**S 1054 Publications, Oct 1, 2013 – Sep 30, 2018**

1. Banerjee, A.,and Sharma, S. (2016). Preparation and Characterization of Biodegradable Electrospun Core-Sheath Yarn for Bio-medical Purposes. American Association of Textile Chemists and Colorists (AATCC) International Conference. Banerjee won the second place in the Graduate Students’ Paper Competition.
2. Banerjee, A., and Sharma, S. (2014). Study of biodegradable polyesters from algal sources for use in future textile fiber applications. American Association of Textile Chemists and Colorists (AATCC) International Conference. Banerjee won the third place in the Graduate Students’ Paper Competition.
3. Banerjee, A. andSharma, S. (2016). Integrated continuous electrospinning nano-core sheath yarn production using biodegradable polymers. AATCC Foundation. ($500)
4. Sharma, S. and ALGIX, LLC ( 2013). Venture Lab proposal. Georgia Research Alliance (GRA). The production of algal bioplastics using a protein-based thermomechanical approach. ($100,000).
5. Jiang, F.; S. Hu, Y.-L. Hsieh, Aqueous synthesis of compressible and thermally stable cellulose nanofibril-silica aerogel for CO2 adsorption, ACS Applied Nano Materials, *1*(12), 6701–6710 (2018).
6. Zhou, J., Y.-L. Hsieh, Conductive polymer protonated nanocellulose aerogels for tunable and linearly responsive strain sensors, ACS Applied Materials and Interfaces, *10*(33), 27902–27910 (2018).
7. Jiang, F., Y.-L. Hsieh, Dual wet and dry resilient cellulose II fibrous aerogel for hydrocarbon-water separation and energy storage applications, *ACS Omega*, 3, 3530−3539 (2018).

4. Jiang, F., D.M. Dinh, Y.-L. Hsieh,Adsorption and desorption of cationic malachite green dye on cellulose nanofibril aerogels, , *Carbohydrate Polymers*, 173: 286-294 (2017).

5. Jiang, F., Y.-L. Hsieh, Cellulose nanofibril aerogels: synergistic improvement of hydrophobicity, strength, thermal stability via crosslinking with diisocyanate, ACS Applied Materials & Interfaces, *9* (3), 2825–2834 (2017).

6. Gu, Jin and Y.-L. Hsieh,Alkaline cellulose nanofibrils from streamlined alkali treated rice straw, ACS Sustainable Chemistry & Engineering, 5: 1730-1737 (2017).

7. Jiang, F., T. Kondo, Y.-L. Hsieh, Rice straw cellulose nanofibrils via aqueous counter collision and differential centrifugation and their self-assembled structures, *ACS Sustainable Chemistry & Engineering*, 4: 1697-1706 (2016).

8. Jiang, F., Y.-L. Hsieh, Self-assembling of TEMPO oxidized cellulose nanofibrils as effected by protonation of surface carboxyls and drying methods, *ACS Sustainable Chemistry & Engineering*, 4:1041-1049 (2016).

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10. Jiang, F., Y.-L. Hsieh, Cellulose nanocrystal isolation from tomato peels and assembled nanofibers, *Carbohydrate Polymers,* 122: 60-68 (2015).

11. Gu, J., Y.-L. Hsieh, Surface and structure characteristics, self-assembling and solvent compatibility of holo-cellulose nanofibrils, *ACS Applied Materials & Interfaces*, *7*(7), 4192–4201 (2015).

12. Jiang, F., Y.-L. Hsieh, Novel holocellulose nanocrystals: amphiphilicity, O/W emulsion and self-assembly, *Biomacromolecules*, 16, 1422-1441 (2015).

