Subtopic 1.3: PV: Cell design and development

Dr. Antonio Abate *ORCID: 0000-0002-3012-3541*

Current positions
Head of Young Investigator Group, HZB (since 2017)
Board member of renewable energy division at HZB (since 2017)
Visiting professorship, Fuzhou University (since 2017)
Lecturer, University of Naples (since 2018)

Previous positions (two selected)
Team leader, University of Fribourg, Adolphe Merkle Institute (2016-2017)
Post-Doctoral Marie Curie Research Fellow, EPFL (2014-2016)

Scientific degree

PhD in Chemistry, Politecnico di Milano (2011)

Recent research topics

Perovskite solar cells with a strong focus on the stability. The goal is to demonstrate 25 year´s stable device under working conditions.

Publications (5 most important)

- **Q. Wang**, **N. Phung**, D. Di Girolamo, P. Vivo, **A. Abate**, Enhancement in Lifespan of Halide Perovskite Solar Cells, *Energ. Environ. Sci.* (2019) doi:10.1039/C8EE02852D
- M. Saliba, J.-P. Correa-Baena, M. Graetzel, A. Hagfeldt, **A. Abate**, Perovskite solar cells from the atomic to the film level, *Angew. Chem. Int. Ed.* (2017) doi:10.1002/anie.201703226
- K. Domanski, B. Roose, T. Matsui, M. Saliba, S.-H. Turren-Cruz, et al., Migration of cations induces reversible performance losses over day/night cycling in perovskite solar cells, *Energ. Environ. Sci.,* 10, 604-613 (2017) doi:10.1039/C6EE03352K
- Ummadisingu, L. Steier, J. Y. Seo, T. Matsui, **A. Abate**, et al., The effect of illumination on the formation of metal halide perovskite films, *Nature* (2017) doi:10.1038/nature22072
- J.-P. Correa-Baena, M. Saliba, T. Buonassisi, M. Grätzel, **A. Abate**, et al., Promises and challenges of perovskite solar cells, *Science,* 358, 6364, 739-744 (2017) doi:10.1126/science.aam6323