

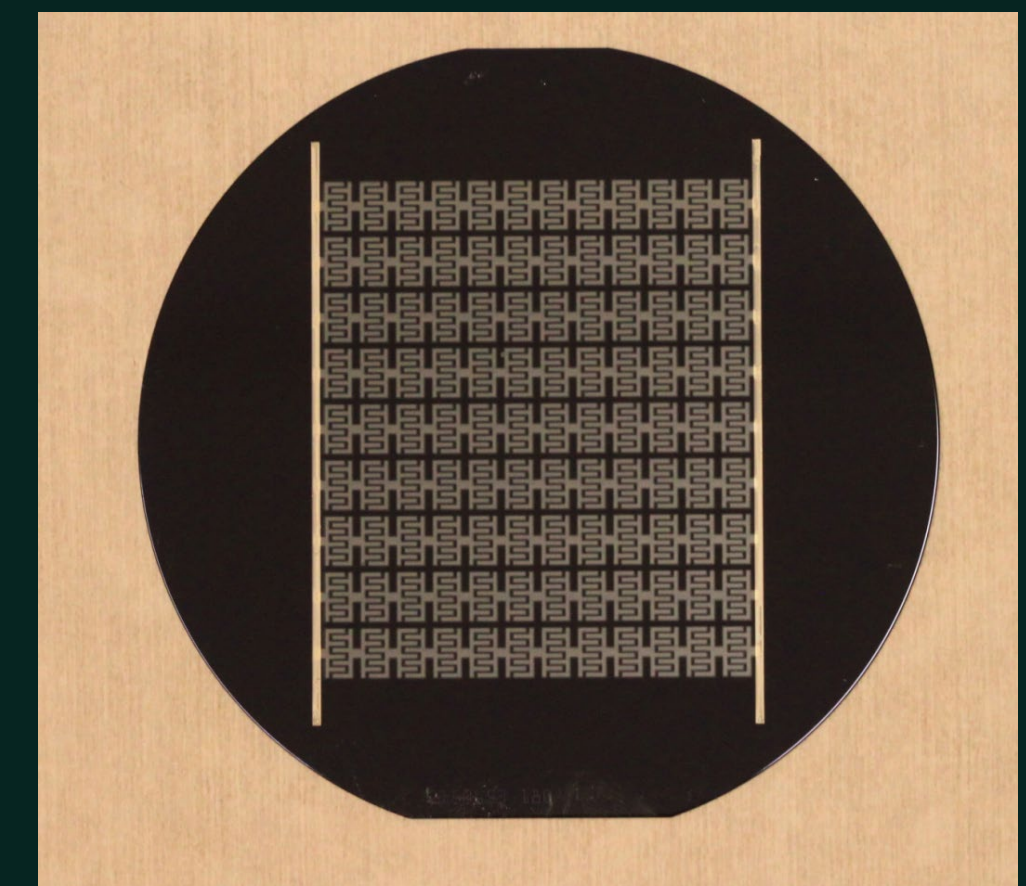
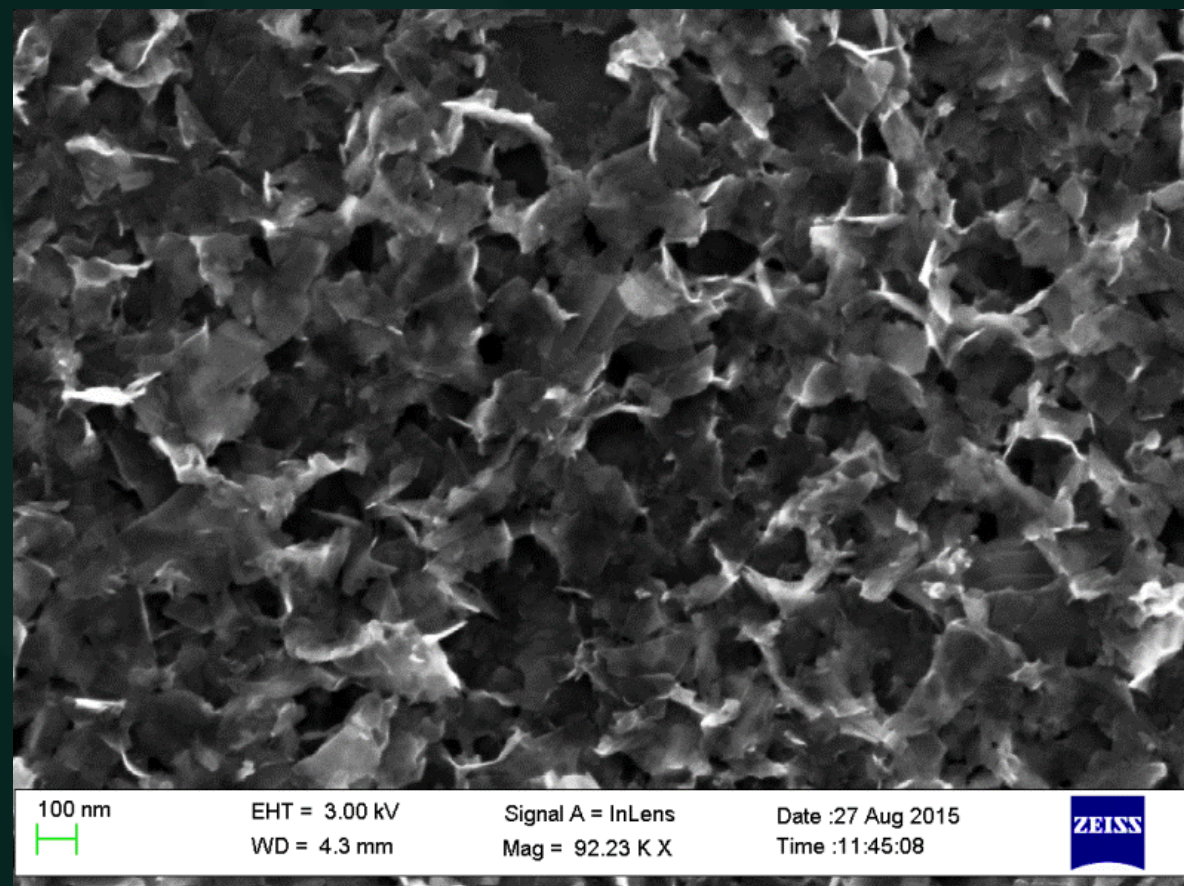
Printed Electronics Helix Launch Event

