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## Optimization of printed Organic Solar Cells

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Organic solar cells (OSCs) have been attracting a lot of attention in research in recent years because to their low weight, non-toxicity, and high efficiency. OSCs are particularly appealing to industry due of their easy solution-based fabrication process and therefore the possibility for thin and flexible solar cells. Due to the solution-based fabrication process, the OSCs can be upscaled with low waste deposition technologies like printing. Being fast and using minimal material, slot-die coating is thereby a very promising technique. During this study we optimize the slot-die printing process of OSCs under ambient conditions and in a nitrogen atmosphere and investigate their properties compared to spin-coated OSCs. The differently manufactured OSCs will be compared with measuring techniques like spectroscopy and real-space imaging in combination with X-ray scattering methods.

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