



WEARPLEX Gamma Workshop: Human Model Equivalent Circuit



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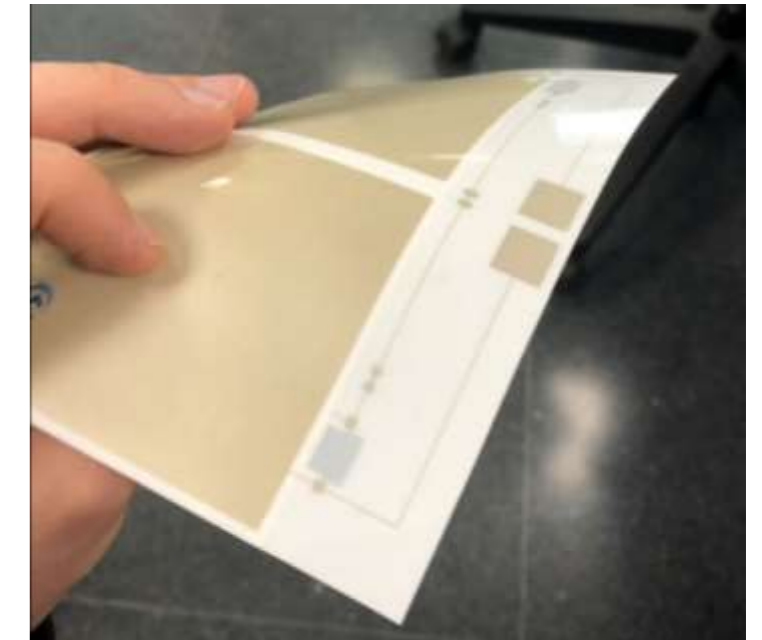
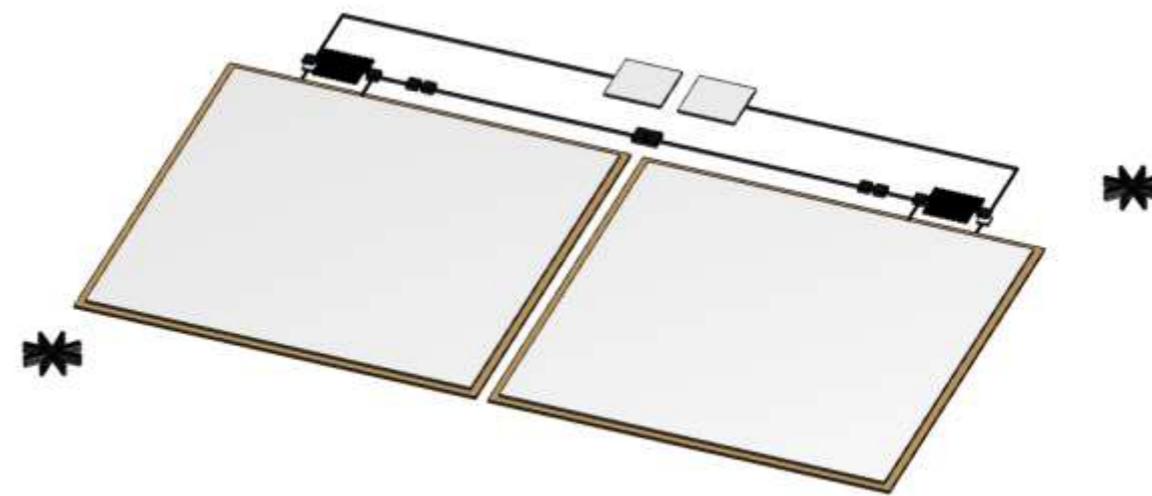
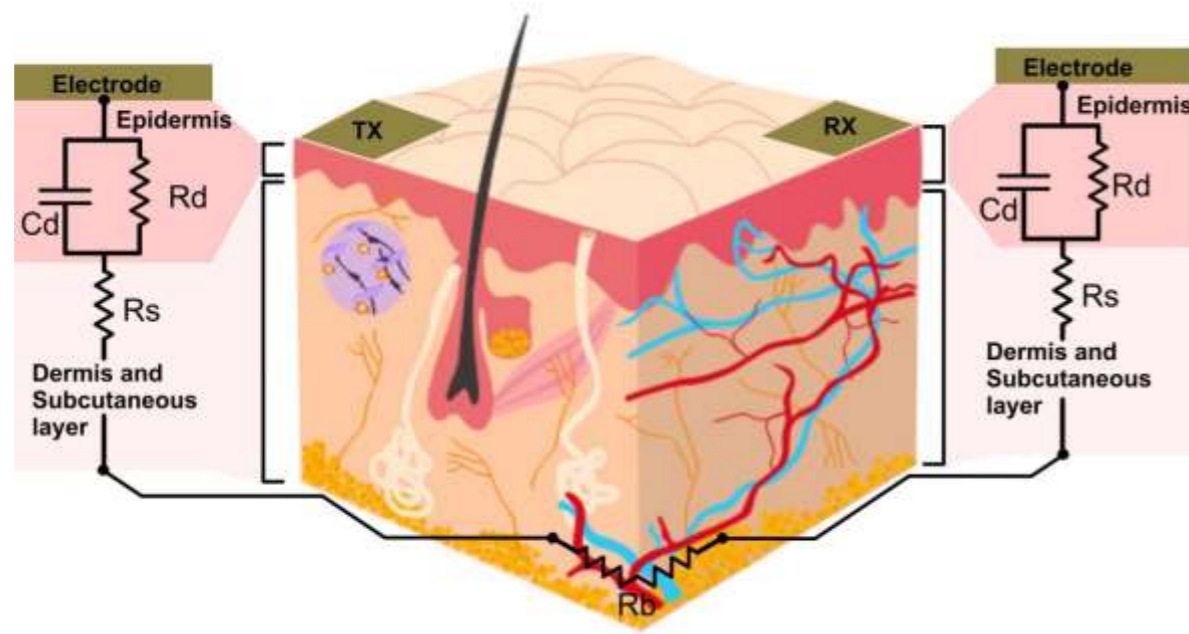
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Printed Human model equivalent circuit (HMEC) Concept