21 September





Printed Electronics at KTH



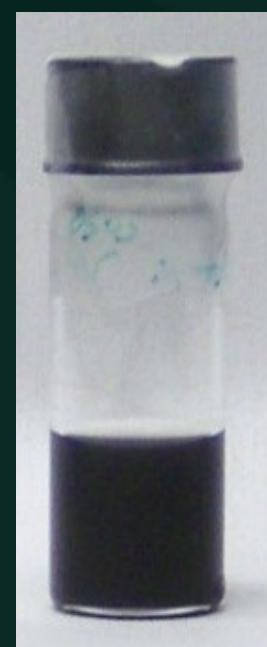
Inks & Printers



01



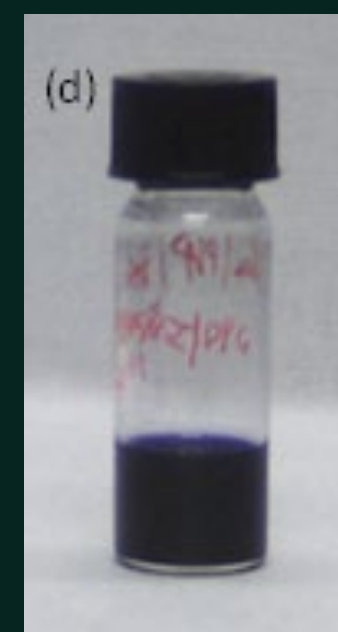
Carbon nanotube



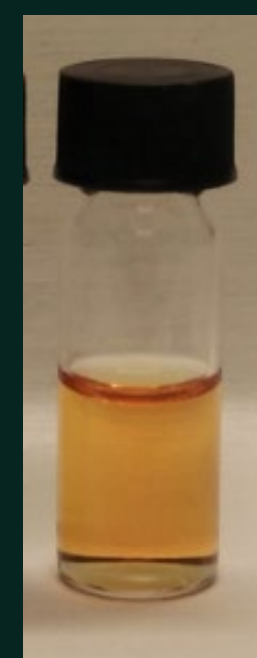
Graphene



MoS₂



Polyaniline (PANI)

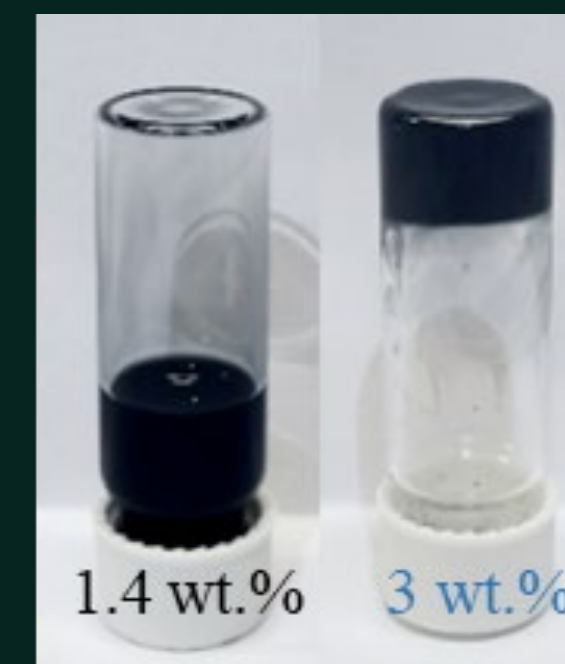


PSSH



PEDOT:PSS

Inkjet



1.4 wt.%

3 wt.%

direct Ink Writing



Dimatix Inkjet Printer

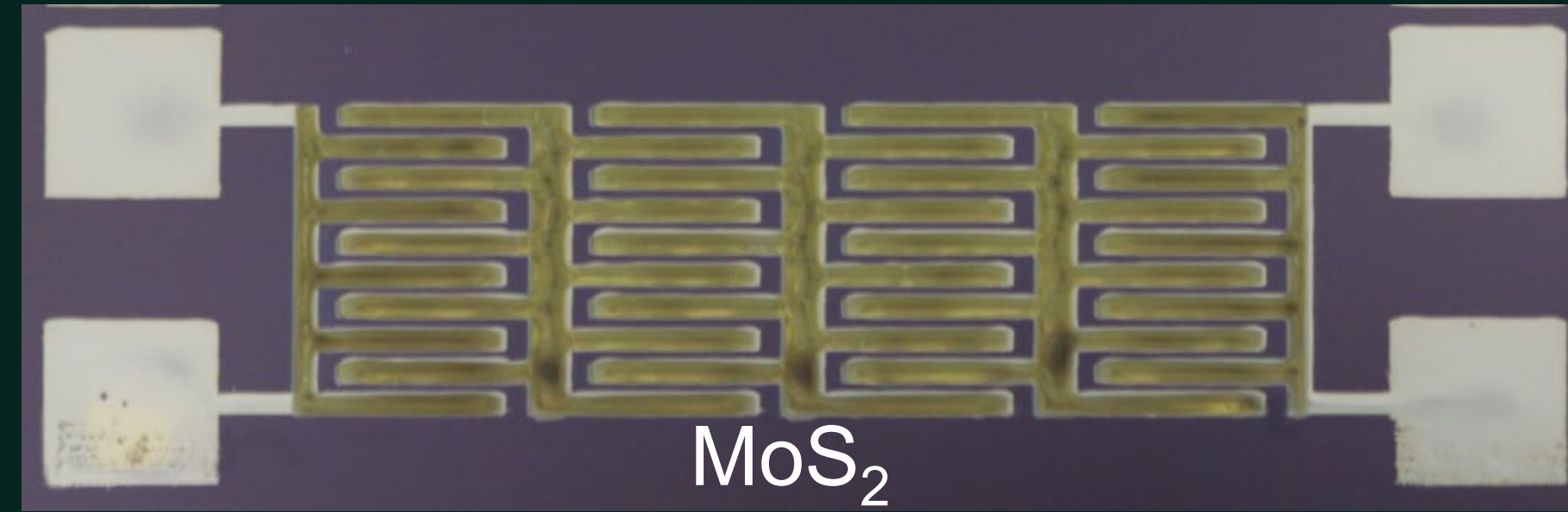
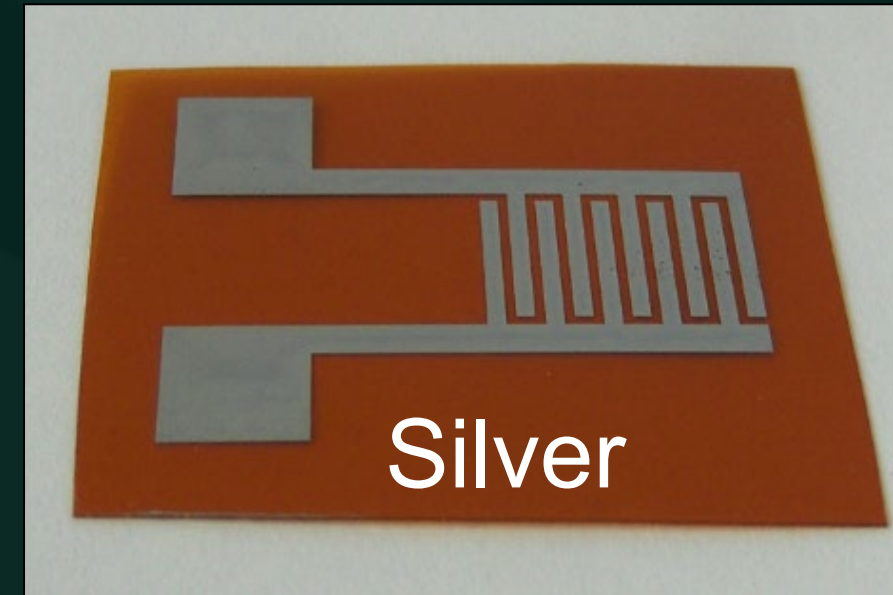


