

**SELECTIVE EMITTERS DESIGN AND
OPTIMIZATION FOR TPV APPLICATIONS**

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SUMMARY: Among several solutions to exploit solar energy, thermopho- tovoltaics (TPV) have been popularized and have known great breakthroughs during the past two decades. Yet, existing systems still have low e_ciciencies since the wavelength range of optimal photovoltaic(PV) conversion is very small compared to the emitter spectral range. Selective emitters are a very promising solution to this problem. We developed some numerical tools to design and optimize such emitters. Some of the resulting structures are pre- sented in this paper. We also show that the usual TPV devices e_ciciency limits can be easily overcome thanks to these structures.