Shaojin Wang

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EXPERTISE

- Thermal death kinetics of microorganisms and insect pests
- Thermal/dielectric properties measurement of agricultural products related to microwave/radio frequency (RF) heating
- Computer simulation model development for RF heating uniformity
- Value added food processing technologies including drying and thermal processing
- Advanced thermal processing technologies for food safety and non-chemical pest control in international trades

EDUCATION

1994-1998 Gembloux Agricultural University (Belgium)
Ph. D. in Agricultural and Biological Engineering
http://www.fsagx.ac.be/

1983-1986 Zhejiang University (P. R. China)
Master degree in Agricultural Engineering
http://www.zju.edu.cn/

1978-1982 Zhejiang University (P. R. China)
Bachelor degree in Mechanical Engineering

PROFESSIONAL EXPERIENCE

RESEARCH

2014-present **Professor, Associate Dean,** College of Mechanical and Electronic Engineering
Northwest A&F University**,** Yangling, China
http://en.nwsuaf.edu.cn/

2011-2013 **Professor**, College of Mechanical and Electronic Engineering
Northwest A&F University**,** Yangling, China
http://en.nwsuaf.edu.cn/

2005-2011 **Assistant Research Professor**, Department of Biological Systems Engineering
Washington State University**,** Pullman, WA
http://www.wsu.edu/

2000-2004 **Research Associate**, Department of Biological Systems Engineering
Washington State University**,** Pullman, WA

1998-1999 **Research Engineer**, Bio-environmental station, INRA, Avignon, France
http://www.avignon.inra.fr/

1991-1993 **Lecturer**, Department of Agricultural Engineering
Zhejiang University, Hangzhou, P. R. China

1989-1990 **Visiting Research Fellow,** Department of Physics
Gembloux Agricultural University, Gembloux, Belgium

1986-1989 **Assistant Lecturer**, Department of Agricultural Engineering

Zhejiang University, Hangzhou, P. R. China

RESEARCH GRANTS

PI Northwest A&F University**,** Yangling, China

- Awarded US$133,000 (RMB800,000) by Program of Introducing International Advanced Agricultural Science and Technologies (948 Program) of Ministry of Agriculture of China (2014-Z21, PI: **S. Wang,** W. Guo, and X. Li) (1/1/2014-12/30/2015)
- Awarded US$5,000 (RMB30,000) by Open Fund for Key Laboratory of Physical Processing of Agricultural Product in Jiangsu Province (JAPP2013-2, PIs: **S. Wang**) (1/1/2014-12/30/2015)
- Awarded US$140,000 (RMB850,000) by General Program of National Natural Science Foundation in China (No. 31371853, PIs: **S. Wang**, X. Li, and H. Tian) (1/1/2014-12/30/2017)
- Awarded US$238,000 (RMB1500,000) by Special Talent Fund of Northwest A&F University (No. Z111021101 PI: **S. Wang**) (11/23/2011-11/22/2014)
- Awarded US$19,000 (RMB120,000) by Ph.D. Programs Foundation of Ministry of Education of China (20120204110022, PIs: **S. Wang**, H. Tian and X Zhu) (1/01/2013-12/30/2015)
- Awarded US$16,700 (RMB100,000) by Shaanxi Agricultural Science and Technology Innovation and Research Project (2013K01-50, PIs: **S. Wang**, X. Zhu and H. Tian) (1/01/2013-12/30/2015)

Department of Biological Systems Engineering, Washington State University

- Awarded $190,374 by a competitive grant from USDA-PMA (No. 2010-02626, PIs: **S. Wang**, T. Davenport and J. Johnson) on 04/03/2010 (10/01/2010-09/30/2012)
- Awarded $160,889 by a competitive grant from USDA-CSREES (No. 2008-34103-19091, PIs: **S. Wang**, J. Tang and J. Johnson) on 03/25/2008 (09/01/2008-08/31/2010)
- "Awarded ¥80,000RMB for a seed grant by Yangling International Academy of Modern Agriculture (YIAMA), Northwest A&F University, Yangling, China (PIs: **S. Wang** and W. Guo) on 07/10/2010

