Microbial Biotechnology - Wiley Online Library

The main focus of the Logan lab is the development of new renewable energy technologies, such as microbial fuel cells, for achieving an energy sustainable water infrastructure. Penn State News. We are also working on education efforts related to energy use and climate change. Current Research Topics

SOLID WASTE MANAGEMENT - 123seminarsonly.com

Waste generation is increasing by about 1.3 per cent per year. With the urban population growing at 2.7 per cent to 3.5 per cent per annum, the yearly increase in the overall quantity of solid waste in the cities will be more than 5 per cent. The Energy and Resources Institute (TERI) has

Logan Research Group - Pennsylvania State University

A microbial fuel cell (MFC) is a bio-electrochemical device that harnesess the power of respiring microbes to convert organic substrates directly into electrical energy. At its core, the MFC is a fuel cell, which transforms chemical energy into electricity using oxidation reduction reactions. The key difference of course is in the name

What are Microbial Fuel Cells? - Alternative Energy Institute

Nuclear power is the use of nuclear reactions to produce electricity. Nuclear power can be obtained from nuclear fission, nuclear decay and nuclear fusion reactions. Presently, the vast majority of electricity from nuclear power is produced by nuclear fission of uranium and plutonium in nuclear power plants. Nuclear decay processes are used in niche applications such as...

Nuclear power - Wikipedia

Aug 10, 2012 · In this paper, we discuss the urgent need to fully and immediately exploit existing microbial biotechnologies to maximize supply security of energy, food and medical supplies, and of waste management, and to invest in new research specifically targeting supply security of essential resources.