CURRICULUM VITAE

NAME: Xiuzhi Susan Sun, Ph.D. University Distinguished Professor, Bio-Materials & Technology Lab

1. EDUCATION

- Ph.D. Agricultural & Biological Engineering, University of Illinois, Urbana, IL, USA, May 1993
- M.S. Agricultural Engineering, Northeast Agricultural University, China, Dec. 1986
- B.S. Agricultural Engineering, Northeast Agricultural University, China, Dec. 1982

2. RESEARCH INTERESTS

Biopolymers, bioproducts and biorefining process engineering; Structure and functional properties of biomacromolecules; Biobased adhesives and coatings, Biodegradable plastics; and Hydrogels.

3. CURRENT TEACHING

GRSC 830, Physical Properties of Cereal Polymers; GRSC 740, Biomaterial Processing;

4. ACADEMIC APPOINTMENTS

1. I CI ID LIMI	
2011- pres	University Distinguished Professor, Department of Grain Science and
	Industry, Department of Biological and Agricultural Engineering, Kansas
	State University.
2015 – pres	Ancillary Faculty, University Distinguished Professor, Department of
	Biological and Agricultural Engineering, Kansas State University.
2019-pres	Adjunct Full Professor, Wake Forest University, School of Medicine,
	Wake Forest Institute of Regenerative Medicine.
2018 Fall	Visiting Researcher (Sabbatical), Wake Forest University, School of
	Medicine, Wake Forest Institute of Regenerative Medicine.
2007 - 2018	Co-Director, Center for Biobased Polymers By Design.
2012 – pres	Founder, PepGel, LLC.
2004 - 2011	Professor, Grain Science and Industry, Kansas State University.
2001 - 2004	Associate Professor, Grain Science and Industry, Kansas State University.
1996 - 2001	Assist. Professor, Grain Science and Industry, Kansas State University.
1995 to 1995	Lecturer/Research Associate, Agricultural Engineering, Texas A&M
	University.
1989 to 1993	Research and Teaching Assistant, Agricultural & Biological Engineering,
	University of Illinois.
1982 to 1989	Lecturer, Agricultural Engineering, Northeast Agricultural University,
	Harbin, China.

5. HONOR and AWARDS (selected)

- Fellow, National Academy of Inventors, 2018.

- Fellow, American Society of Agricultural and Biological Engineers, 2016.
- USPTO Innovation Award: 2015 Innovation Festival Display at the Smithsonian National Museum of American History.
- Colloquia Distinguished Lecture, University of Southern California, Nov 6-7, 2013
- 50 Kansans You Should Know recognition, Ingram's KS, 2013
- Lifetime Achievement Award, BioEnvironmental Polymers Society, 2012
- Inaugural Women of Distinction, Kansas State University, 2012
- Higuchi Research Achievement Award Applied Science, State of Kansas, 2011
- Scientist, Science in Kansas150th Anniversary, 2011
- Outstanding Food Scientist Award, Institute of Food Technology Society, 2008.
- Outstanding Senior Scientist Award, The Scientific Research Society, Sigma XI, 2007.
- Outstanding Service Award, American Association of Cereal Chemists, 2001.

6. FUNDING RECORDS

Total \$20+ million extramural and internal funding sponsored by USDA, NSF, DOE, DOD, The State of Kansas, Kansas State University, and Industries from Jan 1996 to date.

8. PUBLICATIONS (selected from total of 520 publications in terms of SCI referee articles, books, book chapters, patents, conference papers/presentations, and invited seminars)