1. Xiang, C., Acevedo, N.C., “Biodegradable Bacterial Cellulose Nanocomposites Reinforced with Electrospun Poly(lactic acid)/Lipids Nanofibers”. The Fiber Society 2017 Fall Meeting. Athens, GA, November, 2017.
2. Nakamura, R. and Netravali, A. N., Development of corrugated composites using newspaper and biodegradable or non-biodegradable resins and their mechanical properties, Polymer Composites, **34,** pp 1863-1869,2013.
3. Kim, J. T. and Netravali, A. N., Fabrication of Advanced ‘Green’ Composites using Potassium Hydroxide (KOH) Treated Liquid Crystalline (LC) Cellulose Fibers, J Materials Science**, 48,** pp.3950-3957, 2013.
4. Nakamura, R. and Netravali, A. N., Morgan, A. B., Nyden, M. R., and Gilman, J. W., Effect of Halloysite Nanotubes on Mechanical Properties and Flammability of Soy Protein based Green Composites, Fire and Materials**,** **90**, pp. 75–90, 2013.
5. Ghosh-Dastidar, T. and Netravali, A. N., Crosslinked Waxy Maize Starch based ‘Green’ Nanocomposites, Carbohydrate Polymers, ACS Sustainable Chemistry and Engineering, **1 (12),** pp. 1537-1544, 2013. DOI: 10.1021/sc400113a
6. Ghosh-Dastidar, T. and Netravali, A. N., Novel Thermosetting Resin from Soy Flour Crosslinked using Green Technology, Green Chemistry, **15 (11)**, pp. 3243-3251, 2013. DOI: 10.1039/C3GC40887F
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11. Kim J. R. and Netravali, A. N., One-Step Toughening of Soy Protein based Green Resin using Electrospun Epoxidized Natural Rubber Fibers, ACS Sustainable Chemistry & Engineering, **5 (6),** pp. 4957–4968, 2017. **DOI:** 10.1021/acssuschemeng.7b00347
12. Kim J. R. and Netravali, A. N., "Self-Healing Starch-based ‘Green’ Thermoset Resin", Polymer, [**117**](http://www.sciencedirect.com/science/journal/00323861/117/supp/C), pp. 150-159, 2017. **DOI:** 10.1016/j.polymer.2017.04.026
13. Kim J. R. and Netravali, A. N., Self-healing Green Composites Based on Soy Protein and Microfibrillated Cellulose, Composites Sci. Technol., **143**, pp. 22-30, 2017. **DOI:** 10.1016/j.compscitech.2017.02.030
14. Kim J. R. and Netravali, A. N., Parametric study of protein-encapsulated microcapsule formation and effect on self-healing efficiency of ‘green’ soy protein resin, J. Mater. Sci., **52(6)**, pp. 3028-3047, 2017. **DOI:** 10.1007/s10853-016-0588-y
15. Souzandeh H. and Netravali, A. N., Study and Characterization of Sisal Fiber/Zein Resin Interface, Reviews of Adhesives and Adhesion-Open Access Supplement, Published online,2018. **DOI:** 10.7569/RAA.2018.097307
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17. Sharma, S., Ayton, E., Zeller, M.A., Hunt, R., and Jones, A. (2014). Biodegradable polymeric materials from algae. Book Chapter. Chu, C.- (Ed., Cornell University): Biodegradable polymers: New developments. Nova Science Publishers.
18. Sharma, S., Mandal, A., Wang, K. (2014). Modification of protein rich algal-biomass to form bio-plastics and odor removal. Waste-derived proteins: Transformation from environmental burden into value-added products. Dhillon, Ed. Elsevier Publisher.
19. Banerjee, A., and Sharma, S. (2014). Study of biodegradable polyesters from algal sources for use in future textile fiber applications. American Association of Textile Chemists and Colorists (AATCC) International Conference.
20. Wang, K. (2014) Masters Thesis: “Bioplastic Potential of Spirulina Microalgae.
21. Banerjee, A., Singh, M., Das, K., and Sharma, S. (2016). Study of Biodegradable Polyesters from Algal Sources for Use in Future Textile Fiber Applications. AATCC Journal of Research, 3(1): 1-6 01.
22. R. J. Lozano‑Escárcega, M. G. Sánchez‑Anguiano, Thelma Serrano, J. Y. Chen, and I. Gómez. Synthesis of unsaturated polyester resin from waste cellulose and polyethylene terephthalate. Polymer Bulletin, 2018, DOI: 10.1007/s00289-018-2576-7.
23. Li, W., Mu, B.N., Xu, H.L., Xu, L. and Yang\*, Y.Q. Urea-cysteine Based Extraction of Densely Crosslinked Proteins from Sorghum Distillers Grains with High Yield and Quality. **Industrial Crops and Products**. 121. 360-371(2018).
24. Pan, G.W., Xu\*, H.L., Ma, B.M., Wizi, J. and Yang\*, Y.Q. Polylactide fibers with enhanced hydrolytic and thermal stability via complete stereo-complexation of poly(L-lactide) with high molecular weight of 600,000 and lower-molecular-weight poly(D-lactide). **Journal of Materials Science**. **53**(7). 5490-5500 (2018).
25. Chang, Y., Chen\*, Z.Z., and Yang\*, Y.Q. One-Pot Versatile Synthesis of Branched-Multiblock Copolymers Based on Polylactide and Poly(ε-caprolactone). **Industrial & Engineering Chemistry Research**. **57**(1). 242-249(2018).
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29. Song, K.L., Xu, H.L., Xie, K.L. and Yang\*, Y.Q. Keratin-based biocomposites reinforced and crosslinked with dual-functional cellulose nanocrystals. **ACS Sustainable Chemistry & Engineering**. **5**(7), 5669-5678(2017).
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33. Xu, H.L., Song, K.L., Mu, B.N. and Yang\*, Y.Q. A green and sustainable technology for high-efficiency and low-damage manipulation of densely crosslinked proteins. **ACS Omega**. **2**(5). 1760-1768(2017).
34. Ma\*, B.M., Chen, W.X., Qiao, X., Pan, G.W., Jakpa, W., Hou, X.L. and Yang\*, Y.Q. Tunable wettability and tensile strength of chitosan membranes using keratin microparticles as reinforcement. **Journal of Applied Polymer Science**. **134**(14). 44667 (9 pages). (2017).
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36. Dong, Z., Hou, X.L., Haigler, I. and Yang\*, Y.Q. Preparation and properties of cotton stalk bark fibers and their cotton blended yarns and fabrics. **Journal of Cleaner Production**. **139**. 267-276 (2016).
37. Ma\*, B.M., Qiao, X., Hou, X.L. and Yang\*, Y.Q. Pure keratin membrane and ﬁbers from chicken feather. **International Journal of Biological Macromolecules**. **89**, 614-621(2016).
38. Mu, B.N., Xu, H.L. and Yang\*, Y.Q. Accelerated hydrolysis of substituted cellulose for potential biofuel production: kinetic study and modeling. **Bioresource Technology**. **196**, 332-338 (2015).
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41. Zhao, Y.Z., Zhao, Y., Yang\*, Y.Q. Modified Soy Proteins to Substitute Non-Degradable Petrochemicals for Slashing Industry. **Industrial Crops and Products**. **67.** 466-474 (2015).
42. Ma, Z.Z., Pan, G.W., Xu, H.L., Huang, Y.L., Yang\*, Y.Q. Cellulosic fibers with high aspect ratio from cornhusks via controlled swelling and alkaline penetration. **Carbohydrate Polymers**. **124**. 50-56 (2015).
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45. Hou, X.L., Sun, F., Yan, D., Xu, H.L., Dong, Z., Li, Q. and Yang\*, Y.Q. Preparation of Lightweight Polypropylene Composites Reinforced by Cotton Stalk Fibers from Combined Steam Flash-Explosion and Alkaline Treatment. **Journal of Cleaner Production**. **83**. 454-462 (2014).
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47. Xu, H.L., Ma, Z.Z. and Yang\*, Y.Q. Dissolution and Regeneration of Wool via Controlled Dis-integration and Dis-entanglement of Highly-Crosslinked Keratin. **Journal of Materials Science**. **49**(21) 7513-7521 (2014).
48. Reddy, N., Jiang, J.S., Yang\*, Y.Q., Biodegradable Composites Containing Chicken Feathers as Matrix and Jute Fibers as Reinforcement. **Journal of Polymers and the Environment**. **22**(3) 310-317 (2014).
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55. Reddy, N., Shi, Z., Temme, L., Xu, H.L., Xu, L., Hou, X.L. and Yang\*, Y.Q. Development and Characterization of Thermoplastic Films from Sorghum Distillers Dried Grains Grafted with Various Methacrylates. **Journal of Agricultural and Food Chemistry**. **62**(11), 2406-2411 (2014).
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57. Ma, H., Xu, H.L., Qu, J., Bian W., Zhong, Y. Reddy, N., Yang, Y.Q., and Mao\*, Z. Self-assembly of covalently bonded nano-silicates with controllable modulus and thermal stability. **Composites Science and Technology. 87** 118-125 (2013).
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59. Reddy, N. and Yang\*, Y.Q. Thermoplastic Films from Plant Proteins. **Journal of Applied Polymer Science.**  **130**(2), 729-738 (2013).
60. Yang, Y.Q. and Reddy\*, N., Utilizing Discarded Plastic Bags as Matrix Material for Composites Reinforced with Chicken Feathers. **Journal of Applied Polymer Science**. 130(1) 307-312 (2013).
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62. Reddy, N., Zhao, Y. and Yang\*, Y.Q. Structure and Properties of Cocoons and Silk Fibers Produced by Attacus atlas. **Journal of Polymers and the Environment**. **21**(1) 16-23 (2013).
63. Reddy, N., Han, S, Zhao, Y. and Yang\*, Y.Q. Antimicrobial Activity of Cotton Fabrics Treated with Curcumin. **Journal of Applied Polymer Science**. **127**(4), 2698-2702 (2013).
64. Reddy, N., Chen, L.H. and Yang\*, Y.Q. Thermoplastic Films from Peanut Proteins Extracted from Peanut Meal. **Industrial Crops and Products. 43,** 159-164 (2013).

