

## Appendix A. Supplementary information

### Hybrid Silver-Iron Oxide Nanoflowers: Morphological Tailoring, Application as CT Agents, and Exploitation of Induced Apoptosis in Glioblastoma Treatment

Sofia G. Nikolopoulou<sup>a,b</sup>, Beata Kalska-Szostko<sup>c</sup>, Anna Basa<sup>c</sup>, Giorgos Papanastasiou <sup>d,e</sup>, Adriana Tavares<sup>f</sup>, Carlos Alcaide Corral<sup>f</sup>, Athina Papadopoulou<sup>a,b</sup>, Eleni K. Efthimiadou<sup>a,b</sup>

<sup>a</sup> Inorganic Chemistry Laboratory, Chemistry Department, National and Kapodistrian University of Athens, Panepistimiopolis, Zografou 157 71, Greece

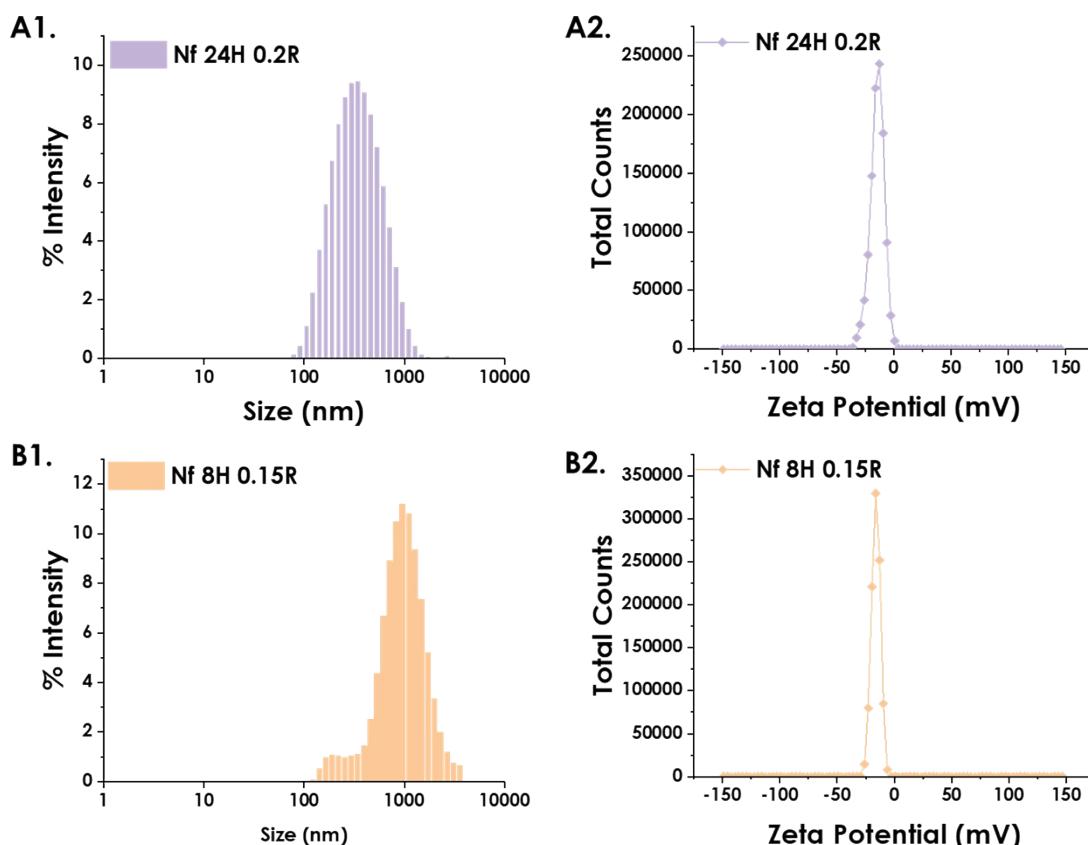
<sup>b</sup> Sol-Gel Lab, Institute of Nanoscience and Nanotechnology, NCSR “Demokritos,” 153 41 Aghia Paraskevi Attikis, Greece.

