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## **Supporting Information for**

## Three-in-One Synergistic Therapy for Tooth Whitening and Biofilm Eradication using Cu doped Bi<sub>2</sub>WO<sub>6</sub>

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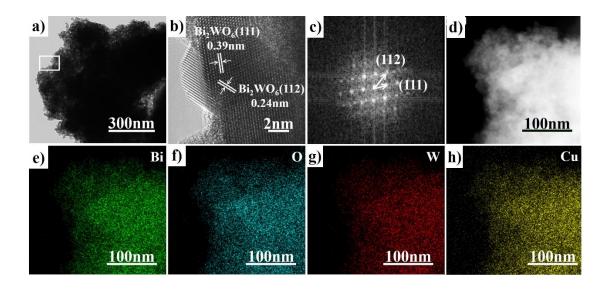
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**Table S1.** The quantitative calculation of the peak areas of O1s and W4f for different samples.

		$\mathrm{Bi}_2\mathrm{WO}_6$	0.5CBWO
Ols	Bi-O	30.1%	26.3%
	W-O	45.6%	47.5%
	Adsorbent Oxygen	24.3%	27.5%
W4f	W <sup>5+</sup>	45.7%	49.7%
	$\mathrm{W}^{6+}$	54.3%	50.3%

Table S2. Actual and theoretical doping amounts of Cu in 0.5CBWO

Element	Atomic%	Actual doping amount of Cu (wt%)	Theoretical doping amount of Cu (wt%)	
Bi4f	16.76			
Cu2p	0.14	0.520/	0.5%	
W4f	5.82	0.53%		
Ols	54.84			



**Fig. S1.** TEM images and EDS elemental mappings for 0.5CBWO: a) TEM image; b) HRTEM image; c) FFT pattern; d) STEM image; e-h) element maps for Bi, O, W and Cu.