

# Julian Geiger

Curriculum Vitae

### General Information

Address Avinguda dels Països Catalans 1, 43007 Tarragona, Spain

Birth Date: 30th November 1994. Location: 90471 Nuremberg

Nationality German

E-Mail jgeiger@iciq.es Phone (+34)611644538

#### Education

10/19 – present PhD Student Núria López research group, Institute of Chemical Research of Catalonia

06/18–12/18 Master's Thesis BASF, Ansgar Schäfer research group (ROM/CQ), Grade: 1.0 Structure generation for the automated investigation of reaction networks.

10/16-12/18 Chemistry M.Sc. Friedrich-Alexander-University Erlangen-Nuremberg, Grade: 1.0

04/16-07/16 Bachelor's thesis Andreas Görling research group, Grade: 1.0

Density Functional Theory investigations on potential catalysts for  $\mathrm{CO}_2$  activation on the basis of  $\mathrm{Cu}(I)$ -NHC complexes with Turbomole

2013 – 2016 Chemistry B.Sc. Friedrich-Alexander-University Erlangen-Nuremberg, Grade: 1.2 (Valedictorian)

2005 – 2013 A-levels Adam-Kraft-Gymnasium Schwabach, Grade: 1.4

## Scholarships

2015 – 2018 Financial funding by the German government and the LEONHARD KURZ Stiftung & Co KG through the German national scholarship program "Germany Scholarship".

08/16-10/16 6-week inorganic chemistry internship at the Texas-Tech-University, Lubbock, funded by the "Research Internships in Science and Engineering" program of the German Academic Exchange Service (DAAD RISE). Findlater research group. Synthesis of Ir(I)-Pincer complexes and their usage as catalysts for the isomerization of internal alkynes to allenes.

# List of publications

- 02/03/2023 Surin, I., Geiger, J. et al., Low-Valent Manganese Atoms Stabilized on Ceria for Nitrous Oxide Synthesis. *Adv. Mater.* **35**, 2211260 (2023).
- 18/08/2022 Geiger, J., Sabadell-Rendón, A., Daelman, N. & López, N. Data-driven models for ground and excited states for Single Atoms on Ceria. *npj Comput. Mater.* **8**, 171 (2022).
- 05/08/2022 Geiger, J. & López, N. Coupling Metal and Support Redox Terms in Single-Atom Catalysts. J. Phys. Chem. C 126, 13698–13704 (2022).
- 22/07/2022 Geiger, J., Settels, V., Deglmann, P., Schäfer, A. & Bergeler, M. Automated input structure generation for single-ended reaction path optimizations. *J. Comput. Chem.* 43, 1662-1674 (2022).
- 04/03/2022 Wan, W., Geiger, J. et al. Highly Stable and Reactive Platinum Single Atoms on Oxygen Plasma-Functionalized CeO<sub>2</sub> Surfaces: Nanostructuring and Peroxo Effects. *Angew. Chem. Int. Ed.* **61**, e202112640 (2022).
- 21/05/2020 Geiger, J., Sprik, M. & May, M. M. Band positions of anatase (001) and (101) surfaces in contact with water from density functional theory. *J. Chem. Phys.* **152**, 194706 (2020).