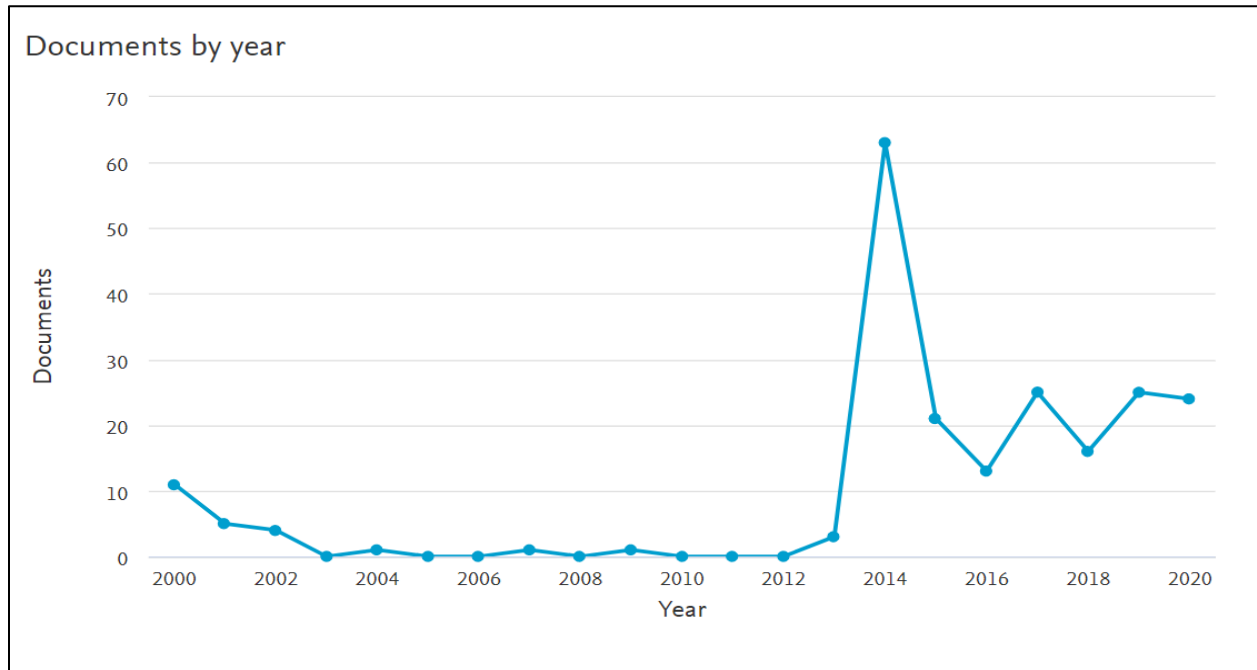
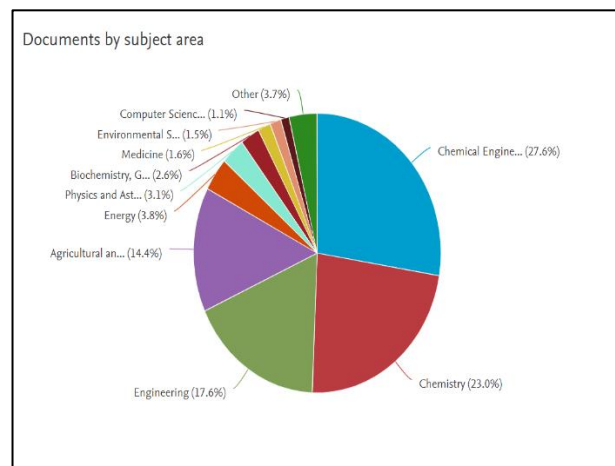
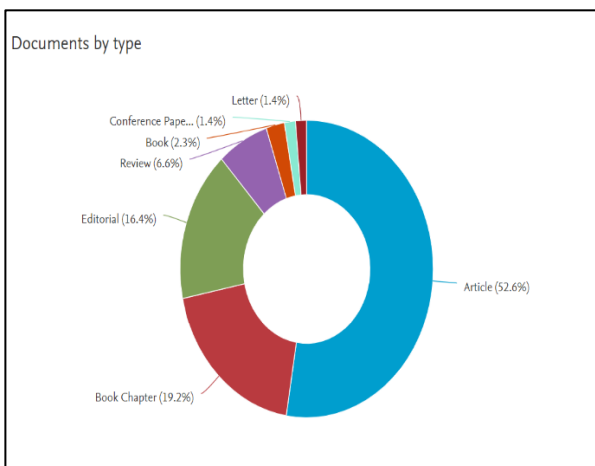


Publications by Prof. Arun S. Mujumdar, McGill University, Canada during 2000 to 2020.



Source: Scopus database, accessed on 01-12-2020



Source: Scopus database, accessed on 01-12-2020

List of Publications:

- [1] Wang, H.; Zhang, Q.; Mujumdar, A. S.; Fang, X. M.; Wang, J.; Pei, Y. P.; Wu, W.; Zielinska, M.; Xiao, H. W., High-humidity hot air impingement blanching (HHAIB) efficiently inactivates enzymes, enhances extraction of phytochemicals and mitigates brown actions of chili pepper. *Food Control*, **2020**, 111, DOI: 10.1016/j.foodcont.2019.107050.
- [2] Deng, L. Z.; Mujumdar, A. S.; Pan, Z.; Vidyarthi, S. K.; Xu, J.; Zielinska, M.; Xiao, H. W., Emerging chemical and physical disinfection technologies of fruits and vegetables: a comprehensive review. *Critical Reviews in Food Science and Nutrition*, **2020**, 60, 2481-2508, DOI: 10.1080/10408398.2019.1649633.
- [3] da Silva Veloso, Y. M.; de Almeida, M. M.; de Alsina, O. L. S.; Passos, M. L.; Mujumdar, A. S.; Leite, M. S., Hybrid phenomenological/ANN-PSO modelling of a deformable material in spouted bed drying process. *Powder Technology*, **2020**, 366, 185-196, DOI: 10.1016/j.powtec.2019.12.047.
- [4] Gupta, R. Mujumdar, A. S., *RECENT DEVELOPMENTS IN FLUIDIZED BED DRYING*. Advances in Drying. Vol. 2. 2020. 155-192.
- [5] Amanor-Atiemoh, R.; Zhou, C.; Mujumdar, A.; Osae, R.; Taiye Mustapha, A.; Wahia, H.; Sampson, G.; Amoa-Owusu, A.; Ma, H., Effect of simultaneous dual-frequency ultrasound aided ethanolic pretreatment on drying kinetics, bioactive compounds, antioxidant activity, and physicochemical properties of apple slices using pulsed vacuum dryer. *Journal of Food Process Engineering*, **2020**, 43, DOI: 10.1111/jfpe.13535.
- [6] Chavan, A.; Vitankar, V.; Mujumdar, A.; Thorat, B., Natural convection and direct type (NCDT) solar dryers: a review. *Drying Technology*, **2020**, DOI: 10.1080/07373937.2020.1753065.
- [7] Mujumdar, A. S., Editorial. *Drying Technology*, **2020**, 38, 1957, DOI: 10.1080/07373937.2019.1699273.
- [8] Xiao, H. W. Mujumdar, A. S., Importance of drying in support of human welfare. *Drying Technology*, **2020**, 38, 1542-1543, DOI: 10.1080/07373937.2019.1686476.
- [9] Li, J.; An, H.; Sasmito, A. P.; Mujumdar, A. S.; Ling, X., Performance evaluation of mass transport enhancement in novel dual-channel design of micro-reactors. *Heat and Mass Transfer/Waerme- und Stoffuebertragung*, **2020**, 56, 559-574, DOI: 10.1007/s00231-019-02727-6.
- [10] Deng, L. Z.; Mujumdar, A. S.; Yang, W. X.; Zhang, Q.; Zheng, Z. A.; Wu, M.; Xiao, H. W., Hot air impingement drying kinetics and quality attributes of orange peel. *Journal of Food Processing and Preservation*, **2020**, 44, DOI: 10.1111/jfpp.14294.
- [11] Wang, J.; Xiao, H. W.; Fang, X. M.; Mujumdar, A. S.; Vidyarthi, S. K.; Xie, L., Effect of high-humidity hot air impingement blanching and pulsed vacuum drying on phytochemicals content, antioxidant capacity, rehydration kinetics and ultrastructure of

