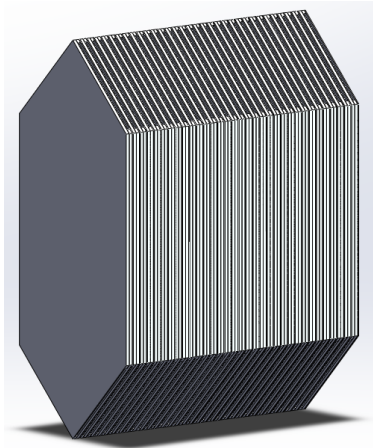
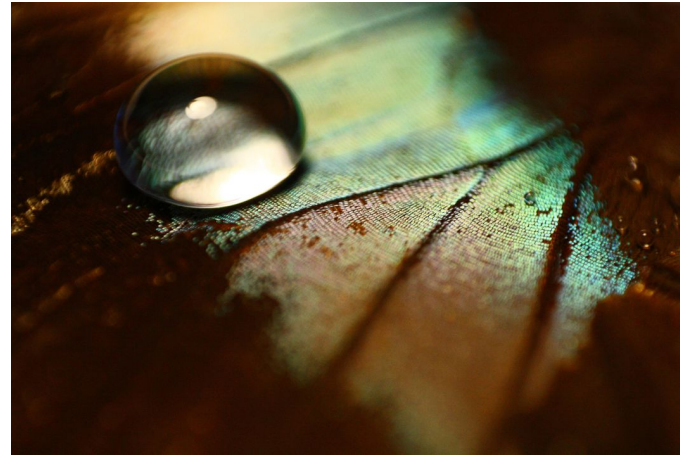


3D-Printed Heat Exchangers with Improved Drainage Properties via Surface Micropatterning

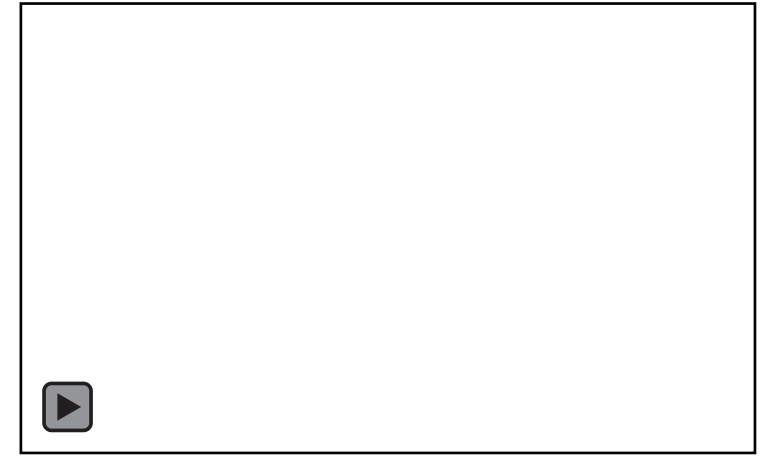
Chris Hughes, Sam Lowrey, Zhifa Sun



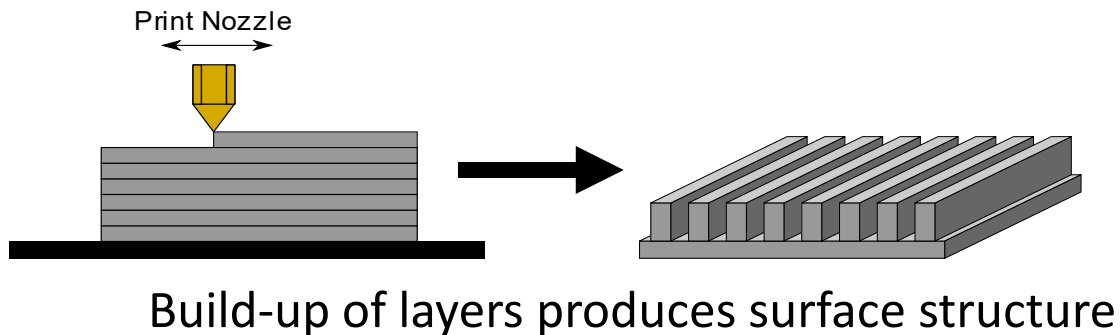
Condensing Heat Exchanger
- Energy recovery
- We want water OUT



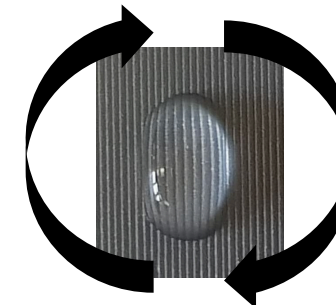
Butterfly Wing
- Excellent water removal
- WE WANT THIS



3D-Printing
- Uses PLA polymer (bioplastic)



Isotropic



Anisotropic

Rotate Structure
=> Improved Water Removal?
=> Improved Energy Efficiency?