

University of Groningen

Detecting free radicals in single cells using diamond relaxometry

Nusantara, Citra

DOI:
[10.33612/diss.229614020](https://doi.org/10.33612/diss.229614020)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2022

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):
Nusantara, C. (2022). *Detecting free radicals in single cells using diamond relaxometry*. [Thesis fully internal (DIV), University of Groningen]. University of Groningen. <https://doi.org/10.33612/diss.229614020>

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

Acknowledgement

This thesis would not have been completely arranged without help and great teamwork from colleagues, friends, and collaborators. I am grateful for being able to work together with them for these 4 years. I would like to express my thanks to everyone who helped me during this journey.

I am very lucky that I found Romana's group for my master's project. **Romana** is an excellent supervisor, mentor, and teacher. Without Romana, I would never have finished my PhD as it is now. Romana always encouraged me whenever I had a doubt and the way she handled everything positively and optimistically inspired me a lot. Thank you Romana, for giving me the opportunity to be in your group.

I would also like to express my gratitude to the reading committee of my thesis; **Prof. Hélder**, **Prof. Geert**, and **Prof. Fedor**. Thank you very much for your time and valuable feedback on my thesis.

During my PhD, I had a very smooth journey because of my colleagues. **Felipe**, you taught me a lot at the start of my PhD. I always look up to you; you are very smart and caring. Every time I had a problem, you always helped and gave me guidance. Even though I had no clue of many things when I first started, slowly I understood more because you were very patient at teaching. Thank you, I am grateful I met you during my PhD. **Mayeul**, thank you for teaching me about diamond magnetometry and the setup. Thank you for your help and support for all my papers.

Aryan, I love your yummy cookies and I love talking to you. It's super fun whenever I discuss with you. I love our memories of going to restaurants. Thank you for being my friend and helping me a lot. **Linyan**, we spent a lot of time in the lab together, I can

always rely on you during many experiments together. It was always super fun working with you.

Rokshana, we had our PhD day together and we were always together in some classes. We also always walked together for any events. Thank you for the fun experience and the chocolate you gave me. **Alina**, thank you, for always answering all my questions and helping me. You are very smart and very good at explaining.

Aldona, working with you is always nice. You are a very hardworking person and very efficient. Thank you for your help and encouragement. **Yuchen**, it's fun to talk to you during the BME events or after experiments. **Thamir** and **Thea**, we had some nice conversations during building or arranging the setups.

Viraj and **Yoshita**, thank you for the encouragement and advice that you gave me. **Charles**, you always answered my questions and explained them in a very nice way. **Ari**, thank you for helping me when I encountered a problem and it was fun talking about anime with you. **Simon**, **Kiran**, **Yori**, and **Sandeep**, it was a pleasure working with you.

Kaiqi, **Claudia**, and **Torben**, my office roommates. Sometimes, I met you during the weekends or very late at night and it was always surprising and fun. **Yue**, **Runrun**, and **Neda**, thank you for helping me whenever I asked for help. It was also nice working on projects with you. **Siyu** and **Arturo**, thank you for your input and engagement.

I would like to thank the supporting staff and technicians of the department for the help and support: **Ed**, **Ina**, **Wya**, **Wytse**, **Willem**, **Willy**, **Gesinda**, **Reinier**, **Hans**, **Joop**, and **Betsy**. Thank you for your support in all administrative and technical matters. To all the scientific staff in the BME department; **Hélder**, **Henk**, **Henny**, **Jelmer**, **Prashant**, **Theo**, **Patrick**, **Inge**, and **Brandon**, it was always good for me to learn from your remarks during the lunch/BME

meeting. To all PhDs at BME, thank you for always being nice and fun. Especially for **Yanyan, Lu Yuan,** and **Guangyue.**

Dong Li, my best friend since my master's degree. Thank you for your help and support during our study time together. Thank you for always being my friend.

To my **Mom,** thank you for your unlimited support and love. Thank you for raising me and always having my back. And for my **Jordy,** thank you for being in my life and for always supporting me. You are the best. This thesis is dedicated to both of you. I am so happy to have you in my life.