

Barbara PREVITALI – CV

Barbara Previtali is Full Professor at the Department of Mechanical Engineering of Politecnico di Milano (Italy) since 2016, responsible of SITEC- Laboratory for Laser Applications since 2009 and co-chair of the AddMe_Lab, the laboratory for metal additive processes of the Department of Mechanical Engineering since 2015. Her main research interests include modelling, optimization and control of laser processes and laser-based additive processes, especially numerical modelling and experimental approaches of welding, heat treatment, micromachining, selective laser melting (SLM) and laser direct energy deposition (DED) processes by innovative laser sources with adaptable beam properties within the three dimensions: time, space, and wavelength. On these research subjects, she is author and co-author of about 255 papers published in referred international journals (135), international conferences (120). She has close to 15 national and international patents currently in charge of prestigious industrial companies. She is member of the technical and steering program committees of several international and well recognized conferences on laser manufacturing and processes (ICALEO - International Congress on Applications of Lasers & Electro-Optics and LANE – CIRP Conference on Photonic Technologies). She is editor of Journal of Optics and Laser Technology and Journal of Laser Applications. as well as member of CEI Technical Committee 76 Laser Equipment. The above-mentioned researches have been generally developed on the basis of research programmes funded by national and international organisations, including the most recent MADE4LO (Progetto Regione Lombardia) and Burner (Horizon 2020 RFCS-02-2018) as well as industry-driven activities.