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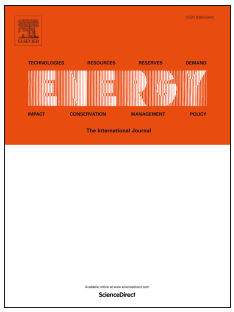

Analysis of Exhaust Gas Recirculation (EGR) effects on exergy terms in an engine operating with diesel oil and hydrogen

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As the EGR mass fraction increases from 0% to 30% by 10% increments:

1- The percentage of cumulative heat loss exergy decreases by 46.1%.

2- The percentage of cumulative work exergy decreases by 67.1%.

3- The percentage of irreversibility decreases by 29.5%.

4- The exergy efficiency decreases by 67.1%.