

# Towards advanced social media metrics: understanding the diversity and characteristics of Twitter interactions around science

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### **Curriculum Vitae**

Zhichao Fang was born on February 25, 1992 in Yueyang City, Hunan Province (China). Zhichao graduated from Yueyang First Senior High School in 2010 and was admitted to Dalian University of Technology in China. He obtained his Bachelor's degree in Public Administration in 2014. After that, he was given exemption from the examination to be admitted to a Master's programme at WISE Lab of Dalian University of Technology. In 2017, Zhichao obtained his Master's degree in Science of Science and Science & Technology Management. After receiving the financial support from the China Scholarship Council (the CSC scholarship), Zhichao moved to the Netherlands in September 2017 and started his PhD research at the Centre for Science and Technology Studies (CWTS) of Leiden University, under the co-supervision of Prof. dr. Paul Wouters and Dr. Rodrigo Costas.

Zhichao's PhD project mainly focuses on diverse Twitter interactions around scientific publications, to characterize the patterns and effectiveness of Twitter reception and dissemination of scientific knowledge. The fundamental objective of his PhD dissertation is to approach more advanced social media metrics of science by taking into consideration the diverse science-social media interactions. In 2019, this PhD dissertation was awarded an honorable mention of the Eugene Garfield Doctoral Dissertation Award by the International Society for Scientometrics and Informetrics (ISSI). During his master and PhD programmes, Zhichao has published a number of peer-reviewed journal papers and conference papers. In addition, Zhichao served as reviewers for a range of scholarly journals, including *Journal of the Association for Information Science and Technology, Scientometrics, Journal of Information Science, Quantitative Science Studies, Journal of Medical Internet Research*, and *Journal of Data and Information Science*.

## List of publications

#### International peer-reviewed journal papers:

Fang, Z., Costas, R., Tian, W., Wang, X., & Wouters, P. (2021). How is science clicked on Twitter? Click metrics for Bitly short links to scientific publications. *Journal of the Association for Information Science and Technology*, 72(7), 918-932.

Fang, Z., Costas, R., Tian, W., Wang, X., & Wouters, P. (2020). An extensive analysis of the presence of altmetric data for Web of Science publications across subject fields and research topics. *Scientometrics*, 124(3), 2519–2549.

Fang, Z., Dudek, J., & Costas, R. (2020). The stability of Twitter metrics: A study on unavailable Twitter mentions of scientific publications. *Journal of the Association for Information Science and Technology*, 71(12), 1455-1469.

Fang, Z., & Costas, R. (2020). Studying the accumulation velocity of altmetric data tracked by Altmetric.com. *Scientometrics*, 123(2), 1077-1101.

#### International peer-reviewed conference papers:

Fang, Z., Costas, R., & Wouters, P. (2021). User engagement with scholarly Twitter mentions: A large-scale and cross-disciplinary analysis. *The 18th International Conference of the International Society for Scientometrics and Informetrics (ISSI 2021)*, Jul 12-15, Leuven, Belgium.

Fang, Z., Dudek, J., Noyons, E., & Costas, R. (2020). Science cited in policy documents: Evidence from the Overton database. *The 2020 Altmetrics Workshop*, Nov 17, online conference.

Fang, Z., Costas, R., Tian, W., Wang, X., & Wouters, P. (2020). How is science clicked on Twitter? Click metrics for Bitly short links to scientific publications. *The 7:AM Altmetrics Conference*, Oct 21 & 28, online conference.

Li, K., Chen, P., & Fang, Z. (2019, poster). Disciplinarity of software papers: A preliminary analysis. *Annual Conference of the American Society for Information Science and Technology (ASIS&T 2019)*, Oct 19-23, Melbourne, Australia.

Fang, Z., Dudek, J., & Costas, R. (2019). The stability of Twitter metrics: A study on unavailable Twitter mentions of scientific publications. *The 2019 Altmetrics Workshop*, Oct 11, Stirling, the UK.

Fang, Z., Lamers, W., & Costas, R. (2019). Studying the scientific mobility and international collaboration funded by the China Scholarship Council. *The 17th International Conference of the International Society for Scientometrics and Informetrics (ISSI 2019)*, Sep 2-5, Rome, Italy.

Fang, Z., & Costas, R. (2018). Studying the posts accumulation patterns of various Altmetric.com data sources. *The 2018 Altmetrics Workshop*, Sep 25, London, the UK.

Fang, Z., & Costas, R. (2018). Studying the Velocity Index for various Altmetric.com data sources. *The 23rd International Conference on Science and Technology Indicators (STI 2018)*, Sep 12-14, Leiden, the Netherlands.

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I treasure the past four years I spent in the Netherlands because I was always surrounded by a lovely group of colleagues and friends. Special thanks to my best friends Wanbin and Juan Pablo for accompanying me to the defense as my paranymphs. Particular thanks to Zohreh, Jonathan, Felipe, Petra, Teresa, and Ali for their very kind help and companionship when I just arrived in the Netherlands. Thanks to my friendly neighbor Koen for helping me check the translation of Dutch summary. Many thanks to Sarah, Ludo, Ed, Nees Jan, Thed, Vincent, Clara, Alfredo, Martijn, Karin, Inge, Lidia, Henri, Patrick, Bram, Wout, Tung-Tung, Qianqian, Kai, Haiyun, Andrea, Judit, Jochem, Carole, Ingeborg, Sonia, André, Soohong, Eleonora, Huizhen, Xiaozan for their kind assistance and comfort when I was facing challenges.

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"陌上花开,可缓缓归矣。"