



Correction to: Branched-chain dicationic ionic liquids for fatty acid methyl ester assessment by gas chromatography

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Correction to: Anal Bioanal Chem

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The authors would like to call the reader's attention to the fact that the original publication included some corrections needed to be addressed.

In the section “Polarity and selectivity with gradient FAME separations” the sentence “IL11 and IL12 are two pyridinium-based dicationic ILs differing by a methyl group in the middle of the C₅ linker confirming the observation made with IL8 and IL9 (Fig. 2) on significant selectivity changes induced by this extra methyl group” should read “IL11 and IL12 are two pyrrolidinium-based dicationic ILs differing by a methyl group in the middle of the C₅ linker confirming the observation made with IL8 and IL9 (Fig. 2) on significant selectivity changes induced by this extra methyl group”.

Some references were incomplete. The citations [5, 15, 33] should be replaced by the following 3 references:

5. Patil RA, Talebi M, Sidisky LM, Armstrong DW. Examination of selectivities of thermally stable geminal dicationic ionic liquids by structural modification. *Chromatographia*. 2017;80(10):1563–74.

15. Talebi M, Frink LA, Patil RA, Armstrong DW. Examination of the varied and changing ethanol content of commercial Kombucha products. *Food Anal Methods*. 2017;10(12):4062–7.

33. Talebi M, Patil RA, Armstrong DW. Physicochemical properties of branched-chain dicationic ionic liquids. *J Mol Liq*. 2018;256:247–55.

On Fig. 1a, b, the boxes on top of each figure should show the complete pair of compounds involved in each series. On Fig. 3, the X-axis was misplaced and incomplete. Please find the corrected version of these figures below.

The authors apologize for the mistakes.

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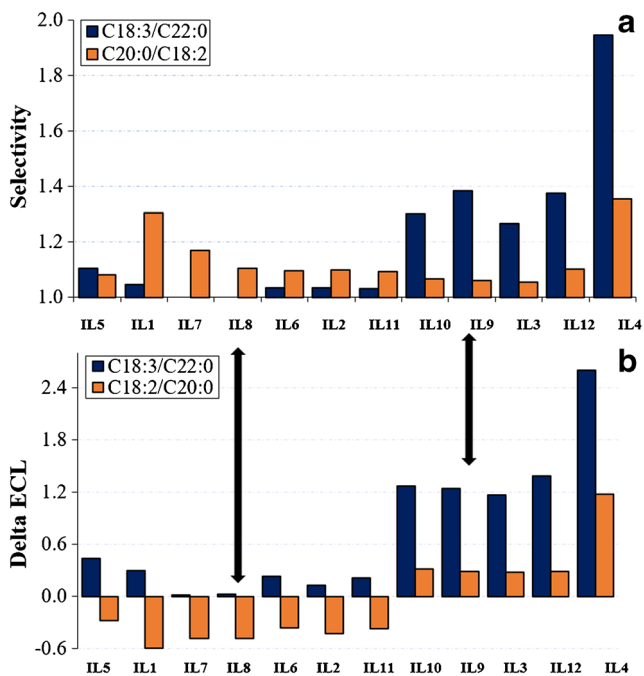


Fig. 1 Comparison of the selectivity obtained with the dicationic ILbased GC columns in the separation of the methyl esters of linoleic acid and arachidic acid (C18:2 and C20:0) and linolenic acid and behenic acid (C18:3 and C22:0). **a** Selectivity factors (ratio of the higher retention factor over the lower one). **b** Equivalent chain length differences. The vertical arrows indicate the two columns whose chromatograms are shown in Fig. 2. The columns are sorted by decreasing polarity order with the most polar IL5 on the left (see Table 1). Columns 30 m × 250 μm, film thickness 20 μm, helium carrier gas at 1 mL/min, 180 °C

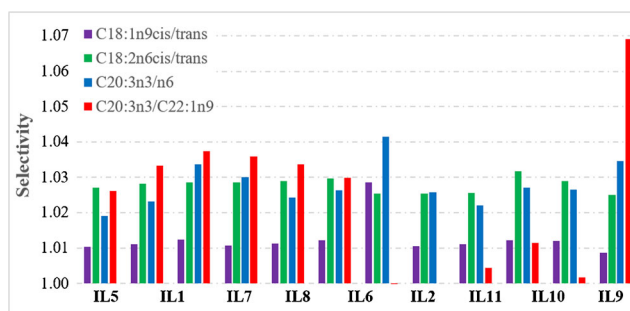


Fig. 3 Comparison of the selectivity obtained with the dicationic ILbased GC columns in the separation of the methyl esters of the cis and trans isomers of C18:1n9 (oleic and elaidic acids), cis and trans isomers of C18:2n6 (linoleic acid), C20:3n3 and n6, and C20:3n3 and C22:1n9 (erucic acid). The columns are sorted by decreasing polarity order with the most polar IL5 on the left. Columns 30 m × 250 μm, film thickness 0.2 μm, helium carrier gas and 1 mL/min, 180 °C