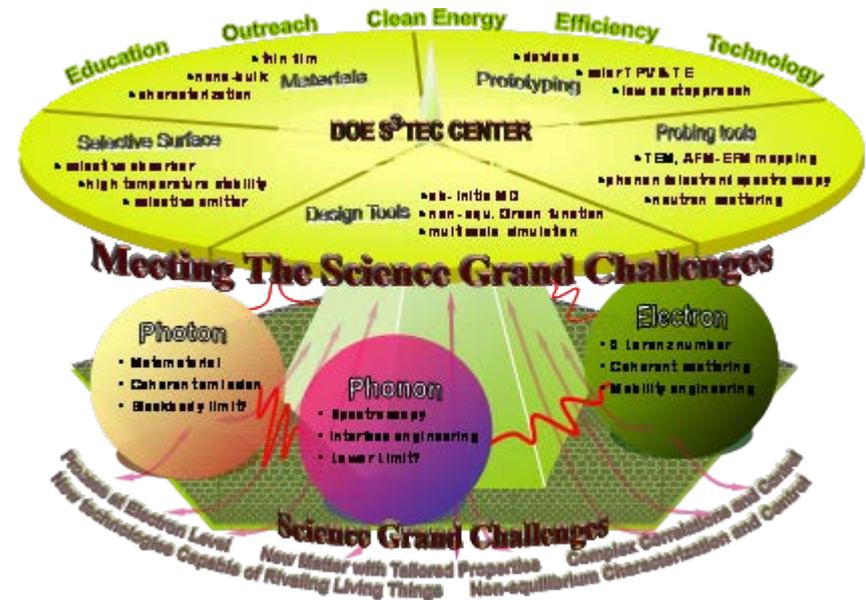


Solid-State Solar Thermal Energy Conversion Center (S³TEC) Gang Chen (MIT)

S³TEC Center aims at developing transformational solid-state energy technologies to convert solar energy into electricity via heat, by advancing fundamental science of energy carrier coupling and transport, designing new materials, and inventing cost-effective manufacturing processes, and training energy workforce.



RESEARCH PLAN AND DIRECTIONS

- (1) Engineering electron and phonon transport in nanostructures to achieve high performance thermoelectric materials,
- (2) controlling photon absorption and emission for materials working at high temperatures, and
- (3) device prototyping to demonstrate the high efficiency and low cost potential of the solar thermal energy conversion technologies.