

Table S4. Key parameter values used in the optimization process of this work

Parameter Name		Settings	Parameter Name		Settings
GA parameters	Population size	300	Max function evaluations		20000
	Maximum generations	50	Objective function tolerance		10^{-8}
	Mutation rate	0.2	Variable tolerance		10^{-8}
	Tournament size	5	Trust region parameters		Sum of squared normalized residuals
	Elite size	3			
	penalty coefficient	2			
Common parameter	Maximum epochs	20			