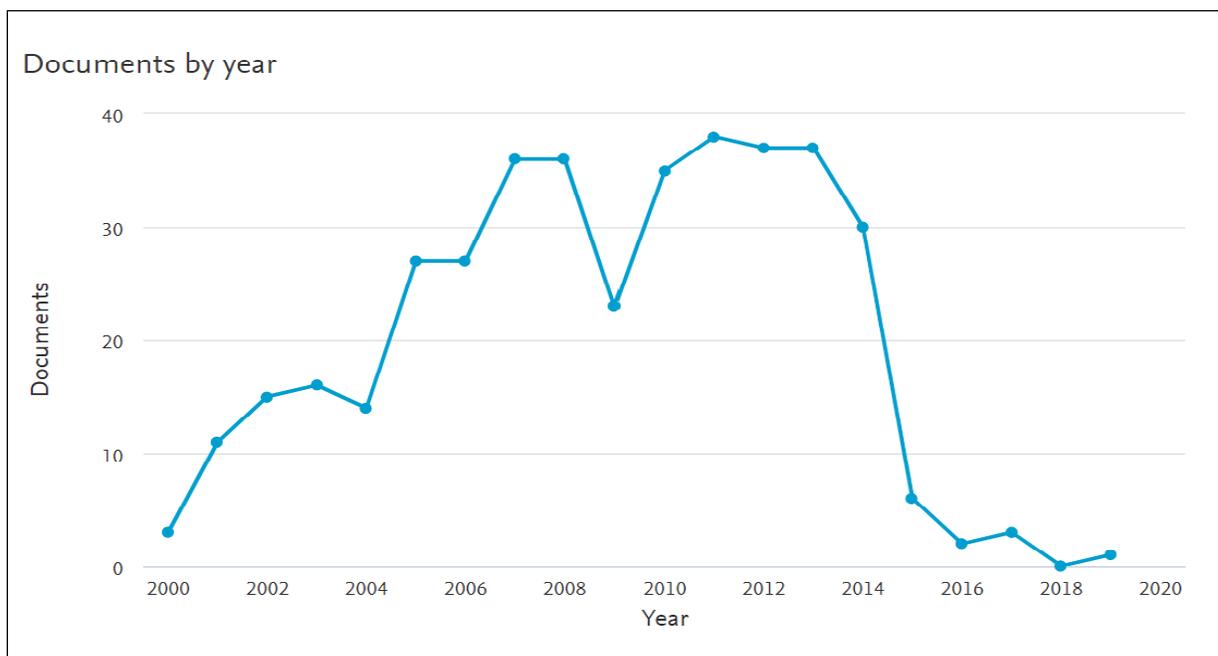
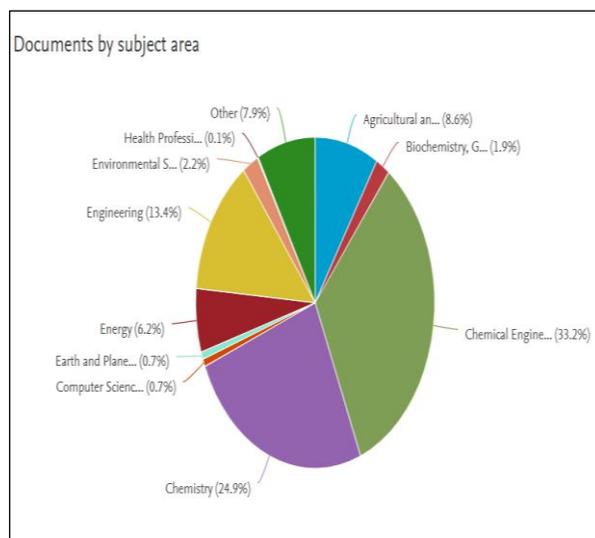
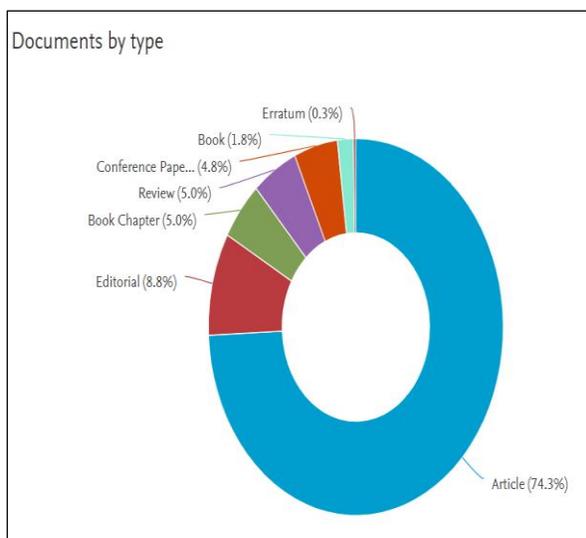


Publications by Prof. Arun S. Mujumdar, NUS, Singapore during 2000 to 2020



Source: Scopus database, accessed on 10-12-2020



Source: Scopus database, accessed on 10-12-2020

List of Publications:

- [1] Jangam, S. V. Mujumdar, A. S., *Miscellaneous drying technologies*, in *Advanced Drying Technologies for Foods*. 2019. p. 205-222.
- [2] Sasmito, A. P.; Kurnia, J. C.; Birgersson, E.; Mujumdar, A. S., Computational evaluation of thermal management strategies in an underground mine. *Applied Thermal Engineering*, **2017**, 90, DOI: 10.1016/j.applthermaleng.2015.01.062.
- [3] Jangam, S. V. Mujumdar, A. S., *Developments in intermittent and non-stationary drying technologies*, in *Intermittent and Nonstationary Drying Technologies: Principles and Applications*. 2017. p. 1-17.
- [4] Jangam, S. V. Mujumdar, A. S., *Drying of herbs and spices*, in *Handbook of Drying of Vegetables and Vegetable Products*. 2017. p. 157-172.
- [5] Tong, W.; Somasundaram, K.; Birgersson, E.; Mujumdar, A. S.; Yap, C., Thermo-electrochemical model for forced convection air cooling of a lithium-ion battery module. *Applied Thermal Engineering*, **2016**, 99, 672-682, DOI: 10.1016/j.applthermaleng.2016.01.050.
- [6] Kurnia, J. C.; Jangam, S. V.; Akhtar, S.; Sasmito, A. P.; Mujumdar, A. S., Advances in biofuel production from oil palm and palm oil processing wastes: A review. *Biofuel Research Journal*, **2016**, 3, 332-346, DOI: 10.18331/BRJ2016.3.1.3.
- [7] Tong, W.; Somasundaram, K.; Birgersson, E.; Mujumdar, A. S.; Yap, C., Numerical investigation of water cooling for a lithium-ion bipolar battery pack. *International Journal of Thermal Sciences*, **2015**, 94, 259-269, DOI: 10.1016/j.ijthermalsci.2015.03.005.
- [8] Tong, W.; Koh, W. Q.; Birgersson, E.; Mujumdar, A. S.; Yap, C., Correlating uncertainties of a lithium-ion battery - A Monte Carlo simulation. *International Journal of Energy Research*, **2015**, 39, 778-788, DOI: 10.1002/er.3282.
- [9] Song, C. F.; Cui, Z. W.; Jin, G. Y.; Mujumdar, A. S.; Yu, J. F., Effects of Four Different Drying Methods on the Quality Characteristics of Peeled Litchis (*Litchi chinensis* Sonn.). *Drying Technology*, **2015**, 33, 583-590, DOI: 10.1080/07373937.2014.963203.
- [10] Jangam, S. V.; Mujumdar, A. S.; Adhikari, B., *Drying: Physical and Structural Changes*, in *Encyclopedia of Food and Health*. 2015. p. 446-455.

- [11] Gao, Y.; Zhang, M.; Wang, Y.; Mujumdar, A. S.; Chen, W., Textural and sensory properties of herring (*Clupea harengus*) cubes in Chinese-type paste as affected by pre-frying methods. *Journal of Aquatic Food Product Technology*, **2015**, 24, 179-190, DOI: 10.1080/10498850.2013.767297.
- [12] Ahmadi, H.; Rajabi-Zargarabadi, M.; Mujumdar, A. S.; Mohammadpour, J., Numerical modeling of a turbulent semi-confined slot jet impinging on a concave surface. *Thermal Science*, **2015**, 19, 129-140, DOI: 10.2298/TSCI121003057A.
- [13] Zolfagharian, M. M.; Rajabi-Zargarabadi, M.; Mujumdar, A. S.; Valipour, M. S.; Asadollahi, M., Optimization of turbine blade cooling using combined cooling techniques. *Engineering Applications of Computational Fluid Mechanics*, **2014**, 8, 462-475, DOI: 10.1080/19942060.2014.11015529.
- [14] Tunçal, T.; Jangam, S. V.; Mujumdar, A. S., *Physicochemical aspects of sludge drying*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 883-894.
- [15] Tsotsas, E. Mujumdar, A. S., Preface of Volume 3. *Modern Drying Technology*, **2014**, 3-4, xvii-xix.
- [16] Tsotsas, E. Mujumdar, A. S., Preface of Volume 4. *Modern Drying Technology*, **2014**, 4-4, xv-xviii.
- [17] Tsotsas, E. Mujumdar, A. S., Preface of Volume 2. *Modern Drying Technology*, **2014**, 2-4, xvii-xxii.
- [18] Tsotsas, E. Mujumdar, A. S., Series Preface 1. *Modern Drying Technology*, **2014**, 1-4, xi-xiv.
- [19] Tsotsas, E. Mujumdar, A. S., *Modern Drying Technology*. Modern Drying Technology. Vol. 1-4. 2014. 1-394.
- [20] Tsotsas, E. Mujumdar, A. S., Preface of Volume 1. *Modern Drying Technology*, **2014**, 1-4, xv-xx.
- [21] Tsotsas, E. Mujumdar, A. S., Series Preface 4. *Modern Drying Technology*, **2014**, 4-4, xi-xiv.
- [22] Tsotsas, E. Mujumdar, A. S., Series Preface 3. *Modern Drying Technology*, **2014**, 3-4, xiii-xvi.
- [23] Tsotsas, E. Mujumdar, A. S., Series Preface 2. *Modern Drying Technology*, **2014**, 2-4, xiii-xvi.

- [24] Shaker, M.; Birgersson, E.; Mujumdar, A. S., Extended Maxwell model for the thermal conductivity of nanofluids that accounts for nonlocal heat transfer. *International Journal of Thermal Sciences*, **2014**, 84, 260-266, DOI: 10.1016/j.ijthermalsci.2014.05.010.
- [25] Mujumdar, A. S.; Jangam, S. V.; Pikoń, J., *Drying of coal*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 999-1022.
- [26] Mujumdar, A. S., Editorial: Role of R&D in Innovation. *Drying Technology*, **2014**, 32, 1, DOI: 10.1080/07373937.2013.813217.
- [27] Mujumdar, A. S., Editorial: Leadership in Drying R&D. *Drying Technology*, **2014**, 32, 495-496, DOI: 10.1080/07373937.2013.813227.
- [28] Mothibe, K. J.; Zhang, M.; Mujumdar, A. S.; Wang, Y. C.; Cheng, X., Effects of Ultrasound and Microwave Pretreatments of Apple Before Spouted Bed Drying on Rate of Dehydration and Physical Properties. *Drying Technology*, **2014**, 32, 1848-1856, DOI: 10.1080/07373937.2014.952381.
- [29] Mohan, B.; Puqing, J.; Sasmito, A. P.; Kurnia, J. C.; Jangam, S. V.; Mujumdar, A. S., Energy-efficient novel heterogeneous gaseous T-junction microreactor design utilizing inlet flow pulsation. *Industrial and Engineering Chemistry Research*, **2014**, 53, 18699-18710, DOI: 10.1021/ie500797f.
- [30] Lu, Y.; Zhang, M.; Liu, H.; Mujumdar, A. S.; Sun, J.; Zheng, D., Optimization of Potato Cube Drying in a Microwave-Assisted Pulsed Spouted Bed. *Drying Technology*, **2014**, 32, 960-968, DOI: 10.1080/07373937.2013.877024.
- [31] Law, C. L.; Chen, H. H. H.; Mujumdar, A. S., *Food Technologies: Drying*, in *Encyclopedia of Food Safety*. 2014. p. 156-167.
- [32] Kurnia, J. C.; Sasmito, A. P.; Wong, W. Y.; Mujumdar, A. S., Prediction and innovative control strategies for oxygen and hazardous gases from diesel emission in underground mines. *Science of the Total Environment*, **2014**, 481, 317-334, DOI: 10.1016/j.scitotenv.2014.02.058.
- [33] Kurnia, J. C.; Sasmito, A. P.; Mujumdar, A. S., Dust dispersion and management in underground mining faces. *International Journal of Mining Science and Technology*, **2014**, 24, 39-44, DOI: 10.1016/j.ijmst.2013.12.007.

