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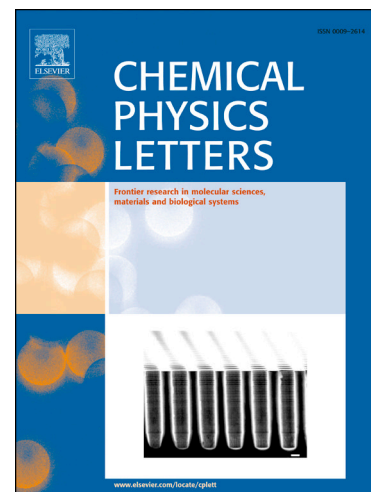
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A New Adsorption Rate Equation in Batch System

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Abstract: In this work, the deficiencies and cause of previous adsorption kinetic models were revealed, new adsorption rate equation has been proposed and its validities were verified by kinetic analysis of various experimental data. This work is a new view on the adsorption kinetics rather than a comment on the previous adsorption papers.

Keywords: Adsorption Kinetics, Deactivation, Kinetic Model, Reaction Order, Calculative Methodology

Highlights

- The deficiencies and cause of previous kinetic models were revealed.
- A new adsorption rate equation had been proposed.
- Its validities were verified by kinetic analysis of various experimental data.
- More important kinetic conclusions were obtained unlike the previous models.

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