

Supporting Information

Copper Sulfide Nanostructures: Ease Synthesis, Photocatalytic and Doxorubicin Anticancer Drug Delivery Applications

Zahra Rafiee^a, Fatemeh Davar^{a,}, Saeed Hasani^b, Ali Majedi^{a,c} and Ahmed Esmail Shalan^{d, e,*,+}*

^a Department of chemistry, Isfahan University of Technology, Isfahan, 84156-83111, Iran.

^b Department of Material Engineering, Yazd University, P.O.Box 89195-741, Yazd, Iran.

^c IQC center of Haerasa, Entekhab electronic group, Isfahan, Iran.

^d BCMaterials, Basque Center for Materials, Applications and Nanostructures, Martina Casiano, UPV/EHU Science Park, Barrio Sarriena s/n, Leioa 48940, Spain.

^e Central Metallurgical Research and Development Institute (CMRDI), P.O. Box 87, Helwan, Cairo 11421, Egypt.

*Corresponding authors. E-mail addresses: davar@iut.ac.ir (F. Davar), a.shalan133@gmail.com; ahmed.shalan@bcmaterials.net (A. E. Shalan).

⁺ Currently on leave from CMRDI

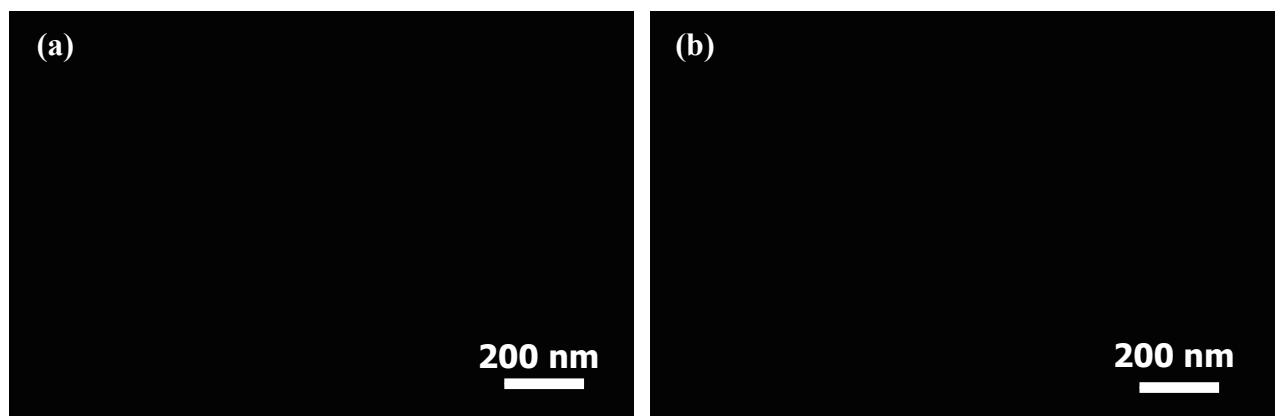


Figure S1: FE-SEM images of samples (a) R₄-PEG, (b) R₄-PEG/DOX.

