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Title: Nanocrystalline Cellulose-Fullerene: Novel Conjugates

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Highlights

- The covalent functionalization of NCC with fullerene derivatives is described.
- The obtained derivatives were fully characterized using spectroscopic techniques and formed stable colloidal suspensions at concentrations up to 0.5 mg/mL.
- They act as effective photosensitizers for singlet oxygen production as demonstrated by the oxidation of L-methionine-methyl ester to the corresponding sulphoxide.
- The compounds showed no cytotoxicity on MCF-7 human breast cancer cells.

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