

## Well-Oriented TIPS Pentacene Crystal Growth

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### Status:

Seeking R&D and/or  
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Patent Pending

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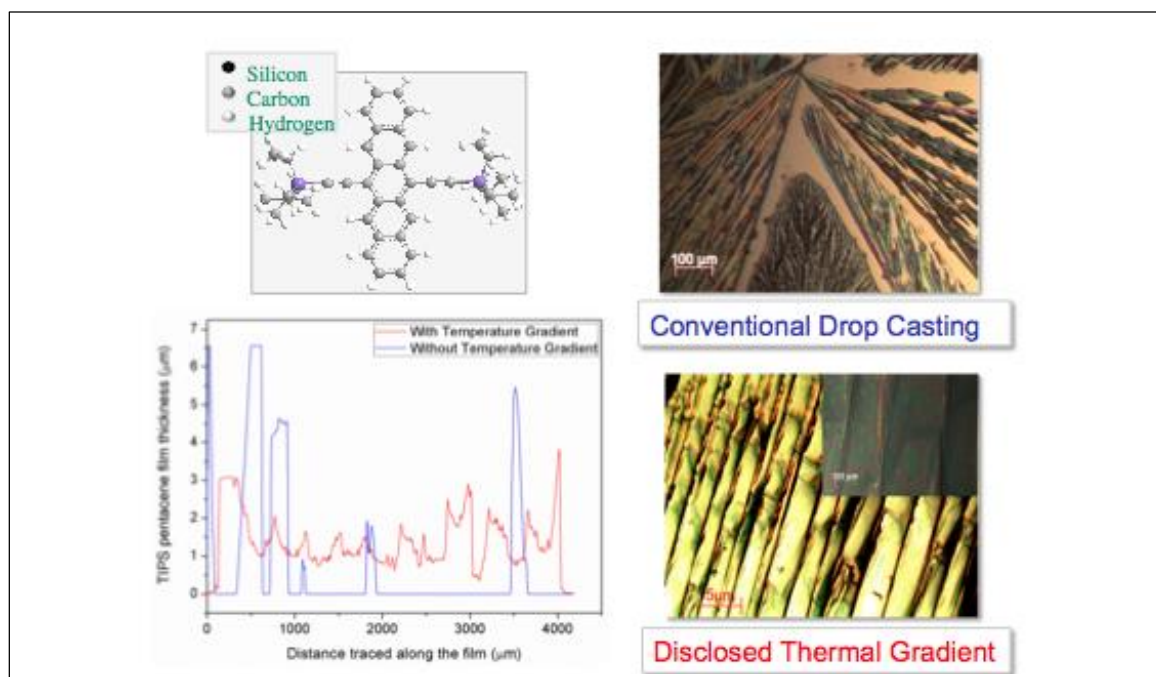
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### Crystal Growth via Temperature Gradient

- Novel method for improved growth of 6,13-bis(triisopropylsilyl)ethynyl-pentacene (TIPS pentacene) films from solution
- Controlled rate of solvent evaporation via low to high temperature gradient
- Results in controlled growth of TIPS pentacene on substrate

### Advantages

- Method produces smooth adjacent crystals with good uniformity and surface continuity not possible with drop or spun cast TIPS pentacene
- Testing of films shows 10X improvement in mobility ( $0.004 \text{ cm}^2/\text{V s}$  for non-annealed films vs  $0.05 \text{ cm}^2/\text{Vs}$  for our technology)



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