Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information

Silver nanoparticles with different size and shape: Equal cytotoxicity, but different antibacterial effect

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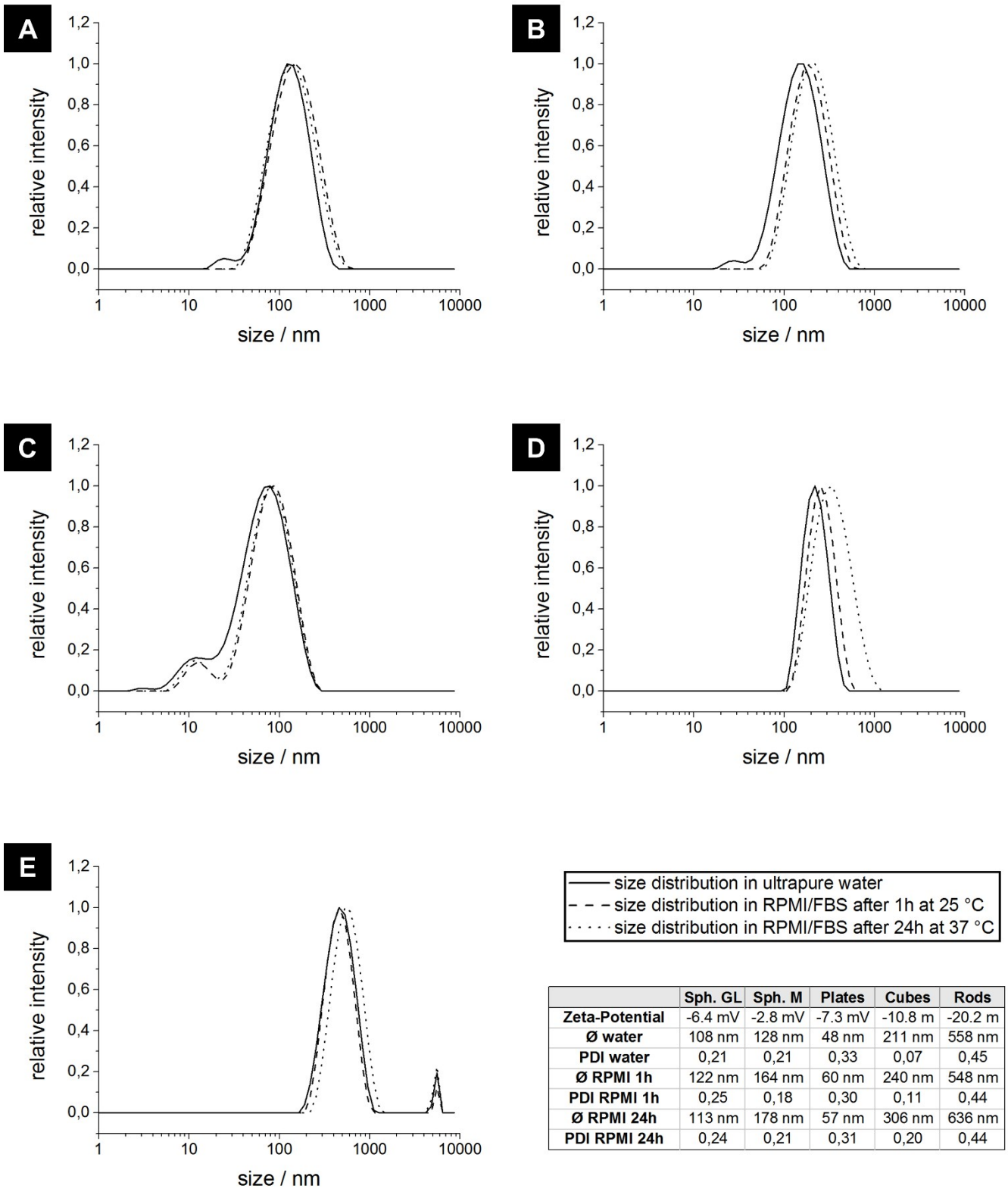

	Sph. GL	Sph. M	Plates	Cubes	Rods
Zeta-Potential	-6.4 mV	-2.8 mV	-7.3 mV	-10.8 m	-20.2 m
Ø water	108 nm	128 nm	48 nm	211 nm	558 nm
PDI water	0,21	0,21	0,33	0,07	0,45
Ø RPMI 1h	122 nm	164 nm	60 nm	240 nm	548 nm
PDI RPMI 1h	0,25	0,18	0,30	0,11	0,44
Ø RPMI 24h	113 nm	178 nm	57 nm	306 nm	636 nm
PDI RPMI 24h	0,24	0,21	0,31	0,20	0,44

Figure S1: Particle size distribution obtained by dynamic light scattering of (**A**) silver nanospheres from glucose synthesis, (**B**) silver nanospheres from microwave synthesis, (**C**) silver nanoplates, (**D**) silver nanocubes and (**E**) silver nanorods in ultrapure water as well as in cell culture medium (RPMI/FBS) after 1 h at 25 °C and after 24 h at 37 °C.