- Quan Li[†], Guangyan Qi[†], Xuming Liu, Jianfa Bai, Jikai Zhao, Guosheng Tang, Yu Shrike Zhang, Ruby Chen-Tsai, Meng Zhang, Donghai Wang, Yuanyuan Zhang, Anthony Atala, Jia-Qiang He, Xiuzhi Susan Xun^{*}, 2021, Universal Peptide Hydrogel for Scalable Physiological Formation and Bioprinting of 3D Spheroids from Human Induced Pluripotent Stem Cells. Advanced Functional Materials, DOI:10.1002/adfm.202104046.
- 2. Jingwen Xu, Guangyan Qi, Weiqun Wang, Xiuzhi Susan Sun, 2021, Advances in 3D peptide hydrogels for cancer research, Nature Partnership Journal, Science of Food, DOI 10.1038/s41538-021-00096-1.
- Jun Li, Sarocha Pradyawong, Xiuzhi S. Sun, Donghai Wang, Zhongqi He, Junyan Zhong, Huai N. Cheng, 2021, Improving adhesion performance of cottonseed protein by the synergy of phosphoric acid and water soluble calcium salts, International Journal of Adhesion and Adhesives, 108 (2021): 102867, https://doi.org/10.1016/j.ijadhadh.2021.102867
- **4.** Pradyawong, Sarocha; Qi, Guangyan; Zhang, Meng; Sun, Xiuzhi Susan; Wang, Donghai, 2021, Effect of pH and pH-shifting on adhesion performance and properties of lignin-protein adhesives, Transactions of the ASABE, (accepted 2021).
- **5.** Zhao, J., J. Li, G. Qi, X. S. Sun, D. Wang. 2021. Two nonnegligible factors influencing valorization. of lignocellulosic biomass to biofuels: Filtration method

after pretreatment and solid loading during enzymatic hydrolysis. Energy & Fuels Energy Fuels 35 (2): 1546–1556 (<u>https://doi.org/10.1021/acs.energyfuels.0c03876</u>).

- Xu. Y., J. Zhao, R. Hu, W. Wang, J. Griffin, Y. Li, X.S. Sun, D. Wang. 2021. Effect of genotype on the physicochemical, nutritional, and antioxidant properties of hempseed. J. Agriculture and Food Research 3 (2021) 100119 (https://doi.org/10.1016/j.jafr.2021.100119).
- 7. Jun Li, Haijing Lin, Scott R. Bean, Xiuzhi S. Sun, Donghai Wang, 2020, Evaluation of adhesive performance of a mixture of soy, sorghum and canola proteins, Industrial Crops and Products, doi.org/10.1016/j.indcrop.2020.112898
- Yajuan Wang, Yanting Shen, Guangyan Qi, Ya Li, Xiuzhi Susan Sun, Dan Qiu, Yonghui Li, 2020, Formation and physicochemical properties of amyloid fibrils from soy protein, International Journal of Biological Macromolecules, 149 (2020): 609-616.
- 9. Tiffany Carter, Guangyan Qi, Weiqun Wang, Annelise Nguyen, Nikki Cheng, Young Min Ju, Sang Jin Lee, James Yoo, Anthony Atala, and Xiuzhi Susan Sun, 2020, Self-Assembling Peptide Solution Accelerates Hemostasis, Journal of Advances in Wound Care, PMID: 32716728, DOI: 10.1089/wound.2019.1109
- 10. Jingwen Xu, Guangyan Qi, Chunxia Sui, Weiqun Wang, Xiuzhi Sun, 2019, 3D h9e peptide hydrogel: An advanced three-dimensional cell culture system for anticancer prescreening of chemopreventive phenolic agents. Toxicology in Vitro, 61(2019)104599.
- 11. Liu, J. M. Wu, M. Wang, Y. Zou, Z. Tan, D. Wang, XS. Sun. Predicting the content of camelina protein using FT-IR spectroscopy coupled with SVM model. Cluster Computing (2019) 22:S8401–S8406 (<u>https://doi.org/10.1007/s10586-018-1838-3</u>).
- 12. Yonghui Li, Cong Li, Xiuzhi Susan Sun. 2019. Fundamental Insights into the Curing Mechanisms of Epoxidized Fatty Acid Methyl Esters and Triglycerides. AOCS DOI 10.1002/aocs.12260.
- 13. Shiwei Xu, Yanting Shen, Jingwen Xu, Guangyan Qi, Gengjun Chen, Weiqun Wang, Xiuzhi Sun, Yonghui Li, 2019, Antioxidant and anticancer effects in human hepatocarcinoma (HepG2) cells of papain-hydrolyzed sorghum kafirin hydrolysates, Journal of Functional Food, 58: 374-382.
- 14. Jingwen Xu, Xiaoyu Su, Yonghui Li, Xiuzhi Susan Sun, Donghai Wang, and Weiqun Wang, 2019, Response of Bioactive Phytochemicals in Vegetables and Fruits to Environmental Factors, Europen Journal of Nutrition and Food Safety, 9(3): 233-247, 2019; Article no.EJNFS.2019.035, ISSN: 2347-5641.
- 15. Longkun Li, Guihuan Liu, X. Susan Sun, Peter Timashev, Tracy Criswell, Anthony Atala, Yuanyuan Zhang, 2019, Biofabrication of Tissue-Specific Extracellular Matrix Proteins to Enhance the Expansion and Differentiation of Skeletal Muscle Progenitor Cells, Applied Physics Reviews, 6, 021309 (2019); doi.org/10.1063/1.5088726
- 16. Li, J., S. Pradyawong, Z. He, S.X. Sun, D. Wang, H. Cheng, J. Zhong. 2019. Assessment and application of phosphorus/calcium-cottonseed protein adhesive for plywood production. Journal of Cleaner Production 229:454-462.
- Pradyawong, S., G. Qi, X.S. Sun, D. Wang. 2019. Laccase/TEMPO-Modified Lignin Improved Soy-Protein-Based Adhesives: Adhesion Performance and Properties. International Journal of Adhesion and Adhesives 91 (2019) 116-122.

