



## **BARDEHLE PAGENBERG Team**

### **Wenwen Mao**

Dr. rer. nat. (Physics)

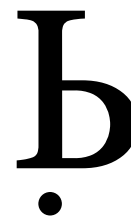


**Patent Engineer**

Location Munich

Languages: German, English, Chinese, Japanese

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Dr. Wenwen Mao has a strong international and technical background, having studied and worked in Germany, China, Japan, Singapore, and Korea. With her training in condense matter physics and high-performance computing, she is particularly suited for technology-driven cases involving advanced materials, semiconductor physics, optics, and software-based innovations.

Dr. Wenwen Mao's work draws on empathetic, patient, and detail-oriented communication. To work smoothly across cultures with clients, experts, and colleagues, she also translates complex technical content into clear, practical, and decision-oriented input for legal strategies.



## Legal Areas

Patent Valuation

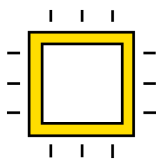
Patent Litigation

Patent Prosecution

Oppositions and Nullity

Unitary Patent

## Industries



Semiconductor Technology



Medical Devices



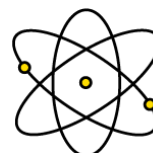
Software, IT & Computer Technology



Telecommunications



Sports



Physics



Quantum Technologies



## Publications

- Wenwen Mao, Shunsuke A. Sato, Angel Rubio. Nonlinear current injection in hexagonal boron nitride using linearly polarized light in a deeply off-resonant regime, *Advanced Optical Materials* 12 (22), 2400651 (2024).
- Wenwen Mao, Shunsuke A. Sato, Angel Rubio. Enhancement of high-order harmonic generation in graphene by mid-infrared and terahertz fields, *Phys. Rev. B* 109 (4), 045421 (2024).
- Kotaro Nakagawa, Wenwen Mao, Shunsuke A. Sato, Hideki Hirori. Hot electron effect on high order harmonic generation from graphene modulated by THz electric pulse fields, *APL Photonics* 9, 076107 (2024).
- Wenwen Mao, Shunsuke A. Sato, Angel Rubio. THz-induced high-order harmonic generation and nonlinear transport in graphene, *Phys. Rev. B* 106, 024313 (2022).
- Ofer Neufeld, Wenwen Mao, Hannes Hübener, Nicolas Tancogne-Dejean, Shunsuke A. Sato, Umberto De Giovannini, Angel Rubio. Time- and angle-resolved photoelectron spectroscopy of strong-field light-dressed solids: Prevalence of the adiabatic band picture, *Phys. Rev. Research* 4, 033101 (2022).
- Wenwen Mao, Li-Hua Lu, You-Quan Li. Quantum model for understanding protein misfolding behavior – phase diagram and manual intervention, *Sci. China Phys. Mech. Astron.* 64, 260011 (2021).
- Wenwen Mao, Li-Hua Lu, Yong-Yun Ji, You-Quan Li. Quantum Intelligence on Protein Folding Pathways, *Chinese Phys. B* 29, 018702 (2020).



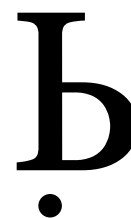
## Lectures & Seminars

- Contributed Talks at ATTO2NANO Workshop – Ultrafast modeling of condensed matter across time scales, CECAM-HQ-EPFL, Lausanne, Switzerland, 2024.
- Contributed Talks at APS March Meeting, Las Vegas, USA. 2023.
- Contributed Talks at DPG (German Physical Society) Fall Meeting, Regensburg, Germany, 2022.



## Memberships

Dr. Wenwen Mao is a member of the German Physical Society (DPG) and the American Physical Society (APS).



## Curriculum Vitae

- 2026 - today** Patent Engineer and Trainee Patent Attorney at BARDEHLE PAGENBERG in Munich, Germany
- 2025** Visiting Scientist, Department of Physics and Photon Science, Gwangju Institute of Science and Technology (GIST), Gwangju, Korea
- 2023** Visiting Scientist, Surface Physics State Key Laboratory, Institute of Physics, Chinese Academy of Sciences, Beijing, China
- 2023** Visiting Scientist, Center for Computational Sciences, University of Tsukuba and Kyoto University, Japan
- 2020 - 2024** Doctoral Researcher, Max Planck Institute for the Structure and Dynamics of Matter (MPSD) & Center for Free-Electron Laser Science (CFEL), Hamburg, Germany
- 2020 - 2024** Ph.D in Condense Matter Physics, International Max Planck Research School for Ultrafast Imaging & Structural Dynamics (IMPRS UFAST) & University of Hamburg
- 2018** Visiting Student Researcher at Centre for Quantum Technologies (CQT), National University of Singapore
- 2017 - 2020** M.Sc in Theoretical Physics, Zhejiang University, Hangzhou, China
- 2016 - 2020** Student Researcher at Center of Modern Physics, Zhejiang University, Hangzhou, China
- 2012 - 2016** B. Eng in Biosystems Engineering, Zhejiang University, Hangzhou, China