- Thompson seedless grape. *Drying Technology*, **2020**, DOI: 10.1080/07373937.2020.1845721.
- [12] Jahangiri, S.; Shiravi, A. H.; Hosseinalipour, M.; Mujumdar, A. S., Numerical study of the oscillation amplitude effect on the heat transfer of oscillatory impinging round jets. *Numerical Heat Transfer, Part B: Fundamentals*, **2020**, DOI: 10.1080/10407790.2020.1803607.
- [13] Song, X. D.; Mujumdar, A. S.; Law, C. L.; Fang, X. M.; Peng, W. J.; Deng, L. Z.; Wang, J.; Xiao, H. W., Effect of drying air temperature on drying kinetics, color, carotenoid content, antioxidant capacity and oxidation of fat for lotus pollen. *Drying Technology*, **2020**, 38, 1151-1164, DOI: 10.1080/07373937.2019.1616752.
- [14] Ju, H. Y.; Zhao, S. H.; Mujumdar, A. S.; Zhao, H. Y.; Duan, X.; Zheng, Z. A.; Gao, Z. J.; Xiao, H. W., Step-down relative humidity convective air drying strategy to enhance drying kinetics, efficiency, and quality of American ginseng root (*Panax quinquefolium*). *Drying Technology*, **2020**, 38, 903-916, DOI: 10.1080/07373937.2019.1597373.
- [15] Shirkole, S. S. Mujumdar, A. S., Facilitating drying R&D via critical review papers. *Drying Technology*, **2020**, 38, 1817-1818, DOI: 10.1080/07373937.2020.1822080.
- [16] Deng, L. Z.; Tao, Y.; Mujumdar, A. S.; Pan, Z.; Chen, C.; Yang, X. H.; Liu, Z. L.; Wang, H.; Xiao, H. W., Recent advances in non-thermal decontamination technologies for microorganisms and mycotoxins in low-moisture foods. *Trends in Food Science and Technology*, **2020**, 106, 104-112, DOI: 10.1016/j.tifs.2020.10.012.
- [17] Zielinska, M.; Ropelewska, E.; Xiao, H. W.; Mujumdar, A. S.; Law, C. L., Review of recent applications and research progress in hybrid and combined microwave-assisted drying of food products: Quality properties. *Critical Reviews in Food Science and Nutrition*, **2020**, 60, 2212-2264, DOI: 10.1080/10408398.2019.1632788.
- [18] Mounir, S.; Amami, E.; Allaf, T.; Mujumdar, A.; Allaf, K., Instant controlled pressure drop (DIC) coupled to intermittent microwave/airflow drying to produce shrimp snacks: Process performance and quality attributes. *Drying Technology*, **2020**, 38, 695-711, DOI: 10.1080/07373937.2019.1694537.
- [19] Mounir, S.; Ghandour, A.; Téllez-Pérez, C.; Aly, A. A.; Mujumdar, A. S.; Allaf, K., Phytochemicals, chlorophyll pigments, antioxidant activity, relative expansion ratio, and microstructure of dried okra pods: swell-drying by instant controlled pressure drop versus conventional shade drying. *Drying Technology*, **2020**, DOI: 10.1080/07373937.2020.1756843.
- [20] Piacentini, R. D.; Novara, I.; Mujumdar, A. S., Climate change and pandemics: New challenges for science and technology. *Drying Technology*, **2020**, 38, 1391-1392, DOI: 10.1080/07373937.2020.1786981.
- [21] Patil, G. K.; Patil, P. B.; Pardeshi, S. R.; Rajput, R. L.; Sonawane, S. H.; Mujumdar, A.; Naik, J. B., Effect of process parameters on the recovery of lactose in an antisolvent acetone/acetone-ethanol mixture: A comparative study based on sonication medium. *Ultrasonics Sonochemistry*, **2020**, 67, DOI: 10.1016/j.ultsonch.2020.105128.

- [22] Gao, Y.; An, J.; Xi, Y.; Yang, Z.; Liu, J.; Mujumdar, A. S.; Wang, L.; Sasmito, A. P., Thermal conductivity and stability of novel aqueous graphene oxide-Al₂O₃ hybrid nanofluids for cold energy storage. *Applied Sciences (Switzerland)*, **2020**, 10, DOI: 10.3390/APP10175768.
- [23] Mujumdar, A. S., Tribute to late professor Czesław Strumiłło: Dedicated educator, outstanding researcher, conscientious mentor, and exceptional human being. *Drying Technology*, **2020**, 38, 2, DOI: 10.1080/07373937.2019.1637349.
- [24] Yu, X. L.; Zielinska, M.; Ju, H. Y.; Mujumdar, A. S.; Duan, X.; Gao, Z. J.; Xiao, H. W., Multistage relative humidity control strategy enhances energy and exergy efficiency of convective drying of carrot cubes. *International Journal of Heat and Mass Transfer*, **2020**, 149, DOI: 10.1016/j.ijheatmasstransfer.2019.119231.
- [25] Deng, L. Z.; Mujumdar, A. S.; Zhang, Q.; Yang, X. H.; Wang, J.; Zheng, Z. A.; Gao, Z. J.; Xiao, H. W., Chemical and physical pretreatments of fruits and vegetables: Effects on drying characteristics and quality attributes—a comprehensive review. *Critical Reviews in Food Science and Nutrition*, **2019**, 59, 1408-1432, DOI: 10.1080/10408398.2017.1409192.
- [26] Yu, X. L.; Ju, H. Y.; Mujumdar, A. S.; Zheng, Z. A.; Wang, J.; Deng, L. Z.; Gao, Z. J.; Xiao, H. W., Experimental and simulation studies of heat transfer in high-humidity hot air impingement blanching (HHAIB) of carrot. *Food and Bioprocesses Processing*, **2019**, 114, 196-204, DOI: 10.1016/j.fbp.2019.01.001.
- [27] H. Bagheri, M.; Esmailpour, K.; Hoseinalipour, S. M.; Mujumdar, A. S., Numerical study and POD snapshot analysis of flow characteristics for pulsating turbulent opposing jets. *International Journal of Numerical Methods for Heat and Fluid Flow*, **2019**, 29, 2009-2031, DOI: 10.1108/HFF-07-2018-0382.
- [28] Deng, L. Z.; Pan, Z.; Mujumdar, A. S.; Zhao, J. H.; Zheng, Z. A.; Gao, Z. J.; Xiao, H. W., High-humidity hot air impingement blanching (HHAIB) enhances drying quality of apricots by inactivating the enzymes, reducing drying time and altering cellular structure. *Food Control*, **2019**, 96, 104-111, DOI: 10.1016/j.foodcont.2018.09.008.
- [29] Guo, C.; Mujumdar, A. S.; Zhang, M., New Development in Radio Frequency Heating for Fresh Food Processing: a Review. *Food Engineering Reviews*, **2019**, 11, 29-43, DOI: 10.1007/s12393-018-9184-z.
- [30] Xue, L.; Wang, S.; Mujumdar, A. S.; Wang, J.; Yu, X.; Gao, Z., Heating Control Technology of Vacuum Pulse Drying Based on Drying Uniformity. *Nongye Jixie Xuebao/Transactions of the Chinese Society for Agricultural Machinery*, **2019**, 50, 317-325, DOI: 10.6041/j.issn.1000-1298.2019.04.036.
- [31] Roknul Azam, S. M.; Zhang, M.; Law, C. L.; Mujumdar, A. S., Effects of drying methods on quality attributes of peach (*Prunus persica*) leather. *Drying Technology*, **2019**, 37, 341-351, DOI: 10.1080/07373937.2018.1454942.
- [32] Cao, X.; Zhang, M.; Mujumdar, A. S.; Wang, Z., Effect of microwave freeze-drying on microbial inactivation, antioxidant substance and flavor quality of Ashitaba leaves

