

I was born in Caserta, 29/01/1994. I graduated in industrial chemistry at University of Naples Federico II in March 2016. Subsequently I obtained a Master's degree in Sciences and Technologies of Industrial Chemistry at University of Naples Federico II in December 2018, with a thesis: *Ab initio* study of oxygen electrocatalysis on Mn and Fe co-doped BaZrO₃: from bulk properties to surface reactions. I'm currently working as research fellow at Consiglio Nazionale di Ricerca – Istituto dei Sistemi Complessi (ISC-CNR) in Si Drive project SILICON ALLOYING ANODES FOR ENERGY DENSE BATTERIES COMPRISING LITHIUM RICH CATHODES AND IONIC LIQUID ELECTROLYTES FOR SAFE HIGH VOLTAGE PERFORMANCE (SI-DRIVE). In particular my studies regard the structural and thermodynamic properties of mixed lithium and transition metal oxides, using ab initio calculations.