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## **Development of personalized health monitoring using ultra-weak photon emission based on systems medicine concepts**

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## Curriculum Vitae

Mengmeng Sun was born on March 23rd, 1985 in Changchun, Jilin province, P.R. China. In 2003, he received his senior high school degree from No.11 High School of Changchun and started to study in Shandong University of Technology, majoring in biology. He received his Bachelor's degree in 2007. In 2008, he was admitted by Changchun University of Chinese Medicine as a master student in the major of pharmaceutical chemistry and drug delivery. He received his Master's degree in 2011.

In 2012, he got a scholarship from the China Scholarship Council and started his research as a PhD candidate at Analytical BioSciences, Leiden Academic Centre for Drug Research, Leiden University. His research is mainly focusing on development of personalized health monitoring using ultra-weak photon emission based on traditional Chinese medicine-based concepts.

## List of publications

1. **Mengmeng Sun**, Roeland Van Wijk, Eduard Van Wijk, Mei Wang, Herman van Wietmarschen, Thomas Hankemeier, Jan van der Greef, Delayed luminescence: an experimental protocol for establishment of quality control parameters for Chinese herbal medicines. *Luminescence*, 31:1220-1226, 2016.
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3. **Mengmeng Sun\***, Li Li\*, Mei Wang, Eduard Van Wijk, Min He, Roeland Van Wijk, Slavik Koval, Thomas Hankemeier, Jan van der Greef, Shengli Wei, Effects of growth altitude on chemical constituents and delayed luminescence properties in medicinal rhubarb. *Journal of Photochemistry & Photobiology, B: Biology*, 162:24-33, 2016.
4. **Mengmeng Sun**, Eduard Van Wijk, Slavik Koval, Roel Van Wijk, Min He, Mei Wang, Thomas Hankemeier, Jan van der Greef, Measuring ultra-weak photon emission as a non-invasive diagnostic tool for detecting early-stage type 2 diabetes: a step toward personalized medicine. *Journal of Photochemistry & Photobiology, B: Biology*, 166:86-93, 2017.
5. **Mengmeng Sun**, Wen-Te Chang, Eduard Van Wijk, Min He, Slavik Koval, Ming-Kuem Lin, Roel Van Wijk, Thomas Hankemeier, Jan van der Greef, Mei Wang, Characterization of the therapeutic properties of Chinese herbal materials by measuring delayed luminescence and dendritic cell-based immunomodulatory response. *Journal of Photochemistry & Photobiology, B: Biology*, 168:1-11, 2017.

6. Min He, Eduard Van Wijk, Herman van Wietmarschen, Mei Wang, **Mengmeng Sun**, Slavik Koval, Roeland van Wijk, Thomas Hankemeier and Jan van der Greef, Spontaneous ultra-weak photon emission in correlation to inflammatory metabolism and oxidative stress in a mouse model of collagen-induced arthritis. *Journal of photochemistry and photobiology B: Biology*, 168:96-106, 2017.
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8. Ping Sun, Xianping Cao, Hanxu Sun, **Mengmeng Sun** and Min He, Spatial pattern characterization of linear polarization-sensitive backscattering Mueller matrix elements of human serum albumin sphere suspension. *Journal of Biological Physics*, 39:501-514, 2013.

\*, These authors contributed equally to the work

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