- » The development of novel large scale flexible FES devices require a need of trial on human subjects
- » These can be reduced/replaced by a flexible HMEC printed testbed



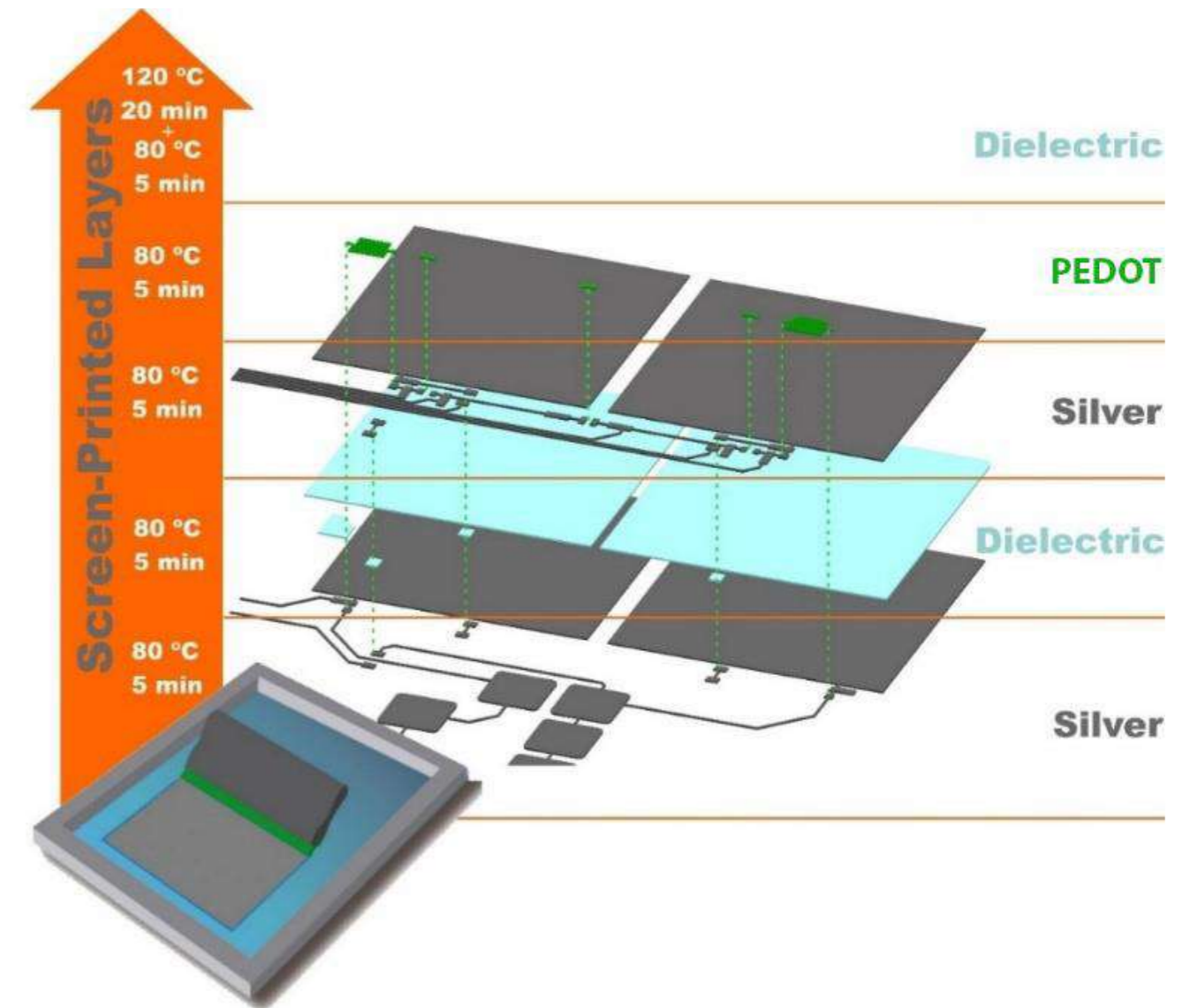
N. Peřinka et al. *Adv. Eng. Mater.* 2022. 2100684.



