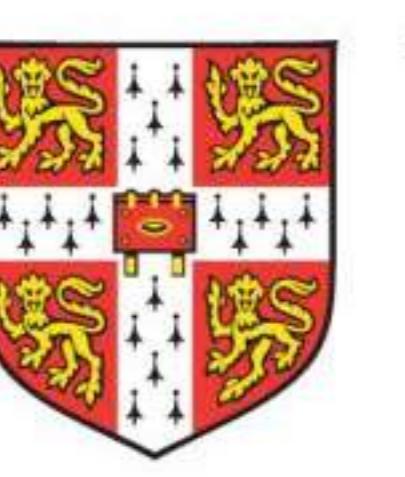


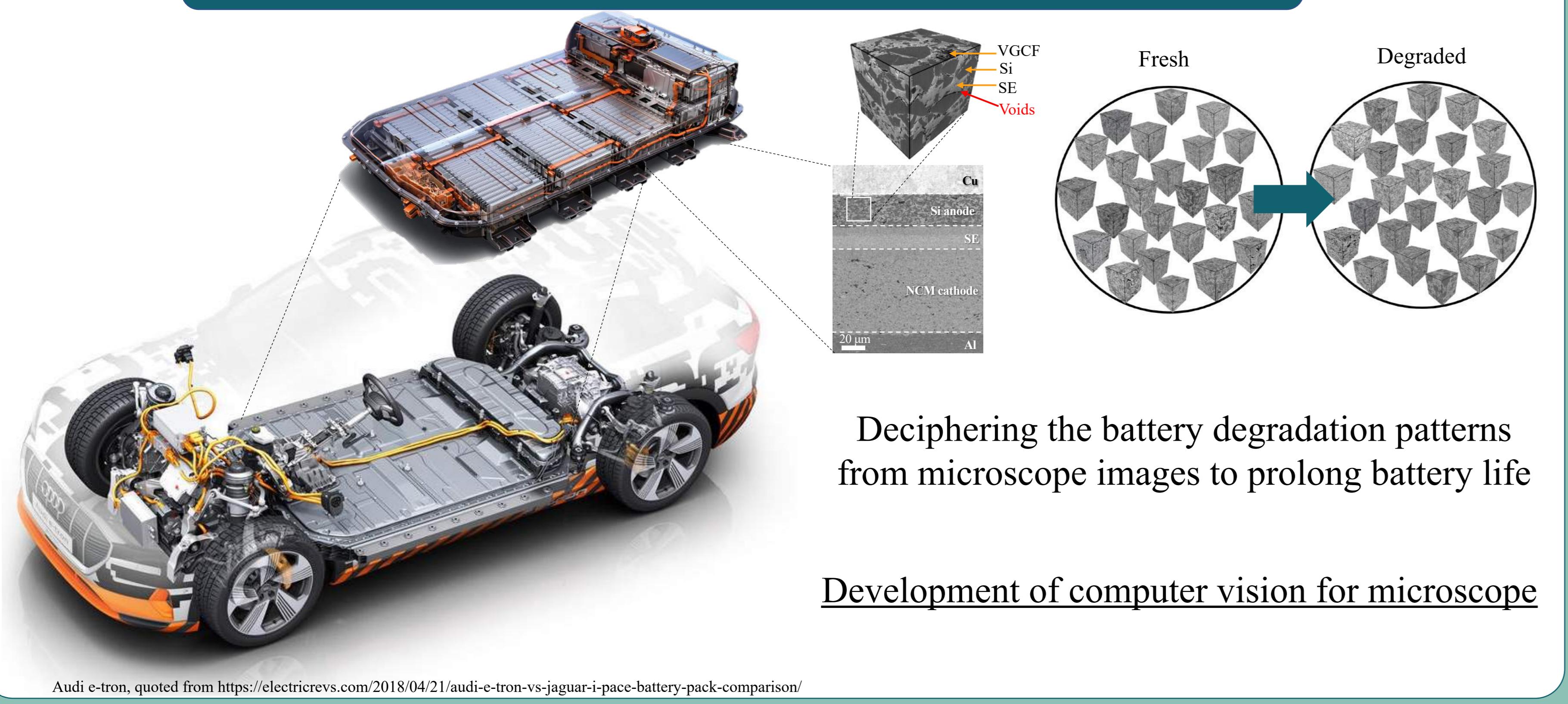
Physics-Aware Image-to-Image Translation to Explore Long-Life All-Solid-State Batteries