- [34] Kurnia, J. C.; Sasmito, A. P.; Mujumdar, A. S., Simulation of a novel intermittent ventilation system for underground mines. *Tunnelling and Underground Space Technology*, **2014**, 42, 206-215, DOI: 10.1016/j.tust.2014.03.009.
- [35] Kurnia, J. C.; Sasmito, A. P.; Mujumdar, A. S., CFD simulation of methane dispersion and innovative methane management in underground mining faces. *Applied Mathematical Modelling*, **2014**, 38, 3467-3484, DOI: 10.1016/j.apm.2013.11.067.
- [36] Kurnia, J. C.; Sasmito, A. P.; Birgersson, E.; Shamim, T.; Mujumdar, A. S., Evaluation of mass transport performance in heterogeneous gaseous in-plane spiral reactors with various cross-section geometries at fixed cross-section area. *Chemical Engineering and Processing: Process Intensification*, **2014**, 82, 101-111, DOI: 10.1016/j.cep.2014.06.004.
- [37] Jiang, H.; Zhang, M.; Mujumdar, A. S.; Lim, R. X., Changes of microwave structure/dielectric properties during microwave freeze-drying process banana chips. *International Journal of Food Science and Technology*, **2014**, 49, 1142-1148, DOI: 10.1111/ijfs.12410.
- [38] Jiang, H.; Zhang, M.; Mujumdar, A. S.; Lim, R. X., Comparison of drying characteristic and uniformity of banana cubes dried by pulse-spouted microwave vacuum drying, freeze drying and microwave freeze drying. *Journal of the Science of Food and Agriculture*, **2014**, 94, 1827-1834, DOI: 10.1002/jsfa.6501.
- [39] Jangam, S. V. Mujumdar, A. S., *Heat Pump Assisted Drying Technology - Overview with Focus on Energy, Environment and Product Quality*, in *Modern Drying Technology*. 2014. p. 121-162.
- [40] Haque, N.; Jangam, S. V.; Mujumdar, A. S., *Life Cycle Assessment of Drying Systems*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 1229-1238.
- [41] Gong, Z. X. Mujumdar, A. S., Process Simulation of Combustion Drying with Simprosys Software. *Drying Technology*, **2014**, 32, 447-454, DOI: 10.1080/07373937.2013.835319.
- [42] Gong, Z. X.; Jangam, S. V.; Mujumdar, A. S., *Simprosys: Software for dryer calculations*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 1209-1228.
- [43] Zhang, C. H.; Huang, L. X.; Xie, P. J.; You, F.; Zhang, Y. L.; Mujumdar, A. S., Numerical Simulation of a Spouted Bed Using Computational Fluid Dynamics (CFD). *Drying Technology*, **2013**, 31, 1879-1887, DOI: 10.1080/07373937.2013.840312.

- [44] Zeng, Q. R.; Zhang, M.; Adhikari, B. P.; Mujumdar, A. S., Effect of Drying Processes on the Functional Properties of Collagen Peptides Produced from Chicken Skin. *Drying Technology*, **2013**, 31, 1653-1660, DOI: 10.1080/07373937.2013.790826.
- [45] Yan, W. Q.; Zhang, M.; Huang, L. L.; Mujumdar, A. S.; Tang, J., Influence of microwave drying method on the characteristics of the sweet potato dices. *Journal of Food Processing and Preservation*, **2013**, 37, 662-669, DOI: 10.1111/j.1745-4549.2012.00707.x.
- [46] Wu, Z.; Xie, J.; Li, E.; Mujumdar, A. S., Novel gas-fired pulse combustors-design evaluation via simulation. *JP Journal of Heat and Mass Transfer*, **2013**, 7, 129-156.
- [47] Wang, Y.; Zhang, M.; Mujumdar, A. S.; Mothibe, K. J.; Roknul Azam, S. M., Study of Drying Uniformity in Pulsed Spouted Microwave-Vacuum Drying of Stem Lettuce Slices with Regard to Product Quality. *Drying Technology*, **2013**, 31, 91-101, DOI: 10.1080/07373937.2012.721431.
- [48] Wang, Y.; Zhang, M.; Mujumdar, A. S.; Mothibe, K. J., Quality Changes of Dehydrated Restructured Fish Product from Silver Carp (*Hypophthalmichthys molitrix*) as Affected by Drying Methods. *Food and Bioprocess Technology*, **2013**, 6, 1664-1680, DOI: 10.1007/s11947-012-0812-y.
- [49] Wang, Y.; Zhang, M.; Mujumdar, A. S.; Mothibe, K. J., Microwave-Assisted Pulse-Spouted Bed Freeze-Drying of Stem Lettuce Slices-Effect on Product Quality. *Food and Bioprocess Technology*, **2013**, 6, 3530-3543, DOI: 10.1007/s11947-012-1017-0.
- [50] Wang, Y.; Zhang, M.; Mujumdar, A. S., Effect of cassava starch gel, fish gel and mixed gels and thermal treatment on structure development and various quality parameters in microwave vacuum-dried gel slices. *Food Hydrocolloids*, **2013**, 33, 26-37, DOI: 10.1016/j.foodhyd.2013.02.005.
- [51] Wang, Y.; Zhang, M.; Adhikari, B.; Mujumdar, A. S.; Zhou, B., The Application of Ultrasound Pretreatment and Pulse-Spouted Bed Microwave Freeze Drying to Produce Desalted Duck Egg White Powders. *Drying Technology*, **2013**, 31, 1826-1836, DOI: 10.1080/07373937.2013.829851.
- [52] Wang, L.; Zhang, M.; Mujumdar, A. S.; Wang, Y.; Zhu, C., Restructured crispy fish cubes containing *Salicornia bigelovii* Torr. developed with microwave vacuum drying. *Journal of Aquatic Food Product Technology*, **2013**, 22, 226-240, DOI: 10.1080/10498850.2011.641672.

- [53] Wan, J.; Zhang, M.; Wang, Y.; Mujumdar, A. S.; Yong-Jun, W., Drying kinetics and quality characteristics of slightly salted grass carp fillets by hot air drying and vacuum microwave drying. *Journal of Aquatic Food Product Technology*, **2013**, 22, 595-604, DOI: 10.1080/10498850.2012.677969.
- [54] Tohidi, A.; Hosseinalipour, S. M.; Taheri, P.; Nouri, N. M.; Mujumdar, A. S., Chaotic advection induced heat transfer enhancement in a chevron-type plate heat exchanger. *Heat and Mass Transfer/Waerme- und Stoffuebertragung*, **2013**, 49, 1535-1548, DOI: 10.1007/s00231-013-1180-5.
- [55] Tang, W. L.; Zhang, M.; Adhikari, B.; Mujumdar, A. S., Effects of Preparation and Drying Methods on the Antioxidant Activity of Enzymatically Hydrolyzed Porcine Placenta Hydrolysates. *Drying Technology*, **2013**, 31, 1600-1610, DOI: 10.1080/07373937.2013.808660.
- [56] Sasmito, A. P.; Shamim, T.; Mujumdar, A. S., Passive thermal management for PEM fuel cell stack under cold weather condition using phase change materials (PCM). *Applied Thermal Engineering*, **2013**, 58, 615-625, DOI: 10.1016/j.applthermaleng.2013.04.064.
- [57] Sasmito, A. P.; Shamim, T.; Birgersson, E.; Mujumdar, A. S., Numerical investigation of water and temperature distributions for open-cathode polymer electrolyte fuel cell stack with edge cooling. *Journal of Fuel Cell Science and Technology*, **2013**, 10, DOI: 10.1115/1.4025054.
- [58] Sasmito, A. P.; Shamim, T.; Birgersson, E.; Mujumdar, A. S. *Numerical investigation of water and temperature distributions for open-cathode polymer electrolyte fuel cell stack with edge cooling*. in *ASME 2013 11th Int. Conf. on Fuel Cell Science, Eng. and Technology Collocated with the ASME 2013 Heat Transfer Summer Conf. and the ASME 2013 7th Int. Conf. on Energy Sustainability, FUELCELL 2013*. 2013.
- [59] Sasmito, A. P.; Khan, S. A.; Mujumdar, A. S., *Nanofluids heat transfer: Preparation, characterization and theoretical aspects*, in *Nanofluids: Research, Development and Applications*. 2013. p. 55-90.
- [60] Sasmito, A. P.; Birgersson, E.; Ly, H. C.; Mujumdar, A. S., Some approaches to improve ventilation system in underground coal mines environment - A computational fluid dynamic study. *Tunnelling and Underground Space Technology*, **2013**, 34, 82-95, DOI: 10.1016/j.tust.2012.09.006.

- [61] Qiufang, T.; Zhonghua, W.; Mujumdar, A. S., *Optimization of liquid steel flow in an industrial tundish*, in *Advanced Materials Research*. 2013. p. 1752-1755.
- [62] Qiu, S.; Xu, P.; Qiao, X.; Mujumdar, A. S., Flow and mixing characteristics of pulsed confined opposed jets in turbulent flow regime. *Heat and Mass Transfer/Waerme- und Stoffuebertragung*, **2013**, 49, 277-284, DOI: 10.1007/s00231-012-1092-9.
- [63] Mujumdar, A. S., Editorial: On Right-Brain Activity to Stimulate Creativity in Academic R&D. *Drying Technology*, **2013**, 31, 253-254, DOI: 10.1080/07373937.2013.756664.
- [64] Mujumdar, A. S., Networking-A New Paradigm for Increased R&D Productivity. *Drying Technology*, **2013**, 31, 365-366, DOI: 10.1080/07373937.2012.756669.
- [65] Mujumdar, A. S., Editorial: Why Four Decades of R&D in Drying? *Drying Technology*, **2013**, 31, 617-618, DOI: 10.1080/07373937.2013.793129.
- [66] Mujumdar, A. S., Editorial: R&D: A Historical Perspective. *Drying Technology*, **2013**, 31, 1191, DOI: 10.1080/07373937.2013.812768.
- [67] Mujumdar, A. S., Editorial: On Citation Statistics-What Do They Really Mean? *Drying Technology*, **2013**, 31, 1897-1898, DOI: 10.1080/07373937.2013.813216.
- [68] Moghari, R. M.; Mujumdar, A. S.; Shariat, M.; Talebi, F.; Sajjadi, S. M.; Akbarinia, A., Investigation effect of nanoparticle mean diameter on mixed convection Al₂O₃-water nanofluid flow in an annulus by two phase mixture model. *International Communications in Heat and Mass Transfer*, **2013**, 49, 25-35, DOI: 10.1016/j.icheatmasstransfer.2013.08.017.
- [69] Lee, D. J.; Su, A.; Mujumdar, A. S., Bound Water Content in Wet Materials. *Drying Technology*, **2013**, 31, 202-206, DOI: 10.1080/07373937.2012.694946.
- [70] Lee, D. J.; Chen, G. Y.; Chang, Y. R.; Mujumdar, A. S.; Chang, J. S., Cyclic Filtration-Cleaning of *Chlorella vulgaris* Using Surface-Modified Hydrophilic Polytetrafluoroethylene Membrane with Polyaluminum Chloride as Coagulant. *Drying Technology*, **2013**, 31, 207-212, DOI: 10.1080/07373937.2012.700358.
- [71] Kurnia, J. C.; Sasmito, A. P.; Tong, W.; Mujumdar, A. S., Energy-efficient thermal drying using impinging-jets with time-varying heat input - A computational study. *Journal of Food Engineering*, **2013**, 114, 269-277, DOI: 10.1016/j.jfoodeng.2012.08.029.
- [72] Kurnia, J. C.; Sasmito, A. P.; Jangam, S. V.; Mujumdar, A. S., Improved design for heat transfer performance of a novel phase change material (PCM) thermal energy storage

- (TES). *Applied Thermal Engineering*, **2013**, 50, 896-907, DOI: 10.1016/j.applthermaleng.2012.08.015.
- [73] Kurnia, J. C.; Sasmito, A. P.; Jangam, S. V.; Mujumdar, A. S., Heat transfer in coiled square tubes for laminar flow of slurry of microencapsulated phase change material. *Heat Transfer Engineering*, **2013**, 34, 994-1007, DOI: 10.1080/01457632.2012.753821.
- [74] Jiang, H.; Zhang, M.; Mujumdar, A. S.; Lim, R. X., Analysis of Temperature Distribution and SEM Images of Microwave Freeze Drying Banana Chips. *Food and Bioprocess Technology*, **2013**, 6, 1144-1152, DOI: 10.1007/s11947-012-0801-1.
- [75] Jiang, H.; Zhang, M.; Liu, Y.; Mujumdar, A. S.; Liu, H., The energy consumption and color analysis of freeze/microwave freeze banana chips. *Food and Bioproducts Processing*, **2013**, 91, 464-472, DOI: 10.1016/j.fbp.2013.04.004.
- [76] Jangam, S. V. Mujumdar, A. S., *Recent Developments in Drying Technologies for Foods*, in *Food Engineering Series*. 2013. p. 153-172.
- [77] Hosseinalipour, M.; Esmailpour, K.; Yahyae, A.; Mujumdar, A. S., Numerical simulation of flow and thermal characteristics of harmonic pulsed laminar impinging streams. *Asia-Pacific Journal of Chemical Engineering*, **2013**, 8, 607-617, DOI: 10.1002/apj.1700.
- [78] Bai, J. W.; Sun, D. W.; Xiao, H. W.; Mujumdar, A. S.; Gao, Z. J., Novel high-humidity hot air impingement blanching (HHAIB) pretreatment enhances drying kinetics and color attributes of seedless grapes. *Innovative Food Science and Emerging Technologies*, **2013**, 20, 230-237, DOI: 10.1016/j.ifset.2013.08.011.
- [79] Arasu, A. V.; Sasmito, A. P.; Mujumdar, A. S., Numerical performance study of paraffin wax dispersed with alumina in a concentric pipe latent heat storage system. *Thermal Science*, **2013**, 17, 419-430, DOI: 10.2298/TSCII10417004A.
- [80] Zhonghua Dr, W.; Long, W.; Zhanyong, L.; Mujumdar, A. S., Atomization and Drying Characteristics of Sewage Sludge inside a Helmholtz Pulse Combustor. *Drying Technology*, **2012**, 30, 1105-1112, DOI: 10.1080/07373937.2012.683122.
- [81] Xu, P.; Qiu, S.; Yu, M.; Qiao, X.; Mujumdar, A. S., A study on the heat and mass transfer properties of multiple pulsating impinging jets. *International Communications in Heat and Mass Transfer*, **2012**, 39, 378-382, DOI: 10.1016/j.icheatmasstransfer.2012.01.001.

