

Modified Perovskite Solar Cell

Hanna, Kerolos

Egypt faces a lot of issues that gravely influence its economy, industry, agriculture and the environment in general. For us, the most significant one is the energy crises, using alternative energies is one of the most significant solutions to that problem. There is a lack of energy supplies in Egypt, because of the continuous increasing of population and limited amount of energy. The finite quantity of energy does not satisfy people's needs. Thus, Egypt and some other countries in the world tend to use alternative energies. They are known to be clean, permanent and safe energies such as solar, wind and geothermal. We work on solar energy, the solar cells in particular. They are modern inventions with some disadvantages such as the high cost and the low efficiency. Our project works on decreasing the cost of the solar cell, making it more efficient and more eco-friendly as determined in our design requirements. By using new type of solar cells called Organolead halide perovskite which fabricated by recycling old car batteries, our design requirements have been achieved successfully. Researchers reach to 55%-60% percent