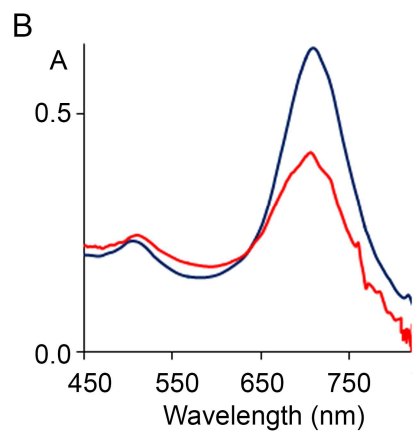
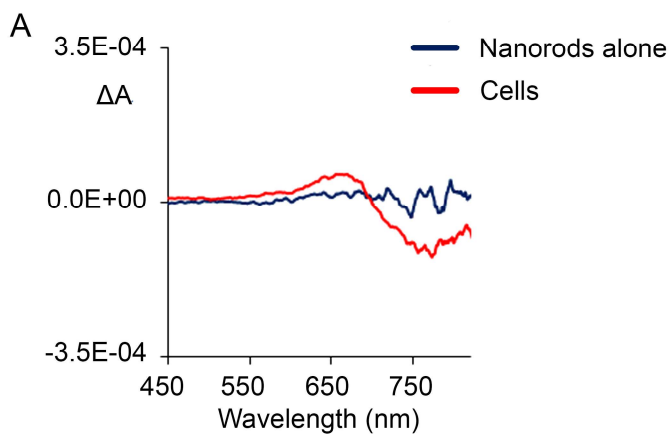
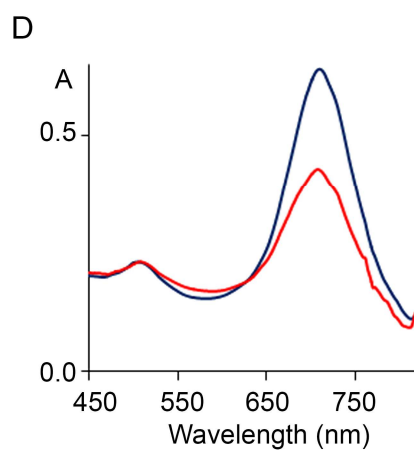
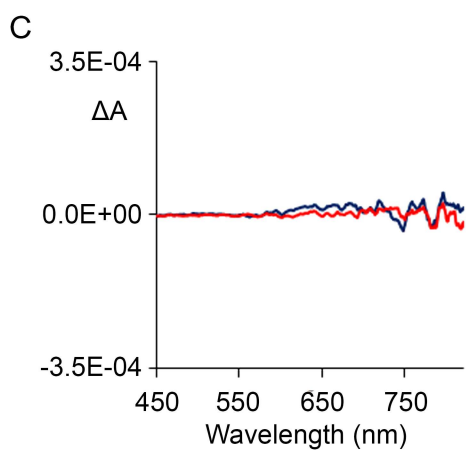


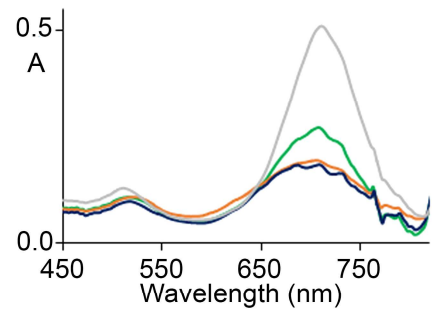
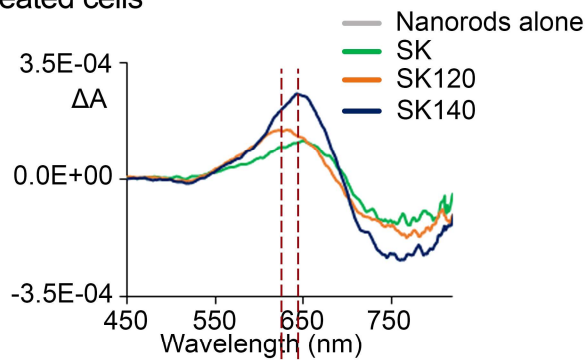
SK (20.000 cells)



