

Supporting Information
Hydrodynamic spinning of protein fractal aggregates into core-shell fibers

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Table of notations

C_{agg}	concentration of aggregates
$C_{Ca^{2+}}$	concentration of aggregates
D	diameter of the fibers
$D_{Ca^{2+}}$	diffusion coefficient of calcium ions
D_{agg}	diffusion coefficient of the aggregates
$Q_{Ca^{2+}}$	Flow rate of calcium chloride solution
Q_{agg}	Flow rate of the suspension of aggregates
L	length of the tube
R_h	hydrodynamic radius
R_m	Molar ratio between calcium ions and WPI
d_f	fractal dimension of aggregates
q	flow rate ratio between calcium chloride and suspension of aggregates
r_i	internal radius of the coaxial needle
r_o	outer radius of the coaxial needle
v	mean flow velocity in the tube
v_1	mean critical flow velocity 1
v_2	mean critical flow velocity 2
Re	Reynolds number
Pe	Péclet number
ρ	density of aggregates
τ_g	time scale of gelation
τ_r	residence time in the tube

Scanning electron microscopy

For SEM imaging, fibers were washed with distilled water, freeze-dried and pasted on a stub covered with double-sided carbon tape. The specimens were coated with Au/Pd and secondary electron images were recorded with an FEI Quanta 250 scanning electron microscope equipped with a field emission gun and operating at 2.5 kV.