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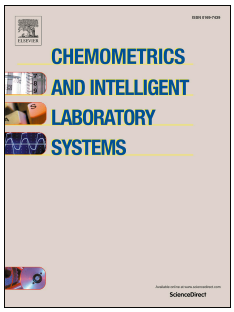

A combination strategy of random forest and back propagation network for variable selection in spectral calibration

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Highlights

- A combined strategy of random forest and BP network proposed for spectrometrics.
- BP network trained with RF produced a renewal informative-plus-net variable group.
- The number of trees and splitting variables were tunable by ΔGini in random forest.
- The number of hidden nodes in BP network was tunable by the minimum output error.
- The renewal variable group was verified performing significantly in applications.

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