Masaki Adachi*, Ignas Budvytis, Caterina Ducati & Roberto Cipolla



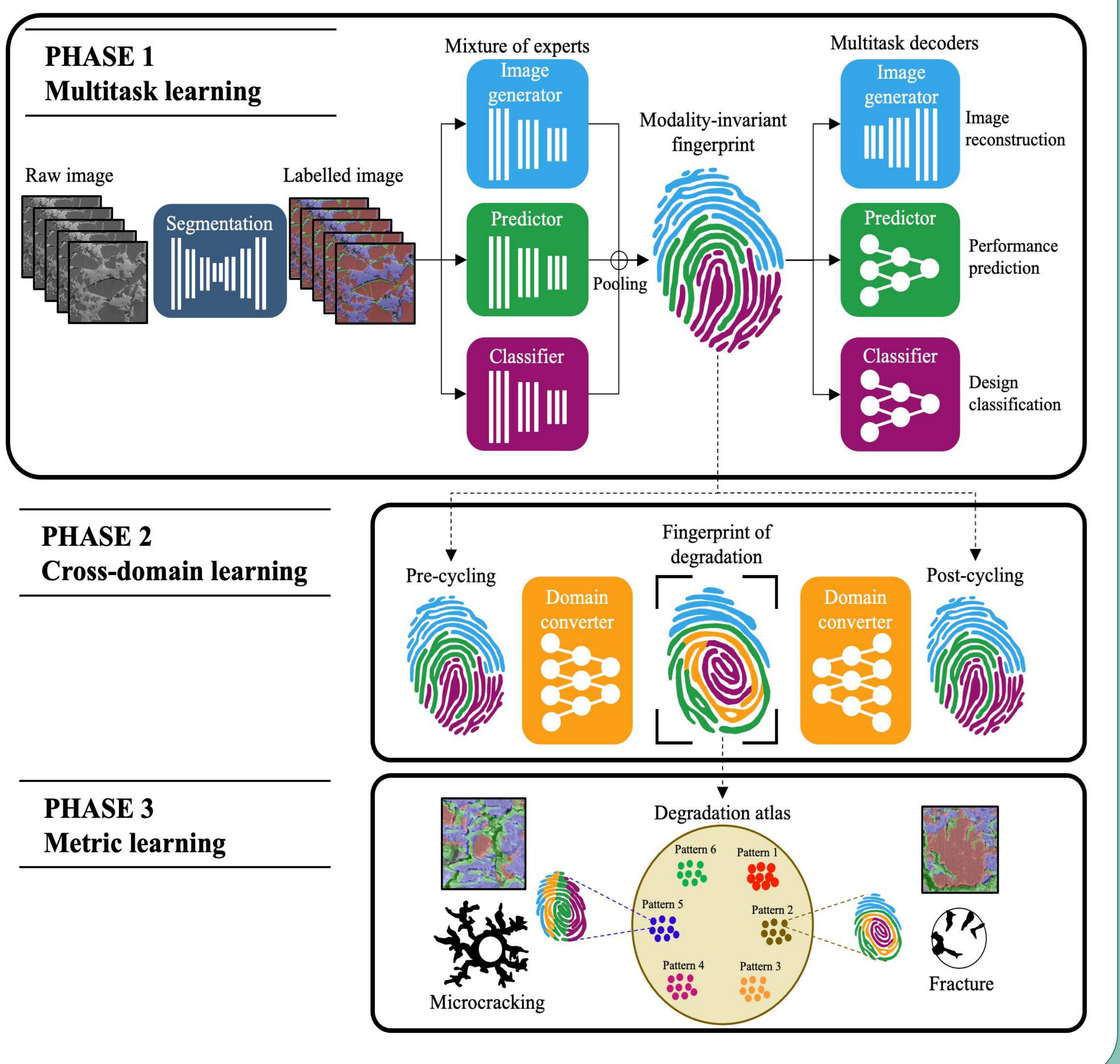
UNIVERSITY OF CAMBRIDGE

Background: Battery Degradation



