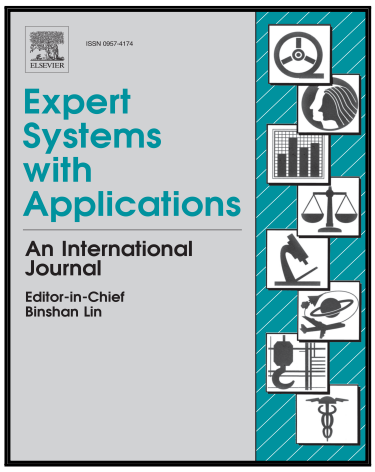

A biased random key genetic algorithm for open dimension nesting problems using no-fit raster

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Highlights

- Irregular 2D cutting problems with one or two open dimensions are tackled.
- The no-fit raster concept is extended to deal with free form items.
- A BRKGA combined with bottom-left heuristics is proposed to solve the problems.
- It outperforms recent methods from the literature on different set of instances.
- Instances with items as circles, convex and non-convex polygons are solved.