- Jonggeun Sung and Xiuzhi Susan Sun, 2018, Cardanol modified fatty acids from camelina oils for flexible bio-based acrylates coatings, Progress in Organic Coatings, 123: 242-253.
- **19.** Haijing Liu, Scott Bean, Xiuzhi Susan Sun[,] 2018, Camelina protein adhesives enhanced by polyelectrolyte interaction for plywood applications, Industrial Crops and Products, 124: 343-352.
- **20.** Yonghui Li, Donghai Wang, Xiuzhi Susan Sun, 2018, Epoxidized and acrylated camelina oils for UV curable wood coatings. AOCS doi.org/10.1002/aocs.12123.
- **21.** Xiwen Cao, Ningbo Li, Guangyan Qi, Xiuzhi Susan Sun, Donghai Wang, 2018, Effect of spray drying on the properties of camelina gum isolated from camelina seeds. Industrial Crops and Products, 117: 278-285.
- 22. Cong, Li, Jiwen Liu, Yizhou Chen, Tao Li, Xiaoxia Cai, Jonggeun Sung, and Xiuzhi Susan Sun, 2018, Hybrid Network via Instantaneous Photoradiation: High Efficient Design of 100% Bio-Based Thermosets with Remoldable and Recyclable Capabilities after UV Curing, Chemical Engineering Journal, 336 (2018) 54-63.
- 23. Emery Brown, Seok-Hwan Park, Ayyappan Elangovan, Yue Yuan, Jooyoun Kim, Xiuzhi Susan Sun, Xiaoming Zhang, Guohong Wang, and Jun Li, 2018, Facilitating High-Capacity V2O5 Cathodes with Stable Two and Three Li+ Insertion Using a Hybrid Membrane Structure Consisting of Amorphous V2O5 Shells Coaxially Deposited on Electrospun Carbon Nanofibers, Electrochimica Acta 269 (2018): 144-154.
- 24. Pradyawong, S., J. Li, Z. He, X.S. Sun, D. Wang, H.N. Cheng, K. T. Klasson. 2018. Blending cottonseed meal products with different protein contents for cost-effective wood adhesion performances. Industrial Crops and Products 126(2018).
- **25.** Jun Liang, Gang Liu1, Jing Wang, and Xiuzhi Susan Sun, 2017, Controlled release of BSA-linked cisplatin through a PepGel self-assembling peptide nanofber hydrogel scaffold, Amino Acids, DOI 10.1007/s00726-017-2444-z.
- 26. X. Zhu, D. Wang, N. Li, X. S. Sun, 2017. A Bio-Based Wood Adhesive from Camelina Protein (a Biodiesel Residue) and De-Polymerized Lignin with Improved Water Resistance, ACS Omega, DOI: 10.1021/acsomega.7b01093.2 (11): 7996-8004
- 27. C. Li, X. Cai, J. Sung, H. Wang, S. H. Bossmann, and X. S. Sun, 2017, Fatty acid chain combined with cycloaliphatic rings via Amberlyst-15: a promising structure for a high bio-content epoxy design, *Journal of Polymer Science Part A: Polymer Chemistry*, 55:794-800.
- **28.** Jun Liang, X. Susan Sun, Zhilong Yang, Shuai Cao, 2017, Anticancer Drug Camptothecin Test in 3D Hydrogel Networks with HeLa cells, Scientific Report 7: 37626.
- **29.** Ke Zhang, Zhenglin Tan, Chengci Chen, Xiuzhi Susan Sun, and Donghai Wang, 2017, Rapid Prediction of Camelina Seed Oil Content Using Near-Infrared Spectroscopy, Energy&Fuels, 31: 5629–5634.
- 30. Yonghui Li, Shih-Hsiung Chou, Wenting Qian, Jonggeun Sung, Shing I Chang, Xiuzhi Susan Sun. 2017. Optimization of soybean oil based pressure-sensitive adhesives using a full factorial design. Journal of the American Oil Chemists' Society, 94, 713-721.