Conference Presentations (\*=presenters)

1. Li, W., Xu\*, L., Mu, B.N., and Yang, Y.Q. An effective extraction and potential utilization of sorghum proteins from distillers grains. **Cereals & Grains 18**. October 21-23, 2018. **AACC International** annual meeting. London, UK.
2. Yang\*, Y.Q., Pan, G.W., Mu, B.N., Xu, H.L., Xu, L., Ma, B.M., Qian, Z.L., Lao, H.Z. Fully Stereo-Complexed PLLA-PDLA Fibers with Excellent Wet Processing and Performance Properties. **Third International Symposium on Materials from Renewables (ISMR).** July 17 - 18, 2018in Fargo, ND. Keynote lecture (Invited Speech).
3. Yang\*, Y.Q., Cai, S.B., Dong, Z., Hou,X.L., Huda, S., Li, W., Liu, P.C., Mu, B.N., Pan, G.W., Reddy, N., Xu, H.L., Yang, M.P., Zhao, Y., Zou, Y. Textile Materials from Agricultural Byproducts, **2018 International Conference on Eco-Textiles (ICET2018)** (Conference Theme: Sustainability and Eco-Textiles). June 22-24, 2018. Wuxi, China. (Keynote speech).
4. Mu\*, B.N, Xu, H.L., and Yang, Y.Q. Investigation of accelerated hydrolysis of cellulose after chemical modification. Sessions of General Posters. **255th ACS National Meeting & Exposition**, New Orleans, LA, United States, March 18-22, 2018, CARB 75. (March 20)
5. Li\*, W., Mu, B.N., and Yang, Y.Q. Sorghum protein based biocomposites reinforced by cellulose nanowhiskers: effect of hydrolysis time. Session of Biobased Gels & Porous Materials. **255th ACS National Meeting & Exposition**, New Orleans, LA, United States, March 18-22, 2018, CELL-312. (March 21).
6. Li\*, W., Mu, B.N., Xu, H.L., Xu, L., and Yang, Y.Q. Green and efficient extraction of highly crosslinked sorghum protein with preserved backbones. Session of General Papers in Division of Agricultural and Food Chemistry. **255th ACS National Meeting & Exposition**, New Orleans, LA, United States, March 18-22, 2018, AGFD-200. (March 21).
7. Yang\*, Y.Q., Pan, G.W., Xu, H.L., Ma, B.M., Qian, Z.L., and Lao, H.Z. Melt-Spun PLLA-PDLA Fibers with Completely Stereo-Complexed Crystallites. **8th International Conference on Advanced Fibers and Polymer Materials. (ICAFPM 2017 Next-Generation Fibers: Changing Our Life)**, **Session H: Natural Fibers and Biomimetic Polymers**. Keynote Speech. Shanghai, China. October 8-10, 2017.
8. Yang\*, Y.Q., Xu, H.L., and Mu, B.N. Fibers Using Highly Crosslinked Proteins from Agricultural Wastes and Co-Products. **The 17th** **IUMRS-ICA(International Union of Materials Research Societies-International Conference in Asia). Symposium T “Advanced Fibers and Nano-composites”.** Keynote Lecture. Qingdao. China, Oct. 20-24. 2016.
9. Chang\*, Y., Chen, Z.Z., and Yang, Y.Q. Synthesis and Characterization of PCL-b-PLA Multi-copolymers. The 30th Annual Meeting of the China Chemical Society (Section 10, Polymer). Dalian University of Technology. Dalian, Liaoning, China. July 1-4, 2016. (Poster) 聚乳酸/聚己内酯多嵌段共聚物的合成与表征. **中国化学会第30届学术年会,**第十分会：高分子**.** July 1-4, 2016. 大连，辽宁。 大连理工大学。(墙报).
10. Ma, Z., Pan, G.W., Huang, Y., Xu\*, H.L., and Yang, Y.Q. Tetramethylammonium Hydroxide Treated Cornhusk Fibers for Potential Industrial Applications. **248th ACS National Meeting & Exposition,** San Francisco, CA, United States, August 10-14, 2014, I&EC-63.
11. Ma\*, Z., Huang, Y., Pan, G.W., Xu, H.L. and Yang, Y.Q., Chemical & biological treated cornhusk fibers for potential textile applications. **9th Corn Utilization and Technology Conference,** Louisville, Kentucky June 2-4, 2014 (poster).
12. Yang, Y.Q. Agricultural Wastes and Byproducts for the Sustainable Growth of Textile Industry. Environment and Green Development Session. **International Conference on Engineering Science and Technology 2014 (ICEST 2014, Engineering and the Future of Humankind).** June 2-3, 2014. Beijing, China. Co-Organized by the Chinese Academy of Engineering (CAE), United Nations Educational, Scientific and Cultural Organization (UNESCO), and International Council of Academies of Engineering and Technological Sciences (CAETS). Invited speech.
13. Hou, X.L., Yan, D., Sun, F., Cheng, Y. and Yang\*, Y.Q. Effect of pre-treatment for cotton stalk bark on mechanical properties of lightweight polypropylene composites. **246th ACS National Meeting & Exposition,** Indianapolis, IN, United States, September 8-12, 2013, CELL-19.
14. Jiang\*, J., Reddy, N., and Yang, Y.Q., Biocomposites developed using poultry feathers as matrix and reinforcement. **246th ACS National Meeting & Exposition,** Indianapolis, IN, United States, September 8-12, 2013, CELL-21.