Co-PI Department of Biological Systems Engineering, Washington State University

- Awarded $496,514 entitled *"Factors affecting pasteurization efficacy for salmonella in low-moisture foods"* by a competitive grant from USDA-AFRI (Marks, B.P., Tang, J., Ryser, E.T., **Wang, S.**, and Jeong, S) (01/01/2012-12/31/2014)
- Awarded $542,824 entitled *"*Improving Process Validation Methods for Multiple Pasteurization Technologies Applied to Low-Moisture Foods*"* by a competitive grant from USDA-NIFSI (PI: Marks, B.P., Tang, J., Ryser, E.T., **Wang, S.**, and Jeong, S) on 08/31/11 (WSU: $181,369, 01/01/2012-12/31/2014)
- Awarded $30,000 by USDA Special Program on 05/25/2009
- Awarded $57,220 by Abbott Laboratories, Columbus, OH on 02/25/2008
- Awarded $335,000 by USDA-NRI on 05/04/2005 (No. 2005-35503-16223)
- Awarded $445,881 by USDA-CSREES on 06/11/2004 (No. 2004-51102-02204)
- Awarded $71,846 by Potato Foundation in WA State on 05/20/2004 (No. 13S-3031-4303)
- Awarded $130,000 by California Department of Food and Agriculture (CDFA) on 01/15/2003 (No. 02-0652)
- Awarded $30,000 by IMPACT Center Federal Funds on 10/15/2001 (No. 11D-3024-6903)

RESEARCH PROPOSALS

2010-present Department of Biological Systems Engineering, Washington State University

- Submitted a proposal ($1,498,776) entitled *"Enhancing Control of Emerging Salmonella Phenotypes and Genotypes in Low-Moisture Foods using Multiple Process Technologies"* as Co-PI (Marks, B.P., Tang, J., Ryser, E.T., Mahdi Saeed, A., **Wang, S.**, and Jeong, S) to USDA-AFRI (06/29/2010)
- Submitted a proposal ($570,666) entitled *"Novel Postharvest Treatments for Controlling Pathogens in Nuts Using Radio Frequency Energy"* as PI (**S. Wang**, J. Tang, DH Kang, E. Mitcham, and J. Johnson) to USDA-National Integrated Food Safety Initiative (01/19/2010)
- Submitted a proposal ($299,872) entitled *"Developing Sustainable Approaches for Improved Management and Detection of Angular Leaf Spot in Commercial Strawberry Production"* as Co-PI (N. Peres, W. Turechek, and **S. Wang**) to USDA-Crops at Risk Program (03/22/2010)
- Submit a proposal ($199,982) entitled *"Thermal Death Kinetics of Salmonella in Low-Moisture High-Fat Foods"* as Co-PI (B. Rasco, J. Tang and **S. Wang**) to ILSI North America Technical Committee on Food Microbiology (04/01/2010)
- Submitted a proposal ($570,666) entitled *"Novel Postharvest Treatments for Controlling Pathogens in Nuts Using Radio Frequency Energy"* as PI (**S. Wang**, J. Tang, DH Kang, E. Mitcham, and J. Johnson) to USDA-National Integrated Food Safety Initiative (01/19/2010)

1999-2005 Department of Biological Systems Engineering, Washington State University

- Assisted (15% contributions) Dr. Tang in proposal writing, which was awarded $1.2 million by USDA-IFAFS (04/15/00)
- Assisted (55% contributions) Dr. Tang in proposal writing, which was awarded $350,000 by BARD (05/25/01)
- Assisted (15% contributions) Dr. Tang in proposal writing, which was awarded $190,000 by USDA- IREECGP (07/15/01)
- Assisted (25% contributions) Dr. Tang in proposal writing, which was awarded $23,000 by California Walnut Commission (04/25/01)
- Assisted (15% contributions) Dr. Tang in proposal writing, which was awarded $150,000 by USDA-IREECGP (09/01/01)
- Assisted (45% contributions) Dr. Tang in proposal writing, which was awarded $25,000 every year by IMPACT Center Federal Funds (2000-2003)

GROUP LEADER

2002-present Department of Biological Systems Engineering, Washington State University

- Assisted Dr. Juming Tang to supervise visiting professors, X. Yin, W. Guo, & Maria Elena Sosa Morales, and Ph.D. students, S. L. Birla and G. Tiwari

TEACHING

2005-present **Assistant Research Professor,** Biological Systems Eng., Washington State Univ.