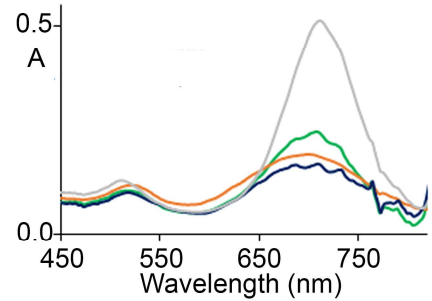
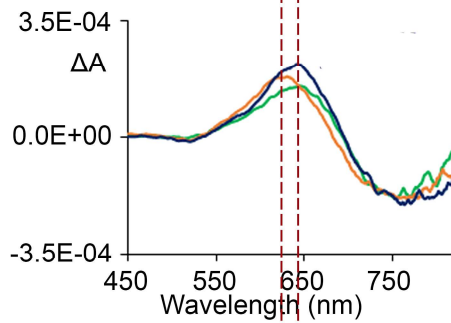
HEK (80.000 cells)



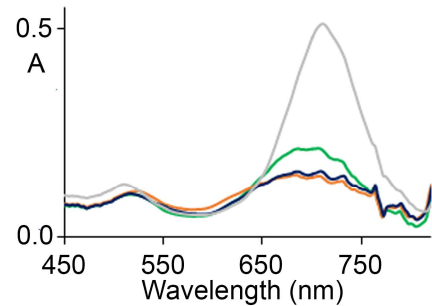
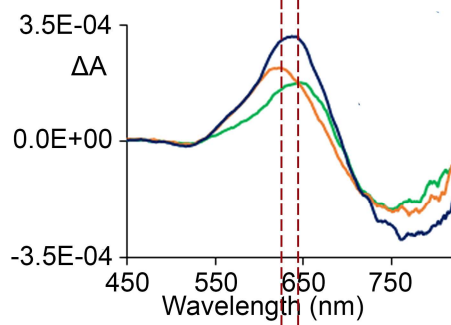
A. Untreated cells



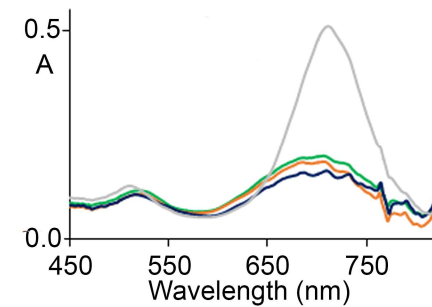
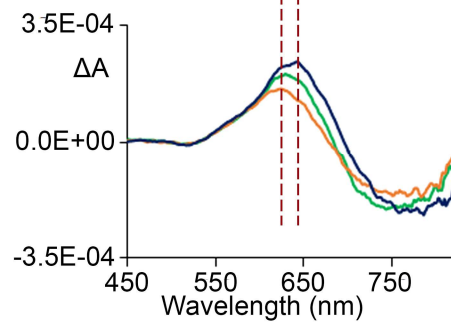
B. Cells treated with fl α Syn monomers

