The architecture of new inorganic powder for sunscreen cosmetic

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The harmful effects of sunlight, especially the solar UV radiation, on human skin are well known. Adverse reactions to the sun UV rays include short-term inflammatory responses (erythema, sunburn) and long-term effects (cutaneous photoageing, immunosuppression and skin cancers), which are increasing throughout the world. Recently, we demonstrated that intercalation in inorganic materials as hydrotalcite (HTlc) could represent a new strategy to improve sunscreen photostability and to avoid a direct contact with skin. Hydrotalcites, natural anionic lamellar solids with positively charged layer balanced by exchangeable anions, are rare in nature, but quite easy to prepare in laboratory. The aim of this work is to obtain new sunscreen cosmetic using hydrotalcite with the lamellar structures.