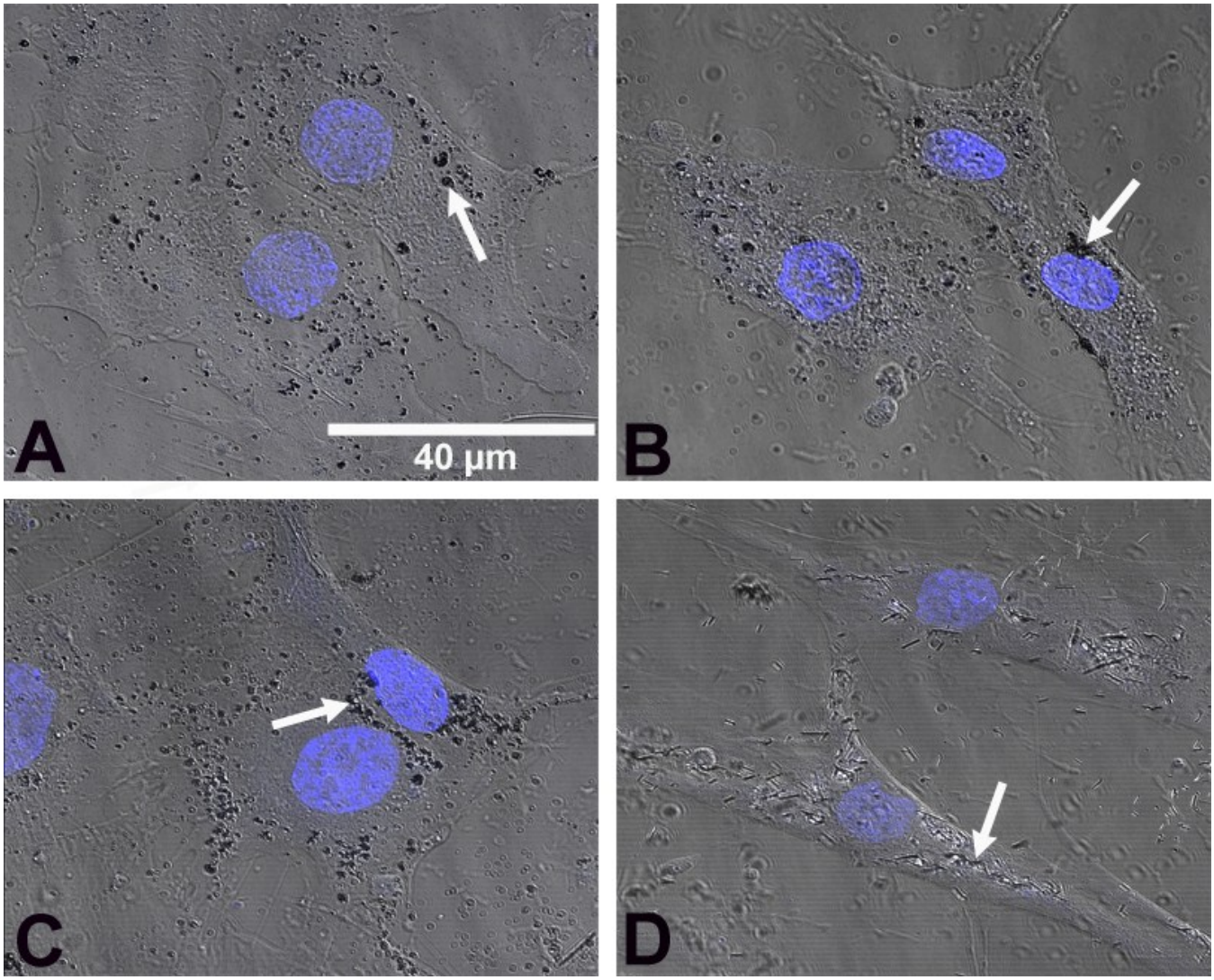

Figure S2. Intracellular occurrence of Ag-NP agglomerates analyzed by phase-contrast microscopy Representative phase-contrast micrograph of hMSC treated with 12.5 µg mL^{-1} silver nanospheres from the glucose synthesis (**A**), silver nanospheres from the microwave synthesis (**B**), silver nanocubes (**C**) and silver nanorods (**D**). The white arrows denotes the perinuclear accumulation of silver (**A-D**). The blue fluorescence of Hoechst33342 was used to stain the cell nucleus.