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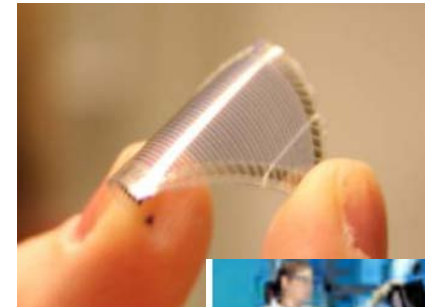
Gate Insulator Material for Printed Electronics

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University of Minnesota



Enabling Materials

- Need for solution processable materials
 - Semiconductors
 - Insulators
 - Dielectrics
- Printable using conventional low-cost and high-speed printing techniques



Printable dielectric material with high switching frequencies



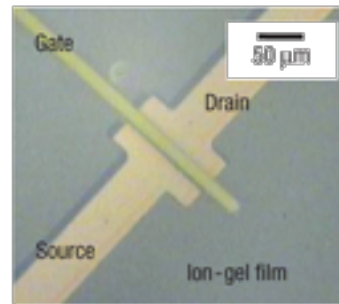
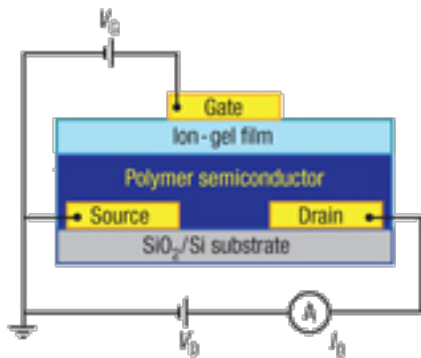
Gate Insulator Material

- A transparent, polymer-based ion gel gate insulator material
- Enables high speed transistor operations
- Superior to state of the art amorphous silicon



Outstanding Properties

- Compatible with multiple printing methods
- Gate electrode can be offset from the channel
 - Enables simpler transistor architectures
- Thickness not critical to performance





Features

- Large capacitances
- Low operating voltages ($<4V$)
- High current
- Fewer shorts
- High polarizability



IP Licensing

- IP Status - PCT application filed
- Development next steps
 - Test printing methods



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For additional information visit...

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