- [82] Wu, Z.; Zhang, J.; Li, Z.; Xie, J.; Mujumdar, A. S., Production of a solid fuel using sewage sludge and spent cooking oil by immersion frying. *Journal of Hazardous Materials*, **2012**, 243, 357-363, DOI: 10.1016/j.jhazmat.2012.10.054.
- [83] Woo, M. W.; Che, L. M.; Daud, W. R. W.; Mujumdar, A. S.; Chen, X. D., Highly swirling transient flows in spray dryers and consequent effect on modeling of particle deposition. *Chemical Engineering Research and Design*, **2012**, 90, 336-345, DOI: 10.1016/j.cherd.2011.06.019.
- [84] Wang, Y.; Zhang, M.; Mujumdar, A. S.; Mothibe, K. J.; Roknul Azam, S. M., Effect of blanching on microwave freeze drying of stem lettuce cubes in a circular conduit drying chamber. *Journal of Food Engineering*, **2012**, 113, 177-185, DOI: 10.1016/j.jfoodeng.2012.06.007.
- [85] Wang, Y.; Zhang, M.; Mujumdar, A. S.; Mothibe, K. J., Experimental Investigation and Mechanism Analysis on Microwave Freeze Drying of Stem Lettuce Cubes in a Circular Conduit. *Drying Technology*, **2012**, 30, 1377-1386, DOI: 10.1080/07373937.2012.667470.
- [86] Wang, Y.; Zhang, M.; Mujumdar, A. S., Influence of green banana flour substitution for cassava starch on the nutrition, color, texture and sensory quality in two types of snacks. *LWT - Food Science and Technology*, **2012**, 47, 175-182, DOI: 10.1016/j.lwt.2011.12.011.
- [87] Tsotsas, E. Mujumdar, A. S., Preface of Volume 4. *Modern Drying Technology*, **2012**, 4, xv-xviii, DOI: 10.1002/9783527631681.
- [88] Tsotsas, E. Mujumdar, A. S., Series Preface. *Modern Drying Technology*, **2012**, 4, xi-xiv, DOI: 10.1002/9783527631681.
- [89] Tsotsas, E. Mujumdar, A. S., *Modern Drying Technology*. Modern Drying Technology. Vol. 4. 2012.
- [90] Somasundaram, K.; Birgersson, E.; Mujumdar, A. S., Thermal-electrochemical model for passive thermal management of a spiral-wound lithium-ion battery. *Journal of Power Sources*, **2012**, 203, 84-96, DOI: 10.1016/j.jpowsour.2011.11.075.
- [91] Somasundaram, K.; Birgersson, E.; Mujumdar, A. S., Model for a bipolar Li-ion battery module: Automated model generation, validation and verification. *Applied Mathematics and Computation*, **2012**, 219, 2231-2245, DOI: 10.1016/j.amc.2012.08.070.
- [92] Shaker, M.; Ghaedamini, H.; Sasmito, A. P.; Kurnia, J. C.; Jangam, S. V.; Mujumdar, A. S., Numerical investigation of laminar mass transport enhancement in heterogeneous

- gaseous microreactors. *Chemical Engineering and Processing: Process Intensification*, **2012**, 54, 1-11, DOI: 10.1016/j.cep.2012.02.001.
- [93] Sasmito, A. P.; Shamim, T.; Birgersson, E.; Mujumdar, A. S., Computational study of edge cooling for open-cathode polymer electrolyte fuel cell stacks. *Journal of Fuel Cell Science and Technology*, **2012**, 9, DOI: 10.1115/1.4007792.
- [94] Sasmito, A. P.; Shamim, T.; Birgersson, E.; Mujumdar, A. S. *Computational study of edge cooling for open-cathode polymer electrolyte fuel cell stacks*. in *ASME International Mechanical Engineering Congress and Exposition, Proceedings (IMECE)*. 2012.
- [95] Sasmito, A. P.; Kurnia, J. C.; Wang, W.; Jangam, S. V.; Mujumdar, A. S., Numerical analysis of laminar heat transfer performance of in-plane spiral ducts with various cross-sections at fixed cross-section area. *International Journal of Heat and Mass Transfer*, **2012**, 55, 5882-5890, DOI: 10.1016/j.ijheatmasstransfer.2012.05.085.
- [96] Sasmito, A. P.; Kurnia, J. C.; Mujumdar, A. S., Numerical evaluation of various gas and coolant channel designs for high performance liquid-cooled proton exchange membrane fuel cell stacks. *Energy*, **2012**, 44, 278-291, DOI: 10.1016/j.energy.2012.06.030.
- [97] Sasmito, A. P.; Kurnia, J. C.; Mujumdar, A. S., Numerical evaluation of transport phenomena in a T-junction microreactor with coils of different configurations. *Industrial and Engineering Chemistry Research*, **2012**, 51, 1970-1980, DOI: 10.1021/ie200139s.
- [98] Sasmito, A. P.; Birgersson, E.; Mujumdar, A. S., A novel flow reversal concept for improved thermal management in polymer electrolyte fuel cell stacks. *International Journal of Thermal Sciences*, **2012**, 54, 242-252, DOI: 10.1016/j.ijthermalsci.2011.11.020.
- [99] Sasmito, A. P.; Birgersson, E.; Lum, K. W.; Mujumdar, A. S., Fan selection and stack design for open-cathode polymer electrolyte fuel cell stacks. *Renewable Energy*, **2012**, 37, 325-332, DOI: 10.1016/j.renene.2011.06.037.
- [100] Rahman, S. M. A. Mujumdar, A. S., *Atmospheric Freeze Drying*, in *Progress in Food Preservation*. 2012. p. 143-160.
- [101] Qiu, S.; Xu, P.; Jiang, Z.; Mujumdar, A. S., Numerical modeling of pulsed laminar opposed impinging jets. *Engineering Applications of Computational Fluid Mechanics*, **2012**, 6, 195-202, DOI: 10.1080/19942060.2012.11015414.

- [102] Pawar, S. B.; Mujumdar, A. S.; Thorat, B. N., CFD analysis of flow pattern in the agitated thin film evaporator. *Chemical Engineering Research and Design*, **2012**, 90, 757-765, DOI: 10.1016/j.cherd.2011.09.017.
- [103] Mujumdar, A. S., Editorial. *Drying Technology*, **2012**, 30, 1505, DOI: 10.1080/07373937.2012.711215.
- [104] Mounir, S.; Allaf, T.; Mujumdar, A. S.; Allaf, K., Swell Drying: Coupling Instant Controlled Pressure Drop DIC to Standard Convection Drying Processes to Intensify Transfer Phenomena and Improve Quality-An Overview. *Drying Technology*, **2012**, 30, 1508-1531, DOI: 10.1080/07373937.2012.693145.
- [105] Liu, P.; Zhang, M.; Mujumdar, A. S., Comparison of three microwave-assisted drying methods on the physiochemical, nutritional and sensory qualities of re-structured purple-fleshed sweet potato granules. *International Journal of Food Science and Technology*, **2012**, 47, 141-147, DOI: 10.1111/j.1365-2621.2011.02819.x.
- [106] Lee, D. J.; Jangam, S.; Mujumdar, A. S., Some recent advances in drying technologies to produce particulate solids. *KONA Powder and Particle Journal*, **2012**, 30, 69-83, DOI: 10.14356/kona.2013010.
- [107] Kurnia, J. C.; Sasmito, A. P.; Mujumdar, A. S., 7Laminar convective heat transfer for in-plane spiral coils of non-circular cross-sections ducts: A computational fluid dynamics study. *Thermal Science*, **2012**, 16, 109-118, DOI: 10.2298/TSCII100627014K.
- [108] Kurnia, J. C.; Birgersson, E.; Mujumdar, A. S., Analysis of a model for pH-sensitive hydrogels. *Polymer*, **2012**, 53, 613-622, DOI: 10.1016/j.polymer.2011.11.054.
- [109] Kurnia, J. C.; Birgersson, E.; Mujumdar, A. S., A phenomenological model for hydrogels with rigid skin formation. *International Journal of Applied Mechanics*, **2012**, 4, DOI: 10.1142/S1758825112001361.
- [110] Kurnia, J. C.; Birgersson, E.; Mujumdar, A. S., Finite deformation of fast-response thermo-sensitive hydrogels - A computational study. *Polymer*, **2012**, 53, 2500-2508, DOI: 10.1016/j.polymer.2012.03.049.
- [111] Jiang, Y.; Xu, P.; Mujumdar, A. S.; Qiu, S.; Jiang, Z., A Numerical Study on the Convective Heat Transfer Characteristics of Pulsed Impingement Drying. *Drying Technology*, **2012**, 30, 1056-1061, DOI: 10.1080/07373937.2012.683121.

- [112] Jangam, S. V. Mujumdar, A. S., *Heat Pump Assisted Drying Technology - Overview with Focus on Energy, Environment and Product Quality*, in *Modern Drying Technology*. 2012. p. 121-162.
- [113] Huang, L. L.; Zhang, M.; Wang, L. P.; Mujumdar, A. S.; Sun, D. F., Influence of combination drying methods on composition, texture, aroma and microstructure of apple slices. *LWT - Food Science and Technology*, **2012**, 47, 183-188, DOI: 10.1016/j.lwt.2011.12.009.
- [114] Chiewchan, N.; Devahastin, S.; Mujumdar, A. S., *Drying of Foods*, in *Handbook of Food Safety Engineering*. 2012. p. 394-411.
- [115] Arasu, A. V. Mujumdar, A. S., Numerical study on melting of paraffin wax with Al₂O₃ in a square enclosure. *International Communications in Heat and Mass Transfer*, **2012**, 39, 8-16, DOI: 10.1016/j.icheatmasstransfer.2011.09.013.
- [116] An, H.; Li, A.; Sasmito, A. P.; Kurnia, J. C.; Jangam, S. V.; Mujumdar, A. S., Computational fluid dynamics (CFD) analysis of micro-reactor performance: Effect of various configurations. *Chemical Engineering Science*, **2012**, 75, 85-95, DOI: 10.1016/j.ces.2012.03.004.
- [117] Zhang, F.; Zhang, M.; Mujumdar, A. S., Drying characteristics and quality of restructured wild cabbage chips processed using different drying methods. *Drying Technology*, **2011**, 29, 682-688, DOI: 10.1080/07373937.2010.525729.
- [118] Wang, Y.; Zhang, M.; Mujumdar, A. S., Trends in processing technologies for dried aquatic products. *Drying Technology*, **2011**, 29, 382-394, DOI: 10.1080/07373937.2011.551624.
- [119] Wang, Y.; Zhang, M.; Mujumdar, A. S., Convective drying kinetics and physical properties of silver carp (*Hypophthalmichthys molitrix*) fillets. *Journal of Aquatic Food Product Technology*, **2011**, 20, 361-378, DOI: 10.1080/10498850.2011.575536.
- [120] Wang, R.; Zhang, M.; Mujumdar, A. S.; Jiang, H., Effect of salt and sucrose content on dielectric properties and microwave freeze drying behavior of re-structured potato slices. *Journal of Food Engineering*, **2011**, 106, 290-297, DOI: 10.1016/j.jfoodeng.2011.05.015.
- [121] Valan Arasu, A.; Sasmito, A. P.; Mujumdar, A. S., Thermal performance enhancement of paraffin wax with Al₂O₃ and CuO nanoparticles - A numerical study. *Frontiers in Heat and Mass Transfer*, **2011**, 2, 1-7, DOI: 10.5098/hmt.v2.4.3005.

- [122] Tsotsas, E. Mujumdar, A. S., Preface of Volume 1. *Modern Drying Technology*, **2011**, 1, xv-xx, DOI: 10.1002/9783527631629.
- [123] Tsotsas, E. Mujumdar, A. S., Series Preface. *Modern Drying Technology*, **2011**, 1, xi-xiv, DOI: 10.1002/9783527631629.
- [124] Tsotsas, E. Mujumdar, A. S., *Modern Drying Technology*. Modern Drying Technology. Vol. 1. 2011.
- [125] Tsotsas, E. Mujumdar, A. S., Preface. *Modern Drying Technology*, **2011**, 3, XIII-XVI, DOI: 10.1002/9783527631667.
- [126] Tsotsas, E. Mujumdar, A. S., *Modern Drying Technology*. Modern Drying Technology. Vol. 3. 2011.
- [127] Somasundaram, K.; Birgersson, E.; Mujumdar, A. S., Analysis of a model for an electrochemical capacitor. *Journal of the Electrochemical Society*, **2011**, 158, A1220-A1230, DOI: 10.1149/2.062111jes.
- [128] Sasmito, A. P. Mujumdar, A. S., Performance evaluation of a polymer electrolyte fuel cell with a dead-end anode: A computational fluid dynamic study. *International Journal of Hydrogen Energy*, **2011**, 36, 10917-10933, DOI: 10.1016/j.ijhydene.2011.05.171.
- [129] Sasmito, A. P.; Kurnia, J. C.; Mujumdar, A. S., Numerical evaluation of laminar heat transfer enhancement in nanofluid flow in coiled square tubes. *Nanoscale Research Letters*, **2011**, 6, 1-14, DOI: 10.1186/1556-276X-6-376.
- [130] Sasmito, A. P.; Birgersson, E.; Mujumdar, A. S., Numerical investigation of liquid water cooling for a proton exchange membrane fuel cell stack. *Heat Transfer Engineering*, **2011**, 32, 151-167, DOI: 10.1080/01457631003769302.
- [131] Sasmito, A. P.; Birgersson, E.; Mujumdar, A. S., Numerical evaluation of various thermal management strategies for polymer electrolyte fuel cell stacks. *International Journal of Hydrogen Energy*, **2011**, 36, 12991-13007, DOI: 10.1016/j.ijhydene.2011.07.028.
- [132] Ren, A. Q.; Zhang, M.; Mujumdar, A. S., Effect of water activity and glass transition on critical preservation conditions of dried squids. *International Agrophysics*, **2011**, 25, 205-209.
- [133] Rahman, S. M. A. Mujumdar, A. S., Aerodynamic and thermal characteristics of a maxwell type vortex tube. *Central European Journal of Engineering*, **2011**, 1, 369-379, DOI: 10.2478/s13531-011-0035-4.

