SHINE ON BLACK GOLD FOR A BRIGHTER FUTURE

When exposed to light, gold (Au) nanoparticles (NPs) generate catalysing "hot" electrons and "hotspots"

Au NP

tuned by tuning the size and gaps between Au NPs

• CO₂ conversion







Colloidosome

"Hot" electron

Black (nano)gold can be used for solar energy harvesting



climate change



Plasmonic colloidosomes of black gold for solar energy harvesting and hotspots directed catalysis for CO_2 to fuel conversion Dhiman, Maity *et al.* (2019) DOI: 10.1039/C9SC02369K

