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**Fig. S1** Effect of Uh-Au@Nano-CF (15% dilution) on the growth of CV026. Samples were taken from each culture at  $OD_{600}$  nm at for indicated time intervals. The Uh-Au@Nano-CF did not suppress the growth of CV026. Data are mean and SE (n = 8).





**Fig. S2** Anti-QS activity of free Swarna nano-colloidal solution (A) and free ULE (B) using *C. violaceum* 12472, a biomonitor strain. Control discs contain only sterilized distilled water. (C-D) Quantification of violacein production in *C. violaceum* 12472 treated with indicated concentrations of free Swarna nano-colloidal solution (C) and free ULE (D) for 48 h. Data are mean and SE (n = 8).



Fig. S3 Protein content in Uh-Au@Nano-CF treated and untreated control. Data are means and SE (n = 6).



Fig. S4 Effect of Uh-Au@Nano-CF on total carbohydrate content in cells of *S. mutans*. Data are means and SE (n = 6).



**Fig. S5** Effect of free Swarna nano-colloidal solution (A) and free ULE (B) on biofilm formation of *S. mutans.* For quantification of biofilm, CV staining assay was used. Data are means and SE (n = 6).