- (Angelica keiskei Koidzumi). *Drying Technology*, **2019**, 37, 793-800, DOI: 10.1080/07373937.2018.1463245.
- [33] Kar, S.; Mujumdar, A. S.; Sutar, P. P., Aspergillus niger inactivation in microwave rotary drum drying of whole garlic bulbs and effect on quality of dried garlic powder. *Drying Technology*, **2019**, 37, 1528-1540, DOI: 10.1080/07373937.2018.1517777.
- [34] Karim, A.; Colette, B.; Ezzeddine, A.; Tamara, A.; Mujumdar, A. S.; Sabah, M., *Drying and instant controlled pressure drop swell drying: Towards high-quality dried foods and starch-free snacks*, in *Advanced Drying Technologies for Foods*. 2019. p. 31-51.
- [35] Khaing Hnin, K.; Zhang, M.; Mujumdar, A. S.; Zhu, Y., Emerging food drying technologies with energy-saving characteristics: A review. *Drying Technology*, **2019**, 37, 1465-1480, DOI: 10.1080/07373937.2018.1510417.
- [36] Cao, X.; Zhang, M.; Mujumdar, A. S.; Zhong, Q., Evaluation of quality properties and water mobility in vacuum microwave-dried carrot slices using pulse-spouted bed with hot air. *Drying Technology*, **2019**, 37, 1087-1096, DOI: 10.1080/07373937.2018.1484758.
- [37] Cao, X.; Zhang, M.; Chitrakar, B.; Mujumdar, A. S.; Zhong, Q.; Wang, Z.; Wang, L., Radiofrequency heating for powder pasteurization of barley grass: antioxidant substances, sensory quality, microbial load and energy consumption. *Journal of the Science of Food and Agriculture*, **2019**, 99, 4460-4467, DOI: 10.1002/jsfa.9683.
- [38] Devi, S.; Zhang, M.; Mujumdar, A. S., Influence of ultrasound and microwave-assisted vacuum frying on quality parameters of fried product and the stability of frying oil. *Drying Technology*, **2019**, DOI: 10.1080/07373937.2019.1702995.
- [39] Sun, Y.; Zhang, M.; Mujumdar, A., Berry Drying: Mechanism, Pretreatment, Drying Technology, Nutrient Preservation, and Mathematical Models. *Food Engineering Reviews*, **2019**, 11, 61-77, DOI: 10.1007/s12393-019-9188-3.
- [40] Mujumdar, A. S. Xiao, H. W., *Advanced drying technologies for foods*. *Advanced Drying Technologies for Foods*. 2019. 1-246.
- [41] Mujumdar, A. S. Xiao, H. W., Preface. *Advanced Drying Technologies for Foods*, **2019**, vii.
- [42] Fan, K.; Zhang, M.; Mujumdar, A. S., Recent developments in high efficient freeze-drying of fruits and vegetables assisted by microwave: A review. *Critical Reviews in Food Science and Nutrition*, **2019**, 59, 1357-1366, DOI: 10.1080/10408398.2017.1420624.
- [43] Sun, Q.; Zhang, M.; Mujumdar, A. S., Recent developments of artificial intelligence in drying of fresh food: A review. *Critical Reviews in Food Science and Nutrition*, **2019**, 59, 2258-2275, DOI: 10.1080/10408398.2018.1446900.
- [44] Mujumdar, A. S., Editorial. *Drying Technology*, **2019**, 37, 269, DOI: 10.1080/07373937.2018.1464341.
- [45] Mujumdar, A. S., IDS in 1992 and 2020. *Drying Technology*, **2019**, 37, 1743-1744, DOI: 10.1080/07373937.2019.1650451.
- [46] Jangam, S. V. Mujumdar, A. S., *Miscellaneous drying technologies*, in *Advanced Drying Technologies for Foods*. 2019. p. 205-222.

