

Supplementary Materials

# Ion-induced polysaccharide gelation: Peculiarities of alginate egg-box association with different divalent cations

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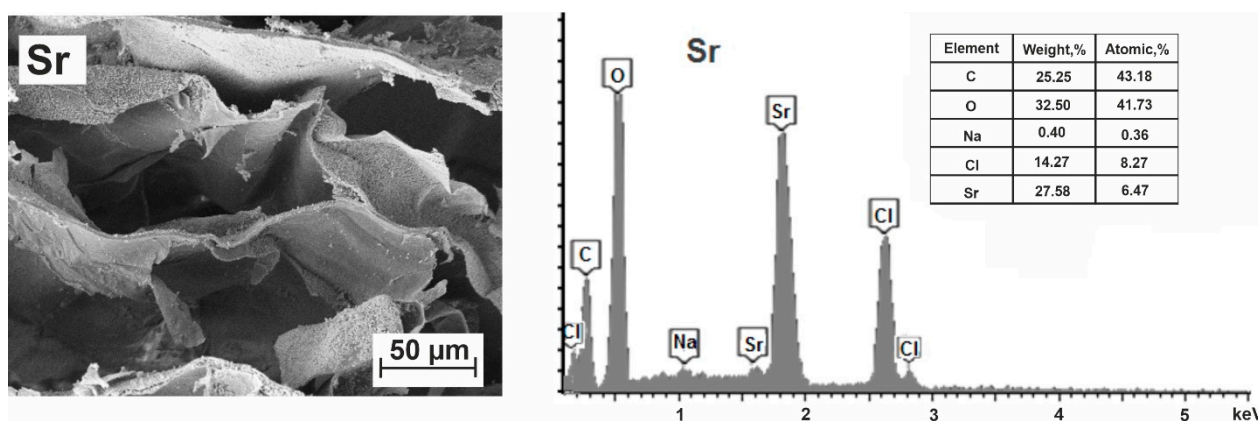
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**Figure S1.** Images of alginate microspheres in presence of divalent metal cations.



**Figure S2.** SEM image of transverse section of Sr-alginate microsphere and its elemental content.

**Table S1.** Calculation of probabilities of various blocks occurrence along alginate chain having a mannuronic acid to guluronic acid ratio M/G = 1.5.

	G	G	M	M	M
G	GG	GG	MG	MG	MG
G	GG	GG	MG	MG	MG
M	GM	GM	MM	MM	MM
M	GM	GM	MM	MM	MM
M	GM	GM	MM	MM	MM

Probabilities of various blocks occurrence.

GG:  $4/25 = 16\%$ ; GM:  $12/25 = 48\%$ ; MM:  $9/25 = 36\%$ .

**Table S2.** Calculation of probabilities of various egg-box cells along alginate dimer having a mannuronic acid to guluronic acid ratio M/G = 1.5.

	GG	GG	GG	GG	GM	GM	GM	GM	GM	GM	MG	MG	MG	MG	MG	MG	MG	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM
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Probabilities of different egg-box cells.

GG-GG:  $16/625 = 2.56\%$ .

GG-GM:  $96/625 = 15.36\%$ .

GG-MM:  $72/625 = 11.52\%$ .

GM-GM:  $72/625 = 11.52\%$ .

GM-MG:  $72/625 = 11.52\%$ .

GM-MM:  $216/625 = 34.56\%$ .

MM-MM:  $81/625 = 12.96\%$ .