

Additional File 2.

Multicriteria global optimization for biocircuit design

Irene Otero-Muras and Julio R. Banga

Bioprocess Engineering Group, Spanish Council for Scientific Research, IIM-CSIC, Eduardo Cabello 6, 36208 Vigo (Spain)

This additional file contains five supplementary figures not included in the main text for space reasons.

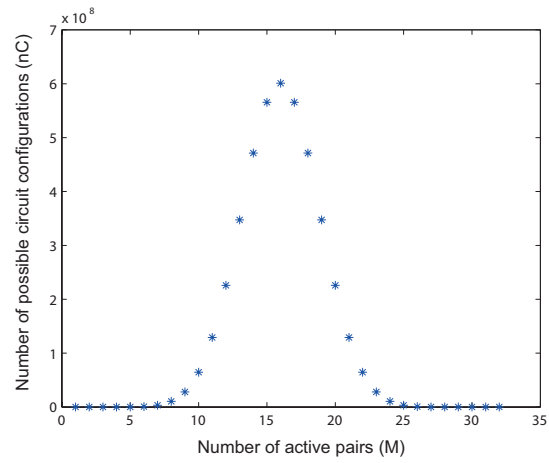


Figure S1 Number of possible circuit configurations as a function of the number of active pairs (for a library with $p = 32$ possible pairs).

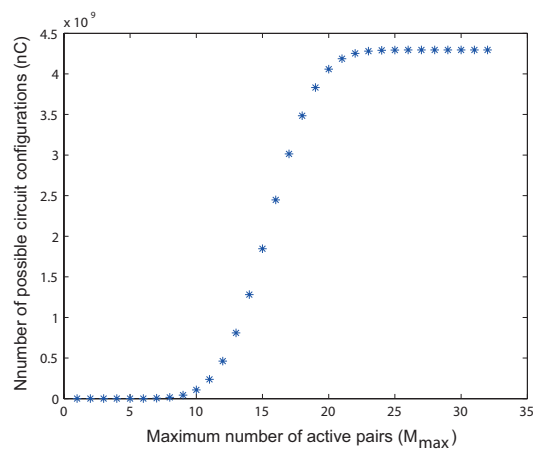


Figure S2 Number of possible circuit configurations for increasing M_{max} (for a library with $p = 32$ possible pairs).

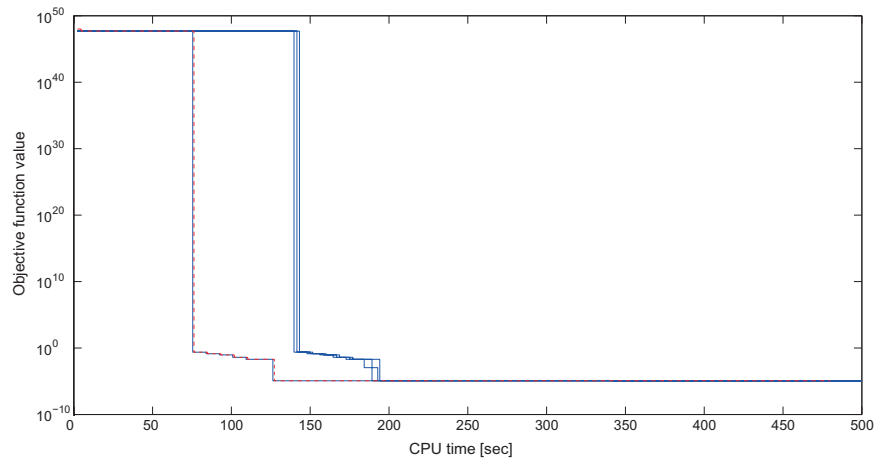


Figure S3 MITS Convergence curves for different initial guesses with $M_{max} = 2$. The initial guess for the red dashed convergence curve is the circuit with no active pairs. To make possible a log scale representation the objective function has been shifted to the positive orthant. Results obtained with Matlab under Windows 7 in a PC Intel 2.8 GHz Xeon.

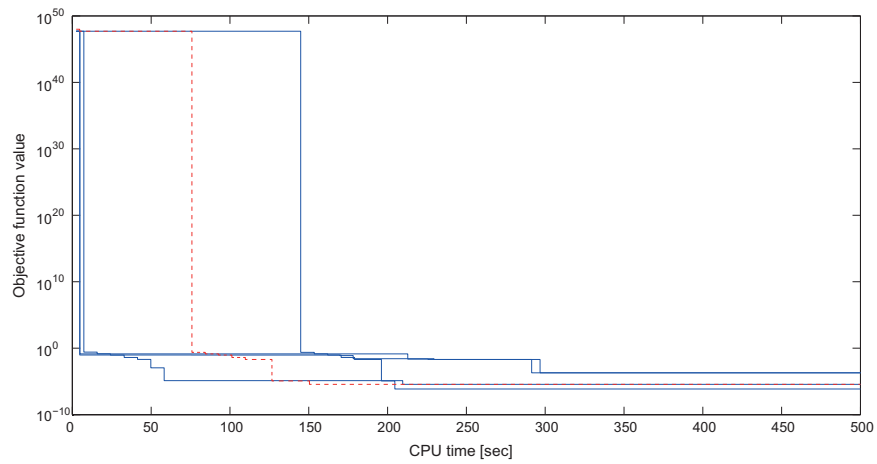


Figure S4 MITS Convergence curves for different initial guesses with $M_{max} = 3$. The initial guess for the red dashed convergence curve is the circuit with no active pairs. To make possible a log scale representation the objective function has been shifted to the positive orthant. Results obtained with Matlab under Windows 7 in a PC Intel 2.8 GHz Xeon.

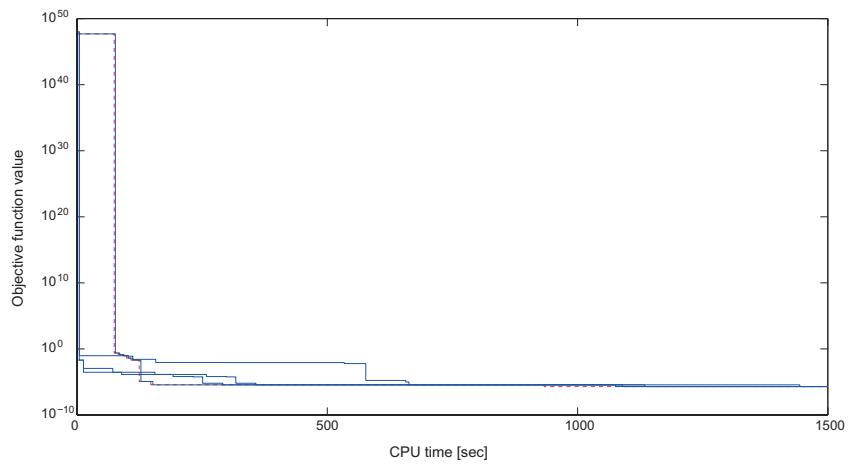


Figure S5 MITS Convergence curves for different initial guesses with $M_{max} = 32$. The initial guess for the red dashed convergence curve is the circuit with no active pairs. To make possible a log scale representation the objective function has been shifted to the positive orthant. Results obtained with Matlab under Windows 7 in a PC Intel 2.8 GHz Xeon.