Table S4: Experimental apparent mobilities and PeakMaster effective mobilities of the analytes in 2.3 M HAc, together with the mobilities relative to K^+.

Ion	z	μ_exp [a]	μ_PM [b]	μ_exp/μ_PM	μ_rel, exp [c]	μ_rel, PM	Δ (%) [d]
K^+	1	51.57 ± 0.71	73.57	0.701	1	1	—
Ca^{2+}	2	39.13 ± 0.61	55.95	0.699	0.7588 ± 0.0023	0.760	−0.2
Mg^{2+}	2	35.22 ± 0.57	49.46	0.712	0.6830 ± 0.0019	0.672	1.6
NO_3^-	−1	−49.06 ± 0.27	−70.12	0.700	0.9516 ± 0.0178	0.953	−0.2
SO_4^{2-}	−2	−41.52 ± 0.26	−66.60	0.623	0.8054 ± 0.0152	0.905	−11.0

Mobilities in 10^{-9} m^2 V^{-1} s^{-1}.

[a] Mean ± SD of nine runs (K10, K20 and K30, n = 3 each), calculated from apex migration times corrected for the 10 s voltage ramp ($t_{eff} = t_m - 5$ s), with L_{det} = 13 cm, L_{tot} = 50 cm and V = 8 kV.

[b] PeakMaster effective mobility with ionic-strength correction (BGE: 2.3 M HAc, pH 2.20, I = 6.9 mM).

[c] $|\mu_i/\mu_{K^+}|$ calculated within each run and averaged over the nine runs (mean ± SD).

[d] $\Delta = (\mu_{rel,exp} - \mu_{rel,PM})/\mu_{rel,PM} \times 100$.