- **31.** Xiangwei Zhu, Donghai Wang, Xiuzhi Susan Sun. 2017. Carbodiimide stabilizes the ultrasound-pretreated camelina protein structure with improved water resistance. *Industrial Crops and Product*. 97(2017) 196-200.
- **32.** Li, N., S. Pradyawong, Z. He, X.S. Sun, D. Wang. 2017. Effect of drying methods on the physicochemical properties and adhesion performance of water-washed cottonseed meal. Industrial Crops and Products, 109, 281-287.
- **33.** Pradyawong, S., G. Qi, N. Li, X.S. Sun, D. Wang. 2017. Adhesion properties of soy protein adhesives enhanced by biomass lignin. International Journal of Adhesion and Adhesives 75(2017) 66-73.
- **34.** Gaind P. Pandey, Tao Liu, Cody Hancock, Yonghui Li, Xiuzhi Susan Sun, Jun Li, 2016, Thermostable gel polymer electrolyte based on succinonitrile and ionic liquid for high-performance solid-state supercapacitors, Journal of Power Sources, 328 (2016): 510-519.
- 35. Gaind P. Pandey, Tao Liu, Emery Brown, Yiqun Yang, Yonghui Li, Xiuzhi Susan Sun, Yueping Fang, and Jun Li, 2016, Mesoporous Composite of Reduced Graphene Oxide-Vanadium Oxide for Lithium-ion Batteries and Electrochemical Capacitors with Enhanced Electrochemical Performance, ACS Applied Materials & Interfaces 2016, 8 (14): 9200–9210
- **36.** H. Liu, X.S. Sun, C. Li. 2016. Blend soy protein adhesives with soy-oil-based waterborne polyurethane to improve wet strength on wood. J of Adhesion and Adhesives, <u>http://dx.doi.org/10.1016/j.ijadhadh.2016.09.006</u>
- 37. Li, Cong, Yonghui Li, Xiaoxia Cai, Hongwang Wang, Stefan H Bossmann, Jonggeun Sung, and Xiuzhi Susan Sun, 2016, Competitive Nucleophilic Attack Chemistry Based on Undecenoic Acid: A new Chemical Route for Plant Oil-based Epoxies. ACS Sustainable Chemistry and Engineering, 4: 5718-5729, DOI:10.1021/acssuschemeng.6b01656
- **38.** Li, Cong, T. Li, X. Cai, X. S. Sun. 2016. Substantially Reinforcing Plant Oil-Based Materials via Cycloaliphatic Epoxy with Double Bond-Bridged Structure, Polymer, 107: 19-28.
- **39.** G. Qi, N. Li, X. S. Sun, Y. Shi , D. Wang, 2016, Effects of glycerol and nanoclay on physiochemical properties of camelina gum-based films, Carbohydrate Polymers, 152: 747-754
- **40.** G. Qi, N. Li, D. Wang, and X.S. Sun. 2016. Adhesive performance of camelina protein affected by extraction conditions. Transaction of the ASABE, 59(3): 1083-1090. (doi: 10.13031/trans.59.11686).
- 41. G. Qi, N. Li, D. Wang, X.S. Sun. 2016. Development of high performance soy protein adhesives using sodium montmorillonite clay modified soy protein. JAOCS 93(11): 1519-1528
- **42.** N. Li, G. Qi, X.S. Sun, D. Wang. 2016. Characterization of gums isolated from camelina seeds. Industrial Crops and Products, 83: 268-274.
- **43.** X. Zhu, D. Wang, and X.S. Sun. 2016. Physic-chemical properties of camelina protein altered by sodium bisulfite and guanidine-HCl. Industrial Crops and Products 83(2016):453-461.
- **44.** Li, Cong, J. Sung, X.S. Sun. 2016. Network from Dihydrocoumarin via Solvent-Free Metal-Mediated Pathway: A Potential Structure for Substantial Toughness

