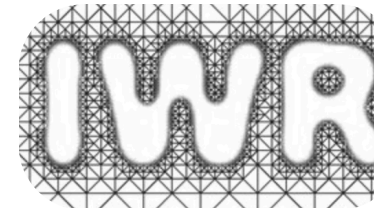




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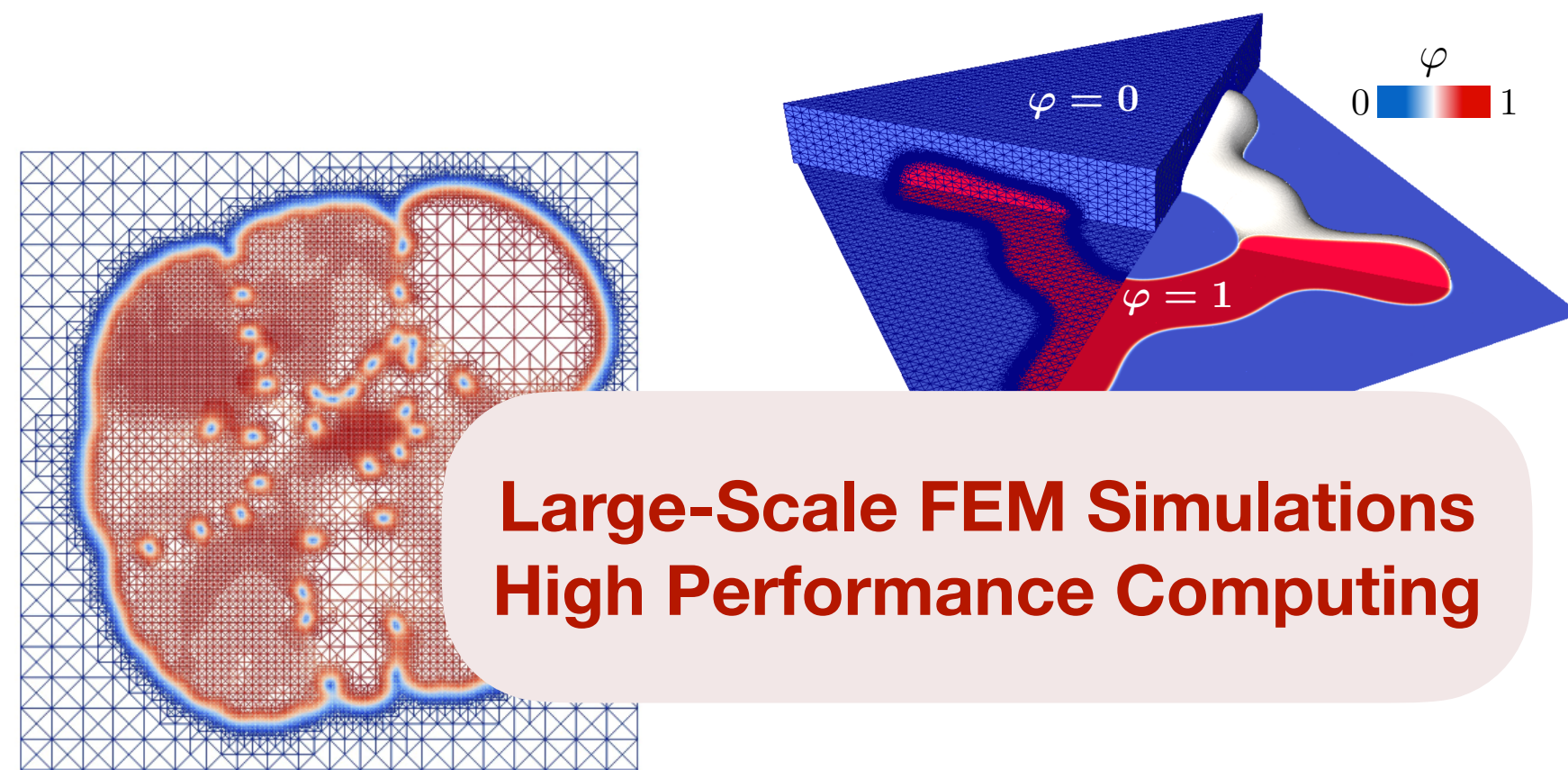
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Mesoscale modeling of material properties through advanced methods and simulations