<sup>c</sup> University of Białystok, Faculty of Chemistry, Białystok 15-245, Poland

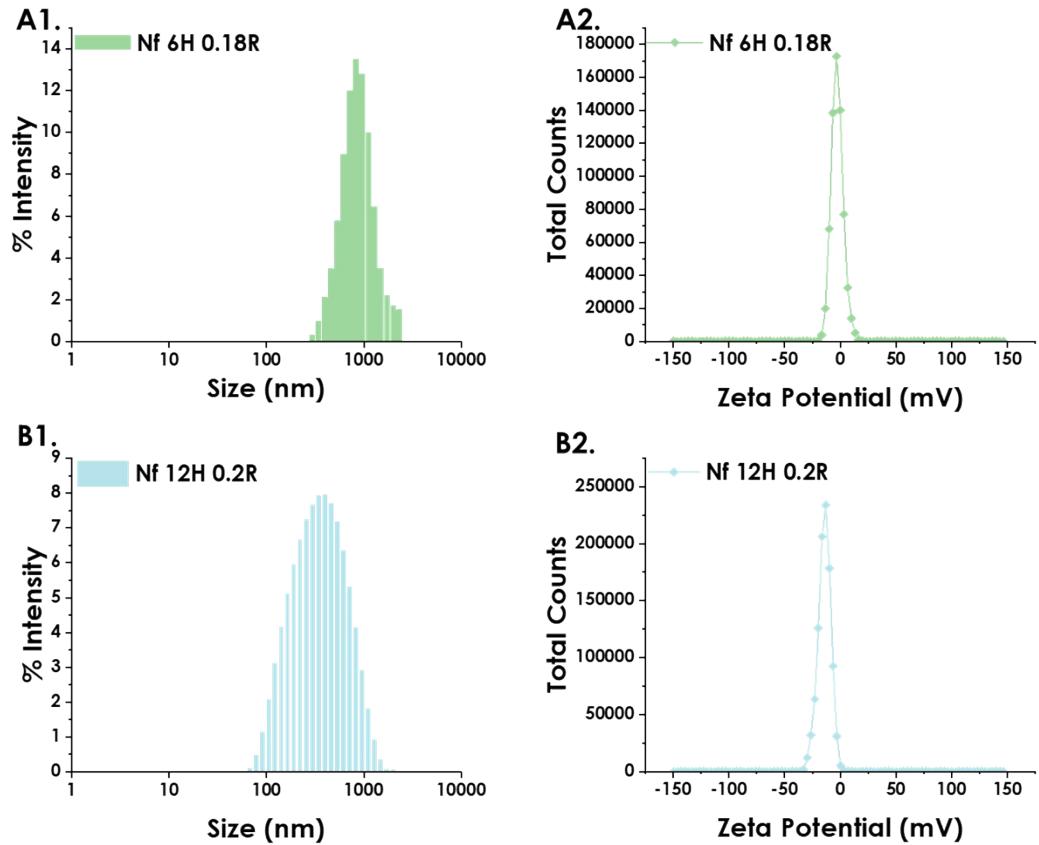
<sup>d</sup> Archimedes Unit, Athena Research Centre, Marousi, 15125, Greece

<sup>e</sup> School of Computer Science and Electronic Engineering, University of Essex, Colchester Campus, CO4 3SQ, UK

