Facts, conjectures, and improvements for simulated annealing

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Abstrak

Simulated annealing has proved to be an easy and reliable method for finding optimal values of a problem in cases where there is no road map to possible solutions. Facts, Conjectures, and Improvements for Simulated Annealing offers an introduction to this topic for novices and provides an informative review of the area for the more expert reader. This book brings together for the first time many of the theoretical foundations for improvements to algorithms for global optimization that until now existed only in scattered research articles. The method described in this book operates by simulating the cooling of a (usually fictitious) physical system whose possible energies correspond to the values of the objective function being minimized. The analogy works because physical systems occupy only states with the lowest energy as the temperature is lowered to absolute zero.