- [134] Pawar, S. B.; Patil, R.; Mujumdar, A. S.; Thorat, B. N., Mathematical modeling of agitated thin-film dryer. *Drying Technology*, **2011**, 29, 719-728, DOI: 10.1080/07373937.2010.526732.
- [135] Pawar, S. B.; Mujumdar, A. S.; Thorat, B. N., Flow pattern and heat transfer in agitated thin film dryer. *Chemical Engineering and Processing: Process Intensification*, **2011**, 50, 687-693, DOI: 10.1016/j.cep.2011.04.005.
- [136] Osman, H.; Jangam, S. V.; Lease, J. D.; Mujumdar, A. S., Drying of low-rank coal (LRC)- A Review of recent patents and innovations. *Drying Technology*, **2011**, 29, 1763-1783, DOI: 10.1080/07373937.2011.616443.
- [137] Nahimana, H.; Zhang, M.; Mujumdar, A. S.; Ding, Z., Mass transfer modeling and shrinkage consideration during osmotic dehydration of fruits and vegetables. *Food Reviews International*, **2011**, 27, 331-356, DOI: 10.1080/87559129.2010.518298.
- [138] Nahimana, H.; Mujumdar, A. S.; Zhang, M., Drying and radial shrinkage characteristics and changes in color and shape of carrot tissues (*Daucus Carota L*) during air drying. *African Journal of Biotechnology*, **2011**, 10, 15327-15345, DOI: 10.5897/AJB11.576.
- [139] Mujumdar, A. S. Tsotsas, E., Preface of Volume 2. *Modern Drying Technology*, **2011**, 2, XVII-XXII, DOI: 10.1002/9783527631643.
- [140] Mujumdar, A. S. Tsotsas, E., Series Preface. *Modern Drying Technology*, **2011**, 2, XIII-XVI, DOI: 10.1002/9783527631643.
- [141] Mujumdar, A. S. Tsotsas, E., *Modern Drying Technology*. Modern Drying Technology. Vol. 2. 2011.
- [142] Mestry, A. P.; Mujumdar, A. S.; Thorat, B. N., Optimization of spray drying of an innovative functional food: Fermented mixed juice of carrot and watermelon. *Drying Technology*, **2011**, 29, 1121-1131, DOI: 10.1080/07373937.2011.566968.
- [143] Li, X.; Zhang, M.; Duan, X.; Mujumdar, A. S., Effect of nano-silver coating on microbial control of microwave-freeze combined dried sea cucumber. *International Agrophysics*, **2011**, 25, 181-186.
- [144] Kurnia, J. C.; Sasmito, A. P.; Mujumdar, A. S., Evaluation of the heat transfer performance of helical coils of non-circular tubes. *Journal of Zhejiang University: Science A*, **2011**, 12, 63-70, DOI: 10.1631/jzus.A1000296.

- [145] Kurnia, J. C.; Sasmito, A. P.; Mujumdar, A. S., Numerical investigation of laminar heat transfer performance of various cooling channel designs. *Applied Thermal Engineering*, **2011**, 31, 1293-1304, DOI: 10.1016/j.applthermaleng.2010.12.036.
- [146] Kurnia, J. C.; Birgersson, E.; Mujumdar, A. S.; Tay, S. P.; Yew, Y. K.; Li, H., Phenomenological model for coupled alcohol and temperature sensitive hydrogels. *International Journal of Applied Mechanics*, **2011**, 3, 279-298, DOI: 10.1142/S1758825111000981.
- [147] Jiang, H.; Zhang, M.; Mujumdar, A. S.; Lim, R. X., Comparison of the effect of microwave freeze drying and microwave vacuum drying upon the process and quality characteristics of potato/banana re-structured chips. *International Journal of Food Science and Technology*, **2011**, 46, 570-576, DOI: 10.1111/j.1365-2621.2010.02523.x.
- [148] Jangam, S. V.; Karthikeyan, M.; Mujumdar, A. S., A critical assessment of industrial coal drying technologies: Role of energy, emissions, risk and sustainability. *Drying Technology*, **2011**, 29, 395-407, DOI: 10.1080/07373937.2010.498070.
- [149] Huang, L. L.; Zhang, M.; Yan, W. Q.; Mujumdar, A. S.; Sun, D. F., Rehydration characteristics of freeze-dried strawberry pieces as affected by whey protein edible coatings. *International Journal of Food Science and Technology*, **2011**, 46, 671-677, DOI: 10.1111/j.1365-2621.2010.02495.x.
- [150] Huang, L. L.; Zhang, M.; Mujumdar, A. S.; Lim, R. X., Comparison of four drying methods for re-structured mixed potato with apple chips. *Journal of Food Engineering*, **2011**, 103, 279-284, DOI: 10.1016/j.jfoodeng.2010.10.025.
- [151] Gong, Z. X.; Stanovský, J.; Mujumdar, A. S., Energy audit of a fiberboard drying production line using simprosys software. *Drying Technology*, **2011**, 29, 408-418, DOI: 10.1080/07373937.2010.498069.
- [152] Ghaedamini, H.; Salimpour, M. R.; Mujumdar, A. S., The effect of sveltiness on the bifurcation angles role in pressure drop and flow uniformity of tree-shaped microchannels. *Applied Thermal Engineering*, **2011**, 31, 708-716, DOI: 10.1016/j.applthermaleng.2010.10.005.
- [153] Fernandes, F. A. N.; Rodrigues, S.; Law, C. L.; Mujumdar, A. S., Drying of Exotic Tropical Fruits: A Comprehensive Review. *Food and Bioprocess Technology*, **2011**, 4, 163-185, DOI: 10.1007/s11947-010-0323-7.

- [154] Bait, R. G.; Pawar, S. B.; Banerjee, A. N.; Mujumdar, A. S.; Thorat, B. N., Mechanically agitated fluidized bed drying of cohesive particles at low air velocity. *Drying Technology*, **2011**, 29, 808-818, DOI: 10.1080/07373937.2010.541574.
- [155] Zhang, C. H.; Huang, L. X.; Wang, C. P.; Mujumdar, A. S., Experimental and numerical investigation of spray-drying parameters on the dried powder properties of ginkgo biloba seeds. *Drying Technology*, **2010**, 28, 380-388, DOI: 10.1080/07373931003645033.
- [156] Yu, G. H.; He, P. J.; Shao, L. M.; Lee, D. J.; Mujumdar, A. S., Extracellular polymeric substances (EPS) and extracellular enzymes in aerobic granules. *Drying Technology*, **2010**, 28, 910-915, DOI: 10.1080/07373937.2010.490766.
- [157] Yang, Z.; Su, A.; Mujumdar, A. S.; Lee, D. J., Electroosmotic flows in sludge at dewatering. *Drying Technology*, **2010**, 28, 1113-1117, DOI: 10.1080/07373937.2010.506172.
- [158] Yan, W. Q.; Zhang, M.; Huang, L. L.; Tang, J.; Mujumdar, A. S.; Sun, J. C., Studies on different combined microwave drying of carrot pieces. *International Journal of Food Science and Technology*, **2010**, 45, 2141-2148, DOI: 10.1111/j.1365-2621.2010.02380.x.
- [159] Yan, W.; Zhang, M.; Huang, L. L.; Tang, J.; Mujumdar, A. S.; Sun, J. C., Study of the optimisation of puffing characteristics of potato cubes by spouted bed drying enhanced with microwave. *Journal of the Science of Food and Agriculture*, **2010**, 90, 1300-1307, DOI: 10.1002/jsfa.3940.
- [160] Xu, P.; Yu, B.; Qiu, S.; Poh, H. J.; Mujumdar, A. S., Turbulent impinging jet heat transfer enhancement due to intermittent pulsation. *International Journal of Thermal Sciences*, **2010**, 49, 1247-1252, DOI: 10.1016/j.ijthermalsci.2010.01.020.
- [161] Xu, P.; Mujumdar, A. S.; Poh, H. J.; Yu, B., Heat transfer under a pulsed slot turbulent impinging jet at large temperature differences. *Thermal Science*, **2010**, 14, 271-281, DOI: 10.2298/TSCI1001271X.
- [162] Wu, Z. H.; Hu, Y. J.; Lee, D. J.; Mujumdar, A. S.; Li, Z. Y., Dewatering and drying in mineral processing industry: Potential for innovation. *Drying Technology*, **2010**, 28, 834-842, DOI: 10.1080/07373937.2010.490485.
- [163] Wu, G. C.; Zhang, M.; Mujumdar, A. S.; Wang, R., Effect of calcium ion and microwave power on structural and quality changes in drying of apple slices. *Drying Technology*, **2010**, 28, 517-522, DOI: 10.1080/07373931003618667.

- [164] Woo, M. W. Mujumdar, A. S., Effects of electric and magnetic field on freezing and possible relevance in freeze drying. *Drying Technology*, **2010**, 28, 433-443, DOI: 10.1080/07373930903202077.
- [165] Woo, M. W.; Daud, W. R. W.; Mujumdar, A. S.; Tasirin, S. M.; Talib, M. Z. M., Role of rheological characteristics in amorphous food particle-wall collisions in spray drying. *Powder Technology*, **2010**, 198, 251-257, DOI: 10.1016/j.powtec.2009.11.015.
- [166] Wang, X. Q.; Xu, P.; Mujumdar, A. S.; Yap, C., Flow and thermal characteristics of offset branching network. *International Journal of Thermal Sciences*, **2010**, 49, 272-280, DOI: 10.1016/j.ijthermalsci.2009.07.019.
- [167] Wang, R.; Zhang, M.; Mujumdar, A. S., Effect of food ingredient on microwave freeze drying of instant vegetable soup. *LWT - Food Science and Technology*, **2010**, 43, 1144-1150, DOI: 10.1016/j.lwt.2010.03.007.
- [168] Wang, R.; Zhang, M.; Mujumdar, A. S., Effect of osmotic dehydration on microwave freeze-drying characteristics and quality of potato chips. *Drying Technology*, **2010**, 28, 798-806, DOI: 10.1080/07373937.2010.482700.
- [169] Wang, R.; Zhang, M.; Mujumdar, A. S., Effects of vacuum and microwave freeze drying on microstructure and quality of potato slices. *Journal of Food Engineering*, **2010**, 101, 131-139, DOI: 10.1016/j.jfoodeng.2010.05.021.
- [170] Sasmito, A. P.; Lum, K. W.; Birgersson, E.; Mujumdar, A. S., Computational study of forced air-convection in open-cathode polymer electrolyte fuel cell stacks. *Journal of Power Sources*, **2010**, 195, 5550-5563, DOI: 10.1016/j.jpowsour.2010.02.083.
- [171] Sasmito, A. P.; Birgersson, E.; Mujumdar, A. S. *Computational study of flow reversal for improved thermal management in a PEMFC stack with forced air convection cooling*. in *2010 14th International Heat Transfer Conference, IHTC 14*. 2010.
- [172] Passos, M. L.; da Costa, E. F.; Mujumdar, A. S., *Drying of particulate solids*, in *Spouted and Spout-Fluid Beds: Fundamentals and Applications*. 2010. p. 187-205.
- [173] Pang, S. Mujumdar, A. S., Drying of woody biomass for bioenergy: Drying technologies and optimization for an integrated bioenergy plant. *Drying Technology*, **2010**, 28, 690-701, DOI: 10.1080/07373931003799236.

- [174] Mujumdar, A. S. Law, C. L., Drying Technology: Trends and Applications in Postharvest Processing. *Food and Bioprocess Technology*, **2010**, 3, 843-852, DOI: 10.1007/s11947-010-0353-1.
- [175] Mujumdar, A. S.; Huang, L. X.; Dong Chen, X., An overview of the recent advances in spray-drying. *Dairy Science and Technology*, **2010**, 90, 211-224, DOI: 10.1051/dst/2010015.
- [176] Li, Z.; Su, W.; Wu, Z.; Wang, R.; Mujumdar, A. S., Investigation of flow behaviors and bubble characteristics of a pulse fluidized bed via CFD modeling. *Drying Technology*, **2010**, 28, 78-93, DOI: 10.1080/07373930903430785.
- [177] Jiang, H.; Zhang, M.; Mujumdar, A. S., Physico-chemical changes during different stages of MFD/FD banana chips. *Journal of Food Engineering*, **2010**, 101, 140-145, DOI: 10.1016/j.jfoodeng.2010.06.002.
- [178] Jiang, H.; Zhang, M.; Mujumdar, A. S., Microwave freeze-drying characteristics of banana crisps. *Drying Technology*, **2010**, 28, 1377-1384, DOI: 10.1080/07373937.2010.482702.
- [179] Huang, L. X. Mujumdar, A. S., Guest Editorial: Recent R&D in liquid drying. *Drying Technology*, **2010**, 28, 322-322, DOI: 10.1080/07373931003626959.
- [180] Hsu, J. P.; Tao, T.; Su, A.; Mujumdar, A. S.; Lee, D. J., Model for sludge cake drying accounting for developing cracks. *Drying Technology*, **2010**, 28, 922-926, DOI: 10.1080/07373937.2010.490775.
- [181] Hsu, J. P.; Su, A.; Mujumdar, A. S.; Lee, D. J., Unified analysis of dewatering and drying of sludge cake. *Drying Technology*, **2010**, 28, 877-880, DOI: 10.1080/07373937.2010.490501.
- [182] Gong, Z. X. Mujumdar, A. S., Simulation of drying nonaqueous systems-an application of simprosys software. *Drying Technology*, **2010**, 28, 111-115, DOI: 10.1080/07373930903430876.
- [183] Gong, Z.; Zhang, M.; Bhandari, B.; Mujumdar, A. S.; Jin-Cai, S., Rheological properties of cabbage pulp. *International Journal of Food Properties*, **2010**, 13, 1066-1073, DOI: 10.1080/10942910902954551.
- [184] Gong, Z.; Gao, L.; An, J.; Zhang, M.; Mujumdar, A. S.; Sun, J., Effects of predrying and vacuum impregnation with Nano-calcium carbonate solution on strawberries, carrots, corn, and blueberries. *Drying Technology*, **2010**, 28, 36-41, DOI: 10.1080/07373930903423913.