15. Xu\*, H.L., and Yang, Y.Q., Novel regenerated protein fibers from chicken feather keratin. **246th ACS National Meeting & Exposition,** Indianapolis, IN, United States, September 8-12, 2013, CELL-23.
16. Temme\*, L., Reddy, N., Shi, Z., and Yang, Y.Q., Properties and potential applications of components extracted from sorghum distillers dried grains. **246th ACS National Meeting & Exposition,** Indianapolis, IN, United States, September 8-12, 2013, CELL-28.
17. Pan\*, G.W., Hou, X.L., and Yang, Y.Q., Preparation and mechanical properties of poly(lactic acid)/wheat straw fibers composites. **246th ACS National Meeting & Exposition,** Indianapolis, IN, United States, September 8-12, 2013, CELL-29.
18. Sharma, S., Jones, A., Ayton, E., Hunt, R., and Zeller, M.A. (2013). Bioplastics and thermoplastic blends made from Spirulina and Chlorella Microalgae species. Proceedings of Global Plastics Environmental Conference (GPEC).
19. Banerjee, A., and Sharma, S. Study of Biocompatibility and Cell proliferation on Microalgal Polyhydroxy Butyrate (PHB) Fibrous Structures for Wound Healing Applications. American Association of Textile Chemists and Colorists (AATCC) International Conference at Savannah, GA, March 2015.
20. Banerjee, A., and Sharma, S. Cyanobacterial Polyhydroxyalkanoates: A Biosynthesis and Industrial Economics Perspective. BSRI Annual Retreat, UGA, GA, May 2015.
21. Banerjee, A., Sharma, S. (2016). Preparation and Characterization of Biodegradable Electrospun core-sheath yarn for Bio-medical purposes. Poster session presented at the meeting of American Association of Textile Chemists and Colorists (AATCC) International Conference at Williamsburg, VA
22. Banerjee, A., & Sharma, S. (2016). Polyhydroxybutyrate (PHB) based Nano-yarn and its Applications in Bio-Textiles. In South East Graduate Consortium, Athens, GA
23. Banerjee, A., and Sharma, S. Polyhydroxyalkanoate based Nano fibrous structures and their application in Biomedical field. Advanced Functional Fabrics of America (AFFOA) Industry Day, UGA, GA, October 2016.
24. Banerjee, A., and Sharma, S. Polyhydroxybutyrate (PHB) based Nano-yarn and its Applications in Bio-Textiles. South Eastern Graduate Consortium, Auburn University, Alabama, March 2016.
25. Sharma, S., Banerjee, A. (2017). A Novel Approach for Preparation of Continuous Biodegradable Polyester based Nano Sheath-Core Yarn for Biomedical Application. 2017 Fall Conference, The Fiber Society.
26. Banerjee, A., & Sharma, S. (2016). Polyhydroxyalkanoate based Nano fibrous structures and their application in Biomedical field. Poster session presented at the meeting of Advanced Functional Fabrics of America (AFFOA) Industry Day, Athens, GA

Refereed Journal Articles (\*=corresponding authors)

1. Cui\*, L., Reddy, N., Xu, H.L., Fan, X.R. and Yang\*, Y.Q. Enzyme-Modified Casein Fibers and their Potential Application in Drug Delivery. **Fibers and Polymers**. **18**(5). 900-906 (2017).
2. Xu, H.L. and Yang\*, Y.Q. Nanoparticles derived from plant proteins for controlled release and targeted delivery of therapeutics. Editorial, **Nanomedicine. 10**(13)2001-2004 (2015).
3. Liu, P., Xu, H.L., Mi, X., Xu, L. and Yang\*, Y.Q. Oxidized sucrose: a potent and biocompatible crosslinker for three-dimensional fibrous protein scaffolds. **Macromolecular Materials and Engineering. 300**(4), 414-422 (2015).
4. Xu, H.L., Liu, P., Mi, X., Xu, L. and Yang\*, Y.Q. Potent and regularizable crosslinking of ultrafine fibrous protein scaffolds for tissue engineering using a cytocompatible disaccharide derivative. **Journal of Materials Chemistry B. Materials for Biology and Medicine. 3**(17)3609-3616 (2015).
5. Reddy, N., Shi, Z., Xu, H.L. and Yang\*, Y.Q. Development of Wheat Glutenin Nanoparticles and their Biodistribution in Mice. **Journal of Biomedical Materials Research Part A.** **103**(5), 1653-1658 (2015).
6. Xu, H.L., Shen, L., Xu, L. and Yang\*, Y.Q. Controlled delivery of hollow corn protein nanoparticles via non-toxic crosslinking: in vivo and drug loading study. **Biomedical Microdevices**. **17**(1):8, 8 pages (2015).
7. Xu, H.L., Shi, Z., Reddy, N. and Yang\*, Y.Q. Intrinsically Water-Stable Keratin Nanoparticles and Their In Vivo Biodistribution for Targeted Delivery**. Journal of Agricultural and Food Chemistry. 62**(37) 9145-9150 (2014).
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Conference Presentations (\*=presenters)

