

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

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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 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

- 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., Berdunov, N., Luna, M. L., Chee, S. W., Daelman, N., López, N., Shaikhutdinov, S. & Cuenya, B. R. Highly Stable and Reactive Platinum Single Atoms on Oxygen Plasma-Functionalized CeO₂ 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).