*Books*

Antimicrobial Textiles, Edited by Gang Sun, Woodhead Publishing Inc. 2016.

*Book Chapters*

Gang Sun,(2016). Chapter 1 Introduction: developing antimicrobial textiles, Woodhead Publishing Series in Textiles: Antimicrobial Textiles, Edited by Gang Sun, Woodhead Publishing Inc., pp1-3.

M. Overcash and Gang Sun. (2016). Life cycle assessment (LCA) of reusable hospital textiles with biocidal finish, Woodhead Publishing Series in Textiles: Antimicrobial Textiles, Edited by Gang Sun, Woodhead Publishing Inc., pp99- 120.

X. Hui, H. Zhu, Gang Sun, (2016). Antimicrobial textiles for treating skin infections and atopic dermatitis, Woodhead Publishing Series in Textiles: Antimicrobial Textiles, Edited by Gang Sun, Woodhead Publishing Inc., pp287-299.

Gang Sun, (2016). Antimicrobial finishes for improving the durability and longevity of fabric structures, Woodhead Publishing Series in Textiles: Antimicrobial Textiles, Edited by Gang Sun, Woodhead Publishing Inc., pp319-332.

*Referred Journal Articles*

Cunyi Zhao and Gang Sun, Catalytic Actions of Sodium Salts in Direct Esterification of 3,3′4,4′-Benzophenone Tetracarboxylic Acid with Cellulose, *Industrial and Engineering Chemistry Research,*  2015, *54* (43), pp 10553–10559

Xiaojie Chen, Dandan Hou, Lu Wang, Qian Zhang, Jiahan Zou, and Gang Sun, Antibacterial Surgical Silk Sutures Using a High-Performance Slow Release Carrier Coating System, *ACS Appl. Mater. Interfaces* 2015, *7* (40), pp 22394–22403

Hou A, Feng G, Zhuo J, Sun G. UV Light-Induced Generation of Reactive Oxygen Species and Antimicrobial Properties of Cellulose Fabric Modified by 3,3',4,4'-Benzophenone Tetracarboxylic Acid. ACS Appl Mater Interfaces. 2015, Dec 23;7(50):27918-24.

Bipin Kumar, Apurba Das, Ning Pan, R. Alagirusamy, Rupali Gupta and Jitender Singh, Liquid Transmission Characteristics of Padding Bandages under Pressure, Journal of Biomaterials Applications, DOI: 10.1177/0885328215597589.

Bolin Ji, Huan Qi, Kelu Yan. Gang SunCatalytic actions of alkaline salts in reactions between 1,2,3,4-butanetetracarboxylic acid and cellulose: I. Anhydride formation, *Cellulose* (2016) 23:259-267.

Huan Qi, Yangen Huang, Bolin Ji, Gang Sun, Feng-ling Qing, Chunyan Hu, Kelu Yan, (2016). Anti-crease finishing of cotton fabrics based on crosslinking of cellulose with acryloyl malic acid, *Carbohydrate Polymers* 135 (2016) 86–93.

Bolin Ji, Kelu Yan. Gang Sun, (2016). Effects of acid diffusibility and affinity to cellulose on strength loss of polycarboxylic acid crosslinked fabrics, *Carbohydrate Polymers*. [Volume 144](http://www.sciencedirect.com/science/journal/01448617/144/supp/C), 25 June 2016, Pages 282–288.

Abolfazl Aghanouri and Gang Sun, (2016). Prediction of Solubility Behavior of Globular Plant Proteins with Hansen Solubility Parameters: A Conformational Study, *ACS Sustainable Chemistry & Engineering,* 2016, *4* (4), pp 2337–2344.

Peixin Tang, Bolin Ji, Gang Sun, (2016). Whiteness improvement of citric acid crosslinked cotton fabrics: H2O2 bleaching under alkaline condition, *Carbohydrate Polymers,* V147, 2016, Pages 139–145.

