

# **Constrained Optimal Experimental Design**

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Optimal experimental design for constrained design region are rising more often in many engineering fields. In this paper, we propose a general optimal design method which combines coordinate exchange and simulated annealing algorithms. The optimal criteria we have discussed include D-optimal designs, linear-optimal designs, and minimax and maximin space filling designs. Compared to the existing methods, the proposed method can be applied to more general constrained region, including nonlinear and nonconvex constraints. Examples are used to show the efficiency and effectiveness of proposed method.