

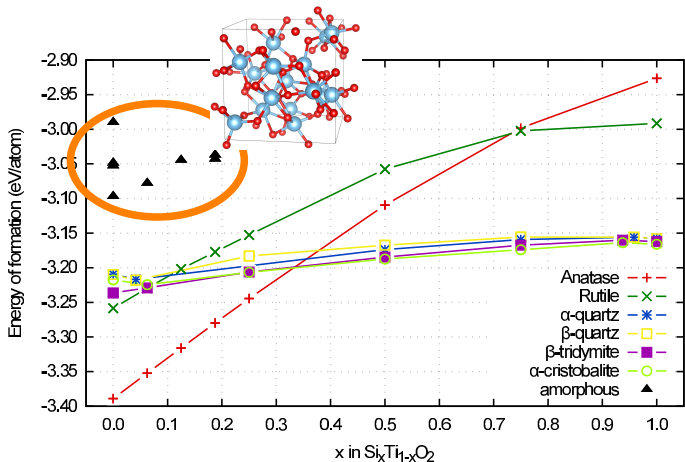
Introduction

Structural properties

Electronic properties

Optical properties

Conclusions



- ▶ stable TiO_2 phase: **anatase**
- ▶ **anatase** → **rutile** transition for $x \approx 0.8$ Si content
- ▶ **silica-based** structures become favourable for $x \approx 0.35$
- ▶ crystalline structures preferred to the **amorphous phase**