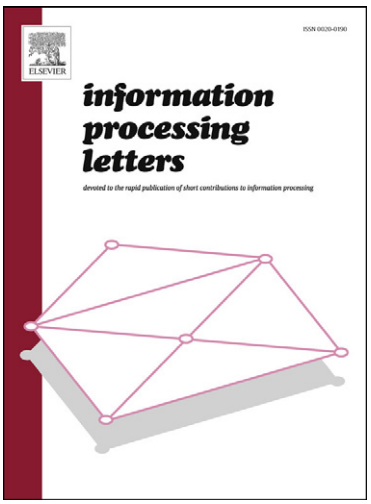

Upper bounds for reversible circuits based on Young subgroups

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Highlights

- We present new upper bounds on the number of To.oli gates in reversible circuits.
- The idea is to use a synthesis method based on Young subgroups as starting point.
- One technique derives the bounds based on function decomposition.
- Another technique is based on existing ESOP upper bounds.
- The best new upper bound improves the existing one by around 77