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Tailored catalyst pellet specification for improved fixed-bed transport characteristics: A shortcut method for the model-based reactor design

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Graphical abstract



Highlights for the paper *"Tailored catalyst specifications for improved fixed-bed transport characteristics: A shortcut method for model-based reactor design*":

- Reactor design approach including the pellet specifications as design variables
- General approach to derive analytical solutions of the catalyst balance equations
- Suitable for reaction networks and reaction kinetic models of different complexity
- Pellet consideration without heterogeneous models to reduce computational cost

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