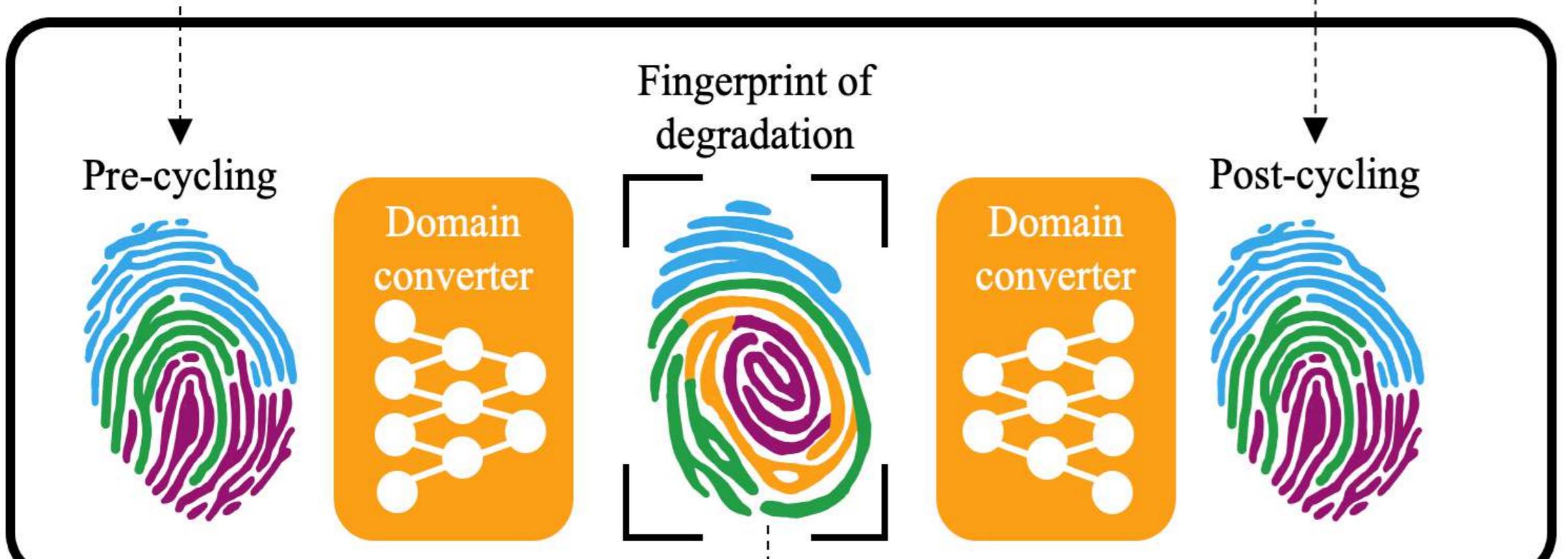
Audi e-tron, quoted from <https://electricrevs.com/2018/04/21/audi-e-tron-vs-jaguar-i-pace-battery-pack-comparison/>

