



Bioceramics



- 1) Morphology manipulation of bioactive glass (BG): spherical, mesoporous and hollow
- 2) Hybrid materials: silver-doped BG
- 3) Novel ceramic and metal composited powder for 3D printing

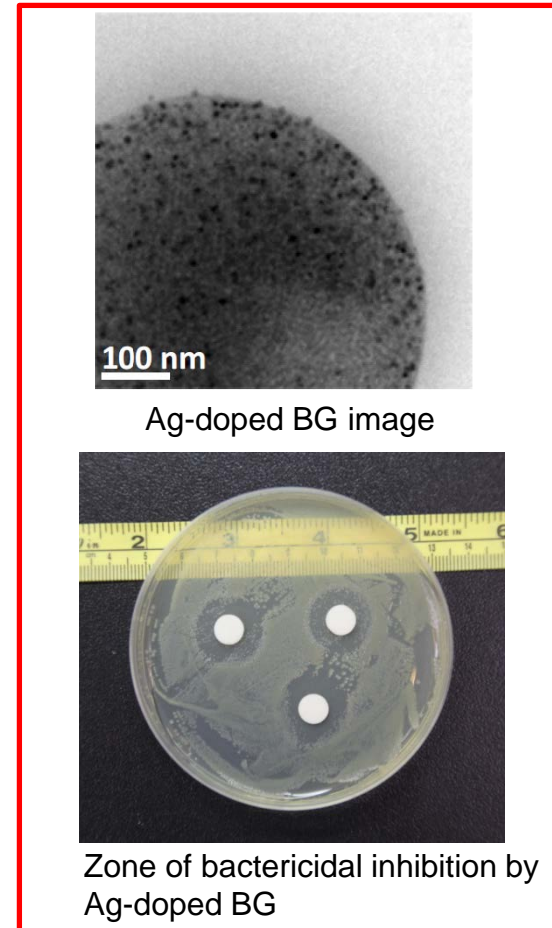
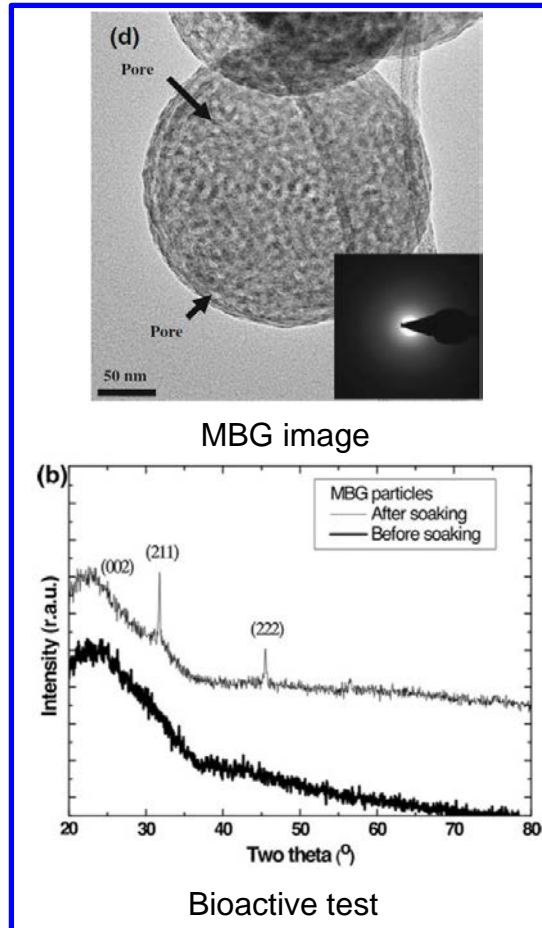
