

Dr. Luca Serenelli is a physicist with large experience in crystalline silicon solar cells technology. In his 10 years lasting work he developed most of interesting technologies and manufacturing processes used in several cells architectures, from standard AL-BSF cells, to selective emitter and laser firing contacts, from heterojunction solar cells to crystalline/perovskites tandem cells. Recent works are focused on amorphous silicon suboxide for crystalline silicon wafers surface passivation, as an alternative to amorphous silicon in Heterojunction solar cells.

In this talk he will concern on application of amorphous silicon suboxide to heterojunction solar cells, using also metal oxides as alternative emitter layer.