



Nanocomposite Membranes for Mixture Gas Separation

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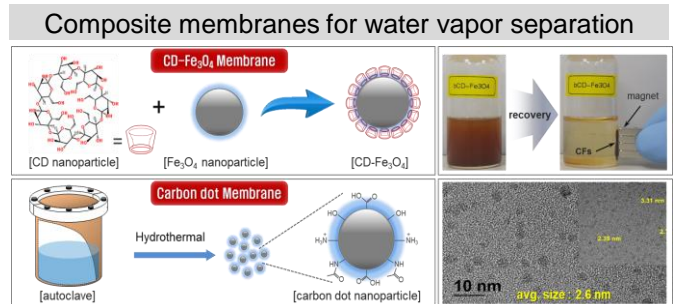
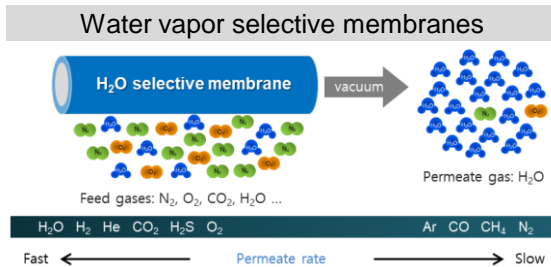
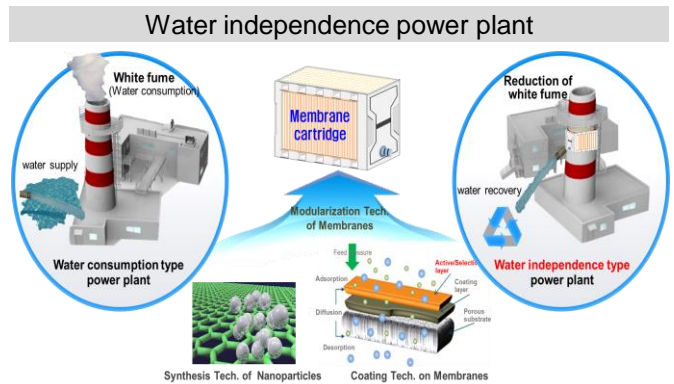
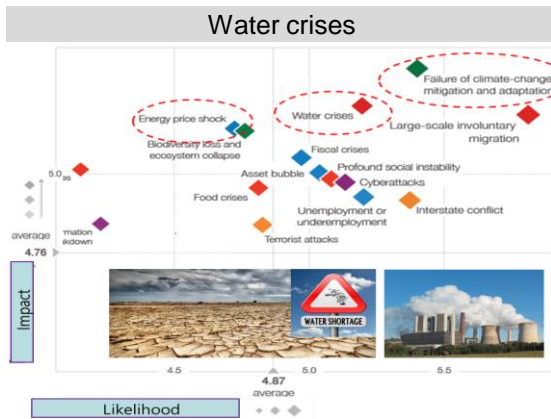
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Descriptions of Research Topics

- Development of neo-functional nanoparticles
- Development of nanocomposite membranes for water vapor separation
- Water vapor harvesting using thin-film composite membranes
- Characterization of nanoparticles and composite membranes properties

Applications:

- Desalination, water treatment
- Water vapor harvesting in cooling tower, dress-room, HVAC
- Gas separation and pervaporation
- Sustainable coating surfaces



Research Fields 1 Material-Nano 2 Environment-Resource

Keywords Water vapor harvesting, Water vapor separation, Composite membrane, Nanoparticle, Coating, Surface modification, Anti-fouling, Hybrid