

Bio-inspired materials for health monitoring

Principal Investigator(s) and affiliation(s), contact information

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Members of the research group

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Description of the scientific aims

The group prioritizes development of newly polymeric materials with diverse functionalities towards health monitoring. The research includes (i) bottom-up synthesis of linking functional groups onto a polymer backbone and (ii) fabrication of these materials onto different sensing platform. The group therefore actively collaborate with other research groups at ÅAU, University of Turku, Technion (Israel), Aarhus University (Denmark), and IIT-Mandi (India).

Selected publications 2013-

1. Muhammad Khatib, **Tan-Phat Huynh**, Yunfeng Deng, Yehu Horev, Walaa Saliba, Weiwei Wu, Hossam Haick*; "A Freestanding Stretchable and Multifunctional Transistor with Intrinsic Self-Healing Properties of all Device Components"; *Small*, 2019, 15, 1803939
2. **Tan-Phat Huynh*** and Hossam Haick*; "Autonomous Flexible Sensors for Health Monitoring"; *Adv. Mater.*, 2018, 30, 1802337
3. **Tan-Phat Huynh***, Prashant Sonar, and Hossam Haick*; "Advanced Materials for Use in Soft Self-healing Devices"; *Adv. Mater.*, 2017, 29, 1604973
4. **Tan-Phat Huynh** and Hossam Haick; "Self-healable, fully-functional and multiparametric flexible sensor based nanoparticles"; *Adv. Mater.*, 2016, 28, 138-143
5. **Tan-Phat Huynh**, Piotr Pieta, Francis D'Souza, and Wlodzimierz Kutner; "Molecularly imprinted polymer for recognition of 5-fluorouracil by the RNA-type nucleobase pairing"; *Anal. Chem.*, 2013, 85, 8304-8312