- [47] Sun, Q.; Zhang, M.; Mujumdar, A. S.; Yang, P., Combined LF-NMR and Artificial Intelligence for Continuous Real-Time Monitoring of Carrot in Microwave Vacuum Drying. *Food and Bioprocess Technology*, **2019**, 12, 551-562, DOI: 10.1007/s11947-018-2231-1.
- [48] Zhang, X. L.; Zhong, C. S.; Mujumdar, A. S.; Yang, X. H.; Deng, L. Z.; Wang, J.; Xiao, H. W., Cold plasma pretreatment enhances drying kinetics and quality attributes of chili pepper (*Capsicum annuum* L.). *Journal of Food Engineering*, **2019**, 241, 51-57, DOI: 10.1016/j.jfoodeng.2018.08.002.
- [49] Shirkole, S. S.; Mujumdar, A. S.; Sutar, P. P., Studies on thermal stability of high-power short time microwave dried paprika (*Capsicum annuum* L.) considering the interaction of water molecules with sorption sites. *Drying Technology*, **2019**, DOI: 10.1080/07373937.2019.1693399.
- [50] Deng, L. Z.; Mujumdar, A. S.; Yang, X. H.; Wang, J.; Zhang, Q.; Zheng, Z. A.; Gao, Z. J.; Xiao, H. W., High humidity hot air impingement blanching (HHAIB) enhances drying rate and softens texture of apricot via cell wall pectin polysaccharides degradation and ultrastructure modification. *Food Chemistry*, **2018**, 261, 292-300, DOI: 10.1016/j.foodchem.2018.04.062.
- [51] Deng, L. Z.; Yang, X. H.; Mujumdar, A. S.; Zhao, J. H.; Wang, D.; Zhang, Q.; Wang, J.; Gao, Z. J.; Xiao, H. W., Red pepper (*Capsicum annuum* L.) drying: Effects of different drying methods on drying kinetics, physicochemical properties, antioxidant capacity, and microstructure. *Drying Technology*, **2018**, 36, 893-907, DOI: 10.1080/07373937.2017.1361439.
- [52] Deshmukh, R.; Mujumdar, A.; Naik, J., Production of aceclofenac-loaded sustained release micro/nanoparticles using pressure homogenization and spray drying. *Drying Technology*, **2018**, 36, 459-467, DOI: 10.1080/07373937.2017.1341418.
- [53] Azam, S. M. R.; Zhang, M.; Mujumdar, A. S.; Yang, C., Study on 3D printing of orange concentrate and material characteristics. *Journal of Food Process Engineering*, **2018**, 41, DOI: 10.1111/jfpe.12689.
- [54] Feng, Y.; Zhang, M.; Fan, K.; Mujumdar, A. S., Effects of drying methods on quality of fermented plant extract powder. *Drying Technology*, **2018**, 36, 1913-1919, DOI: 10.1080/07373937.2018.1461649.
- [55] Cao, X.; Zhang, M.; Mujumdar, A. S.; Zhong, Q.; Wang, Z., Measurement of water mobility and distribution in vacuum microwave-dried barley grass using Low-Field-NMR. *Drying Technology*, **2018**, 36, 1892-1899, DOI: 10.1080/07373937.2018.1449753.
- [56] Cao, X.; Zhang, M.; Mujumdar, A. S.; Zhong, Q.; Wang, Z., Effect of microwave freeze drying on quality and energy supply in drying of barley grass. *Journal of the Science of Food and Agriculture*, **2018**, 98, 1599-1605, DOI: 10.1002/jsfa.8634.
- [57] Cao, X.; Zhang, M.; Mujumdar, A. S.; Zhong, Q.; Wang, Z., Effects of ultrasonic pretreatments on quality, energy consumption and sterilization of barley grass in freeze

- drying. *Ultrasonics Sonochemistry*, **2018**, 40, 333-340, DOI: 10.1016/j.ultsonch.2017.06.014.
- [58] Yang, F.; Zhang, M.; Mujumdar, A. S.; Zhong, Q.; Wang, Z., Enhancing drying efficiency and product quality using advanced pretreatments and analytical tools—An overview. *Drying Technology*, **2018**, 36, 1824-1838, DOI: 10.1080/07373937.2018.1431658.
- [59] Wang, J.; Yang, X. H.; Mujumdar, A. S.; Fang, X. M.; Zhang, Q.; Zheng, Z. A.; Gao, Z. J.; Xiao, H. W., Effects of high-humidity hot air impingement blanching (HHAIB) pretreatment on the change of antioxidant capacity, the degradation kinetics of red pigment, ascorbic acid in dehydrated red peppers during storage. *Food Chemistry*, **2018**, 259, 65-72, DOI: 10.1016/j.foodchem.2018.03.123.
- [60] Gao, Y.; Wang, H.; Sasmito, A. P.; Mujumdar, A. S., Measurement and modeling of thermal conductivity of graphene nanoplatelet water and ethylene glycol base nanofluids. *International Journal of Heat and Mass Transfer*, **2018**, 123, 97-109, DOI: 10.1016/j.ijheatmasstransfer.2018.02.089.
- [61] Mujumdar, A. S., On thirty years of editorship of *Drying Technology*. *Drying Technology*, **2018**, 36, 1781-1782, DOI: 10.1080/07373937.2018.1465323.
- [62] Mujumdar, A. S., Editorial: On academia–industry collaboration in drying research. *Drying Technology*, **2018**, 36, 763, DOI: 10.1080/07373937.2017.1350626.
- [63] Su, Y.; Zhang, M.; Adhikari, B.; Mujumdar, A. S.; Zhang, W., Improving the energy efficiency and the quality of fried products using a novel vacuum frying assisted by combined ultrasound and microwave technology. *Innovative Food Science and Emerging Technologies*, **2018**, 50, 148-159, DOI: 10.1016/j.ifset.2018.10.011.
- [64] Xie, L.; Zheng, Z. A.; Mujumdar, A. S.; Fang, X. M.; Wang, J.; Zhang, Q.; Ma, Q.; Xiao, H. W.; Liu, Y. H.; Gao, Z. J., Pulsed vacuum drying (PVD) of wolfberry: Drying kinetics and quality attributes. *Drying Technology*, **2018**, 36, 1501-1514, DOI: 10.1080/07373937.2017.1414055.
- [65] Ju, H. Y.; Zhao, S. H.; Mujumdar, A. S.; Fang, X. M.; Gao, Z. J.; Zheng, Z. A.; Xiao, H. W., Energy efficient improvements in hot air drying by controlling relative humidity based on Weibull and Bi-Di models. *Food and Bioprocess Processing*, **2018**, 111, 20-29, DOI: 10.1016/j.fbp.2018.06.002.
- [66] Xie, L.; Mujumdar, A. S.; Zhang, Q.; Wang, J.; Liu, S.; Deng, L.; Wang, D.; Xiao, H. W.; Liu, Y. H.; Gao, Z. J., Pulsed vacuum drying of wolfberry: Effects of infrared radiation heating and electronic panel contact heating methods on drying kinetics, color profile, and volatile compounds. *Drying Technology*, **2017**, 35, 1312-1326, DOI: 10.1080/07373937.2017.1319854.
- [67] Wang, Y.; Mujumdar, A. S.; Zhang, M., *Microwave-assisted pulsed fluidized and spouted bed drying*, in *Intermittent and Nonstationary Drying Technologies: Principles and Applications*. 2017. p. 139-162.
- [68] Wang, J.; Mu, W. S.; Fang, X. M.; Mujumdar, A. S.; Yang, X. H.; Xue, L. Y.; Xie, L.; Xiao, H. W.; Gao, Z. J.; Zhang, Q., Pulsed vacuum drying of Thompson seedless grape:

