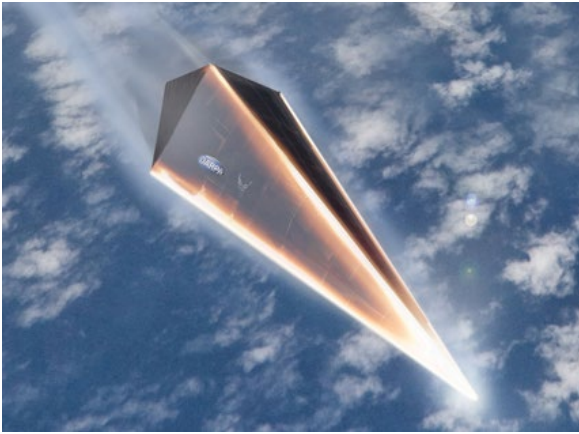
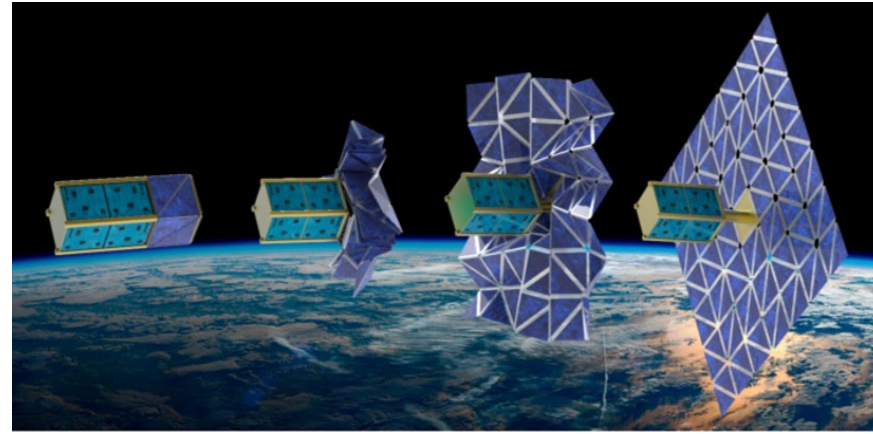


# Next Generation Challenges for Structural Materials



## extreme environments

high temperatures  
high strain rate  
thermal management



## extraterrestrial

low temperatures  
multifunctional  
reducing SWaP



## architecture

high specific strength  
cooling channels  
topology optimization

**Material development, discovery, and design aimed at multifunctionality**