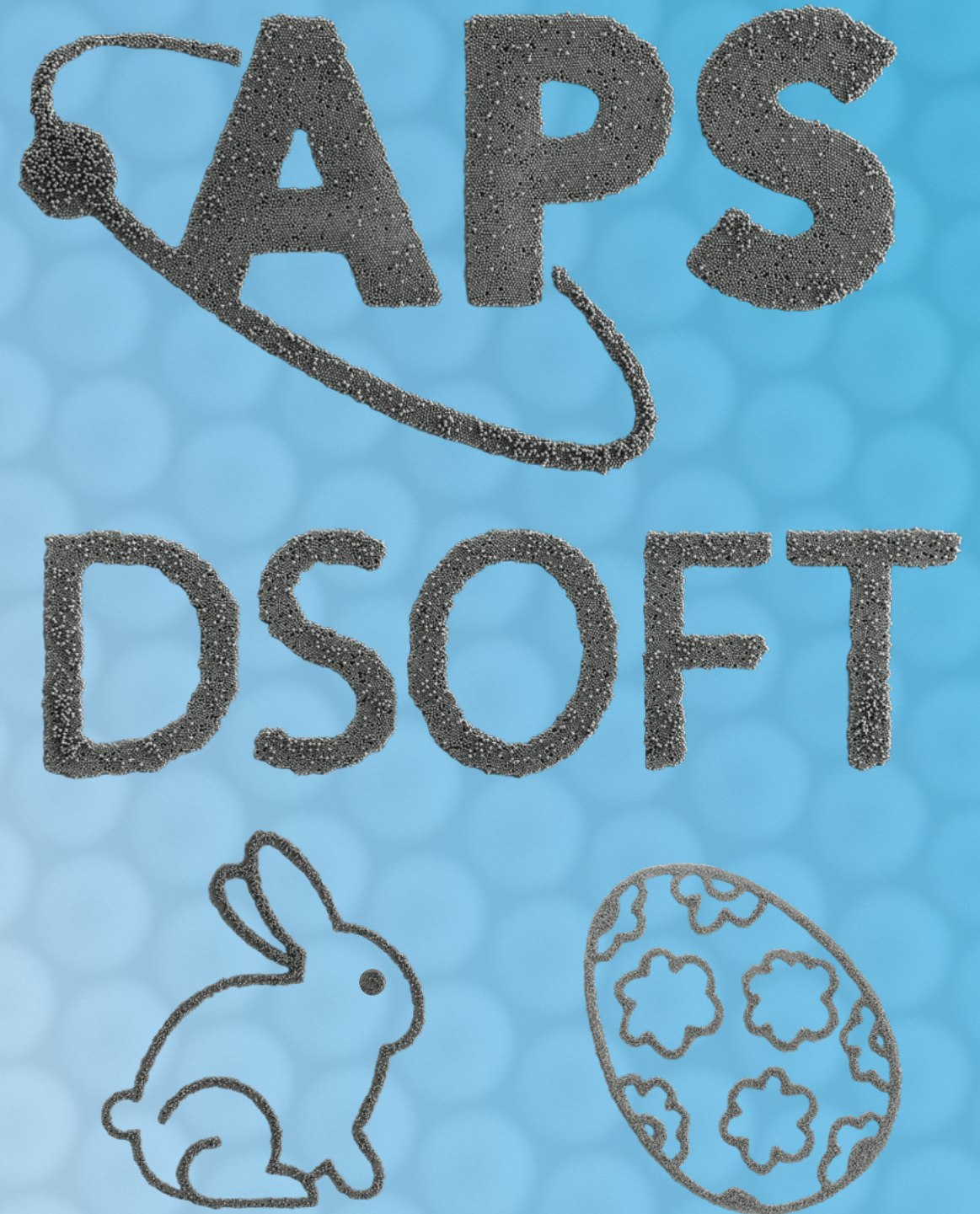
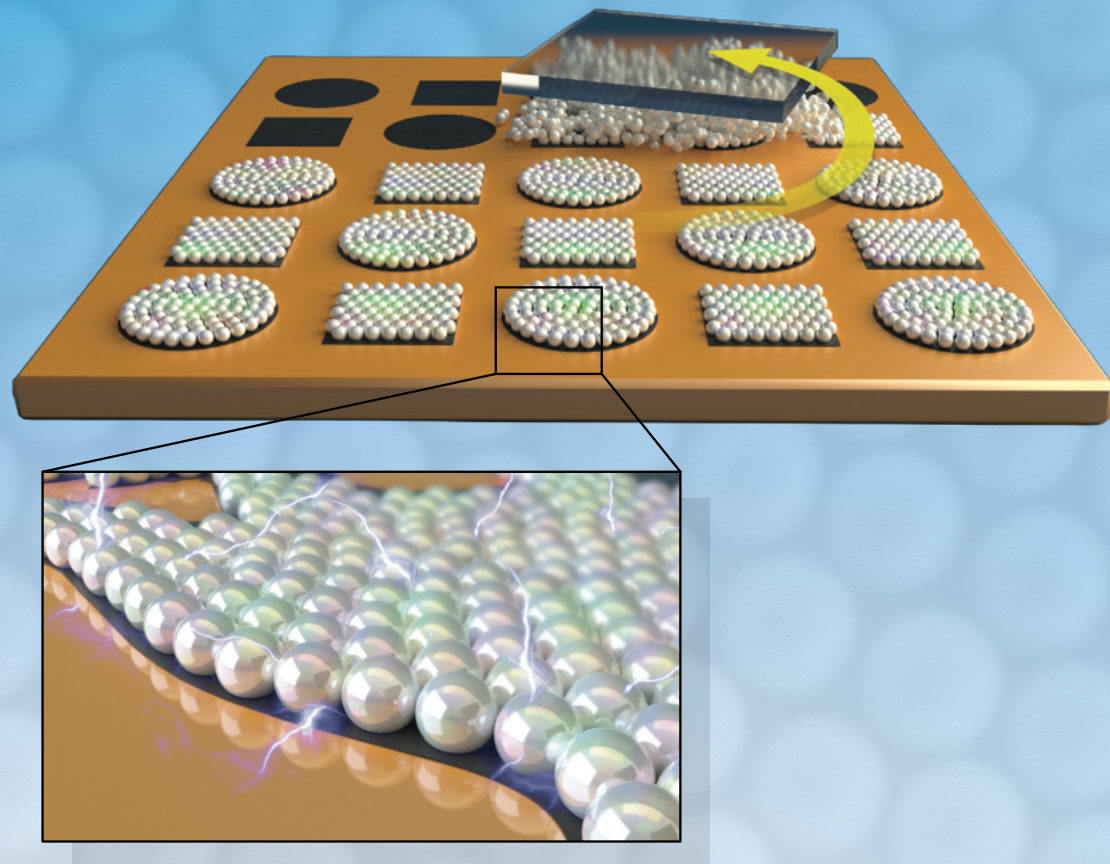


# 2D crystal assembly of spherical colloids



Dry powder comprising aggregated silica or polymer particles is manually rubbed across various substrates using a PDMS sheet to selectively attain arrays of hexagonal closely packed (HCP) crystals in  $\approx 20$  s. The triboelectric charging phenomenon and elastic deformations of particles and fluorocarbon layer enhance the attractive interactions between them, paving the way for assembling HCP crystals on any predetermined pattern.



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