- Effects of berry ripeness on physicochemical properties and drying characteristic. *Food and Bioproducts Processing*, **2017**, 106, 117-126, DOI: 10.1016/j.fbp.2017.09.003.
- [69] Cao, X.; Zhang, M.; Fang, Z.; Mujumdar, A. S.; Jiang, H.; Qian, H.; Ai, H., Drying kinetics and product quality of green soybean under different microwave drying methods. *Drying Technology*, **2017**, 35, 240-248, DOI: 10.1080/07373937.2016.1170698.
- [70] Cao, X.; Zhang, M.; Qian, H.; Mujumdar, A. S., Drying based on temperature-detection-assisted control in microwave-assisted pulse-spouted vacuum drying. *Journal of the Science of Food and Agriculture*, **2017**, 97, 2307-2315, DOI: 10.1002/jsfa.8040.
- [71] Cao, X.; Zhang, M.; Qian, H.; Mujumdar, A. S.; Wang, Z., Physicochemical and nutraceutical properties of barley grass powder microencapsulated by spray drying. *Drying Technology*, **2017**, 35, 1358-1367, DOI: 10.1080/07373937.2017.1332074.
- [72] Wang, J.; Fang, X. M.; Mujumdar, A. S.; Qian, J. Y.; Zhang, Q.; Yang, X. H.; Liu, Y. H.; Gao, Z. J.; Xiao, H. W., Effect of high-humidity hot air impingement blanching (HHAIB) on drying and quality of red pepper (*Capsicum annuum* L.). *Food Chemistry*, **2017**, 220, 145-152, DOI: 10.1016/j.foodchem.2016.09.200.
- [73] 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.
- [74] Sasmito, A. P.; Kurnia, J. C.; Shamim, T.; Mujumdar, A. S., Optimization of an open-cathode polymer electrolyte fuel cells stack utilizing Taguchi method. *Applied Energy*, **2017**, 185, 1225-1232, DOI: 10.1016/j.apenergy.2015.12.098.
- [75] Jangam, S. V. Mujumdar, A. S., *Drying of herbs and spices*, in *Handbook of Drying of Vegetables and Vegetable Products*. 2017. p. 157-172.
- [76] Kurnia, J. C.; Sasmito, A. P.; Xu, P.; Mujumdar, A. S., Performance and potential energy saving of thermal dryer with intermittent impinging jet. *Applied Thermal Engineering*, **2017**, 113, 246-258, DOI: 10.1016/j.applthermaleng.2016.11.036.
- [77] Zhang, M.; Chen, H.; Mujumdar, A. S.; Tang, J.; Miao, S.; Wang, Y., Recent developments in high-quality drying of vegetables, fruits, and aquatic products. *Critical Reviews in Food Science and Nutrition*, **2017**, 57, 1239-1255, DOI: 10.1080/10408398.2014.979280.
- [78] Su, Y.; Zhang, M.; Mujumdar, A. S., *Smart drying technology for vegetable products*, in *Handbook of Drying of Vegetables and Vegetable Products*. 2017. p. 117-134.
- [79] 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.
- [80] Narain, N.; Rajkumar, G.; Leite Neta, M. T. S.; Barros, R. G. C.; Shanmugam, S.; Denadai, M.; Mujumdar, A. S., *Aroma aspects of fresh and dried vegetables*, in *Handbook of Drying of Vegetables and Vegetable Products*. 2017. p. 317-345.
- [81] Rajkumar, G.; Shanmugam, S.; Galvão, M. D. S.; Leite Neta, M. T. S.; Dutra Sandes, R. D.; Mujumdar, A. S.; Narain, N., Comparative evaluation of physical properties and aroma

- profile of carrot slices subjected to hot air and freeze drying. *Drying Technology*, **2017**, 35, 699-708, DOI: 10.1080/07373937.2016.1206925.
- [82] Rajkumar, G.; Shanmugam, S.; Galvão, M. D. S.; Dutra Sandes, R. D.; Leite Neta, M. T. S.; Narain, N.; Mujumdar, A. S., Comparative evaluation of physical properties and volatiles profile of cabbages subjected to hot air and freeze drying. *LWT*, **2017**, 80, 501-509, DOI: 10.1016/j.lwt.2017.03.020.
- [83] Xu, J. C.; Zhang, M.; Mujumdar, A. S.; Adhikari, B., Recent developments in smart freezing technology applied to fresh foods. *Critical Reviews in Food Science and Nutrition*, **2017**, 57, 2835-2843, DOI: 10.1080/10408398.2015.1074158.
- [84] Mujumdar, A. S., Series preface. *Intermittent and Nonstationary Drying Technologies: Principles and Applications*, **2017**, ix, DOI: 10.4324/9781351251303.
- [85] Wang, J.; Yang, X. H.; Mujumdar, A. S.; Wang, D.; Zhao, J. H.; Fang, X. M.; Zhang, Q.; Xie, L.; Gao, Z. J.; Xiao, H. W., Effects of various blanching methods on weight loss, enzymes inactivation, phytochemical contents, antioxidant capacity, ultrastructure and drying kinetics of red bell pepper (*Capsicum annuum* L.). *LWT*, **2017**, 77, 337-347, DOI: 10.1016/j.lwt.2016.11.070.
- [86] Fan, K.; Zhang, M.; Mujumdar, A. S., Application of airborne ultrasound in the convective drying of fruits and vegetables: A review. *Ultrasonics Sonochemistry*, **2017**, 39, 47-57, DOI: 10.1016/j.ultsonch.2017.04.001.
- [87] Feng, Y.; Zhang, M.; Mujumdar, A. S.; Gao, Z., Recent research process of fermented plant extract: A review. *Trends in Food Science and Technology*, **2017**, 65, 40-48, DOI: 10.1016/j.tifs.2017.04.006.
- [88] Xie, L.; Mujumdar, A. S.; Fang, X. M.; Wang, J.; Dai, J. W.; Du, Z. L.; Xiao, H. W.; Liu, Y.; Gao, Z. J., Far-infrared radiation heating assisted pulsed vacuum drying (FIR-PVD) of wolfberry (*Lycium barbarum* L.): Effects on drying kinetics and quality attributes. *Food and Bioprocess Technology*, **2017**, 102, 320-331, DOI: 10.1016/j.fbp.2017.01.012.
- [89] Xiao, H. W.; Pan, Z.; Deng, L. Z.; El-Mashad, H. M.; Yang, X. H.; Mujumdar, A. S.; Gao, Z. J.; Zhang, Q., Recent developments and trends in thermal blanching – A comprehensive review. *Information Processing in Agriculture*, **2017**, 4, 101-127, DOI: 10.1016/j.inpa.2017.02.001.
- [90] Xiao, H. W. Mujumdar, A. S., Role of expert reviews in guiding future drying R&D. *Drying Technology*, **2017**, 35, 525-526, DOI: 10.1080/07373937.2017.1295666.
- [91] Ahmadi, H.; Moghari, R. M.; Esmailpour, K.; Mujumdar, A. S., Numerical investigation of semi-confined turbulent slot jet impingement on a concave surface using an Al₂O₃-water nanofluid. *Applied Mathematical Modelling*, **2016**, 40, 1110-1125, DOI: 10.1016/j.apm.2015.06.021.
- [92] Kurnia, J. C.; Sasmito, A. P.; Mujumdar, A. S., Potential catalyst savings in heterogeneous gaseous spiral coiled reactor utilizing selective wall coating - A computational study. *Computers and Chemical Engineering*, **2016**, 88, 59-72, DOI: 10.1016/j.compchemeng.2016.02.004.

