

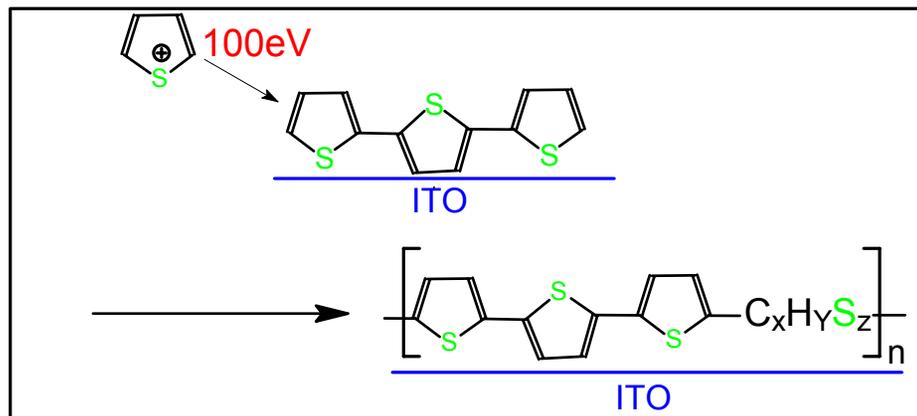
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#### Surface Polymerization by Ion Assisted Deposition (SPIAD) of Polythiophene Films.

Conducting polymers are being widely examined for use in flat panel displays, solar cells, sensors, and other electronics applications. We have developed the SPIAD method to grow polythiophene conducting polymer films from energetic polyatomic ions and organic monomers. We have also demonstrated that SPIAD proceeds by an unequivocal cation-induced surface polymerization mechanism.



SPIAD combines deposition of hyperthermal thiophene ions and terthiophene vapor of to produce a polythiophene conducting polymer film.