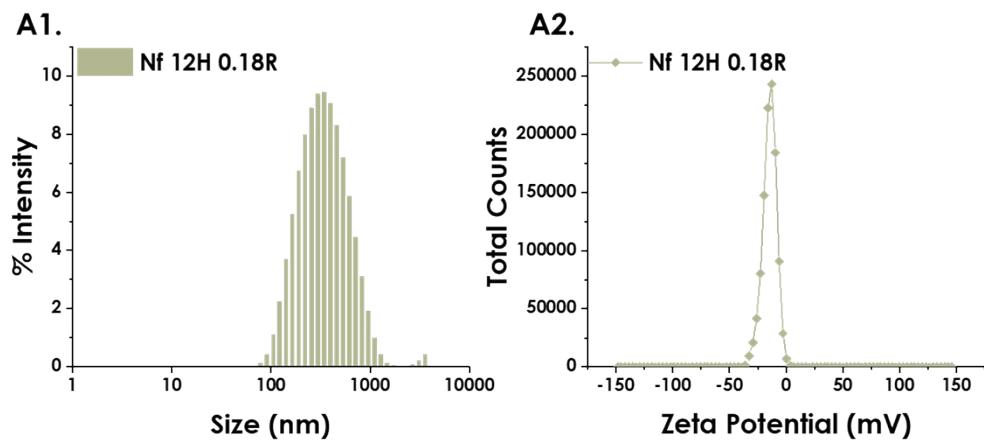
<sup>f</sup> Edinburgh Imaging Queen's Medical Research Institute, University of Edinburgh, Edinburgh EH16 4TJ, UK



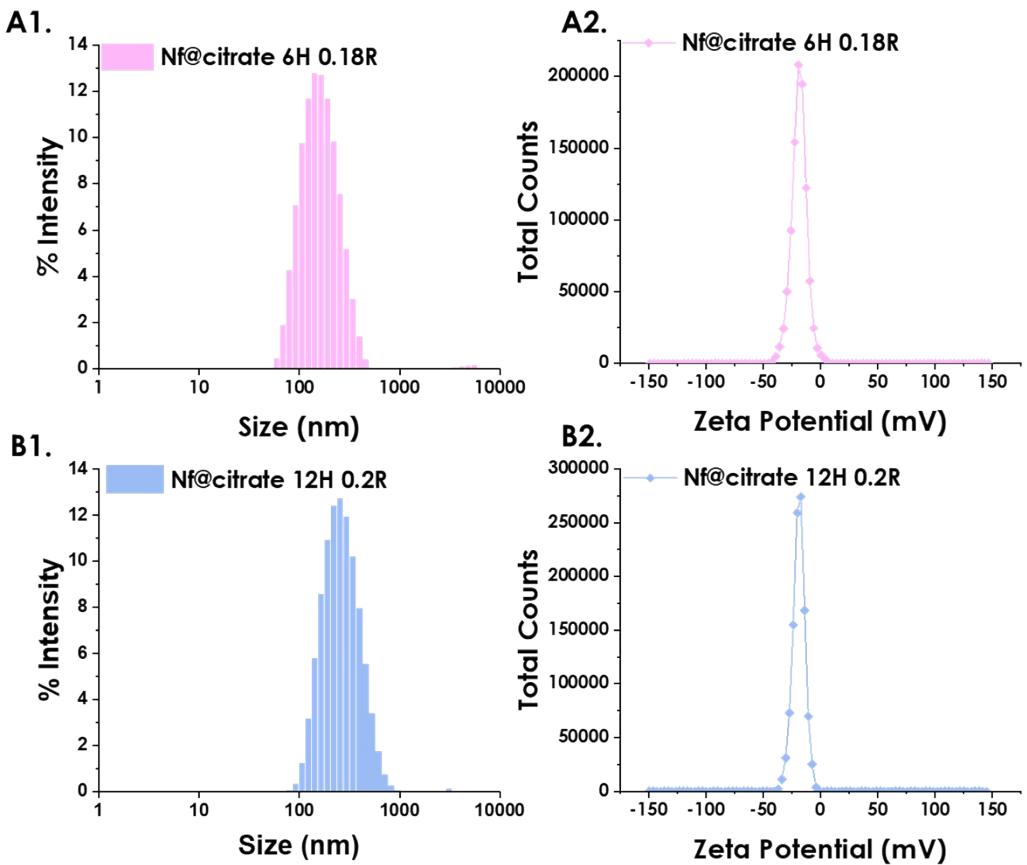
**Figure S1.** DLS and Zeta Potential graphs of Nf 24H 0.2R (A1-A2) and Nf 8H 0.15R (A3-A4)