Improvement of Epoxidized Plant Oil Materials. ACS Sustainable Chemistry & Engineering, 2016, 4: 1231-1239

- **45.** Min Jung Kim, Xiuzhi Susan Sun. 2015, Correlation between physical properties and shear adhesion strength of enzymatically modified soy protein-based adhesives. JAOCS, 19: 1-12.
- **46.** Y. Li, Donghai Wang, Xiuzhi Susan Sun. 2015. Copolymers from epoxidized soybean oil and lactic acid oligomers for pressure-sensitive adhesives. Royal Society of Chemistry, RCS Advances, 5. 27256-27265.
- **47.** G.P. Pandey, S.A. Klankowski, Y. Li, X.S. Sun, J. Wu, R.A. Rojeski, and J. Li. 2015. Effective Infiltration of Gel Polymer Electrolyte into Silicon-Coated Vertically Aligned Carbon Nanofibers as Anodes for Solid-State Lithium-ion Batteries. *ACS Applied Materials & Interfaces*, 7, 20909-20918.
- **48.** Y. Li, X.S. Sun. 2015. Camelina oil derivatives and adhesion properties. Industrial Crops and Products, 73, 73-80.
- **49.** Y. Li, X.S. Sun. 2015. Synthesis and characterization of acrylic polyols and polymers from soybean oils for pressure-sensitive adhesives. RSC Advances, 5, 44009-44017.
- **50.** H. Liu, C. Li, X.S. Sun. 2015. Improved Water Resistance in Undecylenic Acid (UA)-Modified Soy Protein Isolate (SPI)-Based Adhesives. Industrial Crops and Products, 74:577-584
- **51.** Y. Li, X.S. Sun. 2015. Polyols from epoxidized soybean oil and alpha hydroxy acids and adhesion properties from UV polymerization. *International Journal of Adhesion and Adhesives*, 63, 1-8.
- 52. D. Kumar, C. Kandl, C. Hamilton, Y. Shnayder, T. T. Tsue, K. Kakarala, L. Ledgerwood, X. S. Sun, H. H. Huang, D. Girod, S. M. Thomas. 2015, Mitigation of Tumor-Associated Fibroblast-Facilitated Head and Neck Cancer Progression With Anti–Hepatocyte Growth Factor Antibody Ficlatuzumab, J of American Medical Association (JAMA)-Otolaryngology, 141 (12): 1133-1139, Doi:10.1001/jamaoto.2015.2381
- **53.** Namhoon Kim, Yonghui Li, Xiuzhi Susan Sun. 2015. Epoxidation of Camelina sativa oil and peel adhesion properties. *Industrial Crops and Products*, 64, 1-8. Cited 26 by 2018
- **54.** N. Li, G. Qi, X.S. Sun, and D. Wang. 2015. Adhesion property of camelina protein fractions isolated with different sequences. Industrial Crops and Products, 69, 263-272.
- 55. Hongzhou Huang, Debabani Ganguly, Jianhan Chen, and Xiuzhi S. Sun, 2015, Conformational Flexibility and pH Effects in Anisotropic Growth of Sheet-like Assembly by Amphiphilic Peptides, J of Nanoscience and Nanotechnology, 15: 4470-4479.
- **56.** Jonggeun Sung, Yonghui Li, Xiuzhi Susan Sun. 2015. Plasticization effects of dihydroxyl soybean oil improve flexibilities of epoxy-based films for coating applications. *Journal of Applied Polymer Science*, *Vol 132(6)*: 41773.
- **57.** Min Jung Kim, Xiuzhi Susan Sun. 2014. Adhesion properties of soy protein crosslinked with organic calcium silicate hydrate hybrids, *Journal of Applied Polymer Science*, 131(17). 40693, doi: <u>10.1002/app.40693</u>.

