Accepted Manuscript

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PII: S0021-9673(18)30384-4
DOI: https://doi.org/10.1016/j.chroma.2018.03.057
Reference: CHROMA 359296

To appear in: *Journal of Chromatography A*

Received date: 17-2-2018
Revised date: 26-3-2018
Accepted date: 28-3-2018

Please cite this article as: Nesrine Ouadah, Claudine Moire, Fabien Brothier, Jean-François Kuntz, Olivier Deschaume, Carmen Bartic, Hervé Cottet, Capillary electrophoresis for aluminum ion speciation: Optimized separation conditions for complex polycation mixtures, Journal of Chromatography A https://doi.org/10.1016/j.chroma.2018.03.057

Capillary electrophoresis for aluminum ion speciation: optimized separation conditions for complex polycation mixtures

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TITLE RUNNING HEAD. Optimizing aluminum chlorohydrate separations by CE

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Highlights

- Separation of aluminum chlorohydrates by capillary electrophoresis
- Optimization of pH, ionic strength and counterion concentration
- Ionic strength is the main parameter affecting the separation of polycations
- Separation of aluminum hydroxide colloids and aggregated forms of the polycations
- Optimal conditions are 700 mM morpholineethanesulfonic acid at 25 mM ionic strength