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(57) Abstract :  
 METHOD AND SYSTEM FOR SELF-HEALING CONCRETE INCORPORATING BIOMIMIX INFRAMATRIX IN NEXT-GENERATION SUSTAINABLE STRUCTURES ABSTRACT This invention pertains to a method and system for self-healing concrete in next-generation sustainable structures. The method involves formulating a concrete mixture with BioMimix InfraMatrix (108), optimizing its concentration based on specific structural needs (16). This mixture is applied in the construction of sustainable structures, such as buildings or bridges (18). The incorporated BioMimix InfraMatrix initiates a self-healing process, utilizing bio-inspired agents to repair cracks and fissures within the concrete (19). The system (100) includes sensors (110) strategically placed for monitoring structural damage and activation mechanisms (112) for triggering self-healing processes in response to detected damage (9, 10). The invention enhances concrete longevity, structural integrity, and sustainability, offering a pioneering solution for resilient infrastructure.

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