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Sommario/riassunto

"We are in a new era of fermentation and cell culture technologies in which novel techniques and expertise are fast evolving. Fermentation technologies now encompass a broad field which includes the more conventional microbial and enzyme systems that have many applications in the food, biochemical, biomaterial, bioenergy and pharmaceutical sectors. In addition, there has been a growth in new technologies such as genetic engineering, metabolic engineering/systems biology, protein engineering, animal and plant cell based techniques and some bioproducts produced by these new

technologies are already successfully commercialized. The requirement for sustainable production of bioenergy and biomaterials is also demanding innovation and the development of novel fermentation concepts, and the continued introduction of new technology demands process development innovation in novel bioreactor design and scale up processes in cell culture systems"--