- Serve as a committee member of 3 PhD students and 1 Master Degree student
- Assisted to supervise Ph.D. students, G. Tiwari, S. Jiao and B. AlFaifi
- Taught 3h for 3-credit class BsysE 484/584: *Thermal Processing of Foods*

2002-2005 Department of Biological Systems Engineering, Washington State University

- Assisted to supervise Ph.D. student, Sohan L. Birla

- Provided three technical training courses (4h each) for USDA-ARS in Hilo, HI, Weslaco, TX and Parlier, CA

1999-2001 Department of Biological Systems Engineering, Washington State University
- Assisted Dr. Juming Tang to supervise Ph.D. student, K. Luechapattanaporn
- Assisted Dr. Tang to supervise master student, Y. Rodriguez

1998-1999 **Research Engineer**, Bio-environmental station, INRA, Avignon, France
- Assisted Dr. T. Boulard to supervise Ph.D. student, R. Haxaire

1991-1993 **Lecturer**, Department of Agricultural Engineering
Zhejiang Agricultural University, Hangzhou, P. R. China
- Classes taught: *Instrumentation for environmental physiology* for undergraduate students
- Classes taught: *Principles of environmental engineering* for graduate students

1986-1989 **Assistant Lecturer**, Department of Agricultural Engineering
Zhejiang Agricultural University, Hangzhou, P. R. China
- Classes taught: *Principles of Agricultural and Bioenvironmental Engineering* for undergraduate students
- Supervised eleven senior undergraduates in their graduation projects

INSTRUMENTATION

Experienced in using: 915 MHz microwave and 27 MHz radio frequency (RF) heating systems, thermal imaging camera, Campbell and Delta-T data acquisition systems, HP network and Impedance analyzers, sonic anemometer, fiber optical temperature measurement system, thermocouples, and thermal resistance sensors, and solar radiation measurement facilities

COMPUTER SKILL

Systems: UNIX, Windows
Languages: FORTRAN, BASIC, ALGOL, HTML, JAVA
Applications: Sigma Plot, MS Office, WordPerfect, Quattro Pro, MatLab, FEMLAB, Paintbrush, CFD2000, TRNSYS, Flowchart

CLASSES AUDITED AT WSU

Spring, 2000. ENTOM 340: Agricultural Entomology
Fall, 2000. EE 331: Electromagnetic Fields and Waves
Spring, 2001. CPTS 253: JAVA Program
Fall, 2001. BSYSE 584: Thermal Processing of Foods
Fall, 2002. BSYSE 581: Advanced Physical Properties of Foods

PROFESSIONAL AFFILIATION

1. American Society of Agricultural and Biological Engineers (ASABE)
2. Institute of Food Technologists (IFT)
3. International Microwave Power Institute (IMPI)
4. Association of Overseas Chinese Agricultural, Biological, and Food Engineers (AOCABFE)

SERVICE IN PROFESSIONAL ASSOCIATION

2014-Present Editorial Board Member of Emirates Journal of Food and Agriculture.
2014-2015 FPE-01 Food Processing Executive Committee Secretary of ASABE
2013-Present Editorial Board Member of Annals of Food Processing and Preservation.
2013-Present Section Editor of The Open Entomology Journal.