Felix Bioprinter

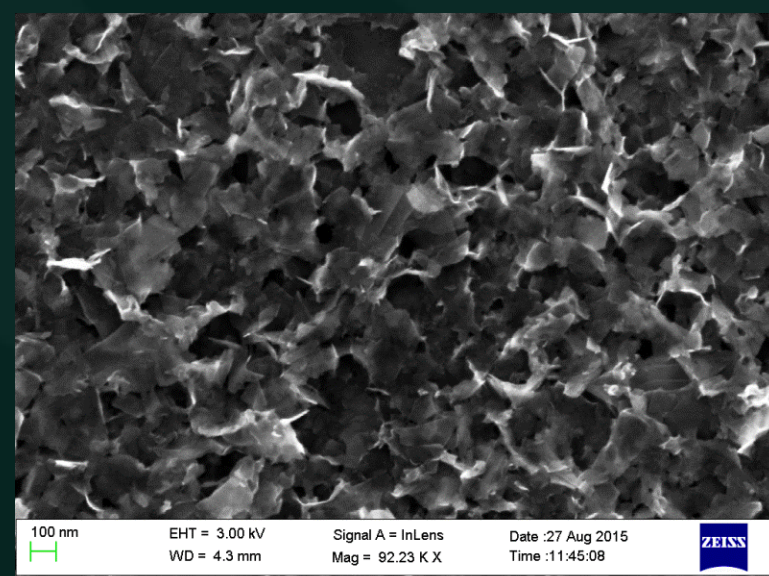
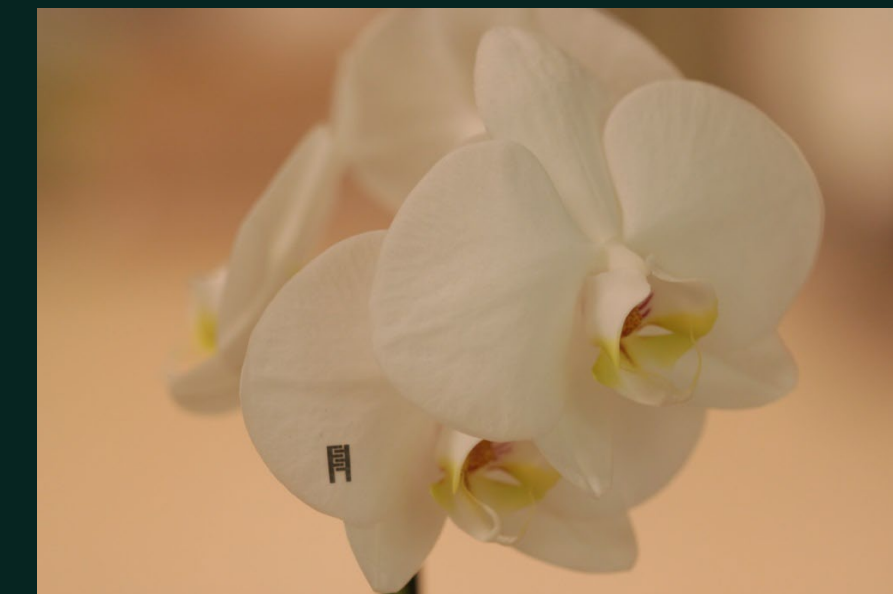
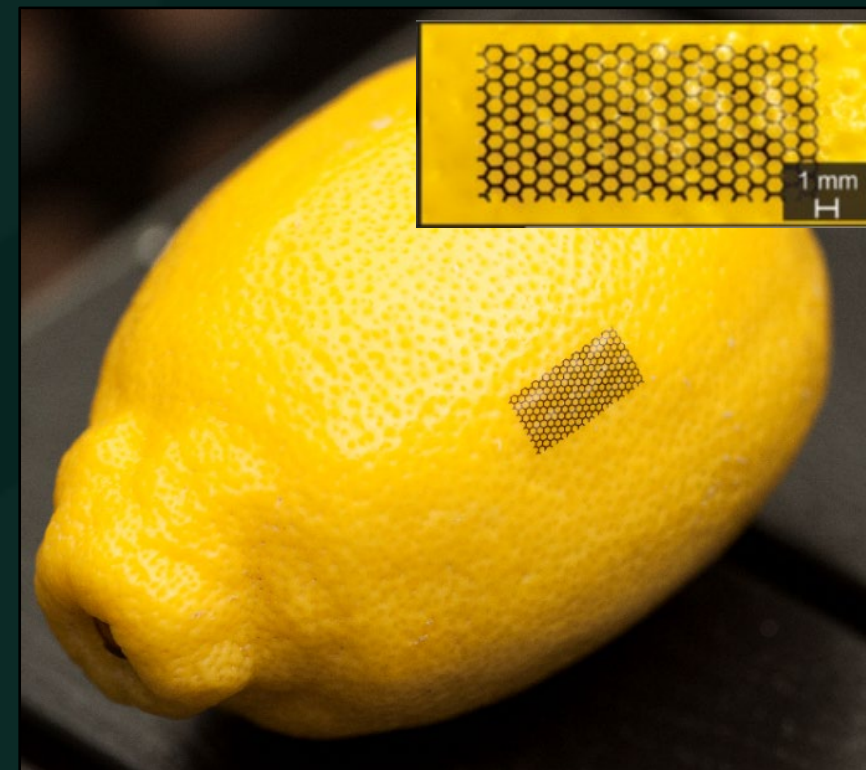
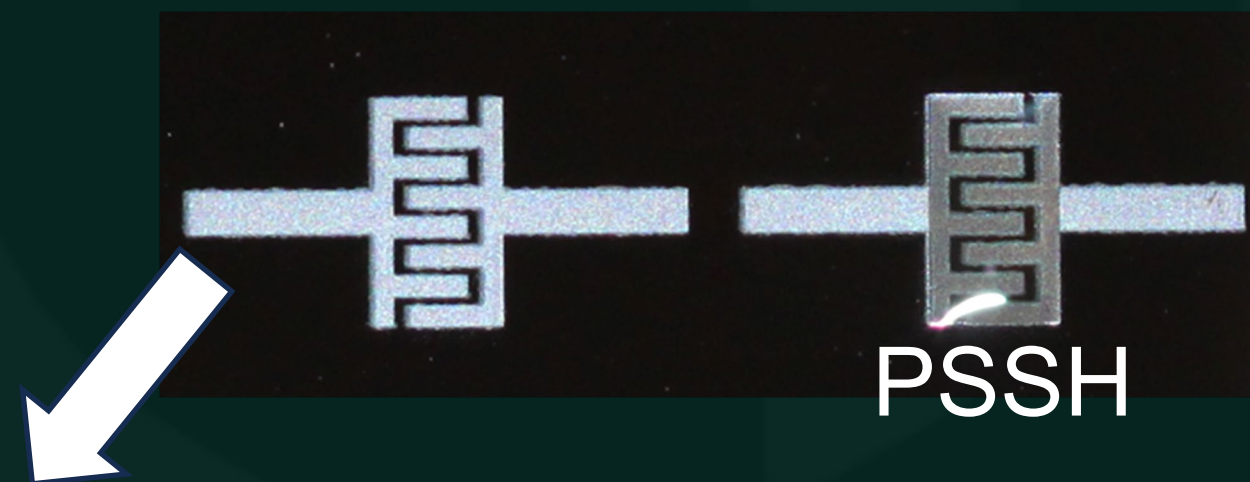
Multiple materials, Arbitrary substrates



