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(54) Title: ANION-DOPED METAL OXIDE

(57) Abstract: The present disclosure relates to a material comprising an oxide of an alkaline earth metal, wherein the oxide of the alkaline earth metal is doped with an anion. In particular embodiments, the material comprises MgO doped with an anion selected from the group consisting of chloride, sulfate, phosphate and any mixtures thereof. The present disclosure also relates to a method for preparing the material, a method for adsorbing CO₂ from an environment and the use of the material to adsorb CO₂ from an environment.

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