1. Xu\*, H.L., Liu, P., Mi, X., Xu, L., and Yang, Y.Q. Three dimensional fibrous corn protein scaffolds with citric acid crosslinking for biomedical applications. **10th Corn Utilization and Technology Conference,** St. Louis, MO. June 6-8, 2016 (poster).
2. Xu, H.L., Mi, X. and Yang\*, Y.Q. Regenerated keratin fibers and their potential applications in textile and biomedical industries. The Fiber Society’s Spring 2015 Conference (FS Spring 2015) in conjunction with the 2015 International Conference on Advanced Fibers and Polymer Materials (ICAFPM 2015 Functional Fibers and Textiles). Shanghai, China. May 24–27, 2015 (Keynote Speech, invited. 30min. May 25 in the session of Fiber Applications in Medical, Transportation and Energy).
3. Elena Ferrari\*, Helan Xu, Yiqi Yang, Mark A. Carlson, and David Oupický. Development of dichloroacetate biomaterials for prevention of postoperative adhesions. **12th International Nanomedicine and Drug Delivery Symposium (NanoDDS’14).** Chapel Hill, NC, October 6-8, 2014.
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5. Xu\*, H.L., Reddy, N., Ma, Z. and Yang, Y.Q., Potential of zein nanoparticles for biomedical applications: in vitro and in vivo studies. **9th Corn Utilization and Technology Conference,** Louisville, Kentucky June 2-4, 2014 (poster).
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7. Jiang, J., Xu, H.L. and Yang\*, Y.Q. Water-stable 3D soyprotein scaffolds for soft tissue regeneration. **246th ACS National Meeting & Exposition,** Indianapolis, IN, United States, September 8-12, 2013, CELL-24.
8. Huang\*, Y., Xu, H.L., and Yang, Y.Q., Potential of 3D porous scaffolds from feather keratin for cartilage repair. **246th ACS National Meeting & Exposition,** Indianapolis, IN, United States, September 8-12, 2013, CELL-27.
9. Refereed Journal Articles (\*=corresponding authors)
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13. Zhao, Y., Pan, G.W., Xu, H.L. and Yang\*, Y.Q. Compression Molded Composites from Waste Polypropylene Carpets. **Polymer Composites.** 39(3). 595-605(2018).
14. Mu, B.N., Xu, H.L. and Yang\*, Y.Q. Improved Mechanism of Polyester Dyeing with Disperse Dyes in Finite Dye Bath. **Coloration Technology**. **133**(5). 415-422(2017).
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Conference Presentations

