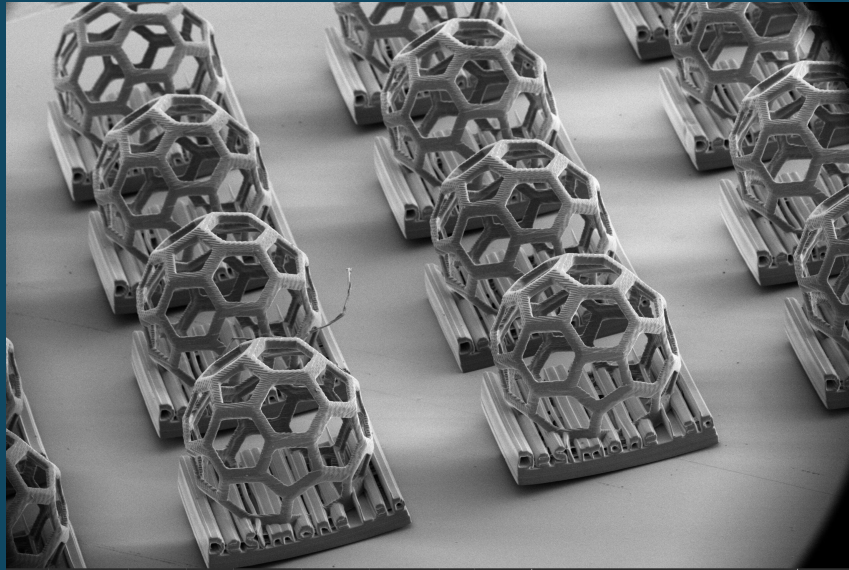
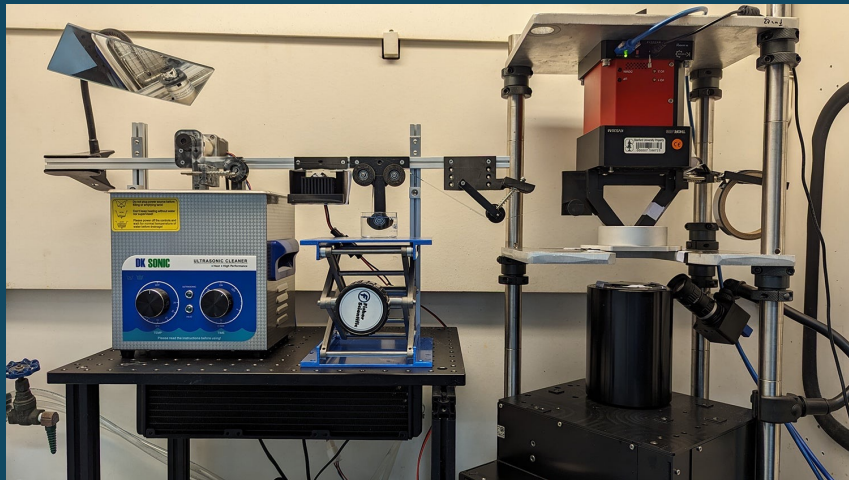


Flashers: High-speed microscale 3D printing technique



8/11/2023 HV curr WD HFW use case det 1 mm
8:02:46 AM 2.00 kV 50 pA 15.8 mm 3.19 mm Standard ETD Apreo

- Stanford researchers developed new flashing technique called roll-to-roll CLIP, or r2rCLIP
- Uses UV light to cure resin without molds, enabling complex shapes and rapid production
- Automates particle printing, combining speed with precision, ideal for future high-value applications in various industries.
- It prints up to 1 million microscale particles daily



- The r2rCLIP setup in the DeSimone lab; printing occurs at the area below the red piece.
- Researchers have experimented with producing both hard and soft particles, made of ceramics and of hydrogels
- Potential uses in drug delivery, microelectronics, and more.