Bolin Ji, Kelu Yan. Gang Sun, (2016). Investigation on functional properties of 1,2,3,4-butanetetracarboxylic acid crosslinked fabrics impacted by molecular structures and chemical affinity of catalysts, *Industrial and Engineering Chemistry Research,* 2016, *55* (18), pp 5216–5222*,*

Bipin Kumar, Jinlian Hu, Ning Pan, (2016). Smart medical stocking using memory polymer for chronic venous disorders, Biomaterials, 75,174-181.

N. Pan, and R. Postle (2016). “10 Commandments” in Wearable Technologies, China Textile Leader, 54-57,

Bipin Kumar, Jinlian Hu, Ning Pan, (2016). Memory Bandage for Functional Compression Management for Venous Ulcers, Fibers, 4, doi:10.3390/fib4010010.

Bipin Kumar, Jinlian Hu, Ning Pan (2016). A smart orthopedic compression device based on a polymeric stress memory actuator, Materials & Design, DOI10.1016/j.matdes.2016.02.092.

Chengdong Li, Binbin Li, Ning Pan, Zhaofeng Chen, Muhammad Umar Saeed, Tengzhou Xu, Yong Yang, (2016). Thermo-physical properties of polyester fiber reinforced fumed silica/hollow glass microsphere composite core and resulted vacuum insulation panel, Energy and Buildings, 125, 298-309.

Chengdong Li, Muhammad Umar Saeed, Ning Pan, Zhaofeng Chen, Tengzhou Xu, (2016). Fabrication and characterization of low-cost and green vacuum insulation panels with fumed silica/rice husk ash hybrid core material, *Materials & Design*, 107, 440–449.

Ashdown, S.P. (2015). Fit and Movement, Subsection in Chapter 2: Providing Mobility in Clothing. In Watkins, S. M. & Dunne, L. E., *Functional clothing design: From sportswear to spacesuits* (pp 70-79). New York, NY: Fairchild Books, an imprint of Bloomsbury Publishing, inc.

Bragança, S., Arezes, P., Carvalho, M., Ashdown, S. (2016). Implications of dynamic working postures in garments’ comfort. In Sušić et al. (Eds*). Book of Proceedings of the 6th International Ergonomics Conference -  Ergonomics 2016 –  Focus on Synergy*. pp. 31-38.

Tian M., Park, H., Koo, H., Xu, Q., & Li, J. (In press). Impacts of Work Boots and Load Carriage on the Gait of Oil Rig Workers, International Journal of Occupational Safety and Ergonomics.

Kim, S., & Park, H. (2015). Impact of Firefighters’ Protective Clothing and Equipment on

Upper Body Range of Motion. Fashion and Textile Research Journal. 17(4). 635-645.

Tian M., Park, H., Koo, H., Xu, Q., & Li, J. (Under review). Effects of Load Carriage and Work Boots on Oil Rig Workers’ Lower Limb Kinematics, Human Factors and Ergonomics in Manufacturing & Service Industries.

Nancy Elizabeth Allen, Kay Obendorf, and Jintu Fan, Polyoxometalate (POM) Grafted Grooved Nanofibrous Membranes for Improved Self-Decontamination, under review by RSC Advances.

Li, Yanmei, Coffman, C., Ashdown, S.P., & Fan, J. (Under review) A Comparative Study of Disposable Agriculture Coveralls Based on Wearer Trials. Submitted to the International Journal of Clothing Science and Technology

Shaw, A., and P. Schiffelbein. (2016). “Protective Clothing for Pesticide Operators: Part I - Selection of a Reference Test Chemical for Penetration Testing.” *International Journal of Occupational Safety and Ergonomics* (JOSE), Vol. 22, Issue 1, 1-6. doi: 10.1080/10803548.2015.1071926

Shaw, A., and P. Schiffelbein. (2016). “Protective Clothing for Pesticide Operators: Part II - Data Analysis of Fabric Characteristics.” *International Journal of Occupational Safety and Ergonomics* (JOSE), Vol. 22, Issue 1, 7-11.  doi: 10.1080/10803548.2015.1071927

A. Shaw, A. Coleone, and J. Machado-Neto. (2016). “Permeation of Active Ingredient in Pesticide Formulations through Single-use and Reusable Chemical-Resistant Gloves.” *Performance of Protective Clothing and Equipment: 10th Volume, Risk Reduction through Research and Testing.* American Society for Testing and Materials. (Accepted for Publication).

