UNIVERSITY OF MINNESOTA
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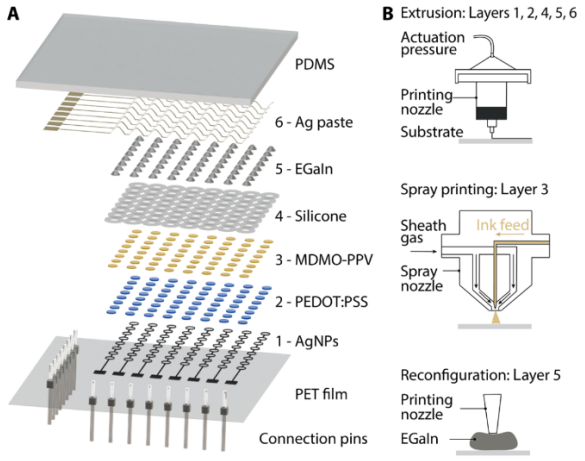
3D printed flexible OLED displays

A method to fully manufacture OLED displays by 3D printing.



IP Status: PCT Pending; Application number PCT/US2022/044322

Applications

- Rapidly prototype and fabricate OLED displays
- Manufacture displays with novel morphologies and configurations

Technology Overview

Researchers at the University of Minnesota have developed a novel method to fully fabricate active electronic devices, including OLED displays, entirely on a 3D printer. By combining extrusion and spray-printing techniques, a multimodal printing methodology was developed to successfully fabricate flexible OLED displays. This novel 3D printing approach allows for the rapid fabrication of OLED displays with novel morphologies without the need for microfabrication facilities.

Phase of Development

TRL: 3-4

Fully 3D-printed OLED displays have been fabricated.

Desired Partnerships

This technology is now available for:

- License
- Sponsored research
- Co-development

Please contact our office to share your business' needs and learn more.

Technology ID

2022-001

Category

Engineering & Physical Sciences/Materials
Engineering & Physical Sciences/Photonics
Engineering & Physical Sciences/Processes
Engineering & Physical Sciences/Semiconductor

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Press Releases

Nature January 7, 2022

Researchers

- **Michael McAlpine** Kuhrmeyer Family Chair Professor, Department of Mechanical Engineering

References

1. Ruitao Su et al.(January 7 2022) , https://www.science.org/doi/10.1126/sciadv.abl8798, https://www.science.org/doi/10.1126/sciadv.abl8798, 8