02



Graphene

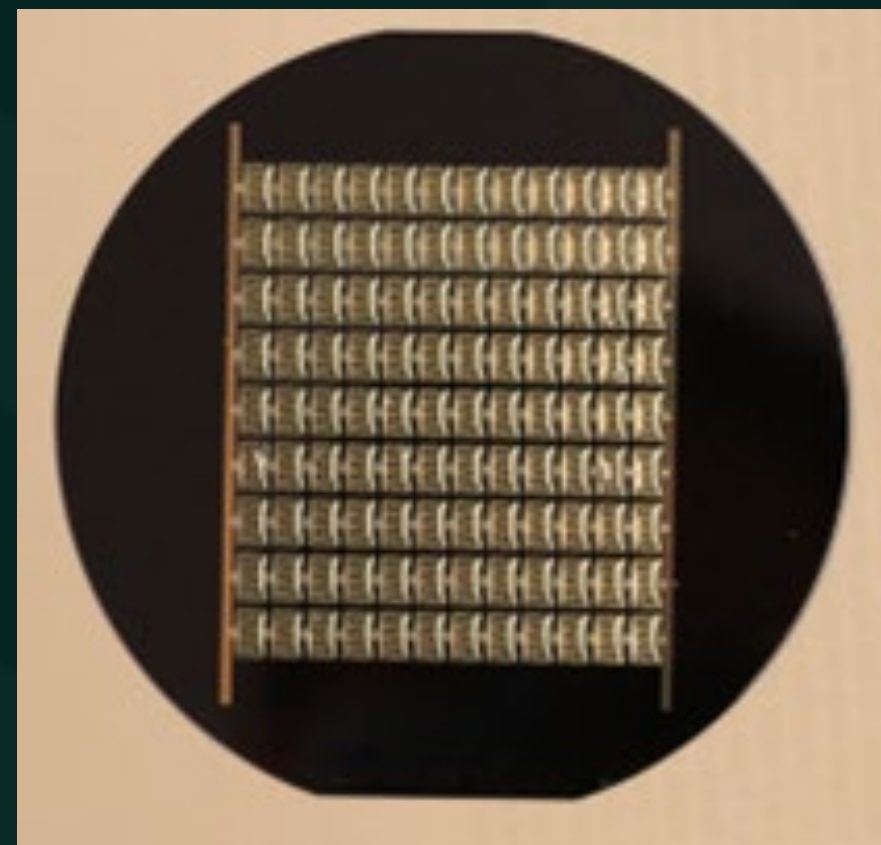
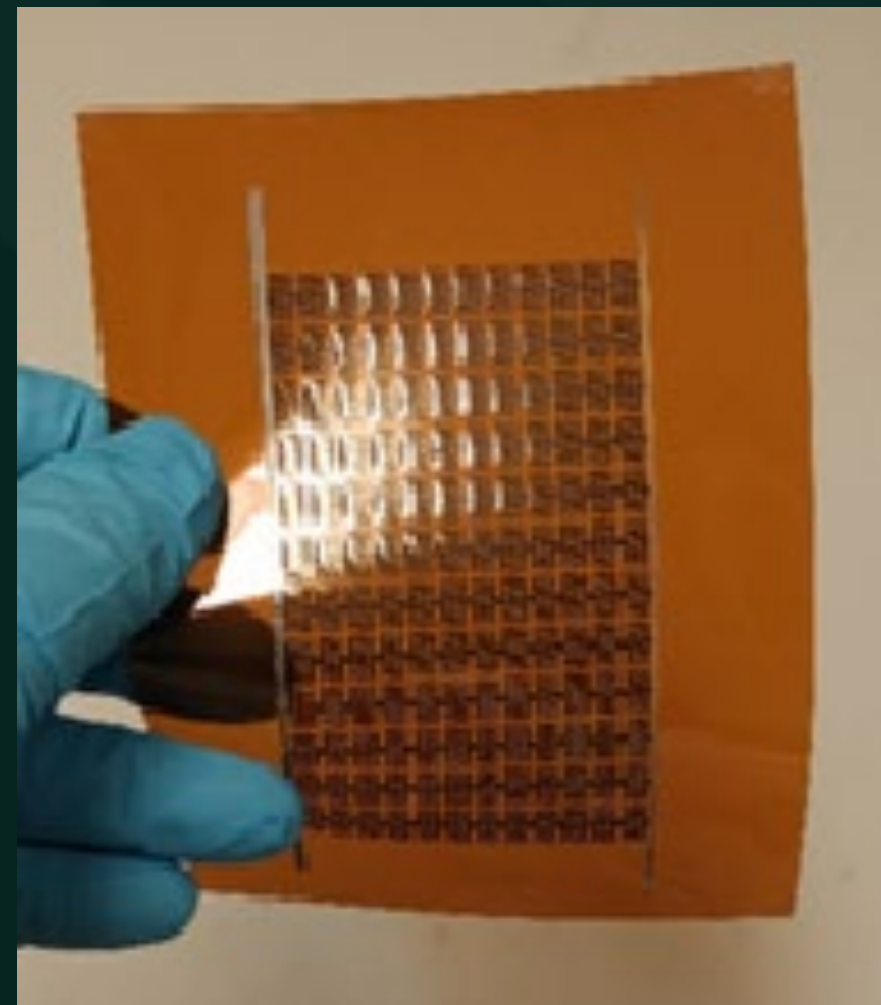


