

High performance polymer solar cell based on PCBM as the acceptor

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One of Prof. Wudl's greatest achievements is the creation of PCBM molecule. It is fair to say that without PCBM, the progress of polymer solar cell would be significantly hindered. Despite tremendous progress in the donor polymers, the field of acceptor molecules is still dominated by PCBM. In this presentation, we will present several high efficiency solar cells based on our new donor polymers mixed with PCBM. It is found that the morphology is critically important for these various polymers. Much effort has been devoted to the understanding and control of the morphology. Finally, our progress in other type of solar cells architectures, such as tandem and inverted cells will also be summarized.