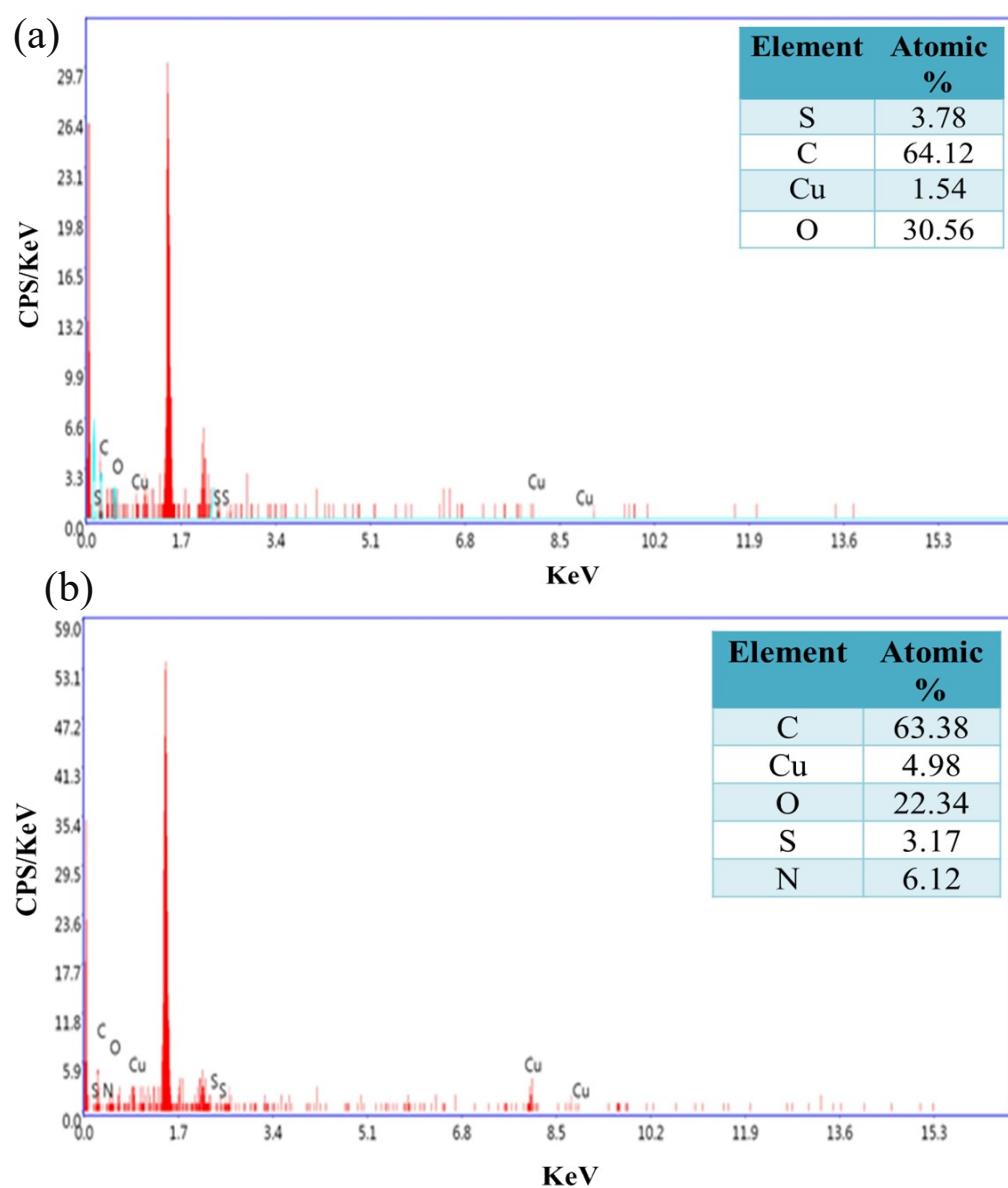


Figure S2: EDS analysis of samples (a) R₄-PEG, (b) R₄-PEG/DOX

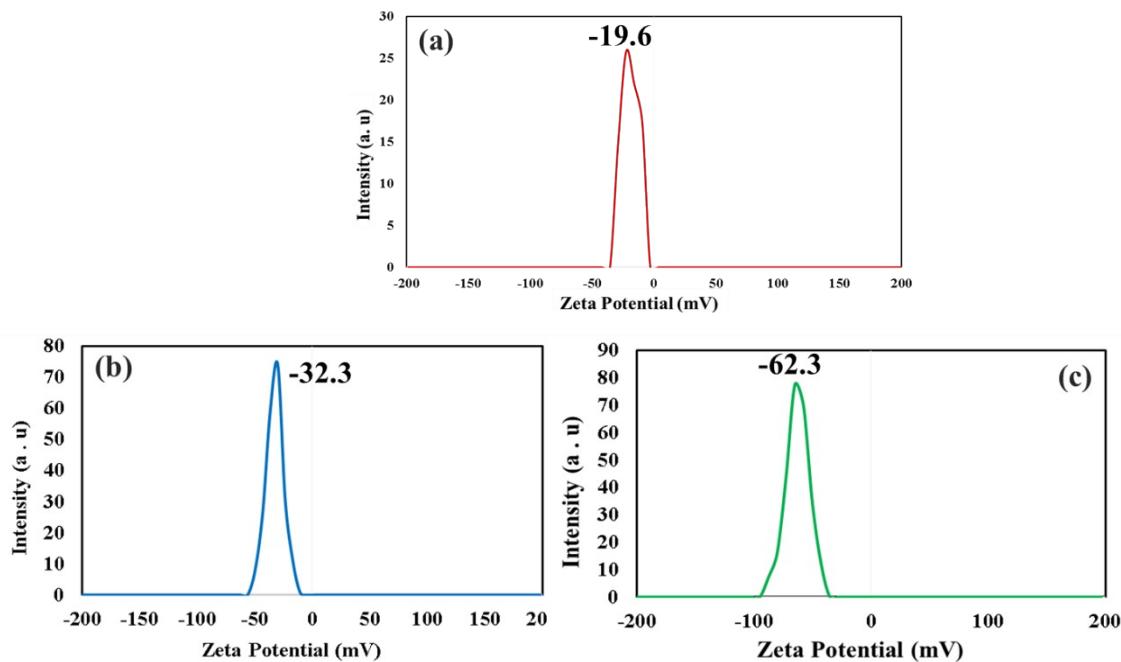