- [93] 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.
- [94] Kurnia, J. C.; Sasmito, A. P.; Mujumdar, A. S., Thermal Performance of Coiled Square Tubes at Large Temperature Differences for Heat Exchanger Application. *Heat Transfer Engineering*, **2016**, 37, 1341-1356, DOI: 10.1080/01457632.2015.1136141.
- [95] Xu, P.; Sasmito, A. P.; Yu, B.; Mujumdar, A. S., Transport Phenomena and Properties in Treelike Networks. *Applied Mechanics Reviews*, **2016**, 68, DOI: 10.1115/1.4033966.
- [96] Xu, P.; Sasmito, A. P.; Qiu, S.; Mujumdar, A. S.; Xu, L.; Geng, L., Heat transfer and entropy generation in air jet impingement on a model rough surface. *International Communications in Heat and Mass Transfer*, **2016**, 72, 48-56, DOI: 10.1016/j.icheatmasstransfer.2016.01.007.
- [97] Xu, P.; Sasmito, A. P.; Mujumdar, A. S., A computational study of heat transfer under twin turbulent slot jets impinging on planar smooth and rough surfaces. *Thermal Science*, **2016**, 20, s47-s57, DOI: 10.2298/TSC1151130016X.
- [98] 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.
- [99] Ju, H. Y.; Zhang, Q.; Mujumdar, A. S.; Fang, X. M.; Xiao, H. W.; Gao, Z. J., Hot-air Drying Kinetics of Yam Slices under Step Change in Relative Humidity. *International Journal of Food Engineering*, **2016**, 12, 783-792, DOI: 10.1515/ijfe-2015-0340.
- [100] Ghasemkhani, H.; Keyhani, A.; Aghbashlo, M.; Rafiee, S.; Mujumdar, A. S., Improving exergetic performance parameters of a rotating-tray air dryer via a simple heat exchanger. *Applied Thermal Engineering*, **2016**, 94, 13-23, DOI: 10.1016/j.applthermaleng.2015.10.114.
- [101] Ghadi, S.; Esmailpour, K.; Hosseinalipour, S. M.; Mujumdar, A., Experimental study of formation and development of coherent vortical structures in pulsed turbulent impinging jet. *Experimental Thermal and Fluid Science*, **2016**, 74, 382-389, DOI: 10.1016/j.expthermflusci.2015.12.007.
- [102] Jiang, H.; Zhang, M.; Mujumdar, A. S.; Lim, R. X., Drying uniformity analysis of pulse-spouted microwave-freeze drying of banana cubes. *Drying Technology*, **2016**, 34, 539-546, DOI: 10.1080/07373937.2015.1061000.
- [103] Kurnia, J. C.; Sasmito, A. P.; Shamim, T.; Mujumdar, A. S., Numerical investigation of heat transfer and entropy generation of laminar flow in helical tubes with various cross sections. *Applied Thermal Engineering*, **2016**, 102, 849-860, DOI: 10.1016/j.applthermaleng.2016.04.037.
- [104] Aghbashlo, M.; Hosseinpour, S.; Mujumdar, A. S., Application of Artificial Neural Networks (ANNs) in Drying Technology: A Comprehensive Review. *Drying Technology*, **2015**, 33, 1397-1462, DOI: 10.1080/07373937.2015.1036288.

- [105] Tohidi, A.; Ghaffari, H.; Nasibi, H.; Mujumdar, A. S., Heat transfer enhancement by combination of chaotic advection and nanofluids flow in helically coiled tube. *Applied Thermal Engineering*, **2015**, 86, 91-105, DOI: 10.1016/j.applthermaleng.2015.04.043.
- [106] Chang, Y. R.; Lee, D. J.; Chang, J. S.; Mujumdar, A. S., Enhancement of Lutein Yield from Coagulated *Chlorella* sp. ESP-6 with Sodium Hypochlorite. *Drying Technology*, **2015**, 33, 429-433, DOI: 10.1080/07373937.2014.970261.
- [107] Tohidi, A.; Hosseinalipour, S. M.; Shokrpour, M.; Mujumdar, A. S., Heat transfer enhancement utilizing chaotic advection in coiled tube heat exchangers. *Applied Thermal Engineering*, **2015**, 76, 185-195, DOI: 10.1016/j.applthermaleng.2014.10.073.
- [108] 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.
- [109] 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.
- [110] Xiao, H. W.; Gao, Z. J.; Mujumdar, A. S., Seafood: Mining shell waste will not be easy. *Nature*, **2015**, 525, 321, DOI: 10.1038/525321c.
- [111] Xiao, H. W.; Mujumdar, A. S.; Che, L., Pollution: Uncouple from economy boom. *Nature*, **2015**, 517, 145, DOI: 10.1038/517145b.
- [112] Xiao, H. W.; Mujumdar, A. S.; Che, L., Uncouple from economy boom. *Nature*, **2015**, 517, 145, DOI: 10.1038/517145e.
- [113] Zhang, M.; Chen, H.; Mujumdar, A. S.; Zhong, Q.; Sun, J., Recent Developments in High-Quality Drying with Energy-Saving Characteristic for Fresh Foods. *Drying Technology*, **2015**, 33, 1590-1600, DOI: 10.1080/07373937.2015.1012267.
- [114] Kurnia, J. C.; Sasmito, A. P.; Akhtar, S.; Shamim, T.; Mujumdar, A. S. *Numerical Investigation of Heat Transfer Performance of Various Coiled Square Tubes for Heat Exchanger Application*. in *Energy Procedia*. 2015.
- [115] Kurnia, J. C.; Sasmito, A. P.; Hassani, F. P.; Mujumdar, A. S., Introduction and evaluation of a novel hybrid brattice for improved dust control in underground mining faces: A computational study. *International Journal of Mining Science and Technology*, **2015**, 25, 537-543, DOI: 10.1016/j.ijmst.2015.05.004.
- [116] Mujumdar, A. S., Editorial: On the Occasion of the 85th Birthday of Professor Czeslaw Strumillo. *Drying Technology*, **2015**, 33, 633, DOI: 10.1080/07373937.2015.1027107.
- [117] Mujumdar, A. S., Editorial: Role of Global Networking in Research Collaboration. *Drying Technology*, **2015**, 33, 513, DOI: 10.1080/07373937.2014.998504.
- [118] Esmailpour, K.; Hosseinalipour, M.; Bozorgmehr, B.; Mujumdar, A. S., A numerical study of heat transfer in a turbulent pulsating impinging jet. *Canadian Journal of Chemical Engineering*, **2015**, 93, 959-969, DOI: 10.1002/cjce.22169.
- [119] Mujumdar, A. S., Editorial: Academic Research Under Resource-Challenged Conditions. *Drying Technology*, **2015**, 33, 257, DOI: 10.1080/07373937.2014.997608.