2012-Present	Division Editor of International Journal of Agricultural and Biological Engineering (IJABE)
2008-2011	Associate Editor of International Journal of Agricultural and Biological Engineering (IJABE)
2007-Present	Associate Editor of Transactions of the ASABE
2012-2013	FPE-703 Food Processing Committee Chair of ASABE
2011-2012	FPE-703 Food Processing Committee Vice Chair of ASABE
2010-2011	FPE-703 Food Processing Committee Secretary of ASABE
2007-2009	Board member at Large of AOCABFE Technology Cooperation Director of AOCABFE FPE-703 Food Processing Committee member of ASABE
2007	Co-organized a USDA Regional Project (NE-1008) meeting on postharvest technologies in the Tri-Cities on June 6 and 7. Attendees from nine different states, USDA-ARS, and Japan visited potato, cherry, hop processing/packaging plants, and WSU viticulture research fields and a winery in central Washington.
2005-2007	FPE04/041 Publication Committee member of ASABE Editor-in-chief of IMPACT Newsletter of AOCABFE http://www.aoc-web.org/newsletter.htm
2003-2005	Treasurer of AOCABFE
1997-1998	Editor-in-chief of a Newsletter (LBTX) for Chinese Student and Scholar Association in Belgium

REVIEWER

Technical reviewer for Swiss National Natural Science Foundation proposals in 2015.

Technical reviewer for the American Association for the Advancement of Science (AAAS)-King Abdulaziz City for Science and Technology (KACST) proposals in 2013.

Technical reviewer for the USDA-SBIR proposals in 2005.

Technical review for Book Proposal "*Dielectric Properties of Agricultural Materials and Their Application*' (Dr. Stuart O. Nelson, USDA, ARS)" in Elsevier.

Technical reviewer for the following journals (total review paper numbers):

Acta Horticulture (1)
African Journal of Agricultural Research (1)
Applied Engineering in Agriculture (1)
Bioresource Technology (1)
Biosystems Engineering (15)
Computers and Electronics in Agriculture (2)
Emirates Journal of Food and Agriculture (1)
Food and Byproducts Processing (1)
Food Research International (2)
HortTechnology (1)
Innovative Food Science and Emerging Technologies (1)
International Agricultural Engineering Journal (1)
International Journal of Agricultural and Biological Engineering (3)
International Journal of Food Microbiology (1)
International Journal of Food Properties (1)
International Journal of Pest Management (1)
Journal of Agricultural Engineering Research (2)
Journal of Agricultural Science and Technology (1)
Journal of Economic Entomology (1)
Journal of Food Engineering (23)

Journal of Food Protection (1)
Journal of Food Science (9)
Journal of Zhejiang University Science (2)
Latin American Applied Research Journal (1)
Mathematics and Computers in Simulation (1)
Postharvest Biology and Technology (13)
Transactions of the ASAE (16)

AWARDS AND HONOR

2015 Invited keynote speaker on "Applications of radio frequency treatments for disinfesting agricultural products" at Technology Development Conference on Agricultural and Food Safety organized by Chinese Bioresource Application Association on Dec. 13, 2015, Taipei, Taiwan.

2015 Chair a session on Physical Processing Methods and Equipment for Foods and invited speaker on "*Novel Pasteurization and Disinfestation Technology for Postharvest Agricultural Products using Radio Frequency Energy*" at Annual Meeting of 2015 Agro-Product Processing Technology Association, China Society of Agricultural Engineering, Zhenjiang, Jiangsu, China on November 27-29, 2015.

2015 Invited speaker on "*Potential Industrial Applications of Radio Frequency Technology for Disinfesting Agricultural Products*" at International Symposium on Quality & Safety of Agricultural Products and Cooperation on Industrial Agriculture, Hangzhou, China on November 12-14, 2015.

2015 Invited speaker on "*Novel Pasteurization Technology for Postharvest Agricultural Products using Radio Frequency Energy*" at Food Summit of 12th Annual Meeting of CIFST, Dalian, China on October 22, 2015.

2015 Invited speaker on "*Developing Fast and Environmental-Friendly New Technology for Postharvest Pathogen and Pest Control in Agricultural Products*" at International Forum on New Urbanization & Low-Carbon Development in Chongqing, China on Sept. 20, 2015.

