Electronic Supplementary Material (ESI) for Journal of Materials Chemistry B.

Quercetin Nanoparticles with Enhanced Bioavailability as Multifunctional Agents toward Amyloid Induced Neurotoxicity

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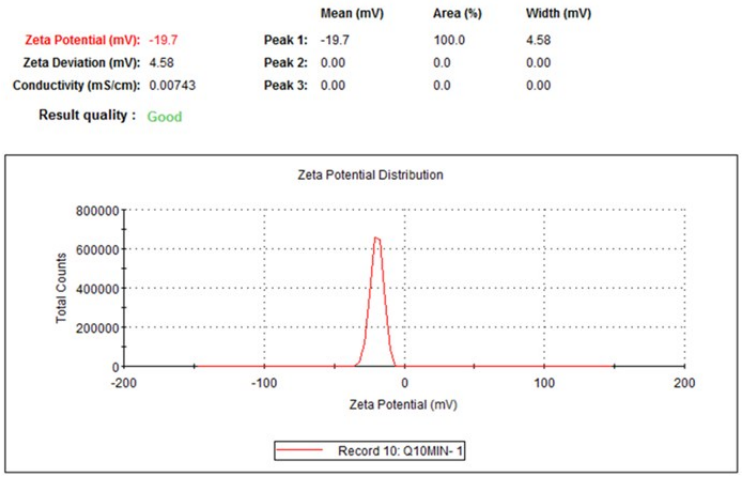
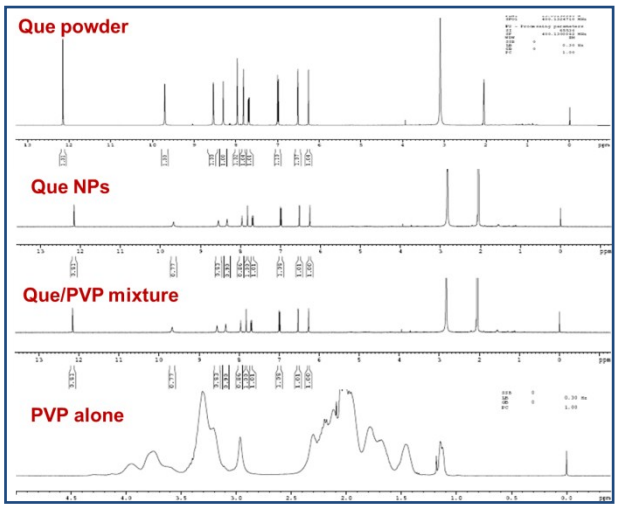
† Supporting information for this article is available



Fig,S1 Zeta potential of Que NPs.



Fig,S2 ^{1}H NMR spectra of Que powder, Que NPs and PVP alone.

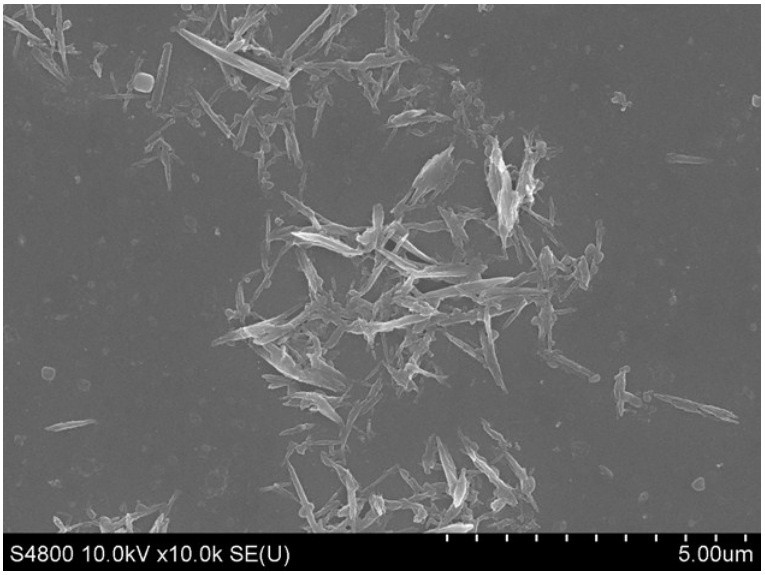


Fig.S3 SEM of Que fabricated by PLA without PVP.

