great attention to replace conventional brittle inorganic oxide materials. Self-organized polymeric anode materials were prepared based on poly(3,4-ethylenedioxythiophene): polystyrene sulphonate (PEDOT: PSS) in which 50% DMDI was added to enhance their conductivity. As a key component, perfluorinated ionomer (PFI) was included to achieve a high work function and hydrophobicity. They showed excellent tuning of work-function which enabled to perform the conventional ITO. The maximum work-function of the anode is 5.8 eV which is the highest value among the flexible anodes which have been reported until now. Moreover, transparency was higher than 90% in the visible range. We applied these conducting polymer anodes to bulk-LED junction organic photovoltaic cells (OPCs). The lifetime of the OPVs was highly enhanced compared with the conventional ones with an ITO anode.

3PS-144 치아용
A High Mobility Conjugated Polymer Based on Diheteroaromatic and Diketopyrrolopyrrole for Organic Photovoltaics

3PS-145 소재
Template-Assisted Fabrication of TiO2 Nanotube Arrays via Si-Containing Block Copolymer Lithography and Atomic Layer Deposition: Properties and Potential in Photovoltaic Devices

3PS-146 경전
Organic Thin Film Transistor with New Organic Semiconducting Materials Having Benzothiadiazine Unit

3PS-147 조광성
Effect of Bridge Unit in Thieno[3,4-d]:thiazoled based Conjugated Polymer for Photovoltaic Application

3PS-148 조용문
Sulfonation of Exfoliated Graphene Nanoplatelets for Hydrogen Storage

Graphene is recently focused for next generation carbon material which has outstanding properties and 2-dimensional sheet form but it requires techniques to make well-defined graphene sheets and commercially producible. Exfoliated graphene nanoplatelets (GnP) can be an answer for this requirements. It is micro-scale graphene sheets which has