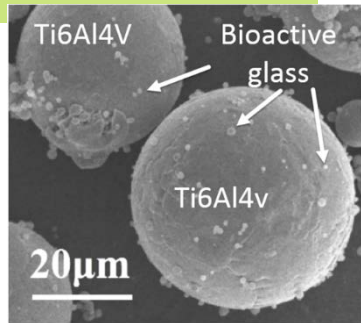
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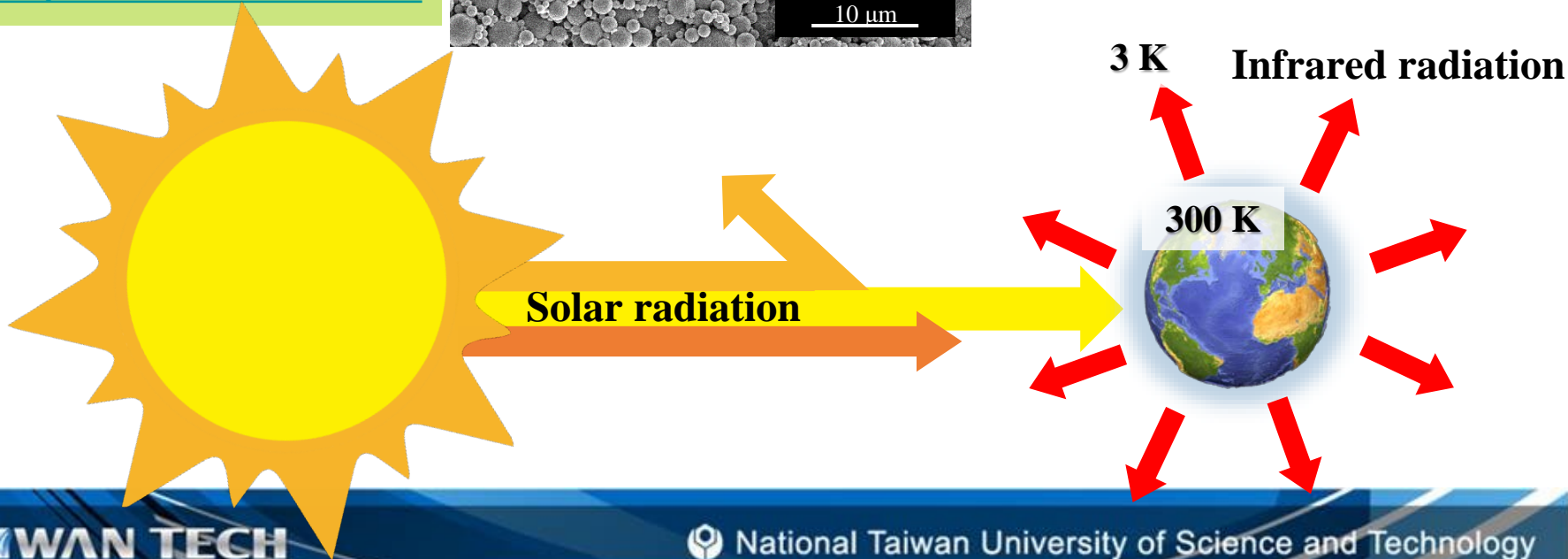
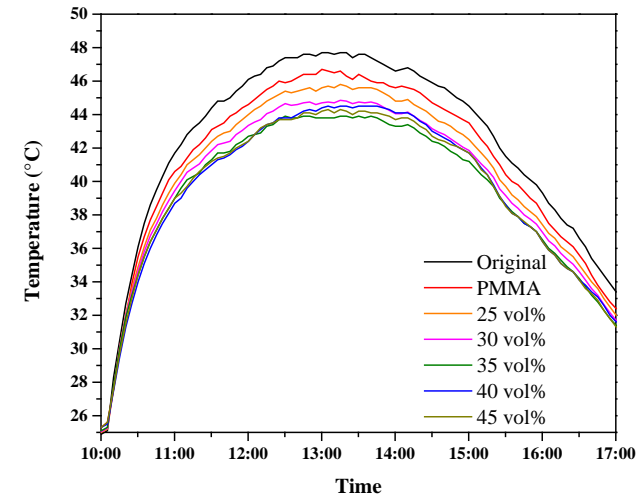
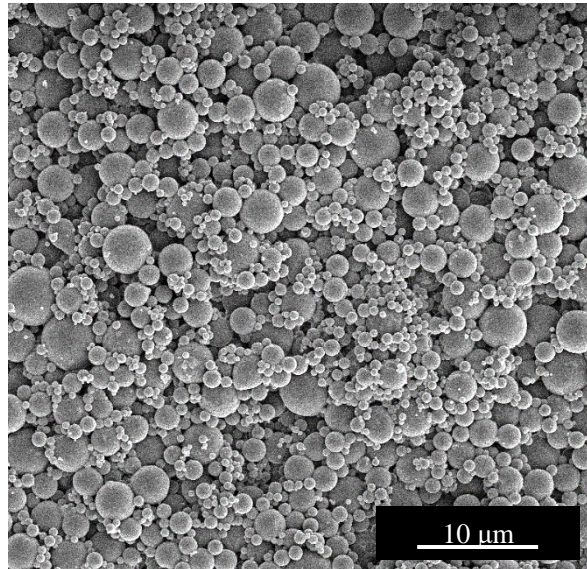
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Radiative cooling materials



