

Contents

Recent Advances in Genetic Engineering of Thermophilic Ethanol Producing Bacteria	1
Sean Michael Scully and Johann Orlygsson	
Systems Metabolic Engineering of <i>Saccharomyces cerevisiae</i> for Production of Biochemicals from Biomass	31
Luis Caspeta and Tania Castillo	
<i>Zymomonas mobilis</i> for the Conversion of Lignocellulosic Biomass to Fuels and Chemicals	67
Manoj Agrawal, Kori L. Dunn and Christopher V. Rao	
Glycerol as Carbon Source for Production of Added-Value Compounds	93
Georg A. Sprenger	
Metabolic Engineering of <i>Escherichia coli</i> for Lactic Acid Production from Renewable Resources	125
Alfredo Martinez, María E. Rodríguez-Alegría, Maria Conceição Fernandes, Guillermo Gosset and Alejandra Vargas-Tah	
Engineering Bacterial Sugar Catabolism and Tolerance Toward Lignocellulose Conversion	147
Andrew D. Flores, Gavin L. Kurgan and Xuan Wang	
Evolutionary Engineering of Microorganisms to Overcome Toxicity During Lignocellulose Hydrolysates Utilization	181
Gustavo M. Lastiri-Pancardo and José Utrilla	

Engineering of Microorganisms for the Production of
Chemicals and Biofuels from Renewable Resources

Gosset, G. (Ed.)

2017, VII, 200 p. 18 illus., 15 illus. in color., Hardcover

ISBN: 978-3-319-51728-5