- **58.** Ningbo Li, Guangyan Qi, Xiuzhi Susan Sun, Donghai Wang, Scott R Bean, Deidre Blackwell. 2014. Isolation and characterization of protein fractions isolated from camelina meal. *Transactions of the ASABE*, 57, 1, 169-178.
- **59.** Yonghui Li, Caihong Chen, Jun Li, Xiuzhi Susan Sun. 2014. Photoactivity of poly(lactic acid) nanocomposites modulated by TiO2 nanofillers. *Journal of Applied Polymer Science*, 131, 40241, doi: 10.1002/app.40241.
- **60.** Yonghui Li, Donghai Wang, Xiuzhi Susan Sun. 2014. Oxirane cleavage kinetics of epoxidized soybean oil by water and UV-polymerized resin adhesion properties. *J Am Oil Chem Soc*, 92(1): 121-131.
- **61.** Yonghui Li, Xiuzhi Susan Sun. 2014. Di-hydroxylated soybean oil polyols with varied hydroxyl values and their influence on UV-curable pressure-sensitive adhesives. *J Am Oil Chem Soc*, 91(8): 1425-1432.
- **62.** L. Peña, K. L. Hohnb, J. Li, X.S. Sun and D. Wang. 2014. Effect of synthesis conditions on surface and catalytic properties of propyl-sulfonic acid-functionalized nanoparticles. J. Biomaterials and Nanobiotechnology 5(4): 241-253.
- **63.** Y. H. Li, C. Chen, J. Li, X. S. Sun, 2013, Photoactivity of Poly(lactic acid) nanocomposites modulated by TiO₂ nanofillers, J of Applied Polymer Science, DOI: 10.1002/app.40241
- **64.** Li, X., Galliher-Beckley, A.J., Nietfeld, J.C., Huang, H., Sun, X., Faaberg, K.S., and Shi, J. 2013, Peptide nanofiber hydrogel adjuvanted live virus vaccine induces cross-protective immunity to porcine reproductive and respiratory syndrome virus, Vaccine 31 (2013), pp. 4508-4515
- **65.** Zhigang Xiao, Yonghui Li, Xiaorong Wu, Guangyan Qi, Ningbo Li, Ke Zhang, Donghai Wang, and Xiuzhi Susan Sun, 2013, Utilization of Sorghum Lignin to Improve Adhesion Strength of Soy Protein Adhesives on Wood Veneer, Industrial Crops and Products, 50:501-509
- **66.** Guangyan Qi, Ningbo Li, Donghai Wang, Xiuzhi Susan Sun, 2013, Adhesion and physicochemical properties of soy protein modified by sodium bisulfite, J. American Oil Chemistry, 90(12): 1917-1926
- **67.** Guangyan Qi, Ningbo Li, Donghai Wang, Xiuzhi Susan Sun, 2013, Physicochemical properties of soy protein adhesives modified by 2-octen-1-ylsuccinic anhydride, Industrial Crops and Products, 46. 165-172
- **68.** Ahn, B. Kollbe, Jonggeun Sung, Nassim Rahmani, George Wang, Namhoon Kim, Kevin Lease, and Xiuzhi Susan Sun, 2013, UV-curable, high-shear pressure-sensitive adhesives derived from acrylated epoxidized soybean oil. J. Adhesion, 89: 1-16.
- **69.** Huang H, Ding Y, Sun XS, Nguyen TA, 2013, Peptide Hydrogelation and Cell Encapsulation for 3D Culture of MCF-7 Breast Cancer Cells. PLoS ONE 8(3): e59482. doi:10.1371/journal.pone.0059482
- **70.** Xin Li, Donghai Wang, Jo A. Ratto, Xiuzhi Susan Sun, 2013, Production of High Strength, Thin-layered, Pulp Fiberboard Using Soy Protein Adhesives, J of Adhesion Science and Technology, 27(18-19):2065-2074.
- **71.** Mo, Xiaoqun, and X. Susan Sun, 2013, Soy protein plywood adhesives: formulation and characterization, J of Adhesion Science and Technology, 27(18-19):2014-2026.
- **72.** Ahn, B. Kollbe, Jonggeun Sung, Namhoon Kim, Stefan Kraft, and Xiuzhi Susan Sun, 2013, UV-curable pressure-sensitive adhesives derived from functionalized soybean