1. Anuradhi Liyanapathiranage, Suraj Sharma, Sergiy Minko. “Colloidal chemistry of NFC based sustainable textile dyeing technology and factors affecting dye performance”. **American Chemical Society-Spring National Meeting.** Orlando, FL. March 31 - April 4, 2019
2. Anuradhi Liyanapathiranage,Yunsang Kim, Lauren McCoy, Corbin Feit, Eliza Lee, Alexey Gruzd, Raha Saremi, Hansol Lee, Paula F. De Castro Dmitry G. Shchukin, Igor A. Luzinov, Sudhagar Mani, Ian R. Hardin, Suraj Sharma, Sergiy Minko “Potential Applications of Fibrillated Nanocellulose for a Sustainable Textile Coating Technology**”. Southern Textile Research Conference.**Myrtle Beach, SC, October 7-9, 2018
3. Anuradhi Liyanapathiranage,Yunsang Kim, Lauren McCoy, Corbin Feit, Eliza Lee, Alexey Gruzd, Raha Saremi, Hansol Lee, Paula F. De Castro Dmitry G. Shchukin, Igor A. Luzinov, Sudhagar Mani, Ian R. Hardin, Suraj Sharma, Sergiy Minko.“ Sustainable Industrially Reliable Novel Textile Dyeing Technology and High-Performance Functional Coatings from Nanocellulose**”. International Symposium on Materials from Renewables (ISMR).**Fargo, ND, July 17-18, 2018
4. Anuradhi Liyanapathiranage,Yunsang Kim, Lauren McCoy, Corbin Feit, Eliza Lee, Alexey Gruzd, Raha Saremi, Hansol Lee, Paula F. De Castro Dmitry G. Shchukin, Igor A. Luzinov, Sudhagar Mani, Ian R. Hardin, Suraj Sharma, Sergiy Minko. “Nanocellulose Based Sustainable and Environmentally Sound Textile Dyeing and Finishing Technology”. **Techtextil North America.** Atlanta. GA, May 22 – 24, 2018
5. Minko, S. (2018). Biodegradable Filament Nanofibers. In Materials From Renewables, 3d International Symposium. North Dakota State University, Fargo, ND,
International, Invited
6. Minko, S. (2018). Wearable sensors utilizing nanofiber technology. In ACS National Meeting and Expo. Convention Center, New Orleans, LA, International, Invited
7. Yunsang Kim, Lauren Tolbert, Eliza Lee, Corbin Feit, Raha Saremi, Ian Hardin, Paula Felix De Castro, Dmitry Shchukin, Suraj Sharma, Sergiy Minko, Nanocellulose Functional Coatings on Fabric Surface. The Fiber Society 2016 Fall Meeting and Technical Conference, Cornell University, October 10-12, Ithaca, NY.
8. Yunsang Kim, Lauren McCoy, Eliza Lee, Raha Saremi, Hansol Lee, Corbin Feit, Igor A. Luzinov, Sudhagar Mani, Ian R. Hardin, Suraj Sharma, Sergiy Minko. “Nanocellulose hydrogels for sustainable textile dyeing”, **International Symposium on Materials from Renewables**, Fargo, ND, July 19-20, 2016.
9. Yunsang Kim, Lauren McCoy, Eliza Lee, Raha Saremi, Hansol Lee, Corbin Feit, Igor A. Luzinov, Sudhagar Mani, Ian R. Hardin, Suraj Sharma, Sergiy Minko. Invited talk: “Nanocellulose‐based dyeing: a more sustainable way to dye textiles”, **American Apparel & Footwear Association Environmental Committee Meeting**, Austin, TX, July 19, 2016.
10. Yunsang Kim, Lauren McCoy, Eliza Lee, Raha Saremi, Hansol Lee, Corbin Feit, Igor A. Luzinov, Sudhagar Mani, Ian R. Hardin, Suraj Sharma, Sergiy Minko. “Efficient, Sustainable, and Scalable Textile Dyeing Technology Using Nanocellulosic Fibers”, **Textile innovation meeting in** **Walmart U.S. Manufacturing Summit**, Bentonville, AR, June 28, 2016.
11. Yunsang Kim, Lauren McCoy, Eliza Lee, Raha Saremi, Hansol Lee, Corbin Feit, Igor A. Luzinov, Sudhagar Mani, Ian R. Hardin, Suraj Sharma, Sergiy Minko. "Efficient, sustainable, and scalable textile dyeing technology using nanocellulosic fibers”, **1st prize winner (€50,000) in Green & Sustainable Chemistry Challenge by Elsevier Foundation,** Berlin, Germany, April 3-6, 2016.
12. Yunsang Kim, Lauren McCoy, Eliza Lee, Ian R. Hardin, Suraj Sharma, Sergiy Minko. “Nanocellulose for functional surface modification and coatings on textile fabrics”. **The Fiber Society 2015 Fall Meeting**, Raleigh, NC, October 28-30, 2015.
13. Sergiy Minko, Suraj Sharma, Ian Hardin, Igor Luzinov, Sandy Wu Daubenmire, Andrey Zakharchenko, Raha Saremi, Yun Sang Kim, Less Textile dyeing using nanocellulosic fibers, Patent US 2016/0010275 A1.
14. Anuradhi Liyanapathiranage, Suraj Sharma, Sergiy Minko. “Environmentally sustainable and industrially reliable textile dyeing technology from fibrillated nanocellulose”. **AATCC-International Conference.** Forth Worth, Texas. April 9-11, 2019
15. Anuradhi Liyanapathiranage, Suraj Sharma, Sergiy Minko. “Commercial and Environmental Benefits of NFC Based Sustainable Textile Dyeing”. **Techtextil North America.** Raleigh, NC. February 26 – 28, 2019
16. Anuradhi Liyanapathiranage,Yunsang Kim, Lauren McCoy, Corbin Feit, Eliza Lee, Alexey Gruzd, Raha Saremi, Hansol Lee, Paula F. De Castro Dmitry G. Shchukin, Igor A. Luzinov, Sudhagar Mani, Ian R. Hardin, Suraj Sharma, Sergiy Minko. “Sustainable Novel Industrial Applications of Fibrillated Nanocellulose”. **International Symposium on Materials from Renewables (ISMR).**Fargo, ND, July 17-18, 2018
17. Anuradhi Liyanapathiranage,Yunsang Kim, Lauren McCoy, Corbin Feit, Eliza Lee, Alexey Gruzd, Raha Saremi, Hansol Lee, Paula F. De Castro Dmitry G. Shchukin, Igor A. Luzinov, Sudhagar Mani, Ian R. Hardin, Suraj Sharma, Sergiy Minko. “Nanocellulose Based Sustainable and Environmentally Sound Textile Dyeing and Finishing Technology”. **Techtextil North America.** Atlanta. GA, May 22 – 24, 2018
