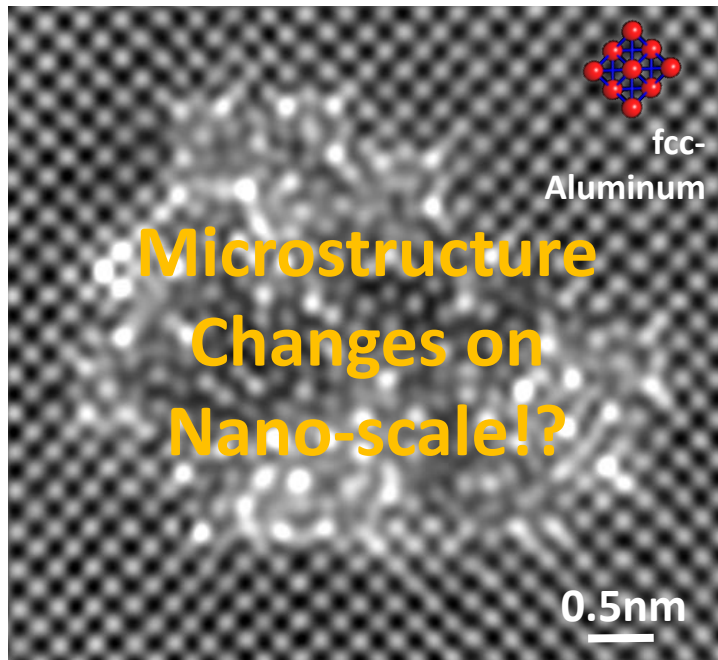


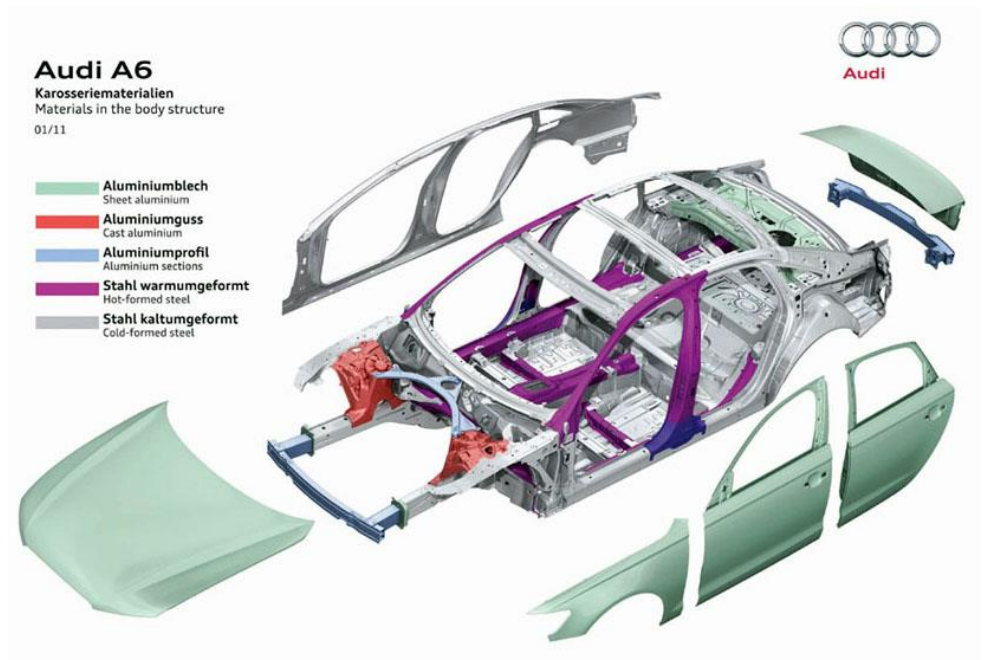
Mysterious metal increasing its strength spontaneously

Abstract

Aluminum alloys are widely used in automotive and other structures because of their lightweight, high-strength, good corrosion resistance. In this lecture, students will learn about the strengthening behavior of aluminum alloys, so-called “age-hardening”. Through simple experiments, students will experience the age-hardening phenomenon and learn the hardening mechanisms from the nano-level structural change.



High resolution STEM image



An example of aluminum alloys applied to the automobile