**NC170: Personal Protective Technologies for Current and Emerging Occupational and Environmental Hazards**

Multistate Research Project: October1, 2017 – September 30, 2022

**Period of Report:** October 1, 2018 – September 30, 2019

**Published Written Works** *Include scientific publications, trade magazine articles, books, posters, websites developed, and any other relevant printed works produced*.

# Ahmed Y El-Moghazy, Cunyi Zhao, Georges Istamboulie, Noha Amaly, Yang Si, Thierry Noguer, Gang Sun, Ultrasensitive label-free electrochemical immunosensor based on PVA-co-PE nanofibrous membrane for the detection of chloramphenicol residues in milk, *Biosensors and Bioelectronics* Volume 117, 15 October 2018, Pages 838-844.

# Cheng Huang, Kelu Yan, Gang Sun, Disinfectant Performance of a Chlorine Regenerable Antibacterial Microfiber Fabric as a Reusable Wiper Materials 2019, 12(1), 127;  <https://doi.org/10.3390/ma12010127>

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# Peixin Tang, Ho Ting Leung, Gang Sun, Colorimetric Detection of Carcinogenic Alkylating Fumigants on Nylon-6 Nanofibrous Membrane. Part I: Investigation of 4-(*p*-Nitrobenzyl)pyridine as a “New” Sensing Agent with Ultrahigh Sensitivity, Anal. Chem., 2018, *90* (24), pp 14593–14601.

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**Scientific and Outreach Presentations** *Include workshops, colloquia, conferences, symposia, and industry meetings in which you presented and/or organized.*

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* Griffin, L. (April, 2019) Dynamic Anthropometry: Key to Improved Performance in Medical Wearables. Presented at the *2019 Design of Medical Devices Conference*. Minneapolis, MN.
* Griffin, L. (May, 2019) Advanced Wearable Products & Anthropometry. 3 hour Workshop for 3M Corporation, Woodbury, MN.
* Griffin, L. (November 2019) Integrating Data into Design, Part II: Anthropometry, the Body, & Tools for Inclusive Design, 8 hr Workshop. Kimberly Clark Corporation, Appleton, WI.
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* Ning Pan, Future of Textile Research-Challenges and Opportunities (Plenary Lecture), 6-8 December, IIT Delhi, New Delhi, India
* Noha Amaly, Yang Si, Ahmed Y. El-Moghazy, Gang Sun, Scalable Fabrication of Highly Carbonylated Nylon Nanofibrous via In Situ Citric Acid Grafting for Reversible Adsorption of Laccase by Chelated Copper Ions, Fiber Society fall meeting, University of California, Davis, October, 2018.
* Park, H. (2018), Engineering the Most Intimate Human Interface, University of Georgia, Athens, GA, (October 3, 2018)
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* Peixin Tang and Gang Sun, Paper-based Colorimetric Sensors for Agricultural Toxic Gases Based on Toxicological Reactions, ACS Fall Meeting, Boston, August, 2018
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