oils and rosin ester, Polymer International, 62(9): 1293-1301, online DOI: 10.1002/pi.4420.

- **73.** Ahn, B. Kollbe, Jonggeun Sung, Yonghui Li, Namhoon Kim, Nihar Mohanty, Myles Ikenberry, Phong Nguyen, Keith Hohn, Vikas Berry, and Xiuzhi Susan Sun, 2012, Synthesis and characterization of amphiphilic reduced graphene oxide with epoxidized methyl oleate, Advanced Materials, 24:2123-2129.
- 74. Huang, Hongzhou, Alvaro I. Herrera, Zhiping Luo, Om Prakash, Xiuzhi S. Sun, 2012, Structural transformation and physical properties of a hydrogel forming peptide studied by NMR and TEM, Biophysical Journal, 103: 979-988.
- 75. Ahn, Byung-Jun; Kraft, Stefan; Sun, Xiuzhi, 2012, Solvent-free acid-catalyzed ring opening of epoxidized oleochemicals using stearates/stearic acid, and its applications, J Agriculture and Food Chemistry 60:2179-2189
- 76. Yan, S., X. Wu, J. Faubion, S. Bean, L. Cai, Y-C. Shi, X.S. Sun, and D. Wang. 2012. Ethanol production performance of ozone treated tannin grain sorghum flour. Cereal Chem. 89 (1):30-37.
- **77.** Li, Yonghui, Xiuzhi Susan Sun, 2011, Nanocomposites of poly(lactic acid) and surface grafted MgO nanoparticles: preparation and characterization, J. Biobased Materials and Bioenergy, 5:452-459.
- **78.** Sun, Xiuzhi Susan, 2011, Soy Protein Polymers and Adhesion Properties, J Biobased Materials and Bioenergy, 5: 1-24
- **79.** Wu, X., J. Markham, X.S. Sun, and D. Wang. 2012, Optimization of catalytic fast pyrolysis of biomass for hydrocarbon yield. Transaction of the ASABE, 55(5):1879-1885.
- **80.** N. Li, G. Qi, X.S. Sun, and D. Wang. 2012. Effects of sodium bisulfite on the physicochemical and adhesion properties of canola protein fractions. J. Polymers and Environment, (2012) 20:905-915.
- **81.** Qi, G., N. Li, D. Wang, and X.S. Sun. 2012. Physicochemical properties of soy protein adhesives obtained by in situ sodium bisulfate modification during acid precipitation. AOCS Oil Chemistry 89 (2):301-312.
- **82.** Li, N., G. Qi, X. S. Sun, M. J. Stamm, D. Wang, 2012, Physicochemical properties and adhesion performance of canola protein modified with sodium bisulfite, Journal of American Oil Chemists' Society, 89: 897-908
- 83. Li, Yonghui, Caihong Chen, Jun Li, Xiuzhi Susan Sun, 2012, Isothermal Crystallization and Melting Behaviors of Bionanocomposites from Poly(lactic acid) and TiO₂ Nanowires, J of Applied Polymer Science, 124:2968-2977,
- 84. Ahn, B. Kollbe, Hongwang Wang, Shona Robinson, Tej B. Shrestha, Deryl L. Troyer, Stefan Bossmann, Xiuzhi Susan Sun, 2012, Ring opening of epoxidized methyl oleate using novel acid functionalized iron nanoparticle catalyst, Green Chemistry, 14: 136-142.
- **85.** Ahn, B. Kollbe, Jonggeun Sung, Xiuzhi Susan Sun, 2012, Phosphate esters functionalized dihydroxyl soybean oil fackifier of pressure-sensitive adhesives, J of American Oil Chemistry, 89:909-915
- 86. Pena, L, M. Ikenberry, B. Ware, K. L. Hohn, D. Boyle, X. S. Sun and D. Wang, 2011, Cellobiose hydrolysis using acid-functionalized nanoparticles, Biotechnology and Bioprocess Engineering, 16(6), 1214-1222

