

Gastrobotics Publications

Refereed Publications in Gastrobotics

Wilkinson, S., Klar, J., Applegarth, S.P., "Optimizing Biofuel Cell Performance Using a Targeted Mixed Mediator Combination"-Electroanalysis, special issue on Biological Fuel Cells, WILEY-VCH, in press, accepted July, 2006

Wilkinson, S., Applegarth, S.P., "Bendable, Spliceable, Tubular Biofuel Cell Cable" Proceedings of the 230th American Chemical Society (ACS) Annual Meeting, Division of Fuel Chemistry, Advances in Fuel Cell Research, Biological Fuel Cells, paper #115, Grand Hyatt, Washington, D.C., August 28 – September 1, 2005

Wilkinson, S., Applegarth, S.P., "A Hybrid Biofuel Cell Approach Using Cellular Disruption"- Proceedings of the 204th Meeting of the Electrochemical Society, Symposium U1 – Biological Fuel Cells, paper # U1-1243, Orlando, Florida, October 12-17, 2003.

Wilkinson, S., Applegarth, S.P., Pennington, G.M., "Juice from Juice – Electricity Generation for Carnivorous Gastrobots"- Proceedings of the IASTED International Conference on Robotics & Applications, RA 2001, paper # 346-036, Clearwater, Florida, November 19-22, pp. 204-212, 2001.

Wilkinson, S., Pennington, G.M., Applegarth, S.P., "Potential Role of Bees & Honey in Gastrobot Foraging & Power Generation"- Proceedings of the IASTED International Conference on Robotics & Applications, RA 2001, paper # 346-071, Clearwater, Florida, November 19-22, pp. 213-219, 2001.

Wilkinson, S., "Hungry for Success – Future Directions in Gastrobotics Research", Industrial Robot Journal, Vol. 28(3), May 18, 2001.

Wilkinson, S., "Gastrobots – Benefits & Challenges of Microbial Fuel Cells in Food Powered Robot Applications"- J. Autonomous Robots, paper # 99-026, Vol. 9(24), pp. 99-111, 2000.

Wilkinson, S., "Gastronome – A Pioneering Food Powered Mobile Robot"- Proceedings of the IASTED International Conference on Robotics & Applications, RA 2000, paper # 318-037, Honolulu, Hawaii, August 14-16, pp. 176-181, 2000.

Wilkinson, S., "A Crude but Novel Carrot Powered Gastrobot for Middle or High School Demonstrations"- Proceedings of the IASTED International Conference on Robotics & Applications, RA 1999, paper # 304-024, Santa Barbara, California, October 28-30, pp. 347-351, 1999

Wilkinson, S. & Guanio, D., "Development of a Spectrometric Citrus Odor Sensor for a Frugivorous Robot" Proceedings of the 6th IASTED International Conference on Robotics and Manufacturing, Banff, Alberta, Canada, July 26-31, 1998.

Wilkinson S. & Campbell C., "Green Bug Robots - Renewable Environmental Power for Miniature Robots"- Proceedings of the 4th IASTED International Conference on Robotics and Manufacturing, Honolulu, Hawaii, August 19-22, 1996, ISBN: 0-88986-209-5, pp. 275-278.

Wilkinson S. & Campbell C., "Bio-Power: A Study of Fermentation Driven Insect Robots"- Proceedings of the 1996 Florida Conference on Recent Advances in Robotics, FAU, Boca Raton, FL, April 11-12, 1996, pp. 204-209.

Prominent Magazine Articles & Book Chapters in Gastrobotics

Wilkinson, S., “A Robot That Eats Sugar” in Propulsion by Rene Dore & Gaetan Veilleux (Science & Technology Textbook for High Schools), Montreal, Canada, distributed in Quebec schools (in French), Les Editions CEC inc., p 166, ©2005, ISBN 2-7617-2119-5.

Wilkinson, S., “Biobots – Energy Autonomy in Robots” in The Robots – A History of Robotics by Chantal Leguay, Editions IMHO, France (in French), p. 110, ©2005, ISBN 2-9154-5312-8

Wilkinson, S., “Gastrobots” in Robots Unlimited: Life in a Virtual Age by David Levy, A.K. Peters LTD, Wellesley, MA, Chapter 8, p. 280, ©2005, ISBN 1-5688-1239-6

Wilkinson, S., (Aylett, R., Editor), “The Microbial Fuel Cell”, in: Robots – Bringing Intelligent Machines to Life, Energizing Section, Chapter 5, Barron’s Educational Series Inc., Quarto Publishing Plc, London, ISBN 0-7641-5541-5pp. 96-97, 2002.

Wilkinson, S. & Hapgood, F., “Living Off the Land”, Smithsonian, Phenomena Section, Vol. 32, No. 4, July, pp. 20-22, 2001.

Wilkinson, S., “Marching on its Stomach”, The Economist, Technology Quarterly, Monitor Section, Vol. 359, No. 8227, June 23-29, pp. 12, 2001.

Wilkinson, S. & Wilson, J., “Robot Dines on Sugar Cubes”, Popular Mechanics, Technology Watch Section, Vol. 177, No. 12, December, pp. 18, 2000.

Wilkinson, S. & Thieme, T., “Eating Machine”, Popular Science, Science & Technology Section, Vol. 257, No. 6, December, pp. 16, 2000.

Wilkinson, S. & Graham-Rowe, D., “Feed Me”, New Scientist, No. 2248, July 22, pp. 7, 2000.

Wilkinson, S. & Saunders, F., “It’s an Eating Machine, and That’s a Compliment”, Discover, Tech Watch Section, Vol. 22, No. 4, April, pp. 14, 2001.

Wilkinson, S., “Please Don’t Eat the Daisies”, ASEE Prism Briefings Section, Vol. 10, No. 8, April, pp. 9, 2001.

Wilkinson, S., & E. Sender Domoulin, “Les Robots Vegetariens”, Sciences et Avenir, Techno Robotique Section (in French), No. 645, November, pp. 104-105, 2000.

Wilkinson, S. & Hapgood, F., “Lawn Mowers That Lunch”, Worth, February, pp. 29, 2001

Wilkinson, S. & Vella, M., “Who Says Sugar is Bad?”, IEEE Spectrum, News Briefs Section, Vol. 38, No. 2, February, pp. 20, 2001.

Wilkinson, S. & Talbot, D., “Gastrobot”, MIT Technology Review, Prototypes Section, January/February, pp. 27, 2001.