- [185] Ghasemi, N.; Sohrabi, M.; Khosravi, M.; Mujumdar, A. S.; Goodarzi, M., CFD simulation of solid-liquid flow in a two impinging streams cyclone reactor: Prediction of mean residence time and holdup of solid particles. *Chemical Engineering and Processing: Process Intensification*, **2010**, 49, 1277-1283, DOI: 10.1016/j.cep.2010.09.016.
- [186] Duan, X.; Zhang, M.; Mujumdar, S.; Wang, R., Trends in microwave-assisted freeze drying of foods. *Drying Technology*, **2010**, 28, 444-453, DOI: 10.1080/07373931003609666.
- [187] Duan, X.; Zhang, M.; Mujumdar, A. S.; Wang, S., Microwave freeze drying of sea cucumber (*Stichopus japonicus*). *Journal of Food Engineering*, **2010**, 96, 491-497, DOI: 10.1016/j.jfoodeng.2009.08.031.
- [188] Duan, X.; Zhang, M.; Mujumdar, A. S.; Huang, L. L.; Wang, H., A novel dielectric drying method of sea cucumber. *International Journal of Food Science and Technology*, **2010**, 45, 2538-2545, DOI: 10.1111/j.1365-2621.2010.02419.x.
- [189] Cheng, Y. L.; Wong, R. J.; Lin, J. C. T.; Huang, C.; Lee, D. J.; Mujumdar, A. S., Water coagulation using electrostatic patch coagulation (EPC) mechanism. *Drying Technology*, **2010**, 28, 850-857, DOI: 10.1080/07373937.2010.490492.
- [190] Zhonghua, W. Mujumdar, A. S. *Novel gas-fired pulse combustors-design evaluation via simulation*. in *The Minerals, Metals and Materials Society - 3rd International Conference on Processing Materials for Properties 2008, PMP III*. 2009.
- [191] Zhonghua, W.; Mazumdar, D.; Mujumdar, A. S. *Optimization of post combustion in an electric arc furnace for advanced steelmaking*. in *The Minerals, Metals and Materials Society - 3rd International Conference on Processing Materials for Properties 2008, PMP III*. 2009.
- [192] Yun, L.; Wang, B.; Jing, D.; Lv, X.; Yu, C.; Wang, G.; Huang, L.; Mujumdar, A. S., Drying kinetics of magnesium hydroxide of different morphological micro nanostructures. *Drying Technology*, **2009**, 27, 523-528, DOI: 10.1080/07373930802715252.
- [193] Xu, P.; Wu, Z.; Mujumdar, A. S.; Yu, B., Innovative hydrocyclone inlet designs to reduce erosion-induced wear in mineral dewatering processes. *Drying Technology*, **2009**, 27, 201-211, DOI: 10.1080/07373930802603433.
- [194] Xu, P.; Wang, X. Q.; Mujumdar, A. S.; Yap, C.; Yu, B. M., Thermal characteristics of tree-shaped microchannel nets with/without loops. *International Journal of Thermal Sciences*, **2009**, 48, 2139-2147, DOI: 10.1016/j.ijthermalsci.2009.03.018.

- [195] Xu, P.; Mujumdar, A. S.; Yu, B., Drying-induced cracks in thin film fabricated from colloidal dispersions. *Drying Technology*, **2009**, 27, 636-652, DOI: 10.1080/07373930902820804.
- [196] Xu, H. S.; Zhang, M.; Duan, X.; Mujumdar, A.; Sun, J., Effect of power ultrasound pretreatment on edamame prior to freeze drying. *Drying Technology*, **2009**, 27, 186-193, DOI: 10.1080/07373930802603342.
- [197] Woo, M. W.; Daud, W. R. W.; Mujumdar, A. S.; Wu, Z.; Talib, M. Z. M.; Tasirin, S. M., Non-swirling steady and transient flow simulations in short-form spray dryers. *Chemical Product and Process Modeling*, **2009**, 4, DOI: 10.2202/1934-2659.1351.
- [198] Wang, R.; Zhang, M.; Mujumdar, A. S.; Sun, J. C., Microwave freeze-drying characteristics and sensory quality of instant vegetable soup. *Drying Technology*, **2009**, 27, 962-968, DOI: 10.1080/07373930902902040.
- [199] Song, X. J.; Zhang, M.; Mujumdar, A. S.; Fan, L., Drying characteristics and kinetics of vacuum microwave-dried potato slices. *Drying Technology*, **2009**, 27, 969-974, DOI: 10.1080/07373930902902099.
- [200] Poh, H. J.; Birgersson, E.; Mujumdar, A. S. *Enhanced performance with an impinging jet flow configuration for PEMFC*. in *Proceedings of the ASME 3rd International Conference on Energy Sustainability 2009, ES2009*. 2009.
- [201] Piacentini, R. Mujumdar, A., Climate change and drying of agricultural products. *Drying Technology*, **2009**, 27, 629-635, DOI: 10.1080/07373930902820770.
- [202] Mujumdar, A. S. Law, C. L. *Drying technology: Trends and applications in postharvest processing*. in *5th International Technical Symposium on Food Processing, Monitoring Technology in Bioprocesses and Food Quality Management*. 2009.
- [203] Mahbub, F.; Hawlader, M. N. A.; Mujumdar, A. S., Combined water and power plant (CWPP) - A novel desalination technology. *Desalination and Water Treatment*, **2009**, 5, 172-177, DOI: 10.5004/dwt.2009.581.
- [204] Mahbub, F.; Hawlader, M. N. A.; Mujumdar, A. S. *Exergoeconomic analyses of a Combined Water and Power Plant (CWPP)*. in *Proceedings of the ASME 3rd International Conference on Energy Sustainability 2009, ES2009*. 2009.
- [205] Kurnia, J. C.; Birgersson, E.; Mujumdar, A. S.; Quah, L. C., *Mathematical modeling of hydrogels for microfluidic flow control*, in *Advanced Materials Research*. 2009. p. 33-36.

- [206] Kudra, T. Mujumdar, A. S., *Advanced drying technologies, second edition*. Advanced Drying Technologies, Second Edition. 2009. 1-457.
- [207] Karthikeyan, M.; Zhonghua, W.; Mujumdar, A. S., Low-rank coal drying technologies - Current status and new developments. *Drying Technology*, **2009**, *27*, 403-415, DOI: 10.1080/07373930802683005.
- [208] Kandasamy, R. Mujumdar, A. S., Interface thermal characteristics of flip chip packages - A numerical study. *Applied Thermal Engineering*, **2009**, *29*, 822-829, DOI: 10.1016/j.applthermaleng.2008.04.002.
- [209] Jangam, S. V.; Mujumdar, A. S.; Thorat, B. N., Design of an efficient gas distribution system for a fluidized bed dryer. *Drying Technology*, **2009**, *27*, 1217-1228, DOI: 10.1080/07373930903266700.
- [210] Huang, L. I.; Zhang, M.; Yan, W. q.; Mujumdar, A. S.; Sun, D. f., Effect of coating on post-drying of freeze-dried strawberry pieces. *Journal of Food Engineering*, **2009**, *92*, 107-111, DOI: 10.1016/j.jfoodeng.2008.10.031.
- [211] Huang, L. L.; Zhang, M.; Mujumdar, A. S.; Sun, D. F.; Tan, G. W.; Tang, S., Studies on decreasing energy consumption for a freeze-drying process of apple slices. *Drying Technology*, **2009**, *27*, 938-946, DOI: 10.1080/07373930902901844.
- [212] Banooni, S.; Hosseinalipour, S. M.; Mujumdar, A. S.; Taherkhani, P.; Bahiraei, M., Baking of flat bread in an impingement oven: Modeling and optimization. *Drying Technology*, **2009**, *27*, 103-112, DOI: 10.1080/07373930802565954.
- [213] Zhonghua, W. Mujumdar, A. S., Pulse combustion characteristics of various gaseous fuels. *Energy and Fuels*, **2008**, *22*, 915-924, DOI: 10.1021/ef7004207.
- [214] Zhonghua, W. Mujumdar, A. S., CFD modeling of the gas-particle flow behavior in spouted beds. *Powder Technology*, **2008**, *183*, 260-272, DOI: 10.1016/j.powtec.2007.07.040.
- [215] Yang, Z.; Lee, D. J.; Mujumdar, A.; Peng, X. F.; Su, A.; Hsu, C., Probing heterogeneous structure of aggregates. *Drying Technology*, **2008**, *26*, 1018-1023, DOI: 10.1080/07373930802177719.
- [216] Xu, P.; Mujumdar, A. S.; Yu, B., Fractal theory on drying: A review. *Drying Technology*, **2008**, *26*, 640-650, DOI: 10.1080/07373930802045932.

- [217] Woo, M. W.; Daud, W. R. W.; Mujumdar, A. S.; Wu, Z. H.; Talib, M. Z. M.; Tasirin, S. M., CFD evaluation of droplet drying models in a spray dryer fitted with a rotary atomizer. *Drying Technology*, **2008**, 26, 1180-1198, DOI: 10.1080/07373930802306953.
- [218] Woo, M. W.; Daud, W. R. W.; Mujumdar, A. S.; Talib, M. Z. M.; Hua, W. Z.; Tasirin, S. M., Comparative study of droplet drying models for CFD modelling. *Chemical Engineering Research and Design*, **2008**, 86, 1038-1048, DOI: 10.1016/j.cherd.2008.04.003.
- [219] Wang, Z.; Peng, X. F.; Mujumdar, A. S.; Su, A.; Lee, D. J., Evaporation of ethanol-water mixture drop on horizontal substrate. *Drying Technology*, **2008**, 26, 806-810, DOI: 10.1080/07373930802046526.
- [220] Wang, X. Q.; Yap, C.; Mujumdar, A. S., A parametric study of phase change material (PCM)-based heat sinks. *International Journal of Thermal Sciences*, **2008**, 47, 1055-1068, DOI: 10.1016/j.ijthermalsci.2007.07.016.
- [221] Wang, X. Q. Mujumdar, A. S., A review on nanofluids - Part II: Experiments and applications. *Brazilian Journal of Chemical Engineering*, **2008**, 25, 631-648, DOI: 10.1590/S0104-66322008000400002.
- [222] Wang, X. Q. Mujumdar, A. S., A review on nanofluids - Part I: Theoretical and numerical investigations. *Brazilian Journal of Chemical Engineering*, **2008**, 25, 613-630, DOI: 10.1590/S0104-66322008000400001.
- [223] Tao, T.; Peng, X. P.; Su, A.; Lee, D. J.; Mujumdar, A. S., Modeling convective drying of wet cake. *Journal of the Chinese Institute of Chemical Engineers*, **2008**, 39, 287-290, DOI: 10.1016/j.jcice.2007.12.010.
- [224] Sung, S. S.; Ju, S. P.; Hsu, C.; Mujumdar, A. S.; Lee, D. J., Flocc strength evaluation at alternative shearing with presence of natural organic matters. *Drying Technology*, **2008**, 26, 996-1001, DOI: 10.1080/07373930802115669.
- [225] Rahman, S. M. A. Mujumdar, A. S., A novel atmospheric freeze-drying system using a vortex tube and multimode heat supply. *International Journal of Postharvest Technology and Innovation*, **2008**, 1, 249-266, DOI: 10.1504/IJPTI.2008.021460.
- [226] Rahman, S. M. A. Mujumdar, A. S., A novel atmospheric freeze-dryer using vortex tube and multimode heat input: Simulation and experiments. *Asia-Pacific Journal of Chemical Engineering*, **2008**, 3, 408-416, DOI: 10.1002/apj.135.

- [227] Rahman, S. M. A. Mujumdar, A. S., A novel atmospheric freeze-drying system using a vibro-fluidized bed with adsorbent. *Drying Technology*, **2008**, 26, 393-403, DOI: 10.1080/07373930801928914.
- [228] Pawar, S. B.; Kumar, P. S. R.; Mujumdar, A. S.; Thorat, B. N., Infrared-convective drying of organic pigments. *Drying Technology*, **2008**, 26, 315-322, DOI: 10.1080/07373930801898042.
- [229] Patel, A. K.; Waje, S. S.; Thorat, B. N.; Mujumdar, A. S., Tomographic diagnosis of gas maldistribution in gas-solid fluidized beds. *Powder Technology*, **2008**, 185, 239-250, DOI: 10.1016/j.powtec.2007.10.019.
- [230] Mujumdar, A. S. Zhonghua, W., Editorial. *Drying Technology*, **2008**, 26, 389-390, DOI: 10.1080/07373930801928864.
- [231] Mujumdar, A. S. Yoshida, H., *Electro-osmotic dewatering (EOD) of bio-materials*, in *Food Engineering Series*. 2008. p. 121-154.
- [232] Mujumdar, A. Zhonghua, W., Thermal drying technologies - Cost-effective innovation aided by mathematical modeling approach. *Drying Technology*, **2008**, 26, 146-154, DOI: 10.1080/07373930701812606.
- [233] Min, Q.; Duan, Y. Y.; Peng, X. F.; Mujumdar, A.; Hsu, C.; Lee, D. J., Froth flotation of mineral particles: Mechanism. *Drying Technology*, **2008**, 26, 985-995, DOI: 10.1080/07373930802115628.
- [234] Lou, Z. Q.; Yap, C.; Mujumdar, A. S., A numerical study of a heat sink fin under a laminar impinging jet. *Journal of Electronic Packaging, Transactions of the ASME*, **2008**, 130, 0345011-0345015, DOI: 10.1115/1.2809447.
- [235] Kandasamy, R.; Wang, X. Q.; Mujumdar, A. S., Transient cooling of electronics using phase change material (PCM)-based heat sinks. *Applied Thermal Engineering*, **2008**, 28, 1047-1057, DOI: 10.1016/j.applthermaleng.2007.06.010.
- [236] Jangam, S. V.; Joshi, V. S.; Mujumdar, A. S.; Thorat, B. N., Studies on dehydration of sapota (*Achras zapota*). *Drying Technology*, **2008**, 26, 369-377, DOI: 10.1080/07373930801898190.
- [237] Huang, L. X. Mujumdar, A. S., The effect of rotary disk atomizer RPM on particle size distribution in a semi-industrial spray dryer. *Drying Technology*, **2008**, 26, 1319-1325, DOI: 10.1080/07373930802330938.