PEDOT:PSS on Paper

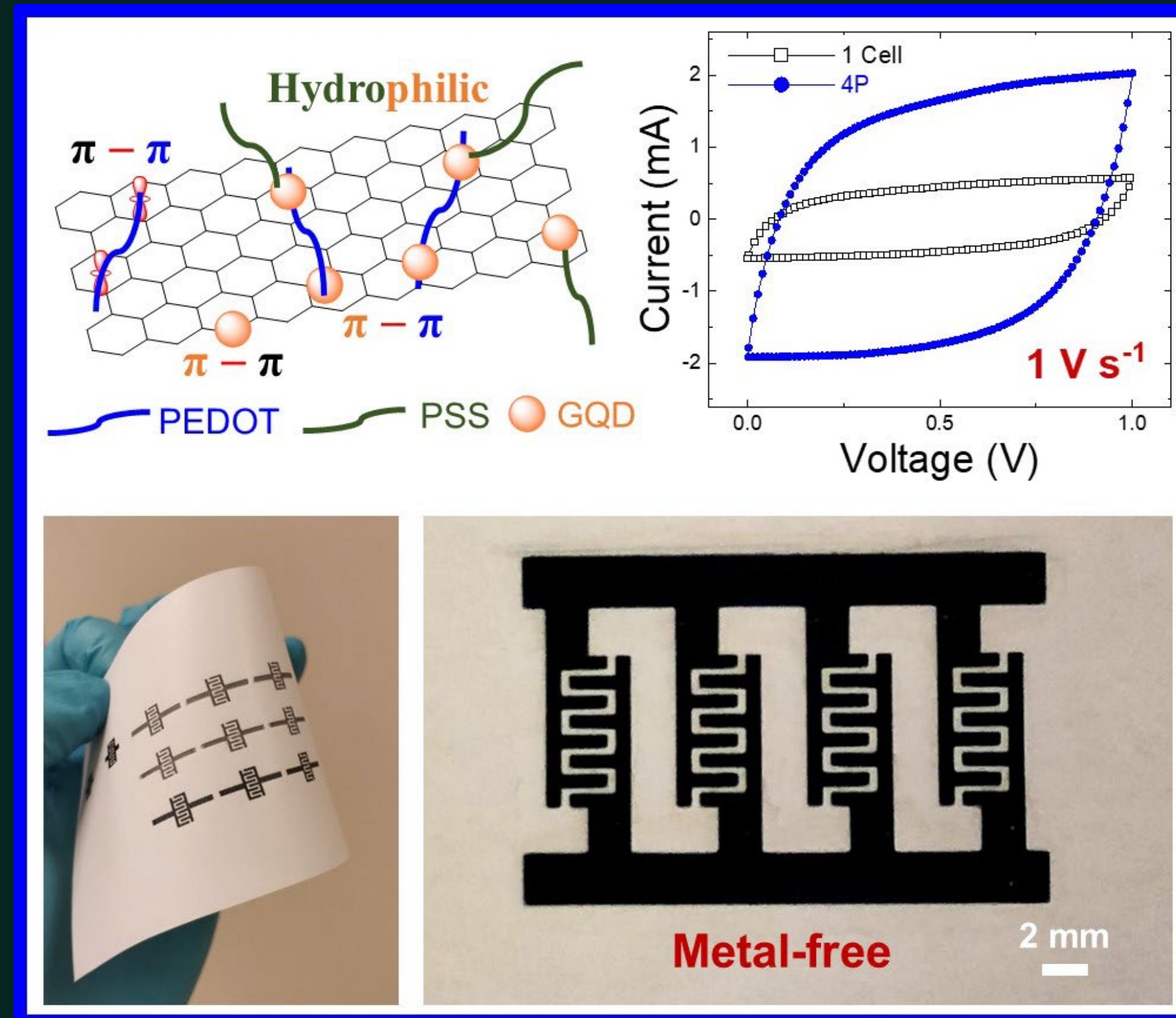


03

Metal-free Ultrafast Microsupercapacitors



ACS Nano 11, 8249 (2017).