18. Anuradhi Liyanapathiranage,Yunsang Kim, Lauren McCoy, Corbin Feit, Eliza Lee, Alexey Gruzd, Raha Saremi, Hansol Lee, Paula F. De Castro Dmitry G. Shchukin, Igor A. Luzinov, Sudhagar Mani, Ian R. Hardin, Suraj Sharma, Sergiy Minko. “Environmentally Sound Textile Dyeing and Finishing Technology from Nanocellulose” **National Science Foundation: Industry–University Cooperative Research Centers Program (NSF-IUCRC).** Athens. GA, February 6-7, 2018
19. Yunsang Kim, Lauren McCoy, Corbin Feit, Alexey Gruzd, Eliza Lee, Paula F. De Castro
20. Dmitry G. Shchukin, Ian R. Hardin, Suraj Sharma, Sergiy Minko. “Nanocellulose Hydrogels for Functional Coating Materials in Textile Applications”, **Advanced Functional Fabrics of America (AFFOA) Industry Day**, Athens, GA, October 20, 2016
21. Yunsang Kim, Lauren McCoy, Eliza Lee, Raha Saremi, Hansol Lee, Corbin Feit,
22. Igor A. Luzinov, Sudhagar Mani, Ian R. Hardin, Suraj Sharma, Sergiy Minko. “Sustainable Textile Dyeing Based on Nanocellulose Hydrogels and Reactive Dyes”. **Advanced Functional Fabrics of America (AFFOA) Industry Day**, Athens, GA, October 20, 2016
23. Lauren Tolbert, Yunsang Kim, Eliza Lee, Mykhailo Savchak, Igor Luzinov, Ian R. Hardin, Suraj Sharma, Sergiy Minko. “Development, processing, and novel applications of sustainable nanocellulose gel”. **2015 TAPPI International Conference on Nanotechnology for Renewable Materials**, Atlanta, GA, June 22-25, 2015
24. Mu, B.N., Li, W., Xu, H.L., Xu, L., Yang\*, Y.Q. Freeze Extrusion and Its Uniqueness. Session F-Advanced Fiber and Functional Textile Materials. **2018 International Seminar on Advanced Materials Research** (2018 ISAMR). August 2-5, 2018. Shanghai, China. (Keynote Lecture).
25. Mu, B.N., Xu, H.L. and Yang\*, Y.Q. Reactive Tendering: Mechanism and Solution. **Chemical Applications Track, AATCC 2018 International Conference**. March 6-8. 2018. Greenville, SC.
26. Mu\*, B.N, Xu, H.L., and Yang, Y.Q. Environmental benign and salt-free reactive dyeing of cellulose using a cottonseed oil/water system to achieve high dye fixation. Session of Valorization of Renewable Resources into New Materials & Multiphase Systems. **255th ACS National Meeting & Exposition**, New Orleans, LA, United States, March 18-22, 2018, CELL-347. (March 21)
27. Mu, B.N., Xu, H.L. and Yang\*, Y.Q. Accelerated Hydrolysis of Cellulosics after Reactive Dyeing. **The Fiber Society’s Fall 2017 Technical Meeting and Conference and International Symposium on Materials from Renewables (Advanced, Smart, and Sustainable Polymers, Fibers, and Textiles)**. November 8-10, 2017. Athens, Georgia, USA.
28. Xu, H.L., Palakurthi, M., Xu, L. and Yang\*, Y.Q. Compression molded composites from waste polyester and cotton textiles. Session of Processing & Properties of Biobased Composites & Blends. **253rd ACS National Meeting & Exposition,** San Francisco, CA, United States, April 2-6, 2017, CELL-309. (April 4, 1:55-2:20 pm).
29. Zhao, Y., Xu, H.L. and Yang\*, Y.Q. Evaluate the use of soymeal as warp sizing agent. **Fibers & Thermoplastics Technical Advisory Panel (TAP) meeting**, sponsored by the **United Soybean Board**. Charlotte, NC. August, 16-17, 2016.
30. Yiqi Yang\*. The Sustainable Growth of Textile Industry. **International Symposium on Materials from Renewables (ISMR).** July 19 - 20, 2016in Fargo, ND. Keynote lecture.
31. Xu\*, H.L., Liu, P., Mi, X., Xu, L., and Yang, Y.Q. Potent and controllable crosslinking of ultrafine fibers from zein using disaccharide derivative. **10th Corn Utilization and Technology Conference,** St. Louis, MO. June 6-8, 2016 (poster).
32. Xu, H.L., Liu, P., Mi, X., Xu, L., Li\*, W. and Yang, Y.Q. Water stable films from zein crosslinked by oxidized sucrose for packing applications. **10th Corn Utilization and Technology Conference,** St. Louis, MO. June 6-8, 2016 (poster).
33. Zhao, Y., Xu, H.L., Zhao, Y.Z., Xu, L. and Yang\*, Y.Q. Soyprotein based biochemicals to replace PVA for high speed weaving. **The Fiber Society’s Fall 2015 Meeting and Technical Conference**. North Carolina State University, Raleigh, North Carolina, USA. Oct. 28-30, 2015.
34. Zhao, Y., Xu, H.L., Zhao, Y.Z., Xu, L. and Yang\*, Y.Q. Biodegradable Slashing Agents from Soy Protein for Textile Industry. **250th ACS National Meeting & Exposition,** Boston, MA, United States, August 16-20, 2015, I&EC-103. (Aug. 20, 8:30-8:50am).
35. Liu\*, J., Wang, B.J., Chen, J.G., Xu, X.M., and Yang, Y.Q. Non-toxic, renewable, and cost-effective crosslinking system based on citric acid and xylitol as a replacement of the formaldehyde-releasing N-methylol crosslinkers. **250th ACS National Meeting & Exposition**, Boston, MA, United States, August 16-20, 2015, ENVR-525. (Aug. 19, 6:00-8:00pm. Poster).
36. Zhao, Y., Xu, H.L., Zhao, Y.Z. and Yang\*, Y.Q. Evaluate the use of soy proteins as warp sizing agent. **Fibers & Thermoplastics Technical Advisory Panel (TAP) meeting**, sponsored by the **United Soybean Board**. Charlotte, NC. August, 5-6, 2015.
37. Xu\*, S.X., Chen, J.G. and Yang, Y.Q. Molecular Surface Area Based Predictive Models for the Adsorption and Diffusion of Disperse Dyes in Polylactic Acid Matrix. **250th ACS National Meeting & Exposition**, Boston, MA, United States, August 16-20, 2015, PHYS-503. (Aug. 19, 6:00-8:00pm. Poster).