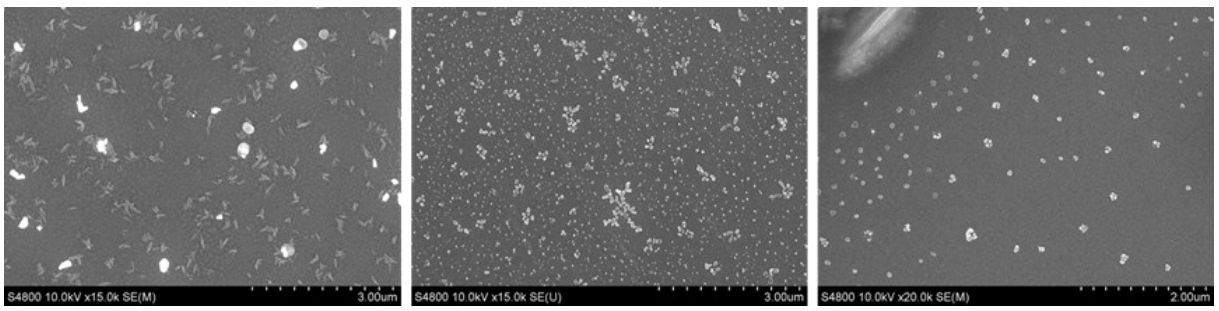


Fig.S4 SEM of Que NPs fabricated by PLA. From left to right, the PVP content are 1%, 2% and 5% and laser parameters are 10 mJ, 10 min.

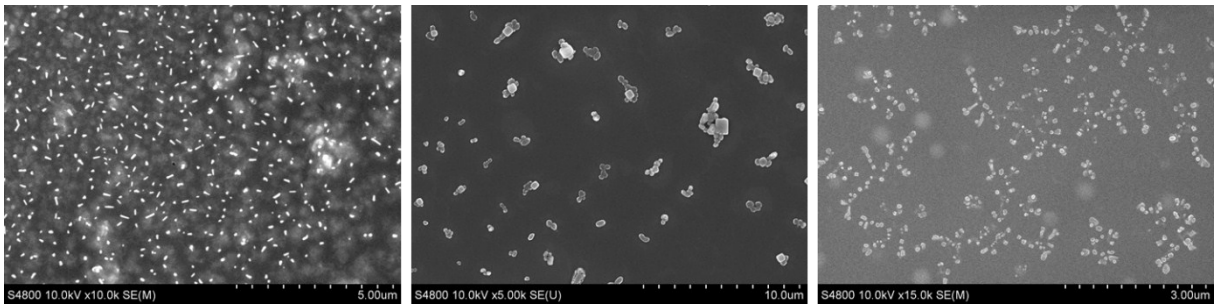


Fig.S5 SEM of Que NPs fabricated by PLA. From left to right, the PVP content are 1%, 2% and 5% and laser parameters are 30 mJ, 10 min.

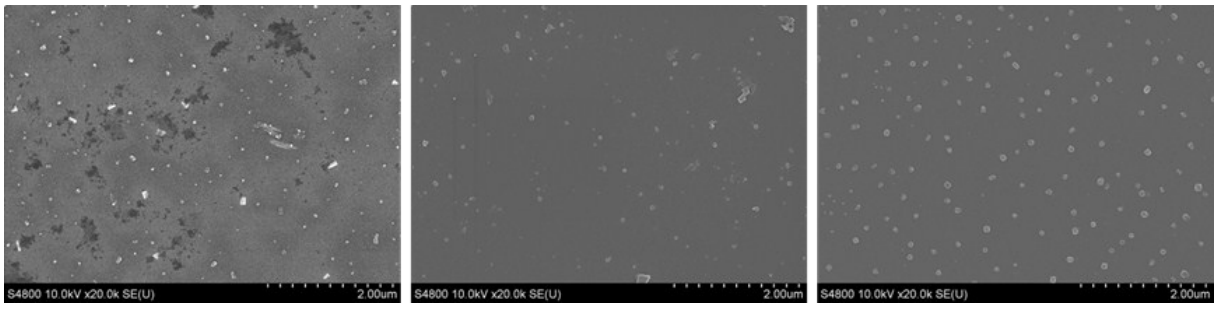


Fig.S6 SEM of Que NPs fabricated by PLA. From left to right, the laser duration are 10 min, 20 min and 30 min, laser energy is 10 mJ and PVP content is 2%.

