



Universiteit
Leiden
The Netherlands

T-CYCLE EPR Development at 275 GHz for the study of reaction kinetics & intermediates

Panarelli, E.G.

Citation

Panarelli, E. G. (2018, December 10). *T-CYCLE EPR Development at 275 GHz for the study of reaction kinetics & intermediates*. *Casimir PhD Series*. Retrieved from <https://hdl.handle.net/1887/68233>

Version: Not Applicable (or Unknown)

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/68233>

Note: To cite this publication please use the final published version (if applicable).

Cover Page



Universiteit Leiden



The handle <http://hdl.handle.net/1887/68233> holds various files of this Leiden University dissertation.

Author: Panarelli, E.G.

Title: T-CYCLE EPR Development at 275 GHz for the study of reaction kinetics & intermediates

Issue Date: 2018-12-10

Curriculum Vitae

Gabriele Panarelli was born on March 2nd, 1989 in Cuneo, Italy.

He obtained his Bachelor's degree in Chemistry in 2011 and his Master's degree in Physical Chemistry in 2013, both from the University of Turin, Italy. In his Master's degree experimental project, Gabriele studied surface holes in TiO_2 with Electron Paramagnetic Resonance (EPR), under the supervision of Prof. Elio Giamello and dr. Stefano Livraghi.

In 2013 Gabriele joined the group of prof. dr. Edgar Groenen as a PhD student at Leiden University, the Netherlands, to study spin systems and chemical kinetics with high-frequency EPR.

Since September 2018, Gabriele has been working as a managing editor for a portfolio of Physics journals at Elsevier, Amsterdam.

Acknowledgments

Like any successful human activity, this piece of research too is the result of an extended network of collaborations, both on a professional and on a human level, to whose members I would like to express my gratitude.

I am most grateful to my supervisor, prof. dr. Edgar Groenen, who gave me the chance to join his team in the first place, and who patiently and wisely supported my highly non-linear progress during my research. Without him believing in me and encouraging me to develop both scientifically and personally, I would not be at this point.

Some very special thanks go to dr. Peter Gast, whose immense knowledge of the instruments was simply pivotal whenever something broke down or stopped working – which happened more often than not. I am also very thankful for the opportunity he gave me to be his teaching assistant for three years.

An extremely important person in my path as a PhD student has been my friend and former colleague, dr. Mykhailo Azarkh. He was my guiding light during my first years at Leiden University, and kept carrying on that role even when he moved to Germany. There are no words with which I can express my gratitude towards him.

I am exceedingly thankful to a number of persons whose contributions to my work were paramount. Thanks to dr. Wolfgang Löffler for the big hand he provided in relation to my optical setup. His patience and expertise are exceptional, and I will never be able to thank him enough. Thanks to Harmen van der Meer and the Fine Mechanical Department, for always being ready and willing to help in relation to any aspect of the EPR spectrometers. Thanks to Bert Crama and the Electronics Department, for his fundamental role in developing and maintaining the laser setup for my experiments. Thanks to Jos Disselhorst and dr. Huib Blok, for their invaluable role in replacing the microwave mixer of the 275 GHz EPR spectrometer when it

broke down. Thanks to dr. Marcel Rost for his precious insights with the COMSOL software package. Last but not least, thanks to Henriette van Leeuwen for her exceptional assistance in administration and organization matters.

I highly appreciated the insightful conversations about EPR I had with dr. Martina Huber; the fun conversations about anything with my colleague Enrico Zurlo; and the advice I received from prof. dr. Michel Orrit.

Beside the professional support, I am extremely lucky for the care and warmth I received during these tough PhD years from a few special persons. A heartily thank you goes to Mr Jorrit van Wijk, who on countless occasions stretched out his hand to me to help me rise again during the darkest moments.

I am grateful for the fun and familiar time I spent with my friends Raffaella, Antonella, and Dimo, who contributed to making my experience here cheerful and light-hearted.

A loving thank you goes to my boyfriend Nikos, who in the last year withstood my moments of weakness with love and patience.

The most important acknowledgement and thanks are for my family. Not for a single moment did they stop encouraging me during these years, which distance made hard for all of us. Thank you mom, dad, and Annalisa, for constantly reminding me how proud you are of me, for teaching me to always stand tall, and for motivating me to always strive to be a better person. Thank you Gisella, for guiding and comforting me through your memories. Thank you Michelle, Sophie, and Ludovico, for the enthusiasm and joy you filled each of our yearned-for encounters. I love you all.

Printed by:
Ridderprint BV
www.ridderprint.nl