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Evaluation of variable pressure dead-end ultrafiltration behaviors of nanocolloids based on filter cake properties

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Highlights

- Variable pressure dead-end ultrafiltration was examined for nanocolloids.
- Ultrafiltration behaviors were described based on compressible cake filtration model.
- Fundamental data for describing cake structure were determined by method proposed.
- Flux decline behaviors of variable pressure ultrafiltration were well evaluated.
- Filtration behaviors of constant rate ultrafiltration were well estimated.

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