Solar Cells

My Name

The demand for energy is growing rapidly worldwide to satisfy an increasing standard of living. This has led to a never-ending search for new sources of energy. Most of our current energy sources are based on fossil fuels, such as oil, gas, and coal. Burning of fossil fuels produces acid rain, smog, mercury poisoning, and the greenhouse gas CO₂. The most abundant and cleanest source of energy is the Sun itself, which has created all fossil fuels over millions of years. Solar cells convert solar energy directly into electricity in a process termed “photovoltaics” [1,2]. They do not create pollution or greenhouse gases. However, they are still too expensive for mass-production. Some of the concepts for reducing the cost of solar cells will be discussed, such as roll-to-roll processing and integration into buildings.