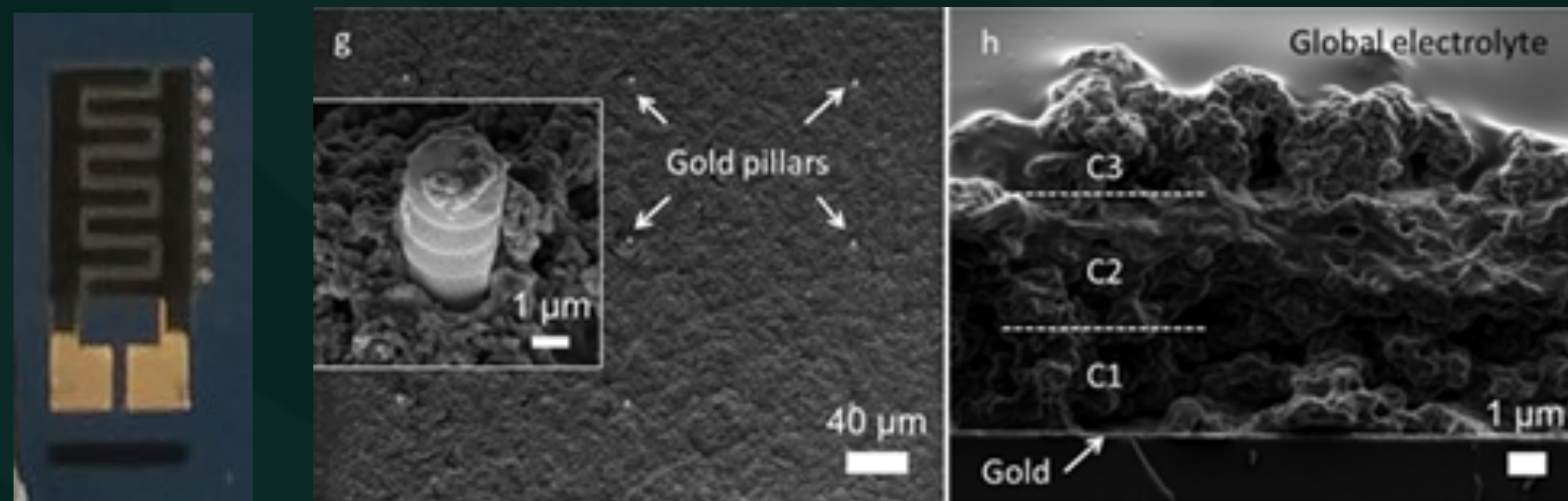
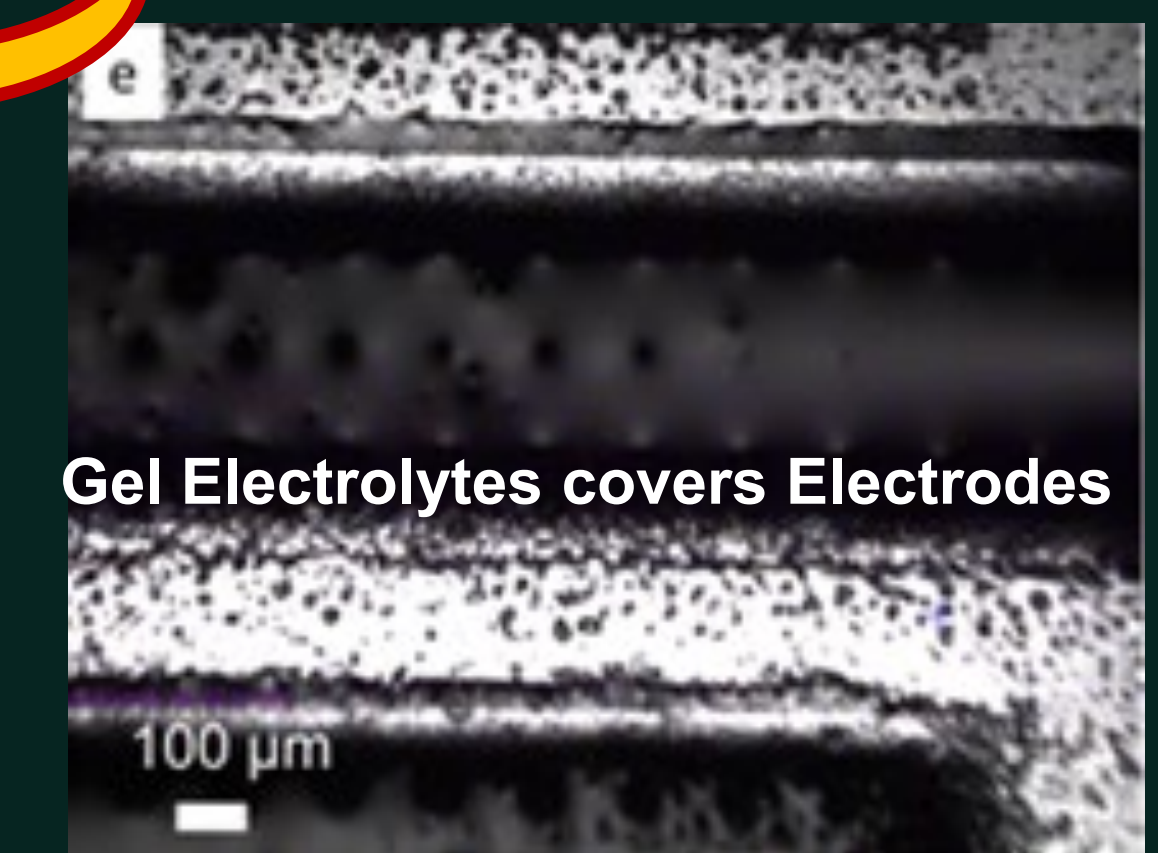
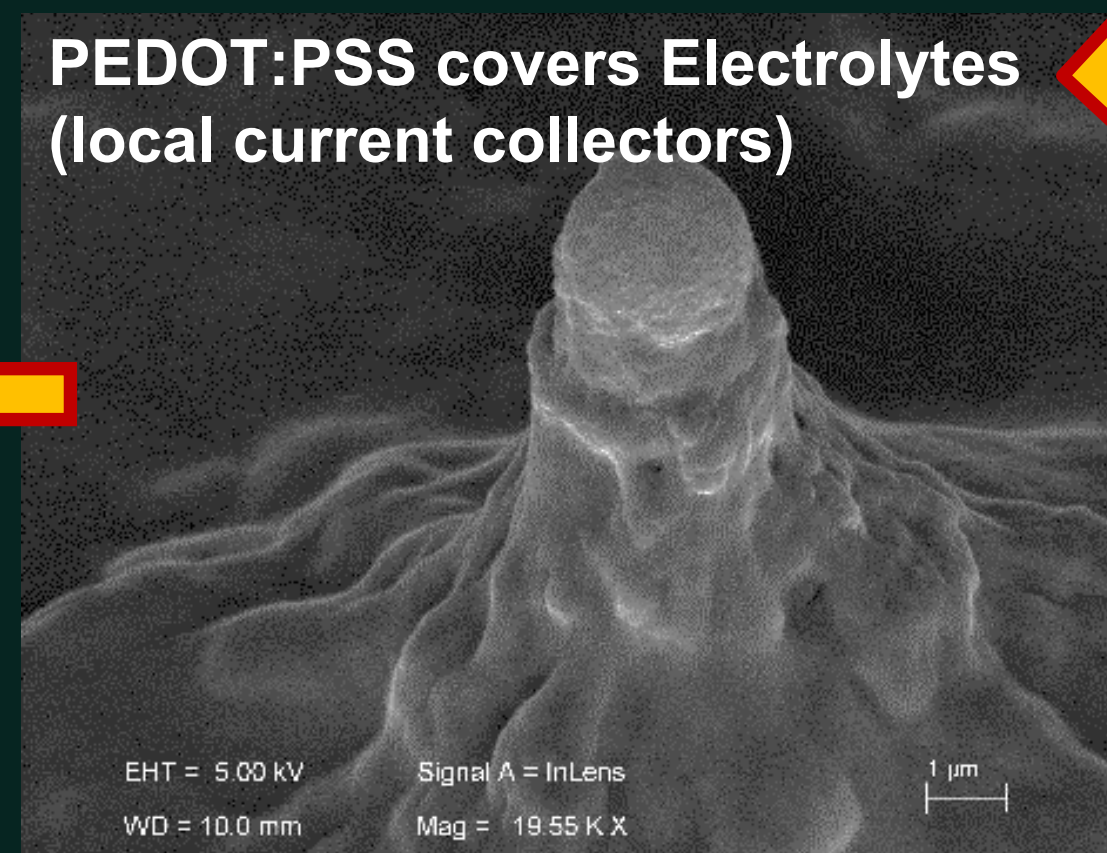
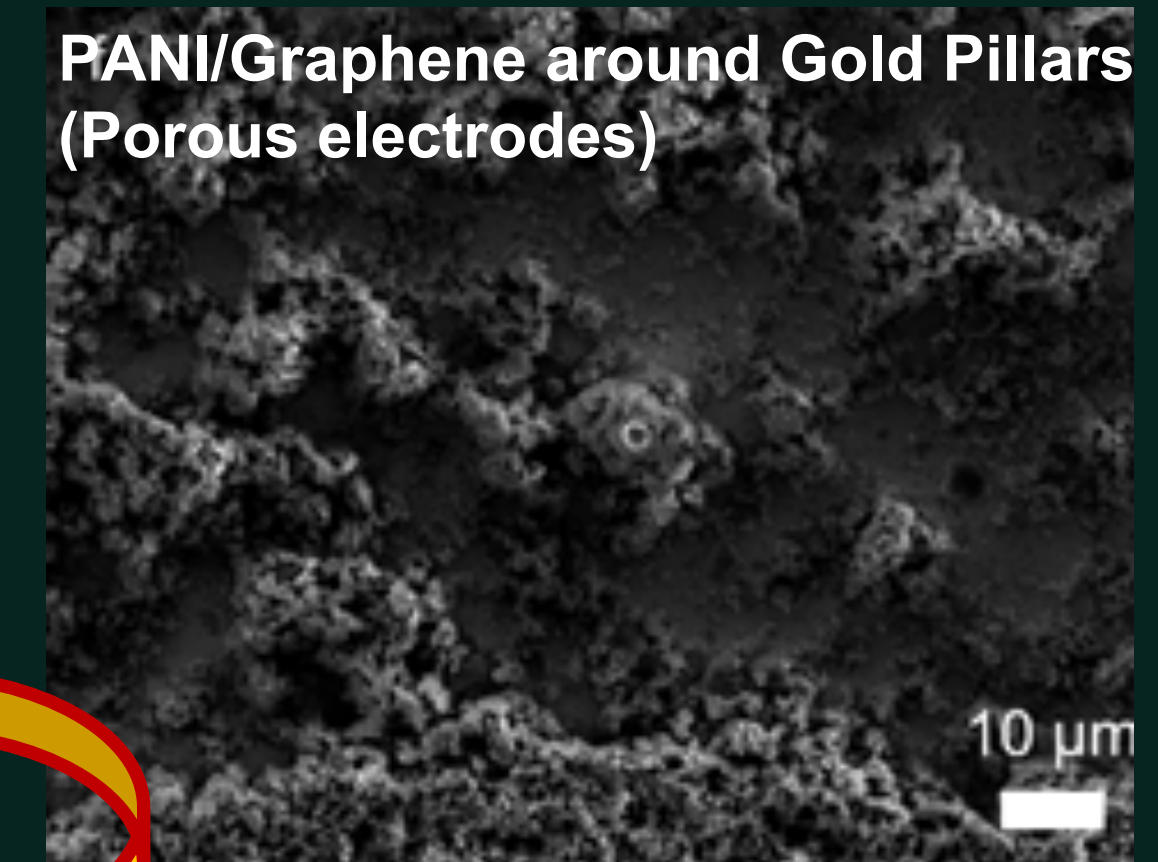