Pham, M., Tanjil, Mostakim, Ruppert-Stroescu, M. (April, 2016) *Application of Gradient Boosting through SAS Enterprise Miner™ 12.3 to Classify Human Activities.* Presented at the SAS Global forum 2016, Las Vegas, NV. <http://support.sas.com/resources/papers/proceedings16/11801-2016.pdf>

M. Balasubramanian, Ruppert-Stroescu, M. (2015). *Developing a 3d-printed obese model for assessing fit of wearable smart garments*. Oral presentation at the Sixth International conference and Exhibition on 3D Body Scanning Technologies, Lugano, Switzerland, October 2015. Extended abstract included in conference proceedings.

Ruppert-Stroescu, M. (2013). *Testing of Electronically Conductive Textiles for Placement in a Medical Garment.* Oral presentation accepted for American Association of Textile Chemists and Colorists (AATCC) International conference, April 2013. Paper included in conference proceedings.

Alam, A K M M., Yapor, J. P., Reynold, M. M., & Li, Y. V. (2016), Study of Polydiacetylene-Poly (Ethylene Oxide) Electrospun Fibers for Temperature Sensitive Biosensors.  *Materials, 9*(3), 202.

Chang, J., Wang, J., Qu, J., Li, Y. V., Ma, L., Wang, L., Wang, X., & Pan, K. (2016), Preparation of α-Fe2O3/polyacrylonitrile nanofiber mat as an effective lead adsorbent. *Environmental Science: Nano*. doi: 10.1039/C6EN00088F

Li, Y. V., Malensek, N., Xiang, C., Sarkar, A. (2016), Colorfastness Properties of Persimmon Dye on Cotton and Wool Fabrics. *Clothing and Textiles Research Journal, 34* (3), 223-234.

Li, Y. V., & Cathles, L. M. (2016), The Surface Interactions of a Near-neutral Carbon Nanoparticle Tracer with Calcite. *Journal of Nanoparticle Research, 18* (3), 1-14.

Park, J, & Langseth-Schmidt, K. (in print). Anthropometric fit evaluation of firefighters’ uniform pants: A sex comparison. *International Journal of Industrial Ergonomics*.

Gioberto, G., Compton, C., and Dunne, L.E. (2016) Machine-Stitched E-textile Stretch Sensors. Sensors & Transducers Journal, 202(7).

Compton, C., and Dunne, L.E. (2016) Pilot Investigation of a Novel Technique for Measuring Dynamic Body-Garment Contact. *Proc. of the International Conference on Environmental Systems.* Vienna, Austria.

Griffin, L., Compton, C., and Dunne, L.E. (2016) An Analysis of the Variability of Anatomical Body References within Ready-to-Wear Garment Sizes. *Proc. of the International Symposium on Wearable Computers,* Heidelberg, Germany.

Berglund, M. E., Duvall, J., and Dunne, L.E. (2016) A Survey of the Historical Scope and

       Current Trends of Wearable Technology Applications. *Proc. of the International*

*Symposium on Wearable Computers,* Heidelberg, Germany.

Reich, J. and Dunne, L.E. (2016) Multi-Modal Wearable Ambient Display: An

       Investigation of Continuous Glucose Monitoring *Proc. of the International*

*Symposium on Wearable Computers,* Heidelberg, Germany.

Boorady, L. M. (December, 2015). Bunker gear for fire fighters: Does it fit today’s firefighters? *Journal of Textile, Apparel and Technology Management*, 9(3), 1-15. <http://ojs.cnr.ncsu.edu/index.php/JTATM/article/view/7916>