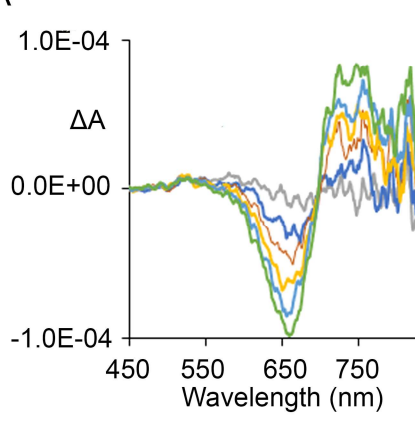


C. Cells treated with fl α Syn PFF

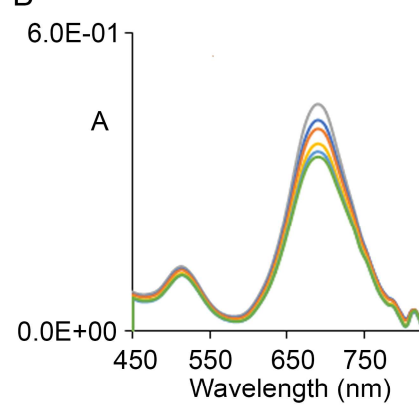


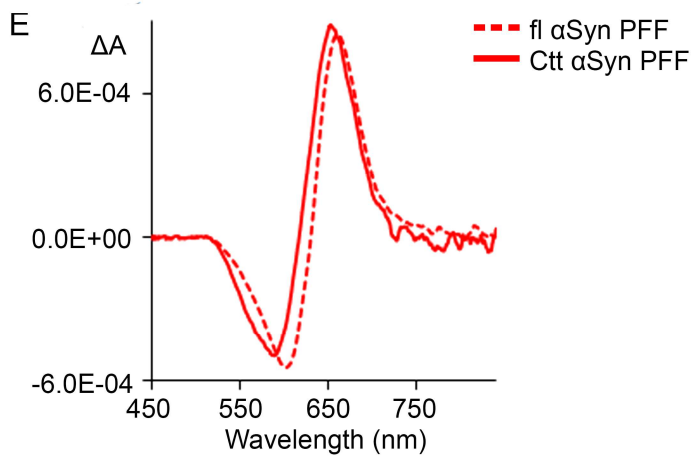
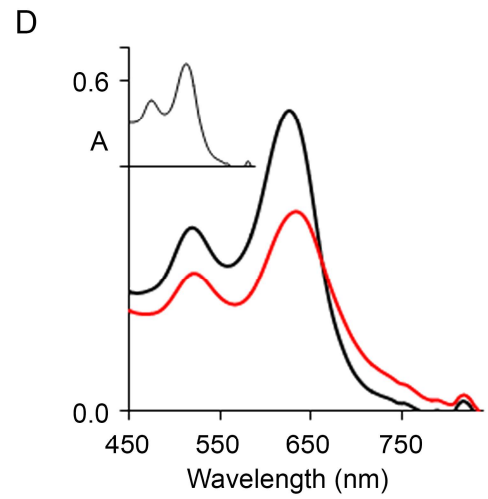
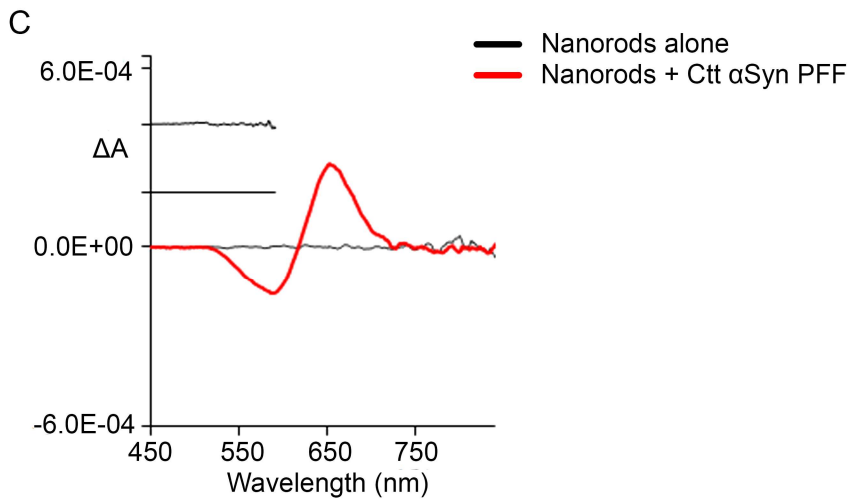
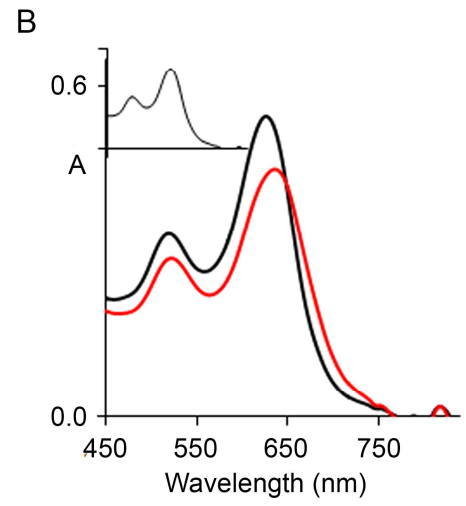
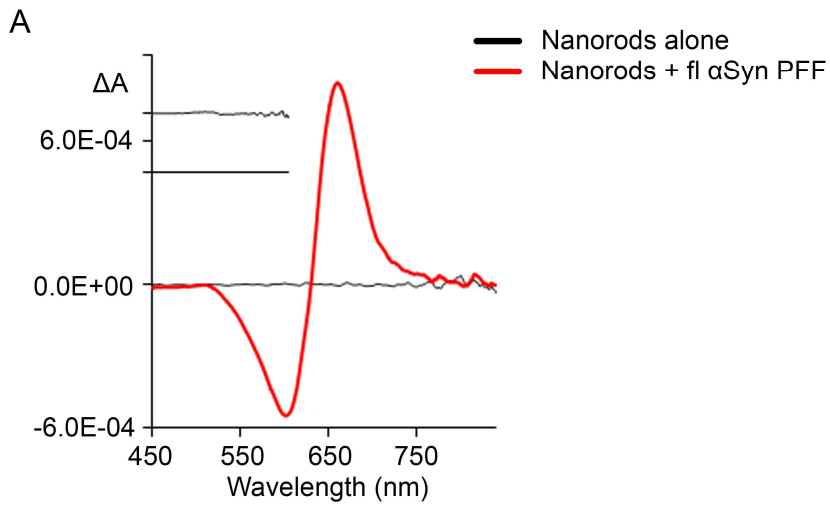
D. Cells treated with Ctt α Syn PFF



