Caterina Minelli studied physics in Florence, Italy, and obtained a PhD in Nanotechnology from the École Polytechnique Fédérale of Lausanne (EPFL, Switzerland) in 2004. Between 2001 and 2004, Caterina gained industry-focused experience working at the company Swiss Center for Electronic and Microtechnology (CSEM SA, Neuchâtel, Switzerland). Caterina was awarded the International Fellowship for Young Scientists to work at the Biomaterials Center of the National Institute for Materials Science (NIMS, Tsukuba, Japan) between 2005 and 2006. Afterwards, she moved to the UK to work at Imperial College London, where she was awarded the competitive EU Marie Curie Fellowship to work on peptide-based nanoscale systems for cancer therapy and diagnostics. Caterina joined NPL in July 2010. In 2014 she was seconded to the former Department of Business, Innovation and Skills (BIS) to work at the development of the Science and Innovation Strategy published by the UK government in December 2014.

Caterina is a chartered physicist and a member of the Institute of Physics.