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Supporting Information

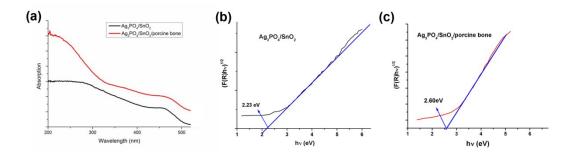
A Green Approach for the Synthesis of Novel $Ag_3PO_4/SnO_2/Porcine$ Bone and Its Exploitation as a Catalyst in the Photodegradation of Lignosulfonate into Alkyl Acids

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Figure S1 SEM images of (a) porcine bone treated with 500 °C calcination; (b) $SnO_2/porcine$ bone; (c) $Ag_3PO_4/SnO_2/porcine$ bone.



 $\label{eq:Figure S2} \textbf{Figure S2} \ (a) \ UV-V is \ diffuser \ reflectance \ absorption \ spectra \ of \ Ag_3PO_4/SnO_2, \ Ag_3PO_4/SnO_2/porcine \ bone; \ \textit{Eg} \ value \ measurement \ using \ Tauc \ plot: \ (b) \ Ag_3PO_4/SnO_2 \ and \ (c) \ Ag_3PO_4/SnO_2/porcine \ bone.$

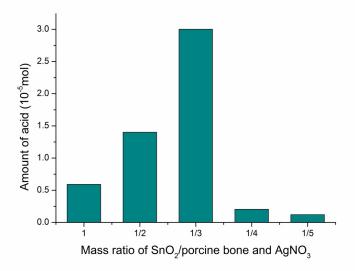


Figure S3 The amount of acid generated in the photocatalytic reaction using catalyst prepared in different mass ratio. The mass ratio of SnO_2 /porcine bone and $AgNO_3$ is 1/1, 1/2, 1/3, 1/4, and 1/5, respectively.

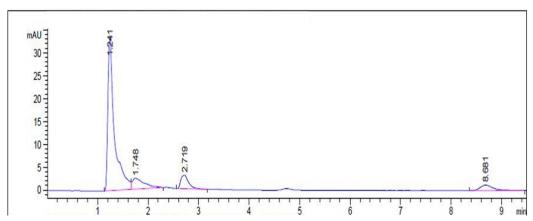


Figure S4 The degradation products analyzed by HPLC (High Performance Liquid Chromatography)