2015 Received 4th place Best Paper Award for two papers from AOCABFE.

2015 Invited speaker on "*International Research Cooperation at Northwest A&F University*" at China Exchange session in annual ASABE meeting in New Orleans on July 28, 2015.

2015 Excellent supervisor at Northwest A&F University.

2014 Invited keynote speaker on "*Applications of Radio Frequency Heating for Postharvest Pest Control in Agricultural Product*" at Session Six of 18th World Congress of CIGR on Sept. 16-19, 2014, Beijing, China.

2006-2015 Chaired one session in microwave and radio frequency heating in agricultural and food processing (FPE-12) in ASABE Annual International Meetings each year.

2013 Outstanding Faculty Award at Northwest A&F University.

2012 Chaired one session of Food Processing in 9th Food Graduate Students' Conference of China, Oct. 24-26, 2012, Yangling, Shaanxi, China.
Chaired one session of Agricultural Applications in 46th International Microwave Power Institute Symposium, June 20-22, 2012, Las Vegas, NE.

2012 Invited speaker on "Developing Postharvest Disinfestation Treatments for Stored Products using Radio Frequency Energy" at International Symposium of Novel Technologies in Food Processing and Byproducts Utilization on May 25-27, 2012, Shanghai, China.

2011 Selected as Member of "the Hundred Talents Program of Shaanxi Province"

2011 Invited keynote speaker on "Applications of radio frequency treatments for disinfesting agricultural products" at Technology Development Conference on Agricultural and Food

Safety organized by Chinese Bioresource Application Association on Sept. 03, 2011, Taipei, Taiwan.

2010 Chaired one session of Process Development in 44th International Microwave Power Institute Symposium, July 14-16, 2010, Denver, CO.

2009 Chaired two sessions of Food Technology in 43rd International Microwave Power Institute Symposium, July 8-10, 2009, Washington D.C.

2009 First Place Paper Award in Food Engineering Division of IFT (co-author)

2004 Chaired two sessions in physical properties and food safety in 1st International Conference of CIGR, Section VI: Bioproducts processing and Food Safety, October 11-14, 2004, Beijing, China.

2004 ASABE Superior Paper Award (top 2.5%) from American Society of Agricultural and Biological Engineers.
http://www.asabe.org/awards/paper/2004_Superior_Paper_Winners.htm

2002 Chaired a session in post-harvest and food engineering in 7th IAEC, Wuxi, China, November 28-30, 2002.

2000 Best Paper Award (top one each year) from American Society for Plasticulture.
http://www.plasticulture.org/about_awards.htm

1998 Grand distinction for my original Ph.D. dissertation received from Gembloux Agricultural University (Belgium)

1994-1998 Awarded a scholarship for my Ph.D. study from Gembloux Agricultural University (Belgium)

1991 Awarded the 3rd Prize for the paper published in Bull. Rech. Agron. Gembloux, 25(4), 1990" by the Zhejiang Committee of Science and Technology (P. R. China)

1989-1990 Awarded a scholarship for the cooperative project between Belgium and China from Belgium French Community

PUBLICATIONS

Books

Tang J., Mitcham E., **Wang S.,** Lurie S. [Eds.], 2007. Heat Treatments for Postharvest Pest Control: Theory and Practice. CABI Publishing, Oxon, UK. 368pp.

Book Chapters

Jiao S., **Wang S.**, 2015. Dielectric properties of fruits. In: Marra F., Barba A., Lyng J. [Eds.] *Dielectric Properties and Experimental Measurement: Foods, Bio-systems and Health Materials*. Springer, pp5.

Wang S., 2012. Microwave processing. In: D-W. Sun [Eds.], *Handbook of Food Safety Engineering.* Wiley-Blackwell, pp371-393.

Tang J., **Wang S.**, Armstrong J.W., 2007. Thermal treatment protocol development and scale-up. In: Tang J., Mitcham E., **Wang S.,** Lurie S. [Eds.], 2007. *Heat Treatments for Postharvest Pest Control: Theory and Practice*. CABI Publishing, Oxon, UK, pp. 291-310.

