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(54) **PROTEIN CRYSTAL ENGINEERING THROUGH DNA HYBRIDIZATION INTERACTIONS**

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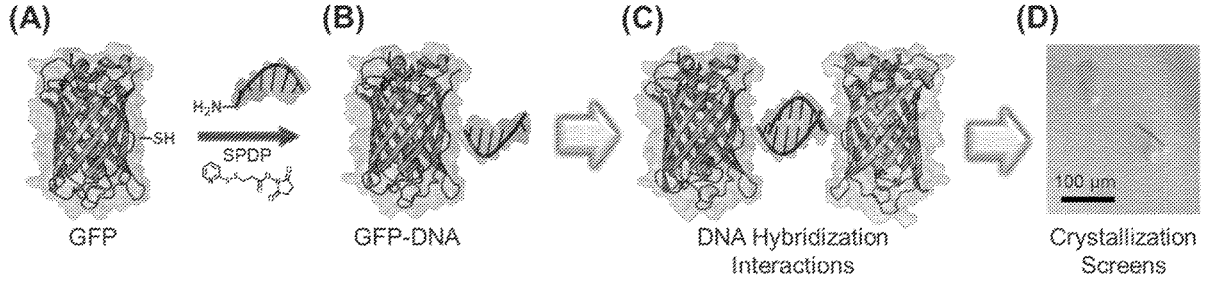
(57) **ABSTRACT**

The present disclosure provides compositions comprising protein crystals and methods for programmable biomaterial synthesis. The methods of the disclosure provide the ability to organize proteins within protein crystals with control over protein orientation.

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