Irregular domain size evaluation

Ti-located unit cells   Zr-located unit cells
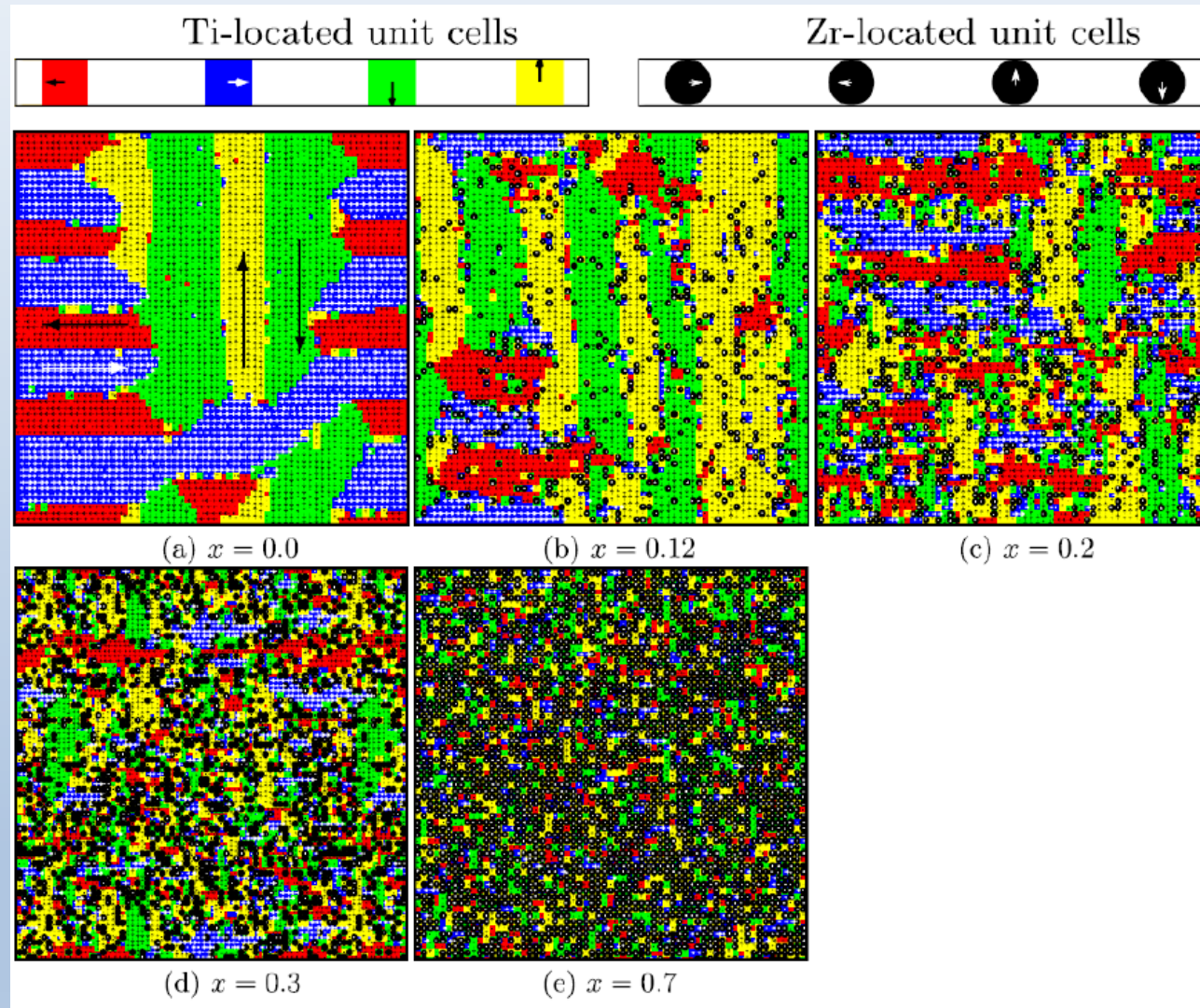
(a) $x = 0.0$ (b) $x = 0.12$ (c) $x = 0.2$