Wang S., Tang J., Hansen J.D., 2007. Experimental and simulation methods of insect thermal death kinetics. In: Tang J., Mitcham E., **Wang S.,** Lurie S. [Eds.], 2007. *Heat Treatments for Postharvest Pest Control: Theory and Practice*. CABI Publishing, Oxon, UK, pp. 105-132.

Tang J., **Wang S.,** Johnson J.A., 2007. Biology and thermal death kinetics of selected insects. In: Tang J., Mitcham E., **Wang S.,** Lurie S. [Eds.], 2007. *Heat Treatments for Postharvest Pest Control: Theory and Practice*. CABI Publishing, Oxon, UK, pp. 133-161.

Tang J., **Wang S.,** 2007. Temperature measurement. In: Tang J., Mitcham E., **Wang S.,** Lurie S. [Eds.], 2007. *Heat Treatments for Postharvest Pest Control: Theory and Practice.* CABI Publishing, Oxon, UK, pp. 56-78.

Tang J., **Wang S.,** 2007. Fundamental heat transfer theory for thermal treatments. In: Tang J., Mitcham E., **Wang S.,** Lurie S. [Eds.], 2007. *Heat Treatments for Postharvest Pest Control: Theory and Practice*. CABI Publishing, Oxon, UK, pp. 27-55.

Komarov, V., **Wang S.**, Tang J., 2005. Permittivity and measurement. In: K. Chang (eds.). The Wiley *Encyclopedia of RF and Microwave Engineering*, John Wiley & Sons, Inc., New York, Vol. 4, pp. 3693-3711.

Tang J., **Wang S.,** 2005. Radio frequency treatments for insect control in fruits and nuts - principles and applications. In: R. Dris (Eds), *Crops: Growth, Quality and Biotechnology*. WFL Publisher, Helsinki, Finland, P967-990.

Wang S., Tang J., 2004. Radio frequency post-harvest quarantine and phytosanitary treatments to control insect pests in fruits and nuts. In: R. Dris and S.M. Jain (Eds), *Production practices and quality assessment of food crops*, Kluwer Academic Publishers, The Netherlands, P17-53.

Wang S., Tang J., Younce F., 2003. Temperature measurement. In: D. R. Heldman (eds.). *Encyclopedia of Agricultural, Food, and Biological Engineering*, Marcel Dekker. New York. P987-993.

Refereed Journals (*Corresponding author):

Li R., **Wang S.***, 2016. Thermo-tolerance and heat shock protein of *Escherichia* coli ATCC 25922 in broth culture. *Current Microbiology*, in review.

Fu L., Sun S., **Wang S.***, 2016. Classification of kiwifruit grades based on fruit shape using a single camera. *Biosystems Engineering*, in review.

Lv X., Peng X., **Wang S.**, Wu Q., Xu Y., Li G., Han Q., Feng Y., Shi C., Xia X., 2016. Microbial stability, physicochemical properties, bioactive compounds and consumer acceptance of kiwi puree processed with radio frequency heating. *Journal of Food Science*, in review.

Alfaifi B., Tang J., **Wang S.**, Rasco B., Sablani S., 2016. Computer simulation analyses to improve radio frequency (RF) heating uniformity in dried fruits for insect control. *International Journal of Heat and Mass Transfer*, in review.

Zhou L., **Wang S.*** 2016. Industrial-scale radio frequency treatments to control *Sitophilus oryzae* in rough, brown, and milled rice. *Journal of Stored Products Research*, in review.

Zhen A., Zhang B., Zhou L., **Wang S.*** 2016. Application of radio frequency pasteurization to corn (*Zea mays* L.): heating uniformity improvement and quality stability evaluation. *Journal of Stored Products Research*, in review.

Kou X., Li R., Hou L., Huang Z., Ling B., **Wang S.**, 2016. Performance of a heating block system designed for studying the heat resistance of bacteria in foods. *Journal of Food Engineering*, in review.

