



Quantum Efficiency Seminar und Colloquium

RAFAEL GIESCHKE

Physikalisches Institut Albert-Ludwigs-Universität Freiburg

Organic Solar Cells: Influence of Loss Mechanisms on Performance

ABSTRACT: Organic solar cells have the potential to fill niche applications in which traditional inorganic solar cells cannot be used, being both flexible and cheap in material costs and processing.

Relying on organic materials like conjugated polymers and fullerenes, their physics substantially differs from inorganic solar cells. The talk gives a basic introduction to organic solar cells and explains their working principle is explained on the basis of the four principle steps light absorption, charge separation, charge transport and charge collection. Special focus is put on the loss mechanisms in these steps and their influence on device properties

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Contact:

Andreas Buchleitner, Institute of Physics, Quantum Optics and Statistics T +49 761 203 5821 F +49 761 203 5967 E <u>buchleitner_office@physik.uni-freiburg.de</u> www.physik.uni-freiburg.de