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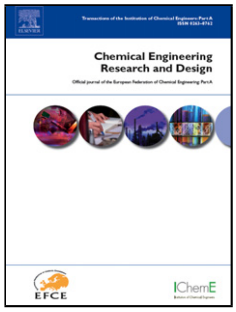

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- Mammalian circadian rhythms are examined using a systems theoretic approach.
- Tools for analysis of oscillatory dynamical systems are derived.
- *In silico* results for resetting the clock using model predictive control are shown.
- Ideal control of the circadian clock may involve multiple control targets.

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