

## Prof. Dr. Rutger Schlatmann



### 1) General Information

Rutger Schlatmann, Prof. Dr.; 23.09.1966, male  
Founding director of the institute PVcomB at the Helmholtz-Zentrum Berlin für Materialien und Energie (HZB), since 2008.  
Speaker of the Solar Energy division at HZB (since 2017)  
Full professor (W3) Photovoltaic Technology at the Hochschule fuer Technik und Wirtschaft Berlin (since 2012).  
Chair European Technology & Innovation Platform Photovoltaics (since 2022, member since 2014).  
Vice-President of the Berlin Brandenburg Energy Network (since 2010)  
Member of numerous national and international advisory and evaluation committees

### 2) Previous positions

R&D manager and management team member at Helianthos BV (AkzoNobel/Shell Solar/Nuon), a company developing flexible thin film Si solar modules (From 1999 until 2008).

### 3) Research Expertise

Si-heterojunction and CIGS, and perovskite-based multijunction solar cells and modules.  
Upscaling of deposition equipment and production technologies, outdoor systems, building integrated photovoltaics.  
Synthesis of thin film and nanostructured systems and reactor development for catalytic applications.  
Resources and circularity aspects for novel technologies.

### 4) Publications

Total number of publications >280, citations >7400 and h-index 39 (Retrieved from Google Scholar on 19.10.23) >15 patent families

- i. S. Mariotti, E. Köhnen et al., "Interface engineering for high-performance, triple-halide perovskite–silicon tandem solar cells", *Science* 381, 63-69 (2023).
- ii. NM Haegel et al., "Photovoltaics at multi-terawatt scale: waiting is not an option", *Science* 380, 39-42 (2023)
- iii. P Tockhorn, J Sutter et al., "Nano-optical designs for high-efficiency monolithic perovskite–silicon tandem solar cells", *Nature Nanotechnology* 17, 1214-1221 (2022)
- iv. F. Bao, et al., "Host, suppressor, and promoter—the roles of Ni and Fe on oxygen evolution reaction activity and stability of NiFe alloy thin films in alkaline media", *ACS Catal.* 11, 10537-10552 (2021).
- v. A. Al-Ashouri, E. Köhnen, B. Li, *et al.*, S. Albrecht, "Monolithic perovskite/silicon tandem solar cell with >29% efficiency by enhanced hole extraction", *Science* 370, 1300-1309 (2020).