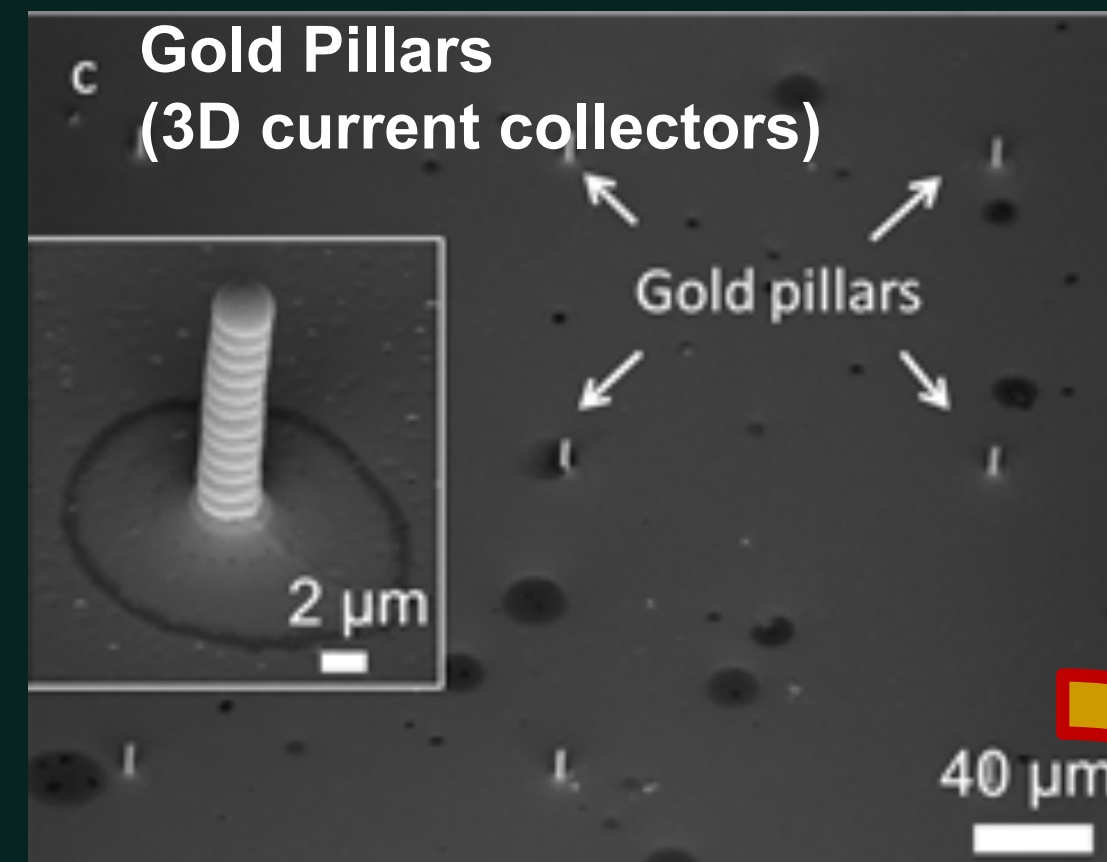
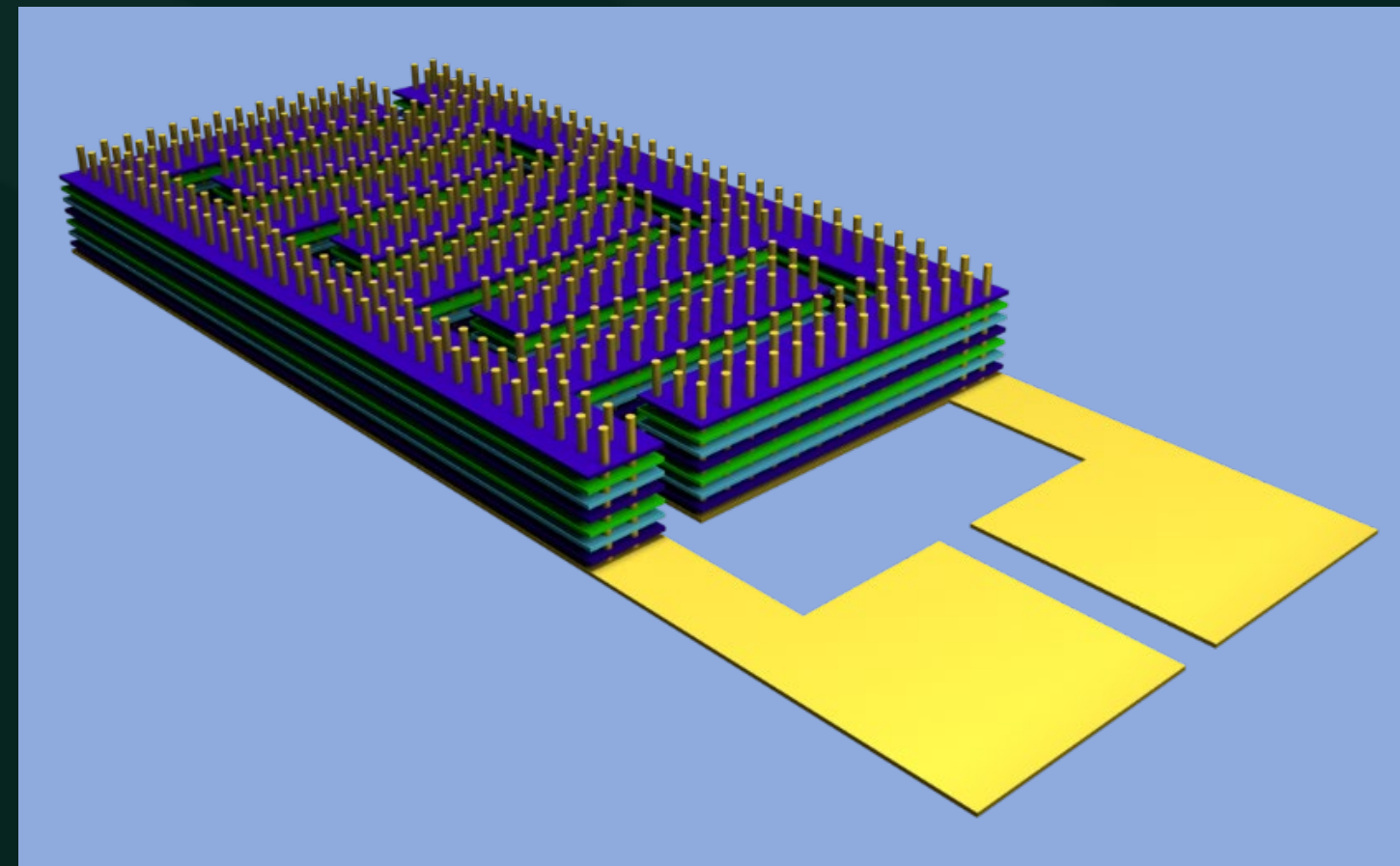


Advanced Functional Materials 32, 2108773 (2022).



04

Fully-Printed 3D-Structured Microsupercapacitors



Hybrid 3D structure realizes vertical scalability

Nano-Micro Letters 12, 40 (2020).