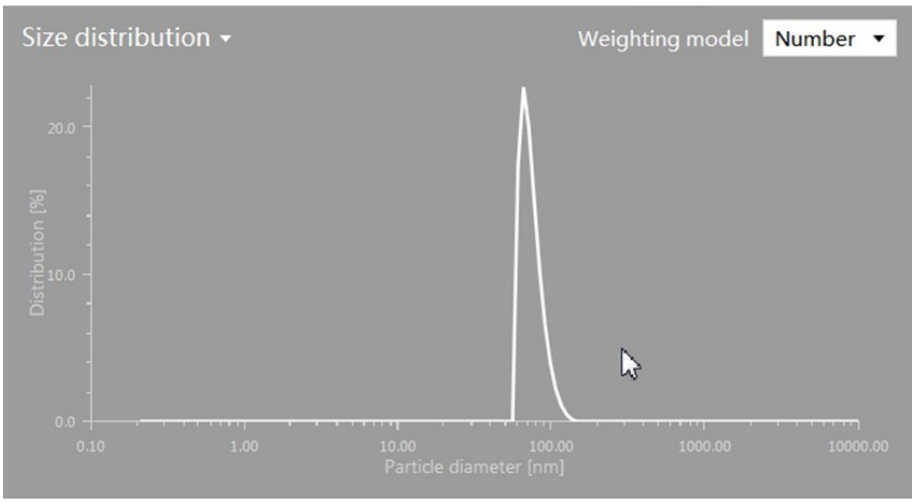


Fig.S7 DLS of Que NPs suspension.

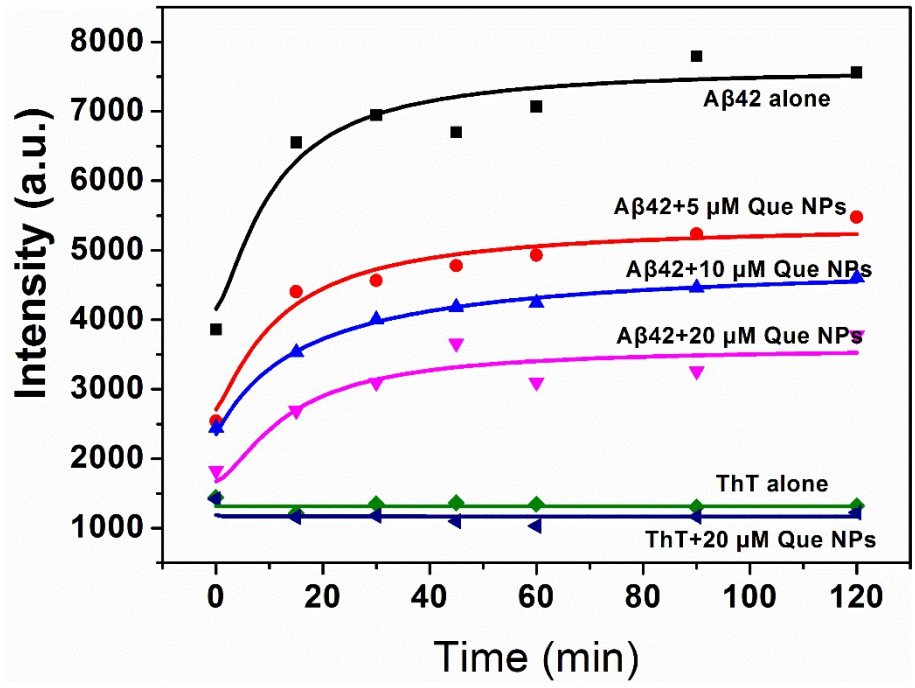


Fig.S8 ThT assay at the initial 2 hours. A lag phase is shown. ThT alone show a relative low intensity at 485 nm and Que NPs show little fluorescence quenching effect at 20 μM.