Physics-aware Image-to-Image Translation Model



PHASE 2

Cross-domain learning



PHASE 3

Metric learning

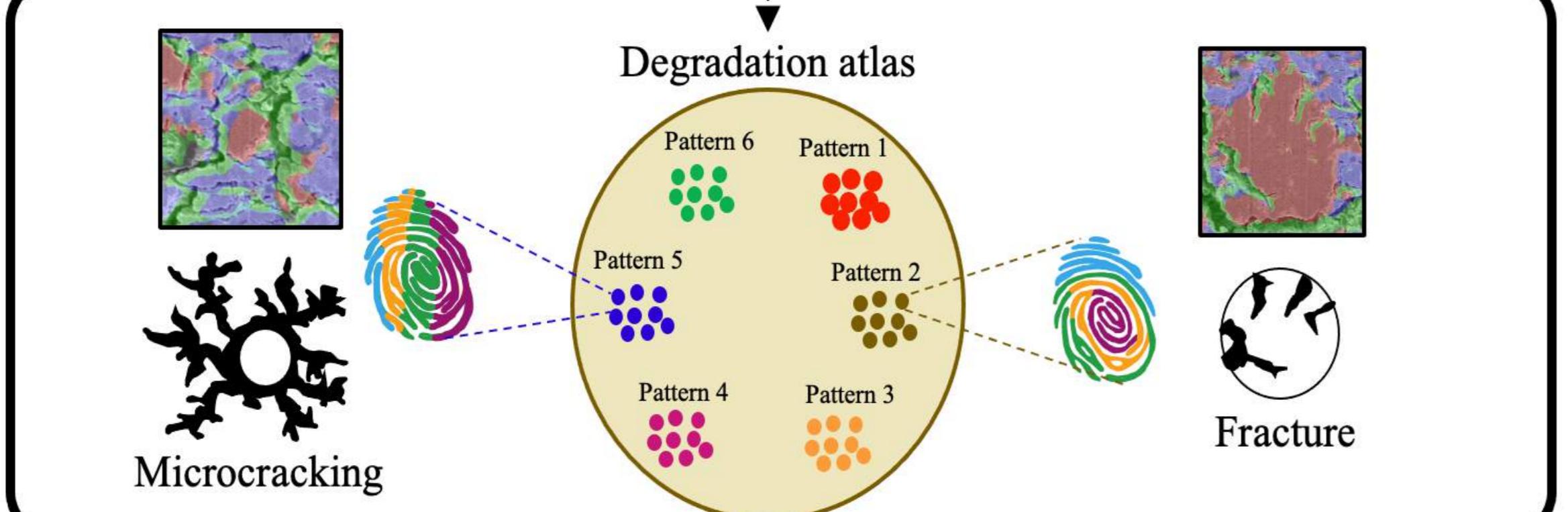
