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Use of group contribution method and intelligent algorithms to predict the flash temperature of binary mixtures

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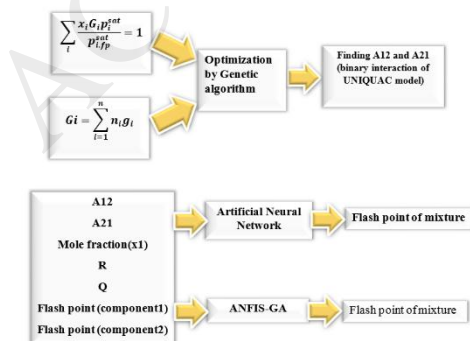
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Highlights

- Optimization of binary interaction of UNIQUAC activity model based on JOBACK group contribution and component family for flash points of 215 binary mixtures
- Using Artificial Neural network with both 5 and 7 input layers for estimating flash points of 513 binary mixtures
- Using ANFIS optimized by Genetic algorithm with both 5 and 7 input layers for estimating flash points of 513 binary mixtures
- Higher accuracy of intelligent algorithms rather than MNR and Liaw methods for binary flash temperature

Graphical abstract



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