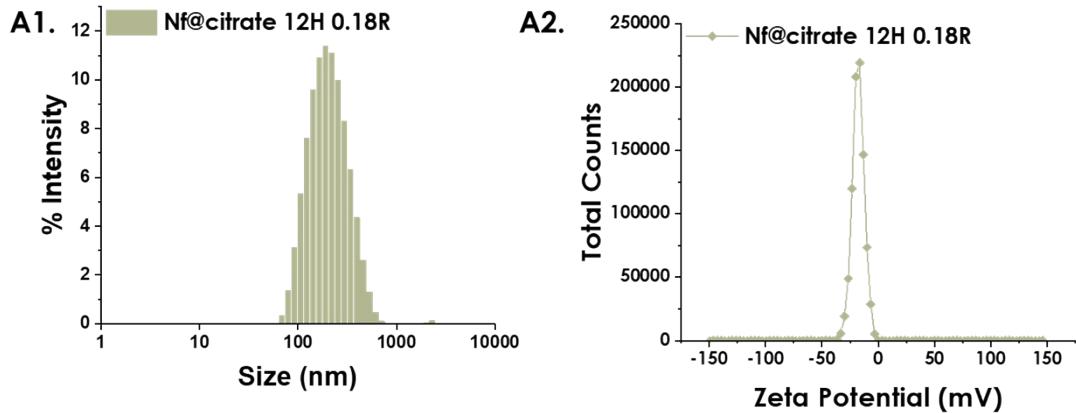
**Figure S2.** DLS and Zeta Potential graphs of Nf 6H 0.18R (**A1-A2**) and Nf 12H 0.2R (**B1-B2**)



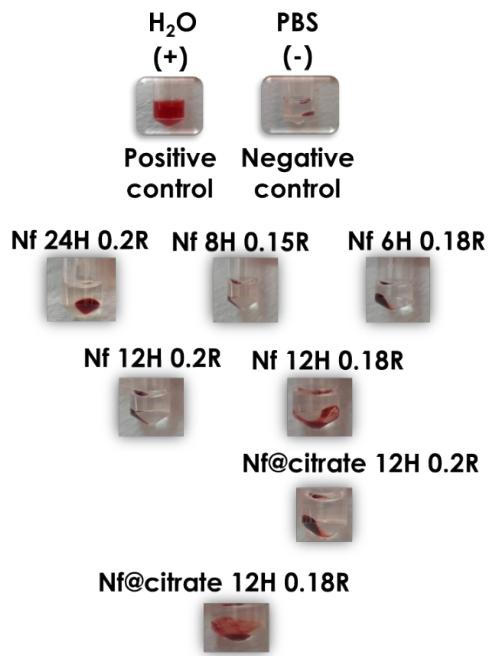
**Figure S3.** DLS and Zeta Potential graphs of Nf 12H 0.18R (**A1-A2**)