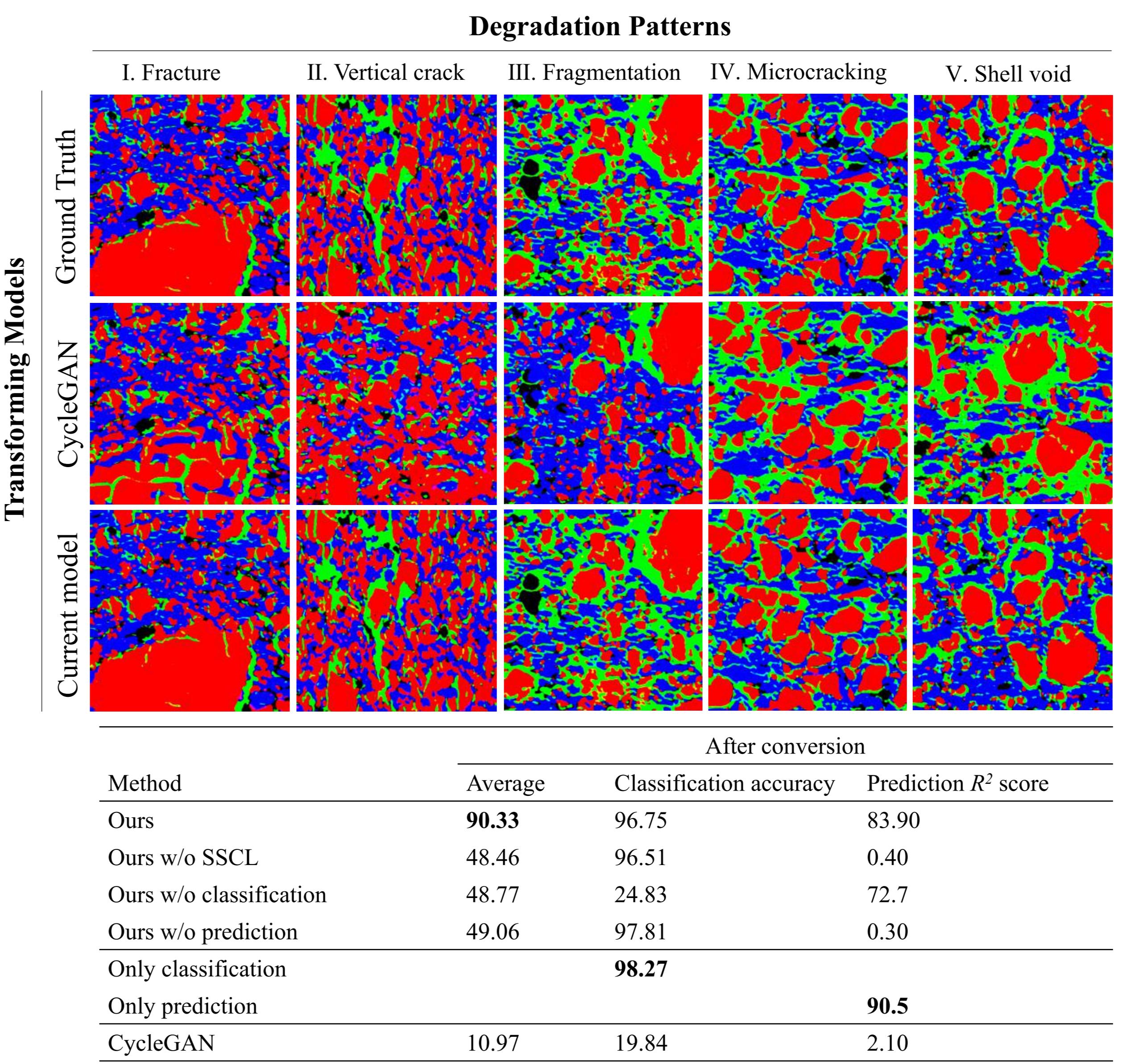
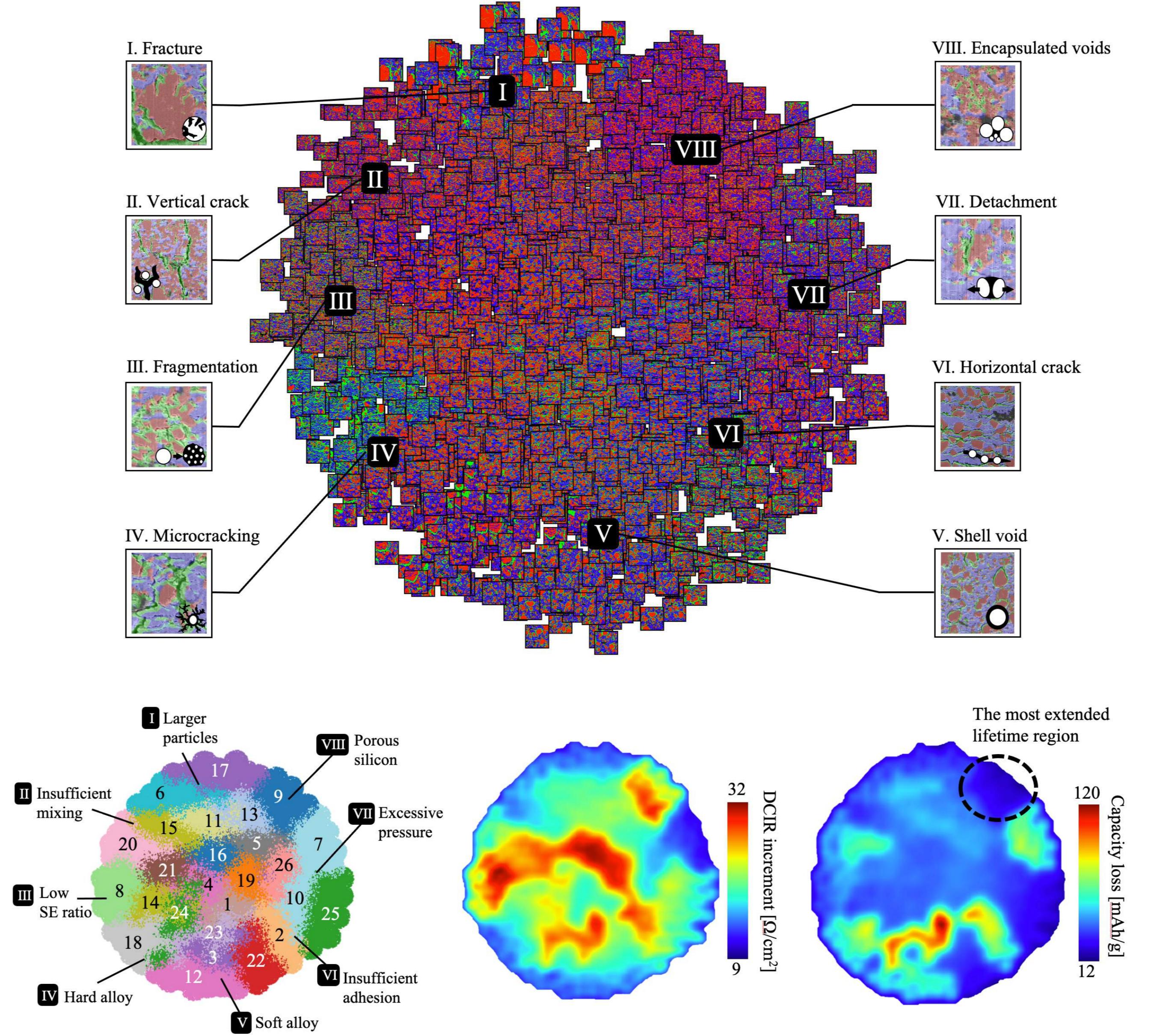


Image-to-Image Translation Results



Degradation Patterns Recognition



Exploration Results