Figure S3: The zeta potential analysis of (a) R₄, (b) R₄-PEG, (c) R₄-PEG/DOX

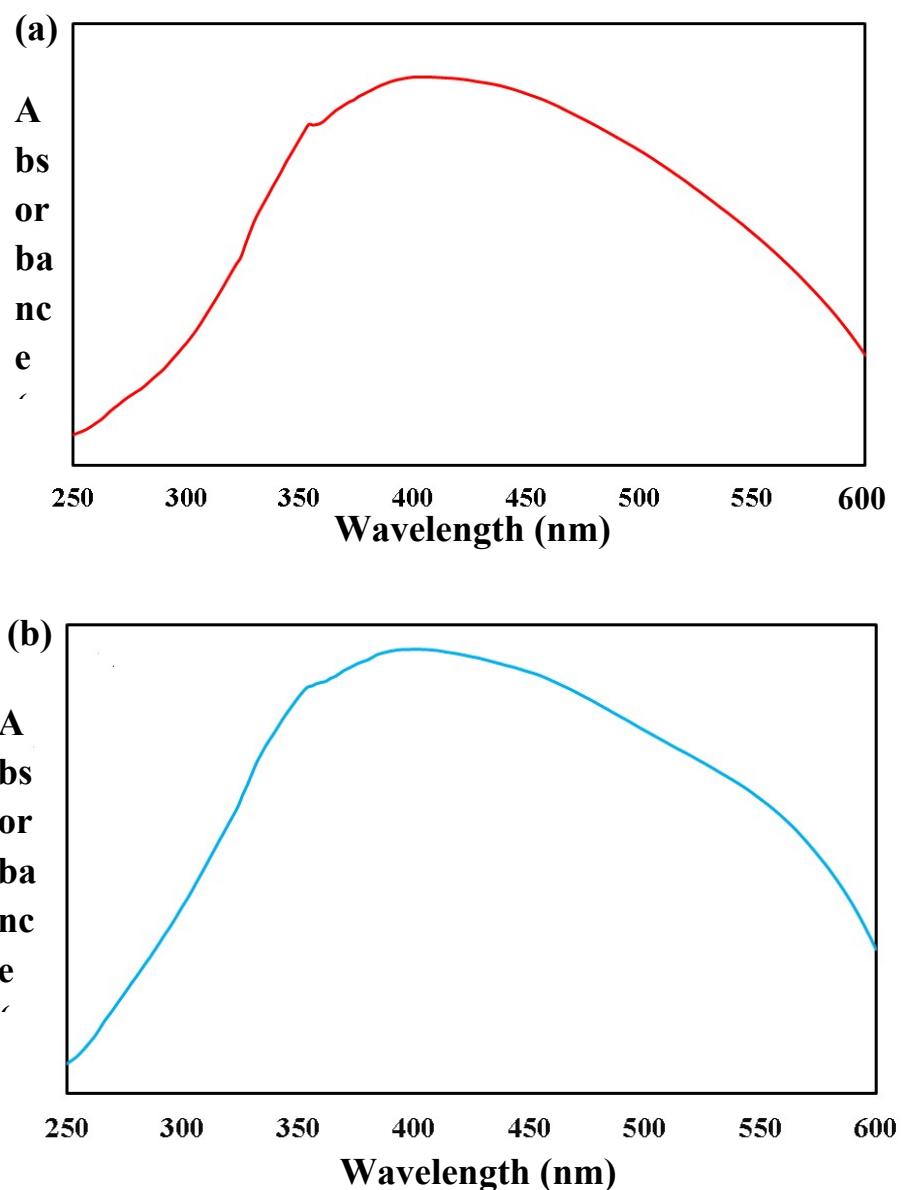


Figure S4: UV-Vis absorption spectra of (a) R₄ sample and (b) R₆ sample