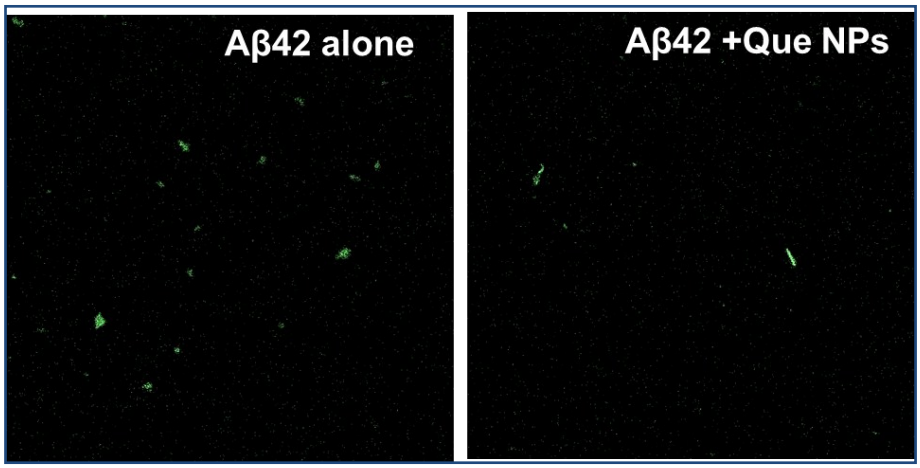


Fig.S9 Fluorescent microscopic image of Aβ42 fiber alone and Aβ42 incubated with Que NPs.

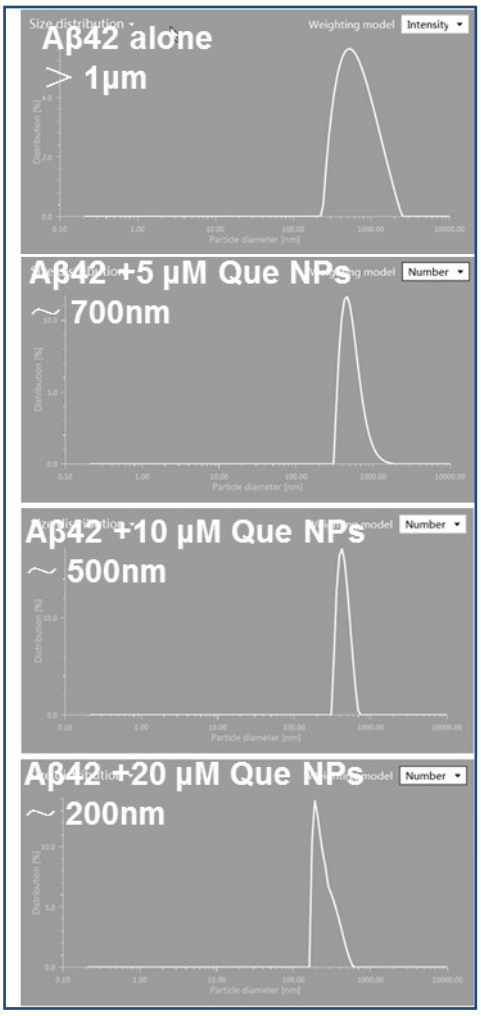


Fig.S10 Light scattering measurements of Aβ with or without Que NPs treatments.

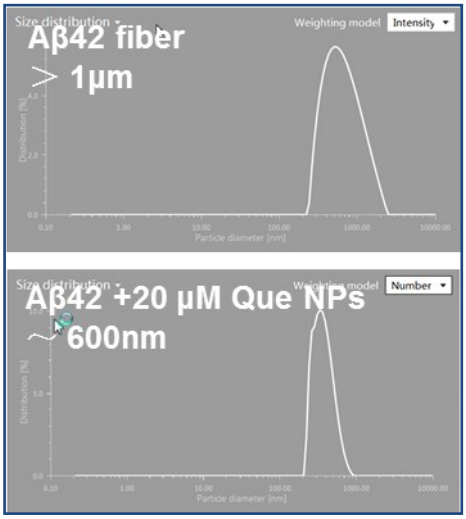


Fig.S11Light scattering measurements of Aβ fiber and treated with Que NPs treatment for 4 hours.