Design and fabrication of printed HMEC

» HMEC is based on a sequence of different functional materials printed on flexible substrates:

- » Conductors (for electrodes/leads)
- » Dielectrics (for capacitors)
- » and semiconductors (for resistances)

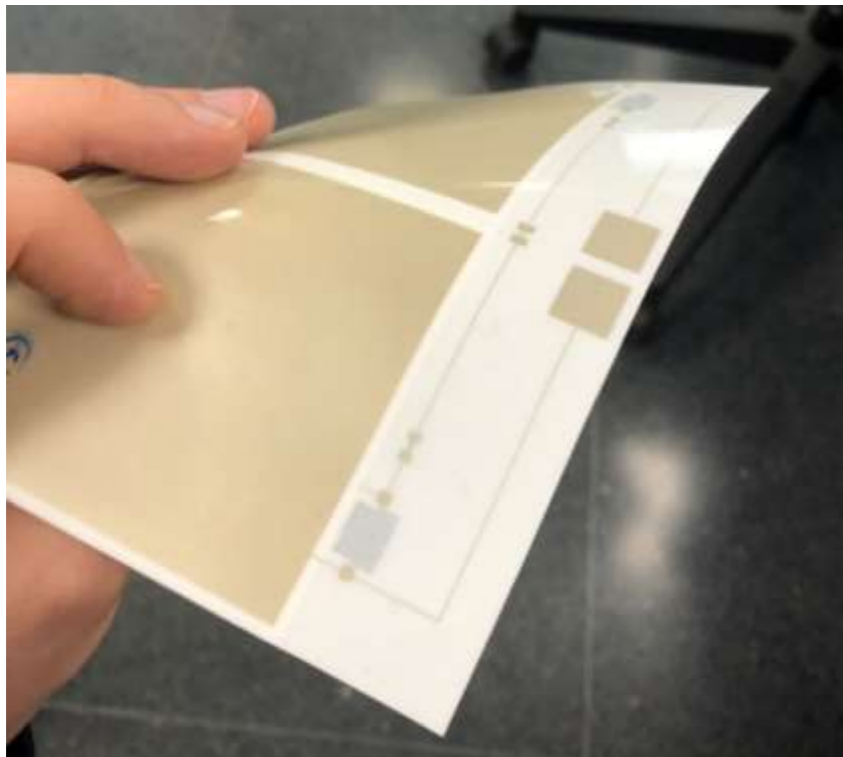


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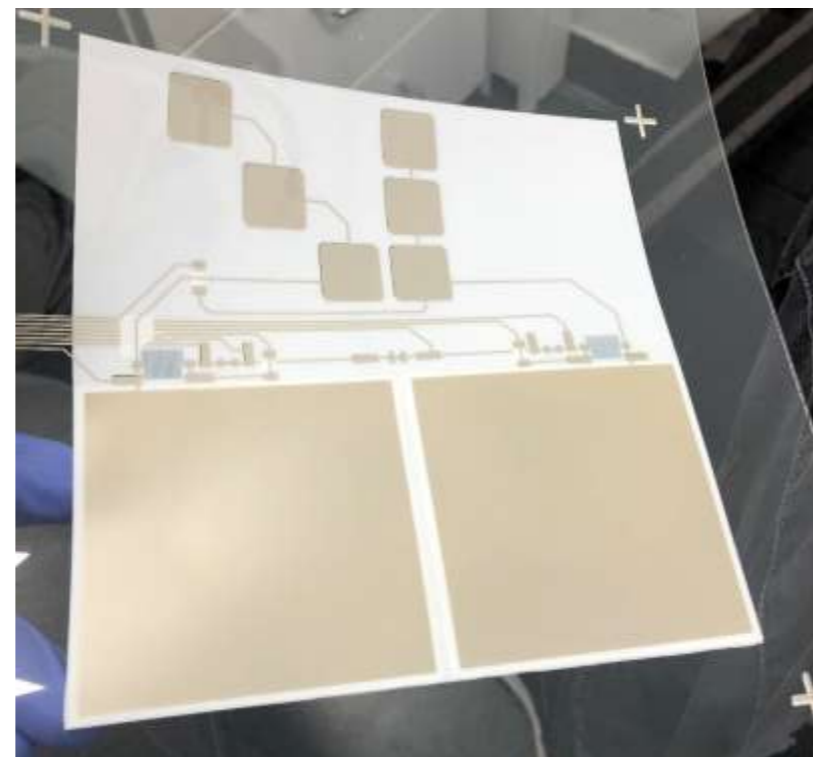


Evolution of HMEC during Wearplex

» The design of the HMEC has been modified along with the Wearplex demonstrator evolution:



Alpha



Beta



Gamma

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