- [238] Huang, L.; Zhang, M.; Mujumdar, A.; Zhang, C.; Lu, D.; Sun, J., Studies on controlling surface accumulation of glucose on dehydrated cabbage. *Drying Technology*, **2008**, 26, 931-935, DOI: 10.1080/07373930802142762.
- [239] Gong, Z. X. Mujumdar, A. S., Software for design and analysis of drying systems. *Drying Technology*, **2008**, 26, 884-894, DOI: 10.1080/07373930802142390.
- [240] Gong, Z.; Zhang, M.; Mujumdar, A.; Sun, J., Spray drying and agglomeration of instant bayberry powder. *Drying Technology*, **2008**, 26, 116-121, DOI: 10.1080/07373930701781751.
- [241] Duan, X.; Zhang, M.; Li, X.; Mujumdar, A. S., Microwave freeze drying of sea cucumber coated with nanoscale silver. *Drying Technology*, **2008**, 26, 413-419, DOI: 10.1080/07373930801929136.
- [242] Duan, X.; Zhang, M.; Li, X.; Mujumdar, A., Ultrasonically enhanced osmotic pretreatment of sea cucumber prior to microwave freeze drying. *Drying Technology*, **2008**, 26, 420-426, DOI: 10.1080/07373930801929201.
- [243] Chung, L. L.; Waje, S. S.; Thorat, B. N.; Mujumdar, A. S., Advances and recent developments in thermal drying for bio-origin and agricultural products. *Stewart Postharvest Review*, **2008**, 4, DOI: 10.2212/spr.2008.1.1.
- [244] Chin, S. K.; Law, C. L.; Supramaniam, C. V.; Cheng, P. G.; Mujumdar, A., Convective drying of *Ganoderma tsugae* Murrill and effect of temperature on basidiospores. *Drying Technology*, **2008**, 26, 1524-1533, DOI: 10.1080/07373930802464018.
- [245] Chen, H. H.; Huang, T. C.; Tsai, C. H.; Mujumdar, A., Development and performance analysis of a new solar energy-assisted photocatalytic dryer. *Drying Technology*, **2008**, 26, 503-507, DOI: 10.1080/07373930801929557.
- [246] Białobrzewski, I.; Zielińska, M.; Mujumdar, A. S.; Markowski, M., Heat and mass transfer during drying of a bed of shrinking particles - Simulation for carrot cubes dried in a spout-fluidized-bed drier. *International Journal of Heat and Mass Transfer*, **2008**, 51, 4704-4716, DOI: 10.1016/j.ijheatmasstransfer.2008.02.031.
- [247] Banooni, S.; Hosseinalipour, S. M.; Mujumdar, A. S.; Taheran, E.; Mashaieki, M., Impingement heat transfer effects on baking of flat bread. *Drying Technology*, **2008**, 26, 910-919, DOI: 10.1080/07373930802142564.

- [248] Banooni, S.; Hosseinalipour, S. M.; Mujumdar, A. S.; Taheran, E.; Bahiraei, M.; Taherkhani, P., Baking of flat bread in an impingement oven: An experimental study of heat transfer and quality aspects. *Drying Technology*, **2008**, 26, 902-909, DOI: 10.1080/07373930802142614.
- [249] Zhonghua, W. Mujumdar, A. S., Simulation of the hydrodynamics and drying in a spouted bed dryer. *Drying Technology*, **2007**, 25, 59-74, DOI: 10.1080/07373930601160775.
- [250] Zhang, Y.; Peng, X. F.; Su, A.; Mujumdar, A. S.; Lee, D. J., Drying of porous medium containing concentration sodium chloride solution. *Drying Technology*, **2007**, 25, 171-175, DOI: 10.1080/01630560601184541.
- [251] Yang, G. Y.; Shi, Y. C.; Liu, X. D.; Mujumdar, A. S., TG-DTG Analysis of Chemically Bound Moisture Removal of $\text{AlF}_3 \cdot 3\text{H}_2\text{O}$. *Drying Technology*, **2007**, 25, 675-680, DOI: 10.1080/07373930701285993.
- [252] Xian, H.; Liu, D.; Shang, F.; Yang, Y.; Du, X.; Mujumdar, A. S.; Huang, L., Study on heat transfer enhancement of oscillating-flow heat pipe for drying. *Drying Technology*, **2007**, 25, 723-729, DOI: 10.1080/07373930701291173.
- [253] Wang, X. Q.; Mujumdar, A. S.; Yap, C., Effect of orientation for phase change material (PCM)-based heat sinks for transient thermal management of electric components. *International Communications in Heat and Mass Transfer*, **2007**, 34, 801-808, DOI: 10.1016/j.icheatmasstransfer.2007.03.008.
- [254] Wang, X. Q.; Mujumdar, A. S.; Yap, C., Effect of bifurcation angle in tree-shaped microchannel networks. *Journal of Applied Physics*, **2007**, 102, DOI: 10.1063/1.2794379.
- [255] Wang, X. Q. Mujumdar, A. S., Heat transfer characteristics of nanofluids: a review. *International Journal of Thermal Sciences*, **2007**, 46, 1-19, DOI: 10.1016/j.ijthermalsci.2006.06.010.
- [256] Wang, W.; Chen, G.; Mujumdar, A. S., Physical interpretation of solids drying: An overview on mathematical modeling research. *Drying Technology*, **2007**, 25, 659-668, DOI: 10.1080/07373930701285936.
- [257] Wang, S. J. Mujumdar, A. S., Three-dimensional analysis of flow and mixing characteristics of a novel in-line opposing-jet mixer. *Industrial and Engineering Chemistry Research*, **2007**, 46, 632-642, DOI: 10.1021/ie060659z.

- [258] Wang, S. J. Mujumdar, A. S., Flow and mixing characteristics of multiple and multi-set opposing jets. *Chemical Engineering and Processing: Process Intensification*, **2007**, 46, 703-712, DOI: 10.1016/j.cep.2006.09.006.
- [259] Wang, B.; Zhang, W.; Zhang, W.; Yu, C.; Wang, G.; Huang, L.; Mujumdar, A. S., Influence of drying processes on agglomeration and grain diameters of magnesium oxide nanoparticles. *Drying Technology*, **2007**, 25, 715-721, DOI: 10.1080/07373930701291108.
- [260] Waje, S. S.; Thorat, B. N.; Mujumdar, A. S., Screw conveyor dryer: Process and equipment design. *Drying Technology*, **2007**, 25, 241-247, DOI: 10.1080/07373930601161112.
- [261] Waje, S. S.; Thorat, B. N.; Mujumdar, A. S., Hydrodynamic characteristics of a pilot-scale screw conveyor dryer. *Drying Technology*, **2007**, 25, 609-616, DOI: 10.1080/07373930701250120.
- [262] Waje, S. S.; Patel, A. K.; Thorat, B. N.; Mujumdar, A. S., Study of residence time distribution in a pilot-Scale screw conveyor dryer. *Drying Technology*, **2007**, 25, 249-259, DOI: 10.1080/07373930601161120.
- [263] Suvarnakuta, P.; Devahastin, S.; Mujumdar, A. S., A mathematical model for low-pressure superheated steam drying of a biomaterial. *Chemical Engineering and Processing: Process Intensification*, **2007**, 46, 675-683, DOI: 10.1016/j.cep.2006.09.002.
- [264] Song, X. J.; Zhang, M.; Mujumdar, A. S., Optimization of vacuum microwave predrying and vacuum frying conditions to produce fried potato chips. *Drying Technology*, **2007**, 25, 2027-2034, DOI: 10.1080/07373930701728638.
- [265] Song, X. J.; Zhang, M.; Mujumdar, A. S., Effect of vacuum-microwave predrying on quality of vacuum-fried potato chips. *Drying Technology*, **2007**, 25, 2021-2026, DOI: 10.1080/07373930701728703.
- [266] Rahman, S. M. A. Mujumdar, A. S., Effect of osmotic treatment with concentrated sugar and salt solutions on kinetics and color in vacuum contact drying. *Journal of Food Processing and Preservation*, **2007**, 31, 671-687, DOI: 10.1111/j.1745-4549.2007.00159.x.
- [267] Rahman, S. M. A.; Islam, M. R.; Mujumdar, A. S., A study of coupled heat and mass transfer in composite food products during convective drying. *Drying Technology*, **2007**, 25, 1359-1368, DOI: 10.1080/07373930701438956.

- [268] Qgura, H.; Yasuda, S.; Otsubo, A.; Mujumdar, A. S., Continuous operation of a chemical heat pump. *Asia-Pacific Journal of Chemical Engineering*, **2007**, 2, 118-123, DOI: 10.1002/apj.50.
- [269] Piacenitini, R. D. Mujumdar, A. S., Guest editorial. *Drying Technology*, **2007**, 25, 1587-1588, DOI: 10.1080/07373930701539803.
- [270] Mujumdar, A. S. Huang, L. X., Global R&D needs in drying. *Drying Technology*, **2007**, 25, 647-658, DOI: 10.1080/07373930701285886.
- [271] Mujumdar, A. S., An overview of innovation in industrial drying: Current status and R&D needs. *Transport in Porous Media*, **2007**, 66, 3-18, DOI: 10.1007/s11242-006-9018-y.
- [272] Liu-Ping, F.; Zhang, M.; Mujumdar, A. S., Storage stability of carrot chips. *Drying Technology*, **2007**, 25, 1537-1543, DOI: 10.1080/07373930701539654.
- [273] Li, X. H.; Guohua, C.; Mujumdar, A. S., Asia-Pacific Journal of Chemical Engineering: Guest editorial. *Asia-Pacific Journal of Chemical Engineering*, **2007**, 2, 1-2, DOI: 10.1002/apj.43.
- [274] Konstantopoulos, D. K.; Maroulis, V. Z.; Karoglou, M.; Moropoulou, A.; Mujumdar, A. S., Hygroscope: A moisture transfer a simulator for buildings. *Drying Technology*, **2007**, 25, 1119-1125, DOI: 10.1080/07373930701396469.
- [275] Kandasamy, R.; Wang, X. Q.; Mujumdar, A. S., Application of phase change materials in thermal management of electronics. *Applied Thermal Engineering*, **2007**, 27, 2822-2832, DOI: 10.1016/j.applthermaleng.2006.12.013.
- [276] Islam, M. R.; Thaker, K. S.; Mujumdar, A. S., A diffusion model for a drum dryer subjected to conduction, convection, and radiant heat input. *Drying Technology*, **2007**, 25, 1033-1043, DOI: 10.1080/07373930701397467.
- [277] Huang, L. X. Mujumdar, A. S., A computational fluid dynamic study of a low-humidity co-current spray dryer. *Asia-Pacific Journal of Chemical Engineering*, **2007**, 2, 12-19, DOI: 10.1002/apj.49.
- [278] Huang, L. Mujumdar, A. S., Simulation of an industrial spray dryer and prediction of off-design performance. *Drying Technology*, **2007**, 25, 703-714, DOI: 10.1080/07373930701291033.

- [279] Hu, Q. G.; Zhang, M.; Mujumdar, A. S.; Xiao, G. N.; Sun, J. C., Performance evaluation of vacuum microwave drying of edamame in deep-bed drying. *Drying Technology*, **2007**, 25, 731-736, DOI: 10.1080/07373930701291199.
- [280] Gong, Z. X. Mujumdar, A. S., Review of R&D in drying of refractories. *Drying Technology*, **2007**, 25, 1917-1925, DOI: 10.1080/07373930701727200.
- [281] Duan, X.; Zhang, M.; Mujumdar, A. S., Studies on the microwave freeze drying technique and sterilization characteristics of cabbage. *Drying Technology*, **2007**, 25, 1725-1731, DOI: 10.1080/07373930701591044.
- [282] Duan, X.; Zhang, M.; Mujumdar, A. S., Study on a combination drying technique of sea cucumber. *Drying Technology*, **2007**, 25, 2011-2019, DOI: 10.1080/07373930701728497.
- [283] Cao, H.; Zhang, M.; Mujumdar, A. S.; Xiao, G. N.; Sun, J. C., Study on reduction of water activity and storage stability for dehydrated brassica parachinensis with intermediate moisture. *Drying Technology*, **2007**, 25, 669-674, DOI: 10.1080/07373930701285969.
- [284] Basu, S.; Shivhare, U. S.; Mujumdar, A. S., Moisture adsorption isotherms and glass transition temperature of xanthan gum. *Drying Technology*, **2007**, 25, 1581-1586, DOI: 10.1080/07373930701539795.
- [285] Zhonghua, W. Mujumdar, A. S., R&D needs and opportunities in pulse combustion and pulse combustion drying. *Drying Technology*, **2006**, 24, 1521-1523, DOI: 10.1080/07373930600961520.
- [286] Zhang, M.; Tang, J.; Mujumdar, A. S.; Wang, S., Trends in microwave-related drying of fruits and vegetables. *Trends in Food Science and Technology*, **2006**, 17, 524-534, DOI: 10.1016/j.tifs.2006.04.011.
- [287] Yong, C. K.; Islam, M. R.; Mujumdar, A. S., Mechanical means of enhancing drying rates: Effect on drying kinetics and quality. *Drying Technology*, **2006**, 24, 397-404, DOI: 10.1080/07373930600616678.
- [288] Xu, Y.; Zhang, M.; Mujumdar, A.; Duan, X.; Jin-cai, S., A two-stage vacuum freeze and convective air drying method for strawberries. *Drying Technology*, **2006**, 24, 1019-1023, DOI: 10.1080/07373930600776209.
- [289] Wu, Z. Mujumdar, A. S., A parametric study of spray drying of a solution in a pulsating high-temperature turbulent flow. *Drying Technology*, **2006**, 24, 751-761, DOI: 10.1080/03602550600685267.