A

— 0.1 nM
— 0.5 nM
— 1.0 nM
— 2.0 nM
— 3.0 nM
— 4.0 nM

B



Supplementary information

Supplementary Figure legends

Figure S1

(A) CD and (B) absorption spectra of plain nanorods buffer suspension (blue line) and of nanorod suspension mixed with purified extracts from SK cells seeded at 20000 cells/dish (red line).

(C) CD spectra and (D) absorption spectra of plain nanorod-buffer suspension (blue line) and of nanorod suspension mixed with purified extracts from HEK cells seeded at 80000 cells/dish (red line). Nanorod size: 10x30 nm.

Figure S2

Comparison of CD (left) and absorption spectra (right) of nanorod suspension incubated for 1 hour with purified extracts from neuroblastoma cells that do not overexpress any kind of α Syn "SK" (green lines), that overexpress Ctt α Syn truncated form "SK120" (orange lines) and cells that overexpress the fl form of α Syn "SK140" (blue lines) in comparison with plain nanorods buffer suspension (gray line). Panel (A): untreated cells, (B): cells treated with fl α Syn monomers, (C): cells treated with fl α Syn sonicated PFF (D): cells treated with Ctt (1-120) α Syn sonicated PFF. The two vertical red dotted lines indicate the wavelength position of the positive peaks observed for all SK120 samples (lower wavelength) and for all SK140 samples (higher wavelength value). Nanorod size: 10x30 nm.

Figure S3

(A) CD and (B) absorption spectra of nanorods mixed with increasing quantities of fl α Syn PFF. Nanorod size: 10x30 nm.

Figure S4

(A) CD and (B) absorption spectra of nanorods for plain nanorod-buffer suspensions (blue line) and for nanorod suspension mixed with 375 nM PFF from fl α Syn (red line) after 1 hour of incubation. Spectra of fl α Syn monomers mixed with nanorods after 4 hours of incubation in Inset. (C) CD and (D) absorption spectra of nanorods (10x25 nm) for plain buffer suspensions (blue line) and after the addition of 375 nM Ctt (1-120) α Syn PFF, (red line) after 2 hours of incubation. Spectra of Ctt (1-120) α Syn monomers mixed with nanorods

after 4 hours of incubation in Inset. (E) CD spectra of nanorod suspensions with fl α Syn (dash) compared to the Ctt (1-120) PFF (solid) multiplied by 3 for sake of comparison. Nanorod size: 10x25 nm.