intensity for Controller Scheduling”. In: *Journal of Physics: Conference Series*. Vol. 1618. 3. The Science of Making Torque from Wind (TORQUE 2020). Sept. 2020, p. 032053. DOI: [10.1088/1742-6596/1618/3/032053](https://doi.org/10.1088/1742-6596/1618/3/032053).
- [46] E. Simley, P. Bortolotti, A. Scholbrock, D. Schlipf, and K. Dykes. “IEA Wind Task 32 and Task 37: Optimizing Wind Turbines with Lidar-Assisted Control Using Systems Engineering”. In: *Journal of Physics: Conference Series*. Vol. 1618. 4. The Science of Making Torque from Wind (TORQUE 2020). Sept. 2020, p. 042029. DOI: [10.1088/1742-6596/1618/4/042029](https://doi.org/10.1088/1742-6596/1618/4/042029).
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