- [290] Wanjari, A. N.; Thorat, B. N.; Baker, C. G. J.; Mujumdar, A. S., Design and modeling of plug flow fluid bed dryers. *Drying Technology*, **2006**, 24, 147-157, DOI: 10.1080/07373930600558946.
- [291] Wang, X. Q.; Yap, C.; Mujumdar, A. S., Laminar heat transfer in constructal Microchannel networks with loops. *Journal of Electronic Packaging, Transactions of the ASME*, **2006**, 128, 273-280, DOI: 10.1115/1.2229228.
- [292] Wang, X. Q.; Mujumdar, A. S.; Yap, C., Numerical analysis of blockage and optimization of heat transfer performance of fractal-like microchannel nets. *Journal of Electronic Packaging, Transactions of the ASME*, **2006**, 128, 38-45, DOI: 10.1115/1.2159007.
- [293] Wang, X. Q.; Mujumdar, A. S.; Yap, C., Thermal characteristics of tree-shaped microchannel nets for cooling of a rectangular heat sink. *International Journal of Thermal Sciences*, **2006**, 45, 1103-1112, DOI: 10.1016/j.ijthermalsci.2006.01.010.
- [294] Wang, S. J.; Devahastin, S.; Mujumdar, A. S., Effect of temperature difference on flow and mixing characteristics of laminar confined opposing jets. *Applied Thermal Engineering*, **2006**, 26, 519-529, DOI: 10.1016/j.applthermaleng.2005.07.029.
- [295] Waje, S. S.; Thorat, B. N.; Mujumdar, A. S., An experimental study of the thermal performance of a screw conveyor dryer. *Drying Technology*, **2006**, 24, 293-301, DOI: 10.1080/07373930600564506.
- [296] Sablani, S. S.; Datta, A. K.; Rahman, M. S.; Mujumdar, A. S., *Handbook of food and bioprocess modeling techniques*. Handbook of Food and Bioprocess Modeling Techniques. 2006. 1-626.
- [297] Sablani, S. S.; Datta, A. K.; Rahman, M. S.; Mujumdar, A. S., *Preface*, in *Handbook of Food and Bioprocess Modeling Techniques*. 2006. p. vii-viii.
- [298] Qing-guo, H.; Min, Z.; Mujumdar, A.; Wei-hua, D.; Jin-cai, S., Effects of different drying methods on the quality changes of granular edamame. *Drying Technology*, **2006**, 24, 1025-1032, DOI: 10.1080/07373930600776217.
- [299] Mujumdar, A. S., Some recent developments in drying technologies appropriate for postharvest processing. *International Journal of Postharvest Technology and Innovation*, **2006**, 1, 76-92, DOI: 10.1504/IJPTI.2006.009185.
- [300] Lim, L. C.; Sablani, S. S.; Mujumdar, A. S., *Dimensional analysis*, in *Handbook of Food and Bioprocess Modeling Techniques*. 2006. p. 533-561.

- [301] Lee, D. J.; Lai, J. Y.; Mujumdar, A. S., Moisture distribution and dewatering efficiency for wet materials. *Drying Technology*, **2006**, 24, 1201-1208, DOI: 10.1080/07373930600838041.
- [302] Kudra, T. Mujumdar, A. S., Guest editorial. *Drying Technology*, **2006**, 24, 795, DOI: 10.1080/07373930600793691.
- [303] Huang, L. X.; Kumar, K.; Mujumdar, A. S., A comparative study of a spray dryer with rotary disc atomizer and pressure nozzle using computational fluid dynamic simulations. *Chemical Engineering and Processing: Process Intensification*, **2006**, 45, 461-470, DOI: 10.1016/j.cep.2005.11.004.
- [304] Huang, L. Mujumdar, A. S., Numerical study of two-stage horizontal spray dryers using computational fluid dynamics. *Drying Technology*, **2006**, 24, 727-733, DOI: 10.1080/07373930600685046.
- [305] Hu, Q. g.; Zhang, M.; Mujumdar, A. S.; Xiao, G. n.; Jin-cai, S., Drying of edamames by hot air and vacuum microwave combination. *Journal of Food Engineering*, **2006**, 77, 977-982, DOI: 10.1016/j.jfoodeng.2005.08.025.
- [306] Fan, L. P.; Zhang, M.; Mujumdar, A. S., Effect of various pretreatments on the quality of vacuum-fried carrot chips. *Drying Technology*, **2006**, 24, 1481-1486, DOI: 10.1080/07373930600952826.
- [307] Devahastin, S.; Suvarnakuta, P.; Mujumdar, A. S., *Recent advances in drying technologies for carrot and sweetpotato*, in *Acta Horticulturae*. 2006. p. 89-96.
- [308] Cao, H.; Zhang, M.; Mujumdar, A. S.; Du, W. H.; Sun, J. C., Optimization of osmotic dehydration of kiwifruit. *Drying Technology*, **2006**, 24, 89-94, DOI: 10.1080/07373930500538741.
- [309] Birchal, V. S.; Huang, L.; Mujumdar, A. S.; Passos, M. L., Spray dryers: Modeling and simulation. *Drying Technology*, **2006**, 24, 359-371, DOI: 10.1080/07373930600564431.
- [310] Basu, S.; Shivhare, U. S.; Mujumdar, A. S., Models for sorption isotherms for foods: A review. *Drying Technology*, **2006**, 24, 917-930, DOI: 10.1080/07373930600775979.
- [311] Basu, S.; Shivhare, U. S.; Mujumdar, A. S., Erratum: Models for sorption isotherms for foods: A review (*Drying Technology* (2006) vol. 24 (917-930)). *Drying Technology*, **2006**, 24, 1705, DOI: 10.1080/07373930601031711.

- [312] Zhao, W.; Kumar, K.; Mujumdar, A. S., Impingement heat transfer for a cluster of laminar impinging jets issuing from noncircular nozzles. *Drying Technology*, **2005**, 23, 105-130, DOI: 10.1081/DRT-200047877.
- [313] Zhao, L.; Li, J.; Pan, Y.; Chen, G.; Mujumdar, A. S., Thermal dehydration methods for fruits and vegetables. *Drying Technology*, **2005**, 23, 2249-2260, DOI: 10.1080/07373930500212768.
- [314] Xu, Y.; Zhang, M.; Tu, D.; Sun, J.; Zhou, L.; Mujumdar, A. S., A two-stage convective air and vacuum freeze-drying technique for bamboo shoots. *International Journal of Food Science and Technology*, **2005**, 40, 589-595, DOI: 10.1111/j.1365-2621.2005.00956.x.
- [315] Wang, X. Q.; Yap, C.; Mujumdar, A. S., Effects of two-dimensional roughness in flow in microchannels. *Journal of Electronic Packaging, Transactions of the ASME*, **2005**, 127, 357-361, DOI: 10.1115/1.1997164.
- [316] Wang, S. J. Mujumdar, A. S., A comparative study of five low Reynolds number k- ϵ models for impingement heat transfer. *Applied Thermal Engineering*, **2005**, 25, 31-44, DOI: 10.1016/j.applthermaleng.2004.06.001.
- [317] Wang, S. J. Mujumdar, A. S., A numerical study of flow and mixing characteristics of three-dimensional confined turbulent opposing jets: Unequal jets. *Chemical Engineering and Processing: Process Intensification*, **2005**, 44, 1068-1074, DOI: 10.1016/j.cep.2005.02.003.
- [318] Wang, S. J.; Devahastin, S.; Mujumdar, A. S., A numerical investigation of some approaches to improve mixing in laminar confined impinging streams. *Applied Thermal Engineering*, **2005**, 25, 253-269, DOI: 10.1016/j.applthermaleng.2004.06.015.
- [319] Wang, B.; Zhang, W.; Zhang, W.; Mujumdar, A. S.; Huang, L., Progress in drying technology for nanomaterials. *Drying Technology*, **2005**, 23, 7-32, DOI: 10.1081/DRT-200047900.
- [320] Suvarnakuta, P.; Devahastin, S.; Soponronnarit, S.; Mujumdar, A. S., Drying kinetics and inversion temperature in a low-pressure superheated steam-drying system. *Industrial and Engineering Chemistry Research*, **2005**, 44, 1934-1941, DOI: 10.1021/ie049675r.
- [321] Suvarnakuta, P.; Devahastin, S.; Mujumdar, A. S., Drying kinetics and β -carotene degradation in carrot undergoing different drying processes. *Journal of Food Science*, **2005**, 70, s520-s526, DOI: 10.1111/j.1365-2621.2005.tb11528.x.

- [322] Sun, L.; Islam, M. R.; Ho, J. C.; Mujumdar, A. S., A diffusion model for drying of a heat sensitive solid under multiple heat input modes. *Bioresource Technology*, **2005**, 96, 1551-1560, DOI: 10.1016/j.biortech.2004.12.016.
- [323] Shi, Y. L.; Mujumdar, A. S.; Ray, M. B., Heat transfer in multiple-turbulent-slot impinging jets of gas-particle suspensions. *Numerical Heat Transfer; Part A: Applications*, **2005**, 47, 147-164, DOI: 10.1080/10407780490517610.
- [324] Sablani, S. S.; Kacimov, A.; Perret, J.; Mujumdar, A. S.; Campo, A., Non-iterative estimation of heat transfer coefficients using artificial neural network models. *International Journal of Heat and Mass Transfer*, **2005**, 48, 665-679, DOI: 10.1016/j.ijheatmasstransfer.2004.09.005.
- [325] Poh, H. J.; Kumar, K.; Mujumdar, A. S., Heat transfer from a pulsed laminar impinging jet. *International Communications in Heat and Mass Transfer*, **2005**, 32, 1317-1324, DOI: 10.1016/j.icheatmasstransfer.2005.07.012.
- [326] Ogura, H.; Yamamoto, T.; Otsubo, Y.; Ishida, H.; Kage, H.; Mujumdar, A. S., A control strategy for a chemical heat pump dryer. *Drying Technology*, **2005**, 23, 1189-1203, DOI: 10.1081/DRT-200059337.
- [327] Mujumdar, A. S., Editorial. *Drying Technology*, **2005**, 23, 999-1000, DOI: 10.1081/DRT-200054945.
- [328] Mujumdar, A. S., Editorial. *Drying Technology*, **2005**, 23, 1001, DOI: 10.1081/DRT-200059130.
- [329] Mujumdar, A. S., Editorial. *Drying Technology*, **2005**, 23, 1165, DOI: 10.1081/DRT-200059321.
- [330] Mujumdar, A. S., Editorial. *Drying Technology*, **2005**, 23, 1343-1344, DOI: 10.1081/DRT-200063471.
- [331] Mujumdar, A. S., Editorial. *Drying Technology*, **2005**, 23, 1761-1762, DOI: 10.1080/07373930500209517.
- [332] Lou, Z. Q.; Mujumdar, A. S.; Yap, C., Effects of geometric parameters on confined impinging jet heat transfer. *Applied Thermal Engineering*, **2005**, 25, 2687-2697, DOI: 10.1016/j.applthermaleng.2004.10.014.

- [333] Li, H.; Elias, E.; Mujumdar, A. S., Theoretical simulation of explosive boiling. *International Communications in Heat and Mass Transfer*, **2005**, 32, 612-619, DOI: 10.1016/j.icheatmasstransfer.2004.10.012.
- [334] Jumah, R. Mujumdar, A. S., Modeling intermittent drying using an adaptive neuro-fuzzy inference system. *Drying Technology*, **2005**, 23, 1075-1092, DOI: 10.1081/DRT-200059138.
- [335] Huang, L. X.; Passos, M. L.; Kumar, K.; Mujumdar, A. S., A three-dimensional simulation of a spray dryer fitted with a rotary atomizer. *Drying Technology*, **2005**, 23, 1859-1873, DOI: 10.1080/07373930500210176.
- [336] Huang, L. Mujumdar, A. S., Development of a new innovative conceptual design for horizontal spray dryer via mathematical modeling. *Drying Technology*, **2005**, 23, 1169-1187, DOI: 10.1081/DRT-200059328.
- [337] Fan, L. P.; Zhang, M.; Mujumdar, A. S., Vacuum frying of carrot chips. *Drying Technology*, **2005**, 23, 645-656, DOI: 10.1081/DRT-200054159.
- [338] Birchal, V. S.; Passos, M. L.; Wildhagen, G. R. S.; Mujumdar, A. S., Effect of spray-dryer operating variables on the whole milk powder quality. *Drying Technology*, **2005**, 23, 611-636, DOI: 10.1081/DRT-200054153.
- [339] Zhao, W.; Kumar, K.; Mujumdar, A. S., Flow and heat transfer characteristics of confined noncircular turbulent impinging jets. *Drying Technology*, **2004**, 22, 2027-2049, DOI: 10.1081/DRT-200034239.
- [340] Zhao, L.; Pan, Y.; Li, J.; Chen, G.; Mujumdar, A. S., Drying of a dilute suspension in a revolving flow fluidized bed of inert particles. *Drying Technology*, **2004**, 22, 363-376, DOI: 10.1081/DRT-120028240.
- [341] Yanyang, X.; Min, Z.; Mujumdar, A. S.; Le-qun, Z.; Jin-cai, S., Studies on hot air and microwave vacuum drying of wild cabbage. *Drying Technology*, **2004**, 22, 2201-2209, DOI: 10.1081/DRT-200034275.
- [342] Shi, Y.; Mujumdar, A. S.; Ray, M. B., Effect of large temperature difference on impingement heat transfer under a round turbulent jet. *International Communications in Heat and Mass Transfer*, **2004**, 31, 251-260, DOI: 10.1016/S0735-1933(03)00230-6.