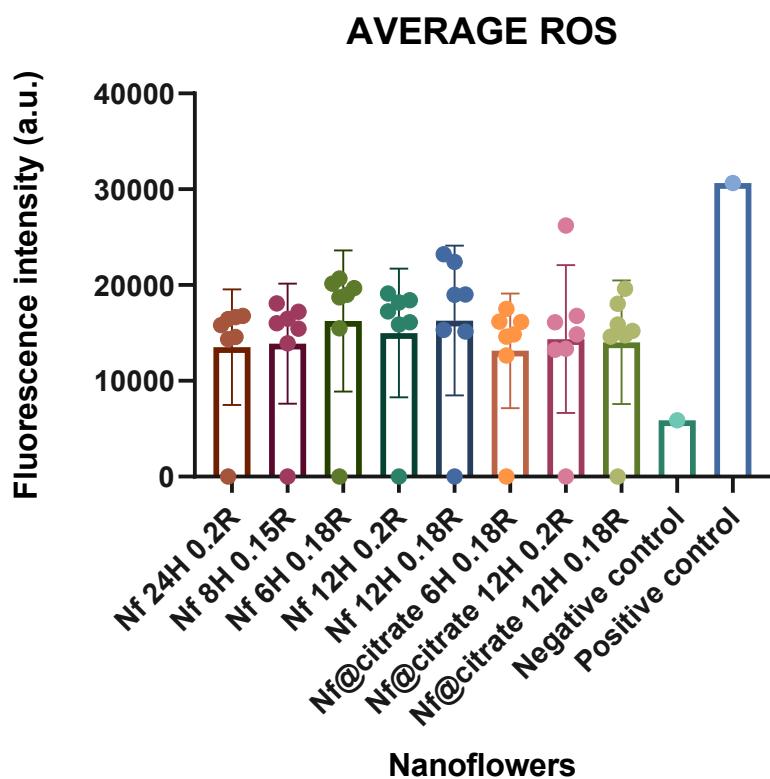
**Figure S4.** DLS and Zeta Potential graphs of Nf@citrate 6H 0.18R (**A1-A2**) and Nf@citrate 12H 0.2R (**B1-B2**)



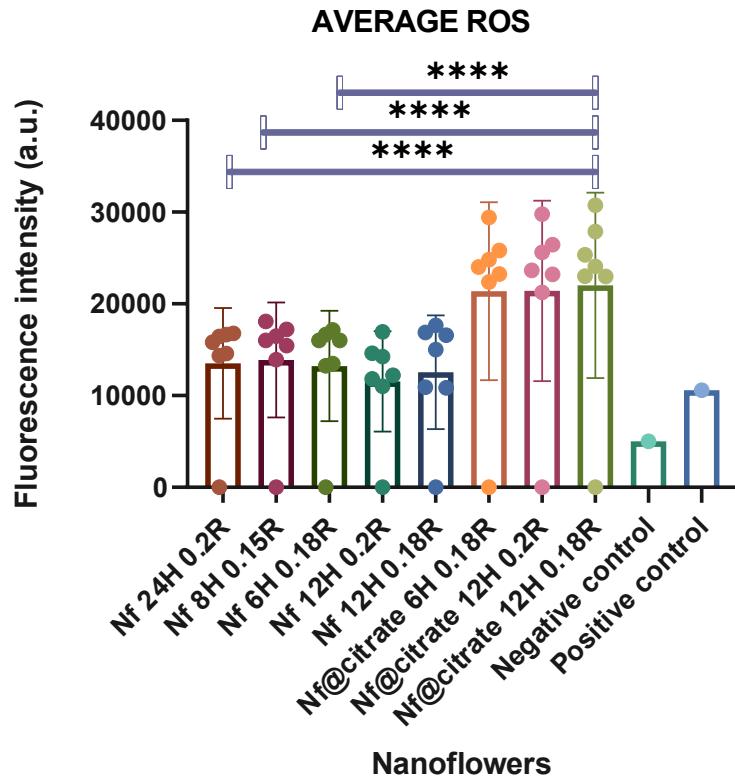
**Figure S5.** DLS and Zeta Potential graphs of Nf@citrate 12H 0.18R (**A1-A2**)



**Figure S6.** Samples of RBCs treated with Nfs after centrifugation step



**Figure S7.** Average results of ROS for all synthesized Nfs - HaCat cells (Statistical analysis by One-way ANOVA with Tukey multiple comparisons test, ns: non significant)



**Figure S8.** Average results of ROS for all synthesized Nfs – U87-MG cells (Statistical analysis by One-way ANOVA with Tukey multiple comparisons test, \*\*\*p<0.0001)