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- 88. Huang, Hongzhou, Jishu Shi, Juilia Laskin, Ziyan Liu, David S. McVey, and Xiuzhi Susan Sun, 2011, Design of a shear-thinning recoverable peptide hydrogel from native sequences and application for influenza H1N1 vaccine adjuvant, Soft Matter 7 (19), 8905 8912
- 89. Qi, Guangyan, Karthik Venkateshan, Xiaoqun Mo[,] Lu Zhang[,] and Xiuzhi Susan Sun, 2011, Physicochemical properties of soy protein: effects of subunit composition, J Agr & Food Chem, 59,9958-9964
- **90.** N. Li, Y. Wang, M. Tilley, SR. Bean, X, Wu, X. S. Sun, and D. Wang. 2011. Adhesive Performance of Sorghum Protein Extracted from Sorghum DDGS and Flour. J. Polymers and the Environment 19 (3) 755-765
- **91.** Byung-Jun Kollbe Ahn, Stefan Kraft and Xiuzhi Susan Sun, 2011, Chemical Pathways of Epoxidized and Hydroxylated Fatty Acid Methyl Esters and Triglycerides with Phosphoric Acid, J of Materials Chemistry, 21, 9498-9505
- 92. Byung-Jun Kollbe Ahn, Stenphen, Donghai Wang, Xiuzhi Susan Sun, 2011, Thermally Stable Transparent Pressure Sensitive Adhesives from Epoxidized and Dihydroxyl Soybean Oil, Biomacromolecules, 12, 1839-1843
- **93.** Yonghui Li, Caihong Chen, Jun Li, Xiuzhi Susan Sun, 2011, Synthesis and Characterization of Bionanocomposites of Ploy(lactic Acid) and TiO2 Nanowires by in situ Polymerization, Polymer 52, 2367-2375
- **94.** Guoping Yu, H. Liu, K. Venkateshan, S. Yan, J. Cheng, X. S. Sun, and D. Wang, 2011. Functional, physiochemical, and rheological properties of duckweed (*Spirodela polyrhiza*) protein. Transactions of the ASABE, 54(2): 555-561
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- **96.** Qi, Guangyan and Xiuzhi Susan Sun, 2011, Soy Protein Adhesive Blends with Synthetic Latex on Wood Veneer, J American Oils Chemistry, 88 (2), 271-281
- 97. Li, Yonghui, Xiuzhi Susan Sun, 2011. Mechanical and thermal properties of biocomposites from poly(lactic acid) and DDGS Blends, J. of Applied Polymer Science, 121: 589-597
- 98. Shera, Jeanne, Daisuke Takahashi, Alvaro I. Herrera, Om Prakash, and Xiuzhi Susan Sun²010, Morphology and structural properties of pH-responsive amphiphilic peptides, JNN 10, 7981-7987
- **99.** Huang, Hongzhou and Xiuzhi S. Sun. 2010, Rational design of responsive selfassembling peptides from native protein sequences, Biomacromolecules, 2010, 11,3390-3394.
- **100.** Li, Yonghui, Karthik venkateshan, Xiuzhi Susan Sun, 2010, Mechanical and Thermal Properties, Morphology, and Relaxation Characteristics of Poly (lactic acid) and Soy Flour/Wood Flour Blends, Polymer International, 59(8), 1099-1109.
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