- [120] Mujumdar, A. S., Editorial: IDS and Global Drying R&D. *Drying Technology*, **2015**, 33, 1, DOI: 10.1080/07373937.2014.892331.
- [121] Mujumdar, A. S.; Law, C. L.; Woo, M. W., *Freeze Drying: Effects on Sensory and Nutritional Properties*, in *Encyclopedia of Food and Health*. 2015. p. 99-103.
- [122] Esmailpour, K.; Bozorgmehr, B.; Hosseinalipour, S. M.; Mujumdar, A. S., Entropy generation and second law analysis of pulsed impinging jet. *International Journal of Numerical Methods for Heat and Fluid Flow*, **2015**, 25, 1089-1106, DOI: 10.1108/HFF-05-2014-0148.
- [123] Sasmito, A. P.; Kurnia, J. C.; Shamim, T.; Mujumdar, A. S. *Optimization of Design Parameters for an Open-cathode Polymer Electrolyte Fuel Cells Stack Utilizing Taguchi Method*. in *Energy Procedia*. 2015.
- [124] Jangam, S. V.; Mujumdar, A. S.; Adhikari, B., *Drying: Physical and Structural Changes*, in *Encyclopedia of Food and Health*. 2015. p. 446-455.
- [125] Allaf, K.; Mounir, S.; Negm, M.; Allaf, T.; Ferrasse, H.; Mujumdar, A. S., *Intermittent drying*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 491-502.
- [126] Chen, F.; Zhang, M.; Mujumdar, A. S.; Jiang, H.; Wang, L., Production of Crispy Granules of Fish: A Comparative Study of Alternate Drying Techniques. *Drying Technology*, **2014**, 32, 1512-1521, DOI: 10.1080/07373937.2014.903410.
- [127] Chen, G. Mujumdar, A. S., *Drying of herbal medicines and tea*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 637-646.
- [128] Chen, G.; Yue, P. L.; Mujumdar, A. S., *Dewatering and drying of wastewater treatment sludge*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 867-882.
- [129] Pakowski, Z. Mujumdar, A. S., *Drying of pharmaceutical products*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 681-702.
- [130] Mujumdar, A. S., Editorial: The Making of the Handbook of Industrial Drying. *Drying Technology*, **2014**, 32, 627-628, DOI: 10.1080/07373937.2013.822648.
- [131] Sablani, S. S. Mujumdar, A. S., *Drying of potato, sweet potato, and other roots*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 647-660.
- [132] Pakowski, Z. Mujumdar, A. S., *Basic process calculations and simulations in drying*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 51-76.
- [133] Pallai, E.; Szentmarjay, T.; Mujumdar, A. S., *Spouted bed drying*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 351-370.
- [134] Mujumdar, A. S., Editorial: On Revised and Enhanced Versions of the Handbook of Industrial Drying. *Drying Technology*, **2014**, 32, 755-756, DOI: 10.1080/07373937.2013.822649.
- [135] Mujumdar, A. S., Editorial: A Historical Perspective on Various Books and Book Series in Drying Edited by Prof. Arun S. Mujumdar. *Drying Technology*, **2014**, 32, 877-878, DOI: 10.1080/07373937.2013.836934.
- [136] Devahastin, S. Mujumdar, A. S., *Superheated Steam Drying of Foods and Biomaterials*, in *Modern Drying Technology*. 2014. p. 57-84.

- [137] Filková, I.; Huang, L. X.; Mujumdar, A. S., *Industrial spray drying systems*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 191-226.
- [138] Gong, Z. X.; Jangam, S. V.; Mujumdar, A. S., *Simprosyst: Software for dryer calculations*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 1209-1228.
- [139] Mujumdar, A. S., Editorial: Vision 2020 for Global Drying R&D. *Drying Technology*, **2014**, 32, 1125-1126, DOI: 10.1080/07373937.2013.830046.
- [140] 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.
- [141] Hung, J. Y.; Wimberger, R. J.; Mujumdar, A. S., *Drying of coated webs*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 917-936.
- [142] Mujumdar, A. S., *Impingement drying*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 371-380.
- [143] Mujumdar, A. S., Editorial: Green Innovation. *Drying Technology*, **2014**, 32, 1523, DOI: 10.1080/07373937.2013.830047.
- [144] Jumah, R. Y. Mujumdar, A. S., *Dryer emission control systems*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 1045-1076.
- [145] Jumah, R. Y. Mujumdar, A. S., *Dryer feeding systems*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 1025-1044.
- [146] Jumah, R. Y.; Mujumdar, A. S.; Raghavan, V. G. S., *Control of industrial dryers*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 1153-1170.
- [147] Mujumdar, A. S., Editorial: Outsourcing, Insourcing, and Rightsourcing of R&D. *Drying Technology*, **2014**, 32, 1641, DOI: 10.1080/07373937.2013.830049.
- [148] Krokida, M.; Marinos-Kouris, D.; Mujumdar, A. S., *Rotary drying*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 139-160.
- [149] Mujumdar, A. S., Editorial: Some Perspectives on the International Drying Symposium (IDS) Series. *Drying Technology*, **2014**, 32, 1887, DOI: 10.1080/07373937.2014.967036.
- [150] Mujumdar, A. S., Editorial: Food Dehydration R&D at Jiangnan University (JU), Wuxi, Jiangsu, P.R. China. *Drying Technology*, **2014**, 32, 1741, DOI: 10.1080/07373937.2014.954093.
- [151] Mujumdar, A. S., *Drying in mineral processing*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 861-866.
- [152] Polat, O. Mujumdar, A. S., *Drying of pulp and paper*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 773-796.
- [153] Qi, L. L.; Zhang, M.; Mujumdar, A. S.; Meng, X. Y.; Chen, H. Z., Comparison of Drying Characteristics and Quality of Shiitake Mushrooms (*Lentinus edodes*) Using Different Drying Methods. *Drying Technology*, **2014**, 32, 1751-1761, DOI: 10.1080/07373937.2014.929588.
- [154] 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.

- [155] 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.
- [156] Ratti, C. Mujumdar, A. S., *Infrared drying*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 405-420.
- [157] 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.
- [158] Tsotsas, E. Mujumdar, A. S., *Modern Drying Technology*. Modern Drying Technology. Vol. 5. 2014. 1-372.
- [159] 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.
- [160] Kurnia, J. C.; Sasmito, A. P.; Mujumdar, A. S., Laminar heat transfer performance of power law fluids in coiled square tube with various configurations. *International Communications in Heat and Mass Transfer*, **2014**, 57, 100-108, DOI: 10.1016/j.icheatmasstransfer.2014.07.016.
- [161] Mohammadpour, J.; Zolfagharian, M. M.; Mujumdar, A. S.; Zargarabadi, M. R.; Abdulazadeh, M., Heat transfer under composite arrangement of pulsed and steady turbulent submerged multiple jets impinging on a flat surface. *International Journal of Thermal Sciences*, **2014**, 86, 139-147, DOI: 10.1016/j.ijthermalsci.2014.07.004.
- [162] Kudra, T. Mujumdar, A. S., *Special drying techniques and novel dryers*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 433-490.
- [163] Mujumdar, A. S.; Jangam, S. V.; Pikoń, J., *Drying of coal*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 999-1022.
- [164] Mohammadpour, J.; Rajabi-Zargarabadi, M.; Mujumdar, A. S.; Ahmadi, H., Effect of intermittent and sinusoidal pulsed flows on impingement heat transfer from a concave surface. *International Journal of Thermal Sciences*, **2014**, 76, 118-127, DOI: 10.1016/j.ijthermalsci.2013.08.018.
- [165] Maroulis, Z. B.; Saravacos, G. D.; Mujumdar, A. S., *Spreadsheet-aided dryer design*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 111-124.
- [166] Markowski, A. S. Mujumdar, A. S., *Safety aspects of industrial dryers*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 1127-1152.
- [167] Mujumdar, A. S., *Superheated steam drying*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 421-432.
- [168] Mujumdar, A. S. Hasan, M., *Drying of polymers*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 937-960.