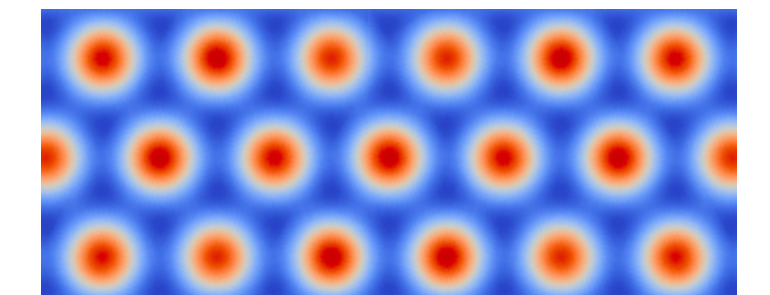
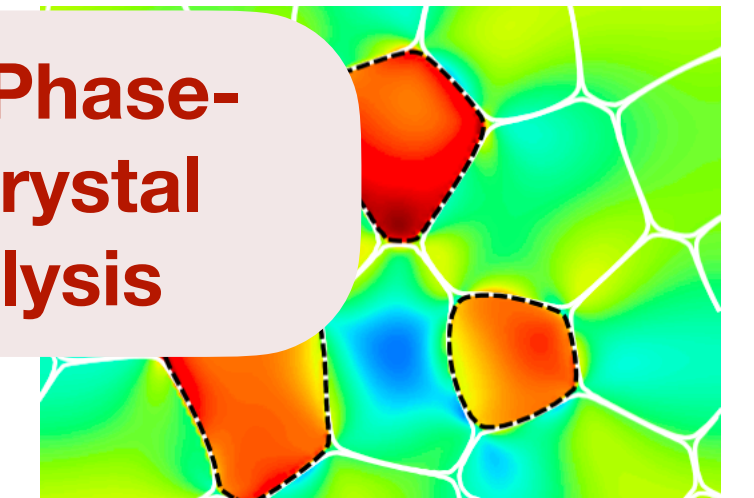
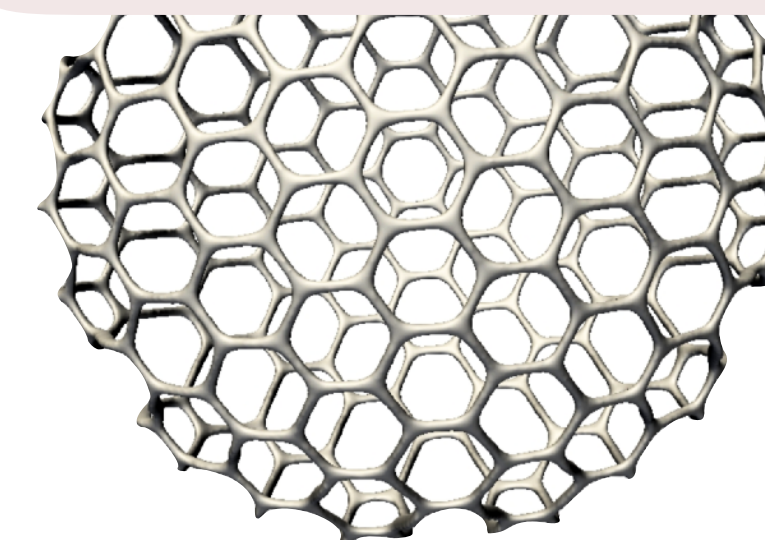
Large-Scale FEM Simulations
High Performance Computing

METHODS

e.g.

- Cryst. Growth Des. **15**, 2787 (2015)
- npj Comput. Mat **5**, 43 (2019)
- JMPS, **137**, 103856 (2020)
- Phys. Rev. Lett. **126**, 185502 (2021)

Continuum Modeling, Phase-Field & Phase-Field Crystal Models, Pattern Analysis

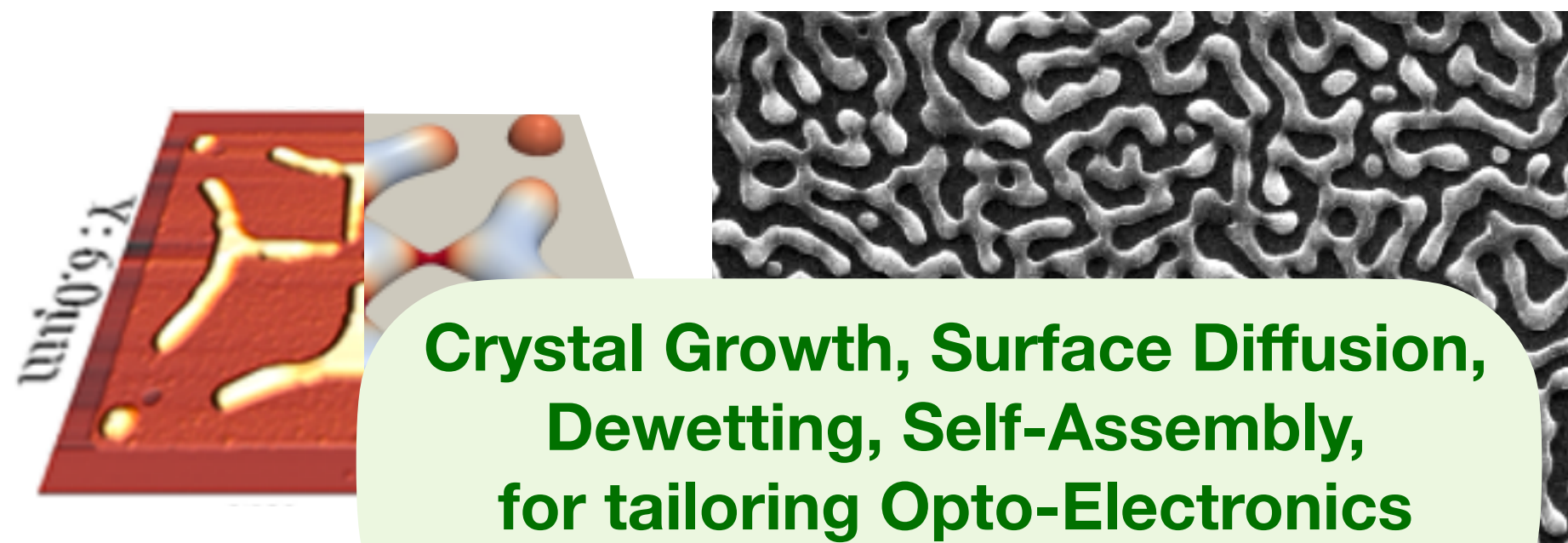


APPLICATIONS

e.g.

- Adv. Mater **28**, 884 (2016)
- Sci. Adv **3**, eaao1472 (2017)
- Nat. Comm **10**, 5632 (2019)
- Phys. Rev. Lett. **125**, 126101 (2020)

Mechanical Behaviors, Defects, Microstructures in Crystals



Crystal Growth, Surface Diffusion, Dewetting, Self-Assembly, for tailoring Opto-Electronics Devices & Metamaterials