1) Novel SiO₂/PMMA Compositd radiative cooling film





Electroceramics



- 1) Grain boundary engineering
- 2) Structural characterization of grain boundaries in SrTiO_3 by EBSD (crystallographic structure), HRTEM(morphology), STEM-HAADF (atomic structure) and XEDS (chemical structure).

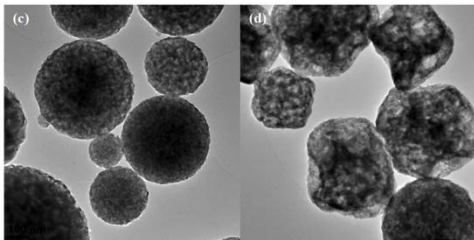
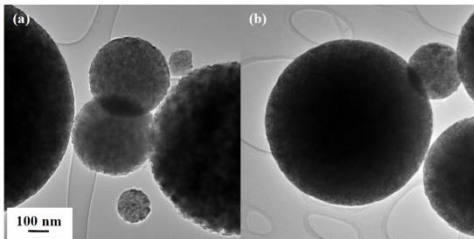
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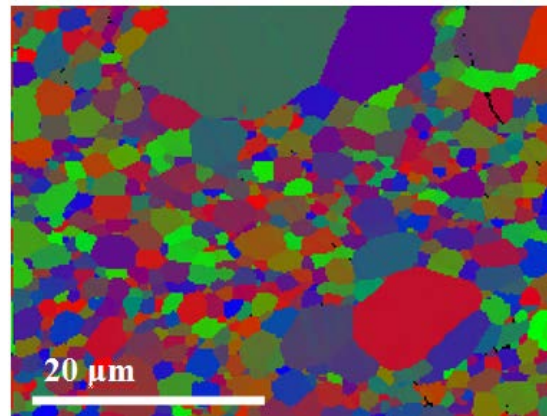
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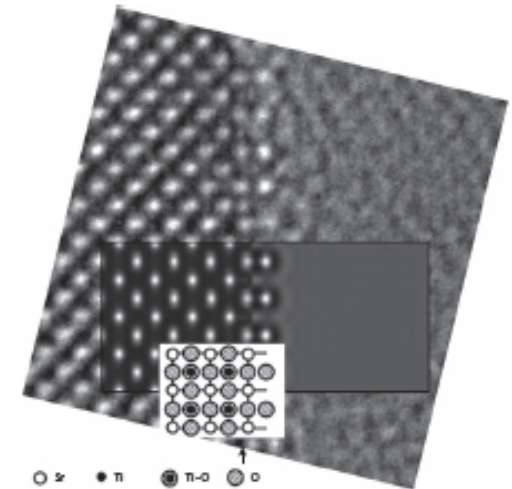
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Synthesis of ceramic powders



EBSD mapping



Comparison of HRTEM and simulation model