38. Wang, B.J., Chen, L., Ruan, X.H., Chen, J.G. and Yang\*, Y.Q. Sustainable dyeing technique using environmental friendly solvents to eliminate waste streams from coloration of cotton. **250th ACS National Meeting & Exposition**, Boston, MA, United States, August 16-20, 2015, ENVR-525. (Aug. 19, 6:00-8:00pm. Poster).
39. Xu, S.X., Chen, J.G. and Yang\*, Y.Q. Sustainable and Hydrolysis-Free Dyeing Process for Polylactic Acid Using Non-Aqueous Medium. **250th ACS National Meeting & Exposition**, Boston, MA, United States, August 16-20, 2015, ENVR-524. (Aug. 19, 6:00-8:00pm. Poster).
40. Chen\*, L.Y., Chen, J.G., Ruan, X.H., Xu, S.X., Yang, Y.Q., and Wang, B.J. Sustainable reactive dyeing of cotton fabric in green non-aqueous medium: a density function theory (DFT) modeling study. Session X: Eco-Dyeing/Printing of Textiles. The 13th International Wool Research Conference (IWRC-13) and AATCC Sustainability Symposium (AATCC-SS). Hangzhou, China. June 10-14, 2015. (Poster)
41. Chen\*, L.Y., Ruan, X.H., Chen, J.G.,  Yang, Y.Q., and Wang, B.J. Recyclable reactive dyeing of wool fabrics in environmental friendly non-aqueous medium for a more sustainable textile industry. Session X: Eco-Dyeing/Printing of Textiles. The 13th International Wool Research Conference (IWRC-13) and AATCC Sustainability Symposium (AATCC-SS). Hangzhou, China. June 10-14, 2015. (Poster)
42. Xu\*, S.X., Chen, J.G., Chen, L.Y., Wang, B.J. and Yang, Y.Q. Sorption thermodynamic and kinetic study of polylactic acid fibers with disperse dyes in non-aqueous medium. Session X: Eco-Dyeing/Printing of Textiles. The 13th International Wool Research Conference (IWRC-13) and AATCC Sustainability Symposium (AATCC-SS). Hangzhou, China. June 10-14, 2015. (Poster)
43. Ruan\*, X.H., Chen, L.Y., Chen, J.G., Yang, Y.Q., and Wang, B.J. Reactive dyeing of cotton using vinyl sulfone dyes in green non-nucleophilic organic solvents: dye adsorption and fixation. Session X: Eco-Dyeing/Printing of Textiles. The 13th International Wool Research Conference (IWRC-13) and AATCC Sustainability Symposium (AATCC-SS). Hangzhou, China. June 10-14, 2015. (Poster)
44. Xu, H.L., Mi, X. and Yang\*, Y.Q. Three-dimensional electrospun ultrafine fibers from keratin. Session VII: Textile-Based Materials. The 13th International Wool Research Conference (IWRC-13) and AATCC Sustainability Symposium (AATCC-SS). Hangzhou, China. June 10-14, 2015 (Keynote Speech, invited).
45. Liu\*, J., Xu, X.M., Hu, H.C., Yang, Y.Q., and Wang, B.J. Citric acid as a cost-effective, eco-friendly cross-linker for resilience enhancement of cotton fabrics: a comprehensive comparison to DMDHEU and DMEDHEU. Session XI: Functional Materials and Functional Finishing . The 13th International Wool Research Conference (IWRC-13) and AATCC Sustainability Symposium (AATCC-SS). Hangzhou, China. June 10-14, 2015. (Poster)
46. Yi Zhao, Helan Xu\*, Yiqi Yang. Textile Size from Soyproteins for High Speed Weaving. 2015 AATCC International Conference. Hilton DeSoto, Savannah, GA, March 24-26, 2015. In New Developments Section of Materials Track (2:45-3:15pm, March 26).
47. Zhao, Y., Xu, H.L., Zhao, Y.Z. and Yang\*, Y.Q. Protein based sizing for a more sustainable textile industry. Symposium on Textile Chemicals: Risk Assessment and Green Alternatives. Donghua University. Shanghai, China. May 22, 2015. (Keynote speech. Invited. 40min).
48. Zhao\*, Y.Z.; Wang, B.J.; Zhao, Y.; Yang, Y.Q. Development and preparation of eco-friendly protein sizing agents. 2014 Annual Meeting of Chinese Society for Environmental Sciences, Chengdu, China, August 22-23, 2014, Section: Technology Innovation and Industry Upgrading of Water Pollution Control.
49. Ye\*, T.; Wang, B.J.; Yao W.T.; Liu J.; Yang Y.Q. Non-formaldehyde durable press finishing technology with high whiteness and washability of cotton fabrics treated by citric acid. 2014 Annual Meeting of Chinese Society for Environmental Sciences, Chengdu, China, August 22-23, 2014, Section: Technology Innovation and Industry Upgrading of Water Pollution Control.
50. Chen\*, L.Y.; Wang, B.J.; Ruan, X.H.; Yang, Y.Q. Waterless and salt-free reactive dyeing on cotton. 2014 Annual Meeting of Chinese Society for Environmental Sciences, Chengdu, China, August 22-23, 2014, Section: Technology Innovation and Industry Upgrading of Water Pollution Control.
51. Zhao\*, Y., Yang, Y.Q. Acrylic Acid Grafted Soy Proteins as Warp Sizing Agents to Replace Poly(vinyl) Alcohol. **248th ACS National Meeting & Exposition,** San Francisco, CA, United States, August 10-14, 2014, AGFD -137.
52. Canisag\*, H., and Yang, Y.Q. Crosslinking of Starch Films with A Bio-based Crosslinker. **248th ACS National Meeting & Exposition,** San Francisco, CA, United States, August 10-14, 2014, AGFD-138.
53. Reddy\*, N., Zhang, Y., Pan, G.W. and Yang, Y.Q., Developing sustainable & green warp sizing agents from corn Distillers Dried Grains. **9th Corn Utilization and Technology Conference,** Louisville, Kentucky June 2-4, 2014 (poster).
54. Zhao\*, Y., Pan, G.W., Yang, Y.Q. Composites for Furniture and Construction Industries from Discarded Carpets. **248th ACS National Meeting & Exposition,** San Francisco, CA, United States, August 10-14, 2014, I&EC-97.
55. Shen, L., Xu\*, H.L. and Yang, Y.Q., Quantitative analysis of reaction between gliadin and citric acid under weak acidic and weak alkaline conditions.  **246th ACS National Meeting & Exposition,** Indianapolis, IN, United States, September 8-12, 2013, CELL-20.