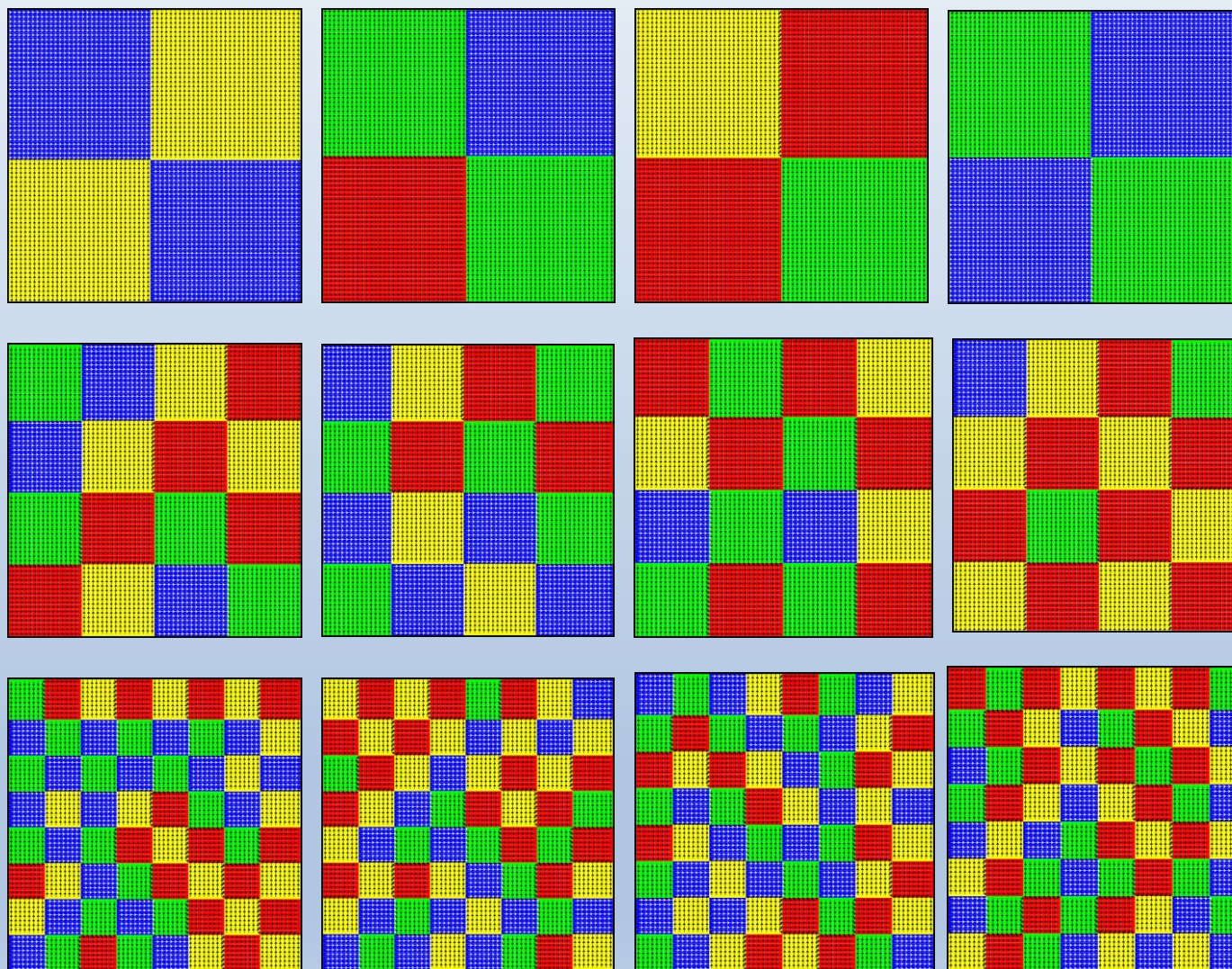(d) $x = 0.3$ (e) $x = 0.7$

Difficult to write a deterministic code to evaluate irregular domain size
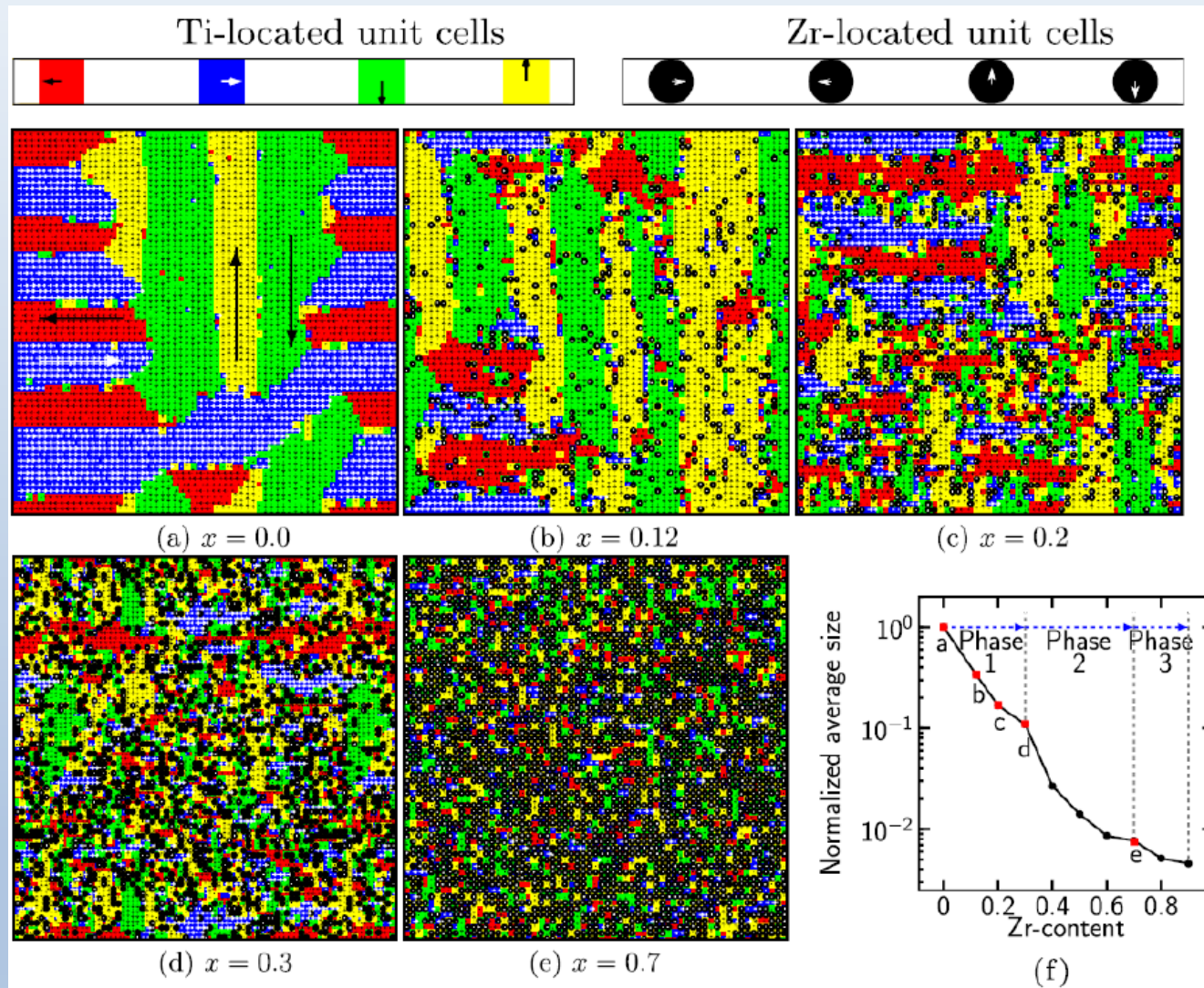
Ma et al., JAP (2017)

Regular domain size as input - tensorflow

1. Generate thousands of images with regular domain shape
2. Images as trainset in tensorflow
3. Train model
4. Evaluate images with irregular domain shape

Irregular domain size evaluation - tensorflow

Ti-located unit cells   Zr-located unit cells

(a) $x = 0.0$ (b) $x = 0.12$ (c) $x = 0.2$

(d) $x = 0.3$ (e) $x = 0.7$ (f)

Ma et al., Journal of Applied Physics 121, 024103 (2017)