

SOME NEW INEQUALITIES FOR CONVEX FUNCTIONS
VIA GENERALIZED INTEGRAL OPERATORS
AND THEIR APPLICATIONS

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Abstract. The authors discover an identity for a generalized integral operator via differentiable function. By using this integral equation, we derive some new bounds on Hermite–Hadamard type integral inequality for differentiable mappings that are in absolute value at certain powers convex. Our results include several new and known results as particular cases. At the end, some applications of presented results for special means and error estimates for the mixed trapezium and midpoint formula have been analyzed. The ideas and techniques of this paper may stimulate further research in the field of integral inequalities.

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