Hou L., Huang Z., Kou X., **Wang S.***, 2016. Computer simulation model development and validation of radio frequency heating for bulk chestnuts based on single particle**.** *Food and Byproducts Processing*, in review.

Zhang B., Zheng A., Zhou L., Huang Z., **Wang S.*,** 2016. Developing hot air-assisted radio frequency drying for in-shell walnuts. *Biosystems Engineering*, in review.

Zhang S., Zhou L., Ling B., **Wang S.*,** 2016. Dielectric properties of peanut kernels associated with microwave and radio frequency drying. *Biosystems Engineering*, accepted.

Ling B., Zhang B., Li R., **Wang S.***, 2016. Nutritional quality, functional properties, bioactivities and microstructure of defatted pistachio kernel flour. *Journal of the American Oil Chemists' Society*, in press.

Ling B., Li R., Yang, X., **Wang S.***, 2016. Physicochemical properties, volatile compounds and oxidative stability of cold pressed kernel oils from raw and roasted pistachio (Pistacia vera L. Var Kerman). *European Journal of Lipid Science and Technology*, in press.

Chen L., Huang Z., Wang K., Li W., **Wang S.***, 2016. Simulation and validation of radio frequency heating with conveyor movement for disinfesting wheat. *Journal of Electromagnetic Waves and Applications*, in press.

Huang Z., Marra F., **Wang S.***, 2016. A novel strategy for improving radio frequency heating uniformity of dry food products using computational modeling. *Innovative Food Science and Emerging Technologies*, 34C: 100-111.

Huang Z., Zhang B., Marra F., **Wang S.***, 2016. Computational modeling of the impact of polystyrene containers on radio frequency heating uniformity improvement for dried soybeans. *Innovative Food Science and Emerging Technologies*, 33C: 365-380.

Ling B., Hou L., Li R., **Wang S.***, 2016. Storage stability of pistachios as influenced by radio frequency treatments for postharvest disinfestations, *Innovative Food Science and Emerging Technologies*, 33C: 357-364.

Zhang X., Wang H., Zou Z., **Wang S.***, 2016. CFD and weighted entropy based simulation and optimization of Chinese solar greenhouses. *Biosystems Engineering*, 142C: 12-26.

Zhou L., **Wang S.*** 2016. Verification of radio frequency heating uniformity and *Sitophilus oryzae* control in rough, brown, and milled rice. *Journal of Stored Products Research*, 65C: 40-47.

Yan R., Huang Z., Zhu H., Johnson J.A., **Wang S.***, 2016. Simulation of heating uniformity in a heating block system modified for controlled atmosphere treatments. *Journal of Stored Products Research*, 65C: 19-29.

Hou L., Johnson J.A., **Wang S.***, 2016. Radio frequency heating for postharvest control of pests in agricultural products: a review**.** *Postharvest Biology and Technology*, 113C: 106-118.

Hou L., Du Y., Johnson J.A., **Wang S.***, 2015. Thermal death kinetics of yellow peach moth, *Conogethes punctiferalis* (Lepidoptera: Pyralidae) as influenced by heating rate and life stage. *Journal of Economic Entomology*, 108: 2192-2199.

Shi Y., Tang J., Yue T., Rasco B., **Wang S.***, 2015. Thermal inactivation kinetics of *Listeria monocytogenes* and *Listeria innocua* in cold-smoked salmon (*Oncorhynchus nerka*). *Journal of Aquatic Food Product Technology*, 24(7): 720-730.

Hou L., Ling B., **Wang S.***, 2015. Kinetics of color degradation of chestnut kernel during thermal treatment and storage. *International Journal of Agricultural and Biological Engineering*, 8(4): 106-115.

Chen L., Huang Z., Wang K., Li W., **Wang S.***, 2015. A strategy to simulate radio frequency heating under mixing conditions. *Computers and Electronics in Agriculture*, 118C:100-110.

Hou L., Hou J., Li Z., Johnson J.A., **Wang S.***, 2015. Validation of radio frequency treatments as alternative non-chemical methods for disinfesting chestnuts. *Journal of Stored Products Research*, 63C: 75-79.