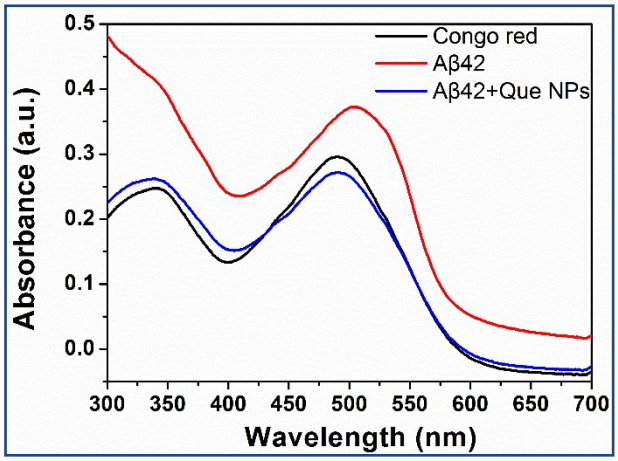


Fig. S12 Congo red binding assay. The absorbance spectrum of the dye shift of the absorption maximum from ~490 nm to ~540 nm upon binding to amyloid.

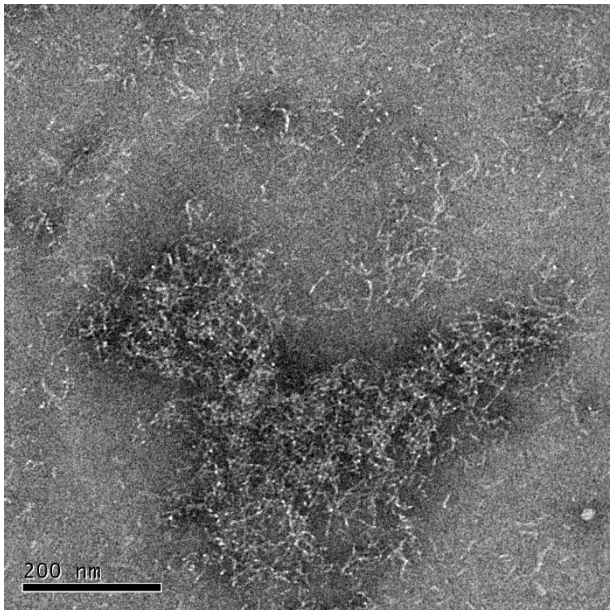


Fig.S13 Aβ fibrils stacked together.

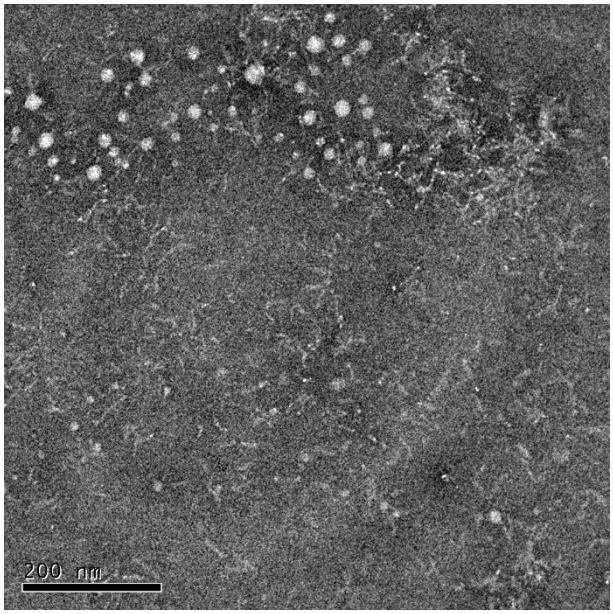


Fig.S14 The interaction between Aβ and Que NPs.