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(54) Title: HIGH PERFORMANCE AQUEOUS HALIDE PEROVSKITE NANOCRYSTALS

(57) Abstract: The present invention relates to a nanocrystal having a core-shell structure, wherein the core comprises a core perovskite structure, and the shell comprises a shell perovskite structure and a compound comprising silicon and oxygen, wherein the shell perovskite structure is different from the core perovskite structure and comprises a low-dimensional perovskite structure that is doped 5 with a metal halide comprising a monovalent, divalent or trivalent metal ion. The present invention also relates to a process for preparing the nanocrystal, a substrate comprising the nanocrystal and the use of the nanocrystal.

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