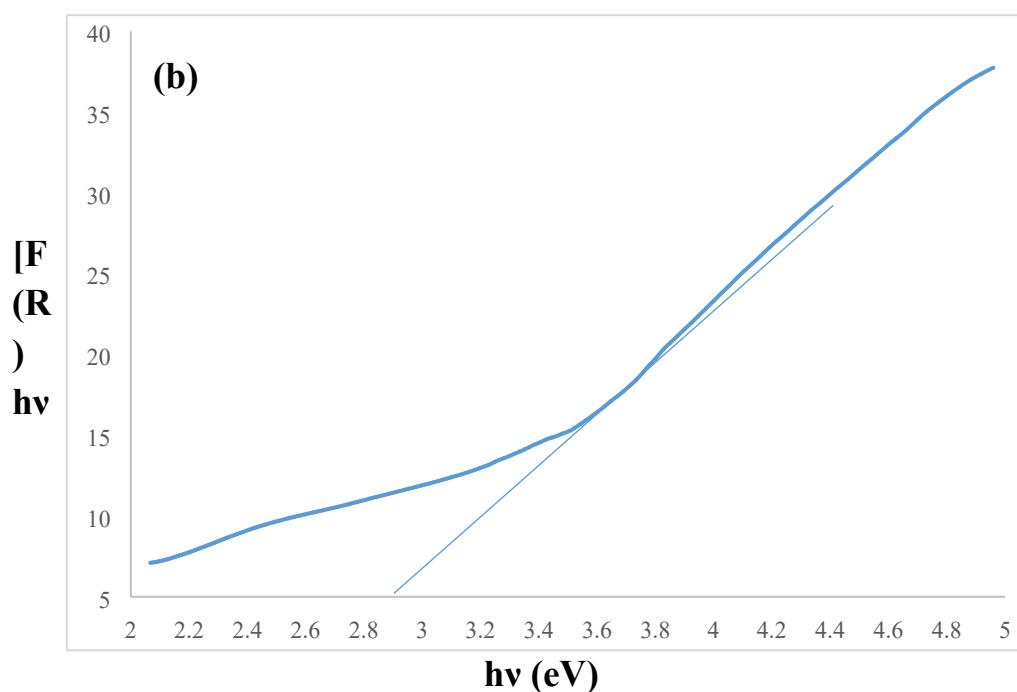
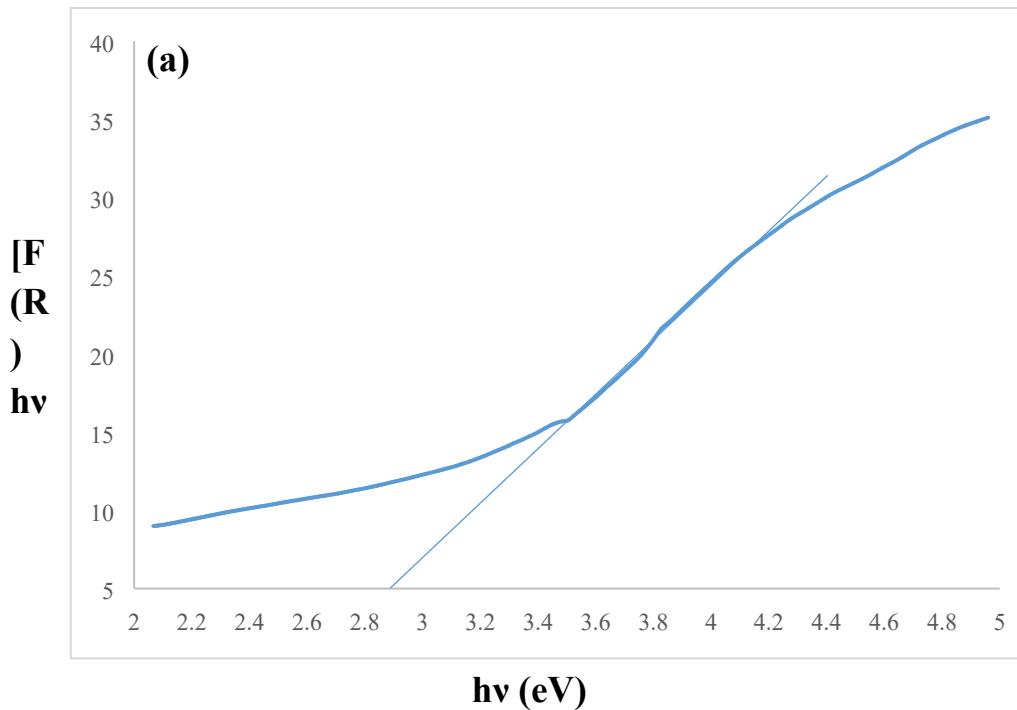


Figure S5: The band gap calculation of sample by Kubelka-Munk model (a) R₄, (b) R₆