- [343] Ranjan, R.; Irudayaraj, J.; Reddy, J. N.; Mujumdar, A. S., Finite-element simulation and validation of stepwise drying of bananas. *Numerical Heat Transfer; Part A: Applications*, **2004**, 45, 997-1012, DOI: 10.1080/10407780490453963.
- [344] Poh, H. J.; Kumar, K.; Chiang, H. S.; Mujumdar, A. S., Heat transfer from a laminar impinging jet of a power law fluid. *International Communications in Heat and Mass Transfer*, **2004**, 31, 241-249, DOI: 10.1016/S0735-1933(03)00229-X.
- [345] Ogura, H.; Hamaguchi, N.; Kage, H.; Mujumdar, A. S., Energy and cost estimation for application of chemical heat pump dryer to industrial ceramics drying. *Drying Technology*, **2004**, 22, 307-323, DOI: 10.1081/DRT-120028236.
- [346] Mujumdar, A. S., Editorial. *Drying Technology*, **2004**, 22, vii-viii, DOI: 10.1081/DRT-200039975.
- [347] Markowski, A. S. Mujumdar, A. S., Drying risk assessment strategies. *Drying Technology*, **2004**, 22, 395-412, DOI: 10.1081/DRT-120028242.
- [348] Huang, L.; Kumar, K.; Mujumdar, A. S., Simulation of a spray dryer fitted with a rotary disk atomizer using a three-dimensional computational fluid dynamic model. *Drying Technology*, **2004**, 22, 1489-1515, DOI: 10.1081/DRT-120038737.
- [349] Huang, L.; Kumar, K.; Mujumdar, A. S., Spray evaporation of different liquids in a drying chamber - Effect on flow, heat and mass transfer performances. *Chinese Journal of Chemical Engineering*, **2004**, 12, 737-743.
- [350] Goel, M.; Hongqiang, H.; Mujumdar, A. S.; Ray, M. B., Sonochemical decomposition of volatile and non-volatile organic compounds - A comparative study. *Water Research*, **2004**, 38, 4247-4261, DOI: 10.1016/j.watres.2004.08.008.
- [351] Devahastin, S.; Suvarnakuta, P.; Soponronnarit, S.; Mujumdar, A. S., A comparative study of low-pressure superheated steam and vacuum drying of a heat-sensitive material. *Drying Technology*, **2004**, 22, 1845-1867, DOI: 10.1081/DRT-200032818.
- [352] Chua, K. J.; Chou, S. K.; Mujumdar, A. S.; Ho, J. C.; Hon, C. K., Radiant-convective drying of osmotic treated agro-products: Effect on drying kinetics and product quality. *Food Control*, **2004**, 15, 145-158, DOI: 10.1016/S0956-7135(03)00026-4.
- [353] Shi, Y. L.; Mujumdar, A. S.; Ray, M. B., Parametric Study of Heat Transfer in Turbulent Gas-Solid Flow in Multiple Impinging Jets. *Industrial and Engineering Chemistry Research*, **2003**, 42, 6223-6231, DOI: 10.1021/ie0303451.

- [354] Shi, Y.; Ray, M. B.; Mujumdar, A. S., Numerical study on the effect of cross-flow on turbulent flow and heat transfer characteristics under normal and oblique semi-confined impinging slot jets. *Drying Technology*, **2003**, 21, 1923-1939, DOI: 10.1081/DRT-120026425.
- [355] Perera, C. O.; Jasinghe, V. J.; Ng, F. L.; Mujumdar, A. S., The effect of moisture content on the conversion of ergosterol to vitamin D in shiitake mushrooms. *Drying Technology*, **2003**, 21, 1091-1099, DOI: 10.1081/DRT-120021876.
- [356] Pan, Y. K.; Zhao, L. J.; Zhang, Y.; Chen, G.; Mujumdar, A. S., Osmotic dehydration pretreatment in drying of fruits and vegetables. *Drying Technology*, **2003**, 21, 1101-1114, DOI: 10.1081/DRT-120021877.
- [357] Ogura, H.; Ishida, H.; Kage, H.; Mujumdar, A. S., Enhancement of energy efficiency of a chemical heat pump-assisted convective dryer. *Drying Technology*, **2003**, 21, 279-292, DOI: 10.1081/DRT-120017749.
- [358] Li, J.; Mason, D. J.; Mujumdar, A. S., A numerical study of heat transfer mechanisms in gas-solids flows through pipes using a coupled CFD and DEM model. *Drying Technology*, **2003**, 21, 1839-1866, DOI: 10.1081/DRT-120025511.
- [359] Li, J.; Campbell, G. M.; Mujumdar, A. S., Discrete modeling and suggested measurement of heat transfer in gas-solids flows. *Drying Technology*, **2003**, 21, 979-994, DOI: 10.1081/DRT-120021851.
- [360] Jia, L. W.; Raisul Islam, M.; Mujumdar, A. S., A simulation study on convection and microwave drying of different food products. *Drying Technology*, **2003**, 21, 1549-1574, DOI: 10.1081/DRT-120024679.
- [361] Islam, R.; Sablani, S. S.; Mujumdar, A. S., An artificial neural network model for prediction of drying rates. *Drying Technology*, **2003**, 21, 1867-1884, DOI: 10.1081/DRT-120025512.
- [362] Islam, R. Mujumdar, A. S., Role of product shrinkage in drying rate predictions using a liquid diffusion model. *International Communications in Heat and Mass Transfer*, **2003**, 30, 391-400, DOI: 10.1016/S0735-1933(03)00057-5.
- [363] Islam, M. R.; Ho, J. C.; Mujumdar, A. S., Simulation of liquid diffusion-controlled drying of shrinking thin slabs subjected to multiple heat sources. *Drying Technology*, **2003**, 21, 413-438, DOI: 10.1081/DRT-120018455.

- [364] Islam, M. R.; Ho, J. C.; Mujumdar, A. S., Convective drying with time-varying heat input: Simulation results. *Drying Technology*, **2003**, 21, 1333-1356, DOI: 10.1081/DRT-120023187.
- [365] Huang, L.; Kumar, K.; Mujumdar, A. S., Use of computational fluid dynamics to evaluate alternative spray dryer chamber configurations. *Drying Technology*, **2003**, 21, 385-412, DOI: 10.1081/DRT-120018454.
- [366] Huang, L.; Kumar, K.; Mujumdar, A. S., A parametric study of the gas flow patterns and drying performance of co-current spray dryer: Results of a computational fluid dynamics study. *Drying Technology*, **2003**, 21, 957-978, DOI: 10.1081/DRT-120021850.
- [367] Dedic, A. D.; Mujumdar, A. S.; Voronjec, D. K., A three dimensional model for heat and mass transfer in convective wood drying. *Drying Technology*, **2003**, 21, 1-15, DOI: 10.1081/DRT-120017280.
- [368] Chua, K. J.; Mujumdar, A. S.; Chou, S. K., Intermittent drying of bioproducts - An overview. *Bioresource Technology*, **2003**, 90, 285-295, DOI: 10.1016/S0960-8524(03)00133-0.
- [369] Uddin, M. S.; Hawlader, M. N. A.; Ding, L.; Mujumdar, A. S., Degradation of ascorbic acid in dried guava during storage. *Journal of Food Engineering*, **2002**, 51, 21-26, DOI: 10.1016/S0260-8774(01)00031-0.
- [370] Shi, Y.; Ray, M. B.; Mujumdar, A. S., Effect of large temperature differences on local nusselt number under turbulent slot impingement jet. *Drying Technology*, **2002**, 20, 1803-1825, DOI: 10.1081/DRT-120015415.
- [371] Shi, Y.; Ray, M. B.; Mujumdar, A. S., Computational study of impingement heat transfer under a turbulent slot jet. *Industrial and Engineering Chemistry Research*, **2002**, 41, 4643-4651, DOI: 10.1021/ie020120a.
- [372] Shi, Y.; Ray, M. B.; Mujumdar, A. S., Effects of prandtl number on impinging jet heat transfer under a semi-confined turbulent slot jet. *International Communications in Heat and Mass Transfer*, **2002**, 29, 929-938, DOI: 10.1016/S0735-1933(02)00413-X.
- [373] Sanga, E. C. M.; Mujumdar, A. S.; Raghavan, G. S. V., Simulation of convection-microwave drying for a shrinking material. *Chemical Engineering and Processing*, **2002**, 41, 487-499, DOI: 10.1016/S0255-2701(01)00170-2.

- [374] Rostami, A. A.; Mujumdar, A. S.; Saniei, N., Flow and heat transfer for gas flowing in microchannels: A review. *Heat and Mass Transfer/Waerme- und Stoffuebertragung*, **2002**, 38, 359-367, DOI: 10.1007/s002310100247.
- [375] Ogura, H.; Yamamoto, T.; Kage, H.; Matsuno, Y.; Mujumdar, A. S., Effects of heat exchange condition on hot air production by a chemical heat pump dryer using $\text{CaO}/\text{H}_2\text{O}/\text{Ca}(\text{OH})_2$ reaction. *Chemical Engineering Journal*, **2002**, 86, 3-10, DOI: 10.1016/S1385-8947(01)00265-0.
- [376] Mujumdar, A. S. Chen, G., Special theme issue: Developments in dewatering and drying. *Developments in Chemical Engineering and Mineral Processing*, **2002**, 10, 223-224, DOI: 10.1002/apj.5500100401.
- [377] Mujumdar, A. S., Drying research - Current state and future trends. *Developments in Chemical Engineering and Mineral Processing*, **2002**, 10, 225-246, DOI: 10.1002/apj.5500100402.
- [378] Ho, J. C.; Chou, S. K.; Chua, K. J.; Mujumdar, A. S.; Hawlader, M. N. A., Analytical study of cyclic temperature drying: Effect on drying kinetics and product quality. *Journal of Food Engineering*, **2002**, 51, 65-75, DOI: 10.1016/S0260-8774(01)00038-3.
- [379] Elustondo, D. M.; Mujumdar, A. S.; Urbicain, M. J., Optimum operating conditions in drying foodstuffs with superheated steam. *Drying Technology*, **2002**, 20, 381-402, DOI: 10.1081/DRT-120002548.
- [380] Devahastin, S. Mujumdar, A. S., A numerical study of flow and mixing characteristics of laminar confined impinging streams. *Chemical Engineering Journal*, **2002**, 85, 215-223, DOI: 10.1016/S1385-8947(01)00163-2.
- [381] Chua, K. J.; Chou, S. K.; Hawlader, M. N. A.; Mujumdar, A. S.; Ho, J. C., Modelling the moisture and temperature distribution within an agricultural product undergoing time-varying drying schemes. *Biosystems Engineering*, **2002**, 81, 99-111, DOI: 10.1006/bioe.2001.0026.
- [382] Chen, G.; Yue, P. L.; Mujumdar, A. S., Sludge dewatering and drying. *Drying Technology*, **2002**, 20, 883-916, DOI: 10.1081/DRT-120003768.
- [383] Chen, G. Mujumdar, A. S., Application of electrical fields in dewatering and drying. *Developments in Chemical Engineering and Mineral Processing*, **2002**, 10, 429-441, DOI: 10.1002/apj.5500100413.

- [384] Zhao, W.; Mujumdar, A. S.; Ray, M. B., Collection efficiencies of various designs of post-cyclone. *Canadian Journal of Chemical Engineering*, **2001**, 79, 708-716, DOI: 10.1002/cjce.5450790502.
- [385] Tan, M.; Chua, K. J.; Mujumdar, A. S.; Chou, S. K., Effect of osmotic pre-treatment and infrared radiation on drying rate and color changes during drying of potato and pineapple. *Drying Technology*, **2001**, 19, 2193-2207, DOI: 10.1081/DRT-100107494.
- [386] Pan, Y. K.; Li, J. G.; Zhao, L. J.; Ye, W. H.; Mujumdar, A. S.; Kudra, T., Performance characteristics of the vibrated fluid bed of inert particles for drying of liquid feeds. *Drying Technology*, **2001**, 19, 2003-2018, DOI: 10.1081/DRT-100107285.
- [387] Mujumdar, A. S., *Recent developments in the drying technologies for the production of particulate materials*, in *Handbook of Powder Technology*. 2001. p. 533-545.
- [388] Ho, J. C.; Chou, S. K.; Mujumdar, A. S.; Hawlader, M. N. A.; Chua, K. J., An optimisation framework for drying of heat-sensitive products. *Applied Thermal Engineering*, **2001**, 21, 1779-1798, DOI: 10.1016/S1359-4311(01)00047-3.
- [389] Hawlader, M. N. A.; Chou, S. K.; Chua, K. J.; Ho, J. C.; Mujumdar, A. S., On The Steady-state modelling of a two-stage evaporator system. *International Journal of Energy Research*, **2001**, 25, 859-880, DOI: 10.1002/er.725.
- [390] Devahastin, S. Mujumdar, A. S., A numerical study of mixing in a novel impinging stream in-line mixer. *Chemical Engineering and Processing*, **2001**, 40, 459-470, DOI: 10.1016/S0255-2701(00)00145-8.
- [391] Devahastin, S. Mujumdar, A. S., A study of turbulent mixing of confined impinging streams using a new composite turbulence model. *Industrial and Engineering Chemistry Research*, **2001**, 40, 4998-5004, DOI: 10.1021/ie010153a.
- [392] Chua, K. J.; Mujumdar, A. S.; Hawlader, M. N. A.; Chou, S. K.; Ho, J. C., Batch drying of banana pieces - Effect of stepwise change in drying air temperature on drying kinetics and product colour. *Food Research International*, **2001**, 34, 721-731, DOI: 10.1016/S0963-9969(01)00094-1.
- [393] Chua, K. J.; Mujumdar, A. S.; Hawlader, M. N. A.; Chou, S. K.; Ho, J. C., Convective drying of agricultural products. Effect of continuous and stepwise change in drying air temperature. *Drying Technology*, **2001**, 19, 1949-1960, DOI: 10.1081/DRT-100107282.

- [394] Chen, G.; Wang, W.; Mujumdar, A. S., Theoretical study of microwave heating patterns on batch fluidized bed drying of porous material. *Chemical Engineering Science*, **2001**, 56, 6823-6835, DOI: 10.1016/S0009-2509(01)00320-7.
- [395] Chua, K. J.; Mujumdar, A. S.; Chou, S. K.; Hawlader, M. N. A.; Ho, J. C., Convective drying of banana, guava and potato pieces : Effect of cyclical variations of air temperature on drying kinetics and color change. *Drying Technology*, **2000**, 18, 907-936, DOI: 10.1080/07373930008917744.
- [396] Chua, K. J.; Chou, S. K.; Ho, J. C.; Mujumdar, A. S.; Hawlader, M. N. A., Cyclic air temperature drying of guava pieces: Effects on moisture and ascorbic acid contents. *Food and Bioproducts Processing: Transactions of the Institution of Chemical Engineers, Part C*, **2000**, 78, 72-78, DOI: 10.1205/096030800532761.
- [397] Chou, S. K.; Chua, K. J.; Mujumdar, A. S.; Hawlader, M. N. A.; Ho, J. C., On the intermittent drying of an agricultural product. *Food and Bioproducts Processing: Transactions of the Institution of Chemical Engineers, Part C*, **2000**, 78, 193-203, DOI: 10.1205/09603080051065296.