

## Supporting Information

### **Preparation of self-driven micromotors loaded with photosensitive adhesives and their application in dentin sensitivity**

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#### ■ **Supplementary videos**

**Video S1. Typical video recording of the motors in H<sub>2</sub>O.**

**Video S2. Typical video recording of the motors in H<sub>2</sub>O and 0.5% H<sub>2</sub>O<sub>2</sub>.**

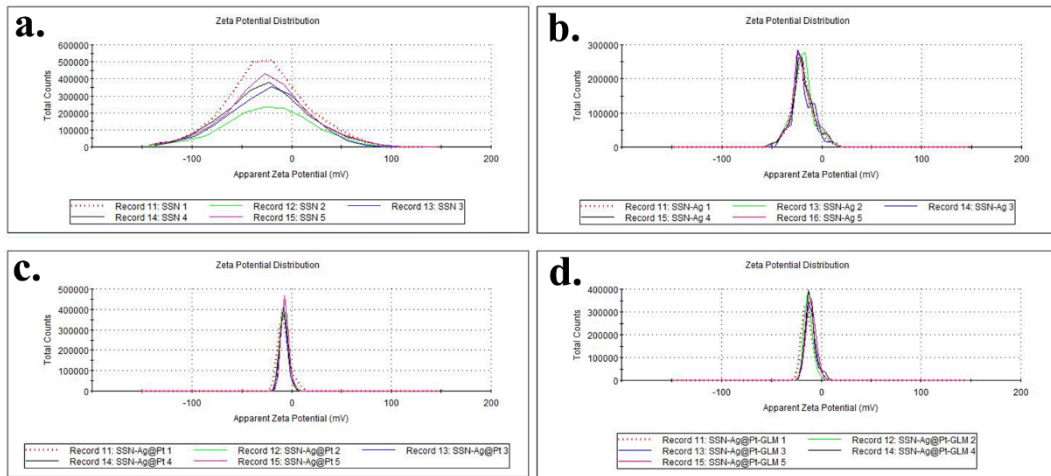
**Video S3. Typical video recording of the motors in H<sub>2</sub>O and 1% H<sub>2</sub>O<sub>2</sub>.**

**Video S4. Typical video recording of the motors in H<sub>2</sub>O and 3% H<sub>2</sub>O<sub>2</sub>.**

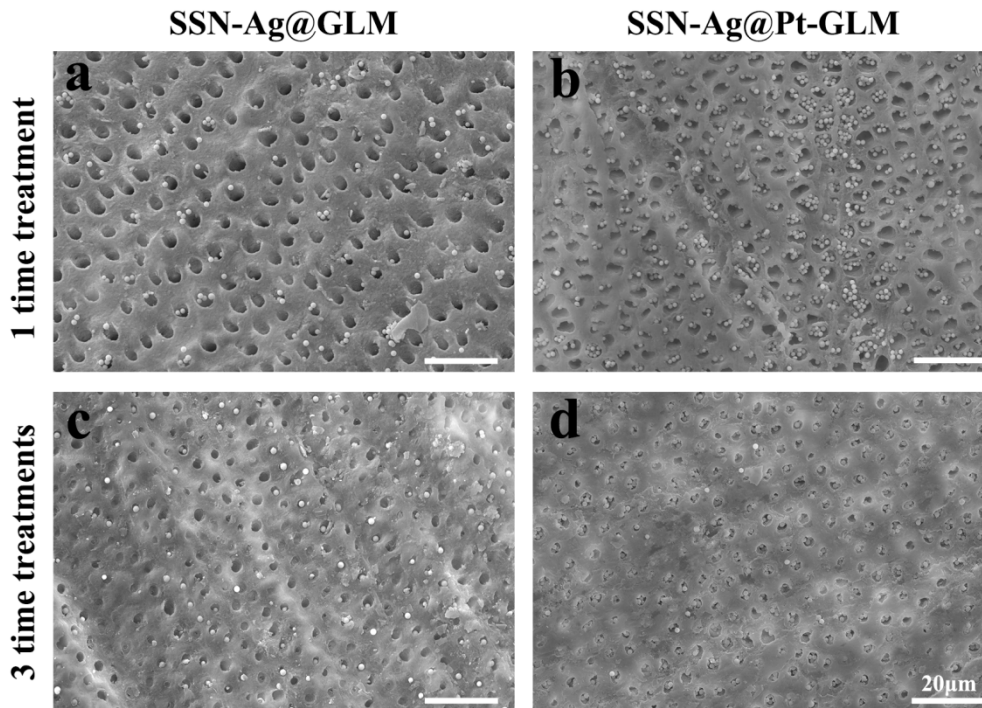
**Video S5. Typical video recording of the motors in Artificial Saliva and 3% H<sub>2</sub>O<sub>2</sub>.**

**Video S6. Typical video recording of the motors in Ringer's fluid and 3% H<sub>2</sub>O<sub>2</sub>.**

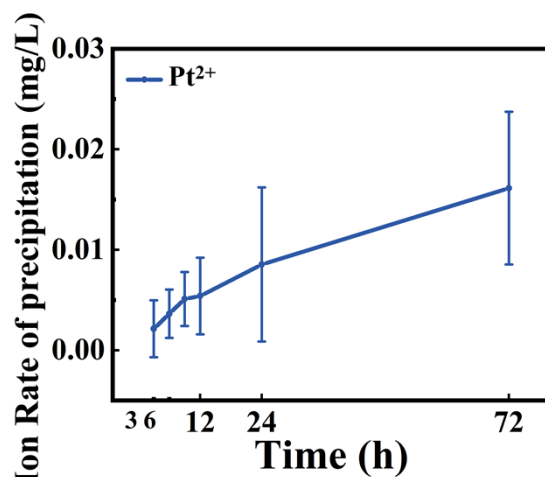
## ■ Supplementary Figures



**Figure S1.** Zeta potential distribution curve of SSN (a), SSN-Ag (b), SSN-Ag@Pt (c), and SSN-Ag@Pt-GLM (d).



**Figure S2.** (a, c) Typical SEM images after treated once (a) and 3 times (c) with SSN-Ag@GLM. (b, d) Typical SEM images after 1 (b) and 3 (d) treatment with SSN-Ag@Pt-GLM.



**Figure S3.** In vitro platinum ion release analysis of SSN-Ag@Pt-GLM.

## ■ Supplementary Tables

**Table S1.** The cell survival rate of pure HGnFs and HGnFs incubated with different concentrations of SSN-Ag@Pt-GLM

Group	Drug Concentration(mg/ml)				
	Control	1. 25	2. 5	5	10
Viability 24h(%)	100.00	95. 64	112. 48	113. 45	115. 80

**Table S2.** Percent elemental analysis (Si, O, C, Ag, Pt) of SSN-Ag@Pt-GLM

Element	Type of signal	Line	Apparent concentration	K ratio	Wt%	Wt% Sigma	At%	Sample
Si	EDS	K	51.66	0.40932	72.04	0.26	59.86	SiO2
O	EDS	K	0.97	0.00325	3.28	0.06	4.79	SiO2
C	EDS	K	0.78	0.00783	17.55	0.29	34.09	C Vit
Ag	EDS	L	1.73	0.01732	4.27	0.05	0.92	Ag
Pt	EDS	M	0.84	0.00836	2.86	0.06	0.34	Pt
Gross					100.00		100.00	