I received my M.S. degree in Physics from the University of Rome - La Sapienza in 2020 under the supervision of Prof. Rinaldo Trotta, investigating novel electronic properties in strained monolayer WS2 via optical spectroscopy. Since 2020, I have been a PhD student in Material Science, carrying out my activity in the Nanophotonics group. I'm consolidating my research expertise in optical spectroscopy, quantum optics, mono and few-layer semiconductor fabrication, semiconductor quantum dots, and low-dimensional semiconductors. I am investigating strain effects in monolayer TMDs, focusing on valleytronics, transport properties, and quantum emitters.