- [169] Mujumdar, A. S., Editorial: Higher Education in Engineering: Need for Paradigm Shift. *Drying Technology*, **2014**, 32, 1397, DOI: 10.1080/07373937.2014.928063.
- [170] Law, C. L. Mujumdar, A. S., *Fluidized bed dryers*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 161-190.
- [171] Mujumdar, A. S., Preface to the first edition. *Handbook of Industrial Drying, Fourth Edition*, **2014**, xxiii, DOI: 10.1201/b17208.
- [172] Tohidi, A.; Hosseinalipour, S. M.; Monfared, Z. G.; Mujumdar, A. S., Laminar heat transfer enhancement utilizing nanofluids in a chaotic flow. *Journal of Heat Transfer*, **2014**, 136, DOI: 10.1115/1.4027773.
- [173] Mujumdar, A. S., Preface to the second edition. *Handbook of Industrial Drying, Fourth Edition*, **2014**, xxi, DOI: 10.1201/b17208.
- [174] Tsotsas, E. Mujumdar, A. S., Series Preface. *Modern Drying Technology*, **2014**, 5, xi-xiv.
- [175] Tsotsas, E. Mujumdar, A. S., Preface of Volume 5. *Modern Drying Technology*, **2014**, 5, xv-xviii.
- [176] Tunçal, T.; Jangam, S. V.; Mujumdar, A. S., *Physicochemical aspects of sludge drying*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 883-894.
- [177] Wang, B.; Huang, L. X.; Mujumdar, A. S., *Drying of nanosize products*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 703-716.
- [178] 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.
- [179] Mujumdar, A. S., Preface to the fourth edition. *Handbook of Industrial Drying, Fourth Edition*, **2014**, xvii-xviii, DOI: 10.1201/b17208.
- [180] Mujumdar, A. S., Preface to the third edition. *Handbook of Industrial Drying, Fourth Edition*, **2014**, xix, DOI: 10.1201/b17208.
- [181] Mujumdar, A. S., *Principles, classification, and selection of dryers*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 3-30.
- [182] 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.
- [183] Mujumdar, A. S., *Handbook of industrial drying, fourth edition*. Handbook of Industrial Drying, Fourth Edition. 2014. 1-1303.
- [184] Mujumdar, A. S., Proceedings of the First International Drying Symposium McGill University, Montreal, Canada, August 1978. *Drying Technology*, **2014**, 32, 128-129, DOI: 10.1080/07373937.2013.813231.
- [185] Wang, Y.; Zhang, M.; Mujumdar, A. S., *Microwave-Assisted Drying of Foods - Equipment, Process and Product Quality*, in *Modern Drying Technology*. 2014. p. 279-315.

- [186] Wang, Y.; Zhang, M.; Mujumdar, A. S.; Chen, H., Drying and Quality Characteristics of Shredded Squid in an Infrared-Assisted Convective Dryer. *Drying Technology*, **2014**, 32, 1828-1839, DOI: 10.1080/07373937.2014.952379.
- [187] Woo, M. W. Mujumdar, A. S., *Product functionality-oriented drying process related to pharmaceutical particles engineering*, in *Handbook of Industrial Drying, Fourth Edition*. 2014. p. 985-998.
- [188] Adhikari, B.; Devahastin, S.; Mujumdar, A. S., Guest Editorial: Special Thematic Issue on Drying of Proteins and Enzymes. *Drying Technology*, **2013**, 31, 1439-1440, DOI: 10.1080/07373937.2013.819262.
- [189] Mujumdar, A. S., Editorial: Why Four Decades of R&D in Drying? *Drying Technology*, **2013**, 31, 617-618, DOI: 10.1080/07373937.2013.793129.
- [190] Mujumdar, A. S., Editorial: The Extreme Future. *Drying Technology*, **2013**, 31, 489-490, DOI: 10.1080/07373937.2013.787305.
- [191] Kudra, T. Mujumdar, A. S., *Advanced drying technologies, second edition*. Advanced Drying Technologies, Second Edition. 2009. 1-457.
- [192] 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.
- [193] Mujumdar, A. S., Research and development in drying: Recent trends and future prospects. *Drying Technology*, **2004**, 22, 1-26, DOI: 10.1081/DRT-120028201.
- [194] 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.
- [195] 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.
- [196] 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.
- [197] Nishimura, A.; Deguchi, S.; Matsuda, H.; Hasatani, M.; Mujumdar, A. S., Heat transfer characteristics in a pulsating fluidized bed in relation to bubble characteristics. *Heat Transfer - Asian Research*, **2002**, 31, 307-319, DOI: 10.1002/htj.10038.
- [198] 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.
- [199] Devahastin, S. Mujumdar, A. S., Some hydrodynamic and mixing characteristics of a pulsed spouted bed dryer. *Powder Technology*, **2001**, 117, 189-197, DOI: 10.1016/S0032-5910(00)00380-6.

- [200] 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.
- [201] Jumah, R. Y. Mujumdar, A. S., Natural convection heat and mass transfer from a vertical flat plate with variable wall temperature and concentration to power-law fluids with yield stress in a porous medium. *Chemical Engineering Communications*, **2001**, 185, 165-182, DOI: 10.1080/00986440108912861.
- [202] Ogura, H.; Ishida, H.; Yokooji, R.; Kage, H.; Matsuno, Y.; Mujumdar, A. S., Experimental studies on a novel chemical heat pump dryer using a gas-solid reaction. *Drying Technology*, **2001**, 19, 1461-1477, DOI: 10.1081/DRT-100105300.
- [203] 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.
- [204] 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.
- [205] Devahastin, S. Mujumdar, A. S., Evaluation of some transport and thermodynamic properties of superheated steam: Effects of steam temperature and pressure. *Drying Technology*, **2000**, 18, 1055-1071, DOI: 10.1080/07373930008917753.
- [206] Jumah, R. Y. Mujumdar, A. S., Free convection heat and mass transfer of non-Newtonian power law fluids with yield stress from a vertical flat plate in saturated porous media. *International Communications in Heat and Mass Transfer*, **2000**, 27, 485-494, DOI: 10.1016/S0735-1933(00)00131-7.
- [207] Khillarkar, D. B.; Gong, Z. X.; Mujumdar, A. S., Melting of a phase change material in concentric horizontal annuli of arbitrary cross-section. *Applied Thermal Engineering*, **2000**, 20, 893-912, DOI: 10.1016/S1359-4311(99)00058-7.
- [208] Mujumdar, A. S., Analysis of recent patent literature on drying and dryers. *Drying Technology*, **2000**, 18, 1147-1156, DOI: 10.1080/07373930008917761.
- [209] Sanga, E.; Mujumdar, A. S.; Raghavan, G. S. V. *Experimental results of combined microwave-convection drying of non-homogeneous (composite) materials*. in 2000 ASAE Annual International Meeting, Technical Papers: Engineering Solutions for a New Century. 2000.
- [210] Nishimura, A.; Deguchi, S.; Matsuda, H.; Hasatani, M.; Mujumdar, A. S., Heat transfer characteristics in a pulsated fluidized bed in relation to bubble characteristics. *Kagaku Kogaku Ronbunshu*, **2000**, 26, 835-836, DOI: 10.1252/kakoronbunshu.26.830.
- [211] Nishimura, A.; Deguchi, S.; Matsuda, H.; Hasatani, M.; Mujumdar, A. S., Bubble characteristics in a pulsated fluidized bed under intermittent fluidization. *Kagaku Kogaku Ronbunshu*, **2000**, 26, 92-93, DOI: 10.1252/kakoronbunshu.26.88.

- [212] Passos, M. L. Mujumdar, A. S., Effect of cohesive forces on fluidized and spouted beds of wet particles. *Powder Technology*, **2000**, 110, 222-238, DOI: 10.1016/S0032-5910(99)00278-8.
- [213] Nebra, S. A.; Silva, M. A.; Mujumdar, A. S., Drying in cyclones - A review. *Drying Technology*, **2000**, 18, 791-832, DOI: 10.1080/07373930008917738.