Zhang P., Zhu H., **Wang S.***, 2015. Experimental evaluation of radio frequency heating in low-moisture agricultural products. *Emirates Journal of Food and Agriculture*, 27(9): 662-668.

Huang Z., Chen L., **Wang S.***, 2015. Computer simulation of radio frequency selective heating of insects in soybeans. *International Journal of Heat and Mass Transfer*, 90C: 406-417.

Jiao Y., Shi H., Tang J., Li F., **Wang S.**, 2015. Improvement of RF heating uniformity on low moisture foods with Polyetherimide (PEI) blocks. *Food Research International*, 74: 106-114.

Li W., Yan R., Wang K., Chen L., Johnson J.A., **Wang S.***, 2015. Performance of controlled atmosphere/heating block systems for assessing insect thermotolerance. *Biosystems Engineering*, 135: 1-9.

Wang K., Chen L., Li W., **Wang S.***, 2015. Evaluating the top electrode voltage distribution uniformity in radio frequency systems. *Journal of Electromagnetic Waves and Applications*, 29(6): 763-773.

Li W., Yan R., Wang K., Chen L., Johnson J.A., **Wang S.***, 2015. Tolerance of *Sitophilus zeamais* (Coleoptera: Curculionidae) to heated and controlled atmospheres treatments. *Journal of Stored Products Research*, 62C: 52-57.

Zhou L., Ling B., Zheng A., Zhang B., **Wang S.*** 2015.Developing radio frequency technology for insect control in milled rice. *Journal of Stored Products Research*, 62C: 22-31.

Huang Z., Zhu H., **Wang S.***, 2015. Finite element modelling and analysis of radio frequency heating rate in mung beans. *Transactions of the ASABE*, 58(1): 149-160.

Wang K., Zhu H., Chen L., Li W., **Wang S.***, 2015. Validation of top electrode voltage in free-running oscillator radio frequency systems with different moisture content soybeans. *Biosystems Engineering,* 131: 41-48.

Ling B., Guo W., Hou L., Li R., **Wang S.***, 2015. Dielectric properties of pistachio kernels as influenced by frequency, temperature, moisture and salt content. *Food and Bioprocess Technology,* 8: 420-430.

Ling B., Tang J., Kong F., Mitcham E.J., **Wang S.***, 2015. Kinetics of food and agriculture product quality changes during thermal processing: a review. *Food and Bioprocess Technology,* 8: 343-358.

Ling B., Tiwari G., **Wang S.***, 2015. Pest control by microwave and radio frequency energy: dielectric properties of stone fruit. *Agronomy for Sustainable Development,* 35(1): 233-240.

Huang Z., Zhu H., Yan R., **Wang S.***, 2015. Simulation and prediction of radio frequency heating in dried soybeans for thermal disinfestations. *Biosystems Engineering,* 129C: 34-47.

Yan R., Huang Z., Zhu H., Johnson J.A., **Wang S.***, 2014. Thermal death kinetics of adult *Sitophilus oryzae* and effects of heating rate on thermotolerance. *Journal of Stored Products Research,* 59C: 231-236.

Ling B., Hou L., Li R., **Wang S.***, 2014. Thermal treatment and storage conditions effects on walnut paste quality associated with enzyme inactivation. *LWT - Food Science and Technology,* 59(2): 786-793.

Zhu H., Yan R., Huang Z., Li R., **Wang S.***, 2014. Experimental studies on leaked electromagnetic fields around radio frequency heating systems. *Applied Engineering in Agriculture,* 30(4): 601-608.

Hou L., Ling B., **Wang S.***, 2014. Development of thermal treatment protocol for disinfesting chestnuts using radio frequency energy. *Postharvest Biology and Technology,* 98C: 65-71.

Jiao Y., Tang J., **Wang S.**, 2014. A new strategy to improve heating uniformity of low moisture foods in radio frequency treatment for pathogen control. *Journal of Food Engineering,* 141C: 128-138.

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