Electronic Supplementary Material (ESI) for Materials Chemistry Frontiers.
This journal is © the Partner Organisations 2023

Supporting information

Dynamic Display of Cell Targeting Motifs via Natural Glycopeptide Recognition for Cancer Cell Isolation

Wenbo He,[a] Zhaoyang Yao,[a] Youlu Diao,[a] Miao Wang,[a]* and Guoqing Pan[a]*

School of Materials Science and Engineering, Jiangsu University,

Zhenjiang, Jiangsu, 212013 China.

Email: wangmiao@ujs.edu.cn (M. W.); panguoqing@ujs.edu.cn (G. P.)

* Corresponding authors' E-mail: wangmiao@ujs.edu.cn (M. W.)

* Corresponding authors' E-mail: panguoqing@ujs.edu.cn (G. P.)

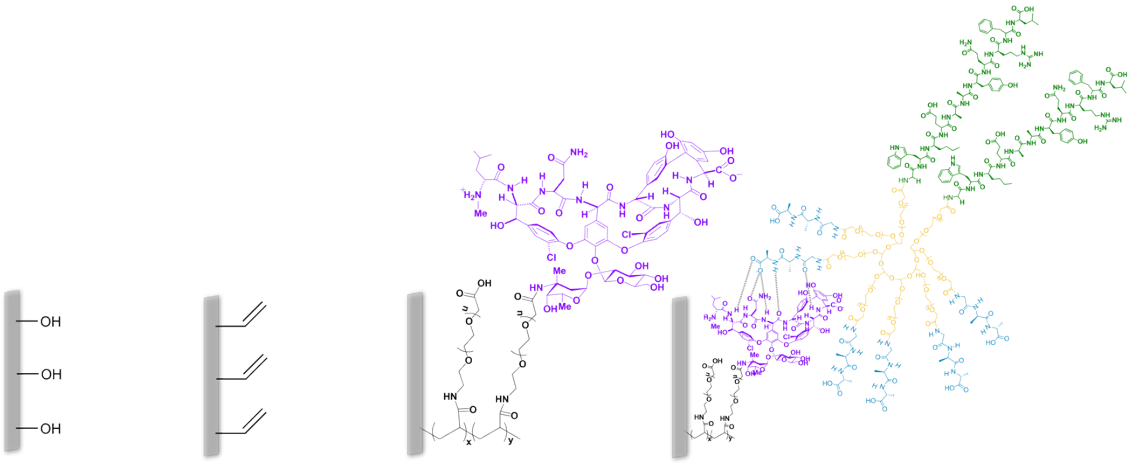

Figure S1. Schematic procedure for the preparation of Van brush grafted quartz substrate binding a target peptide.

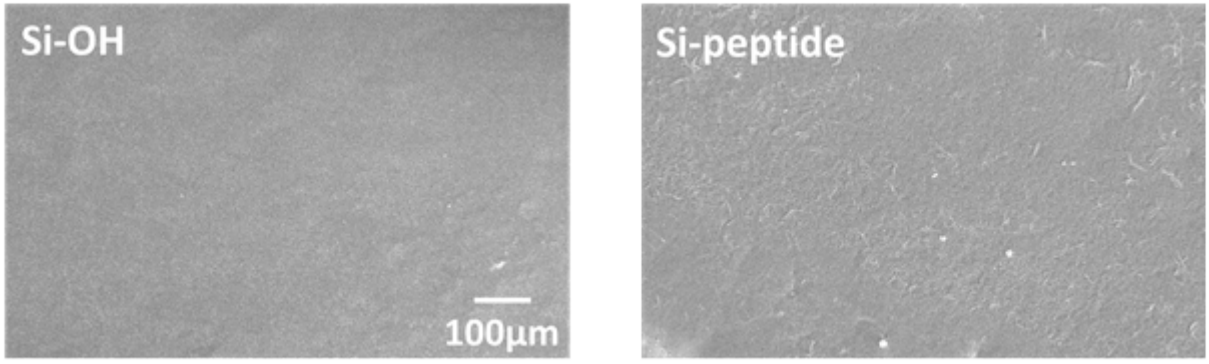

Figure S2. SEM images of different modified active surfaces.

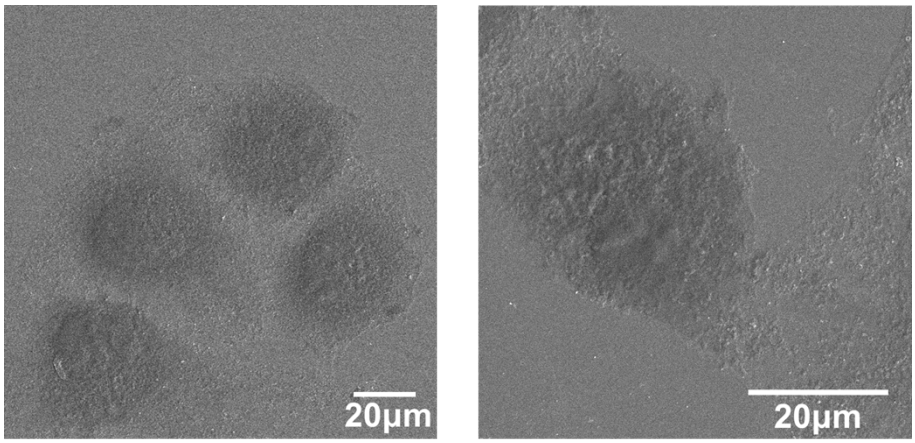

Figure S3. SEM image of MCF-7 cell adhered on the active surface.

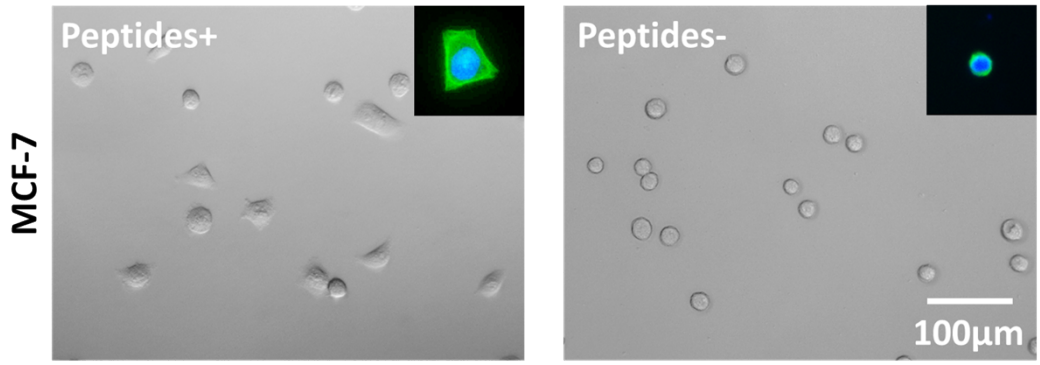

Figure S4. Representative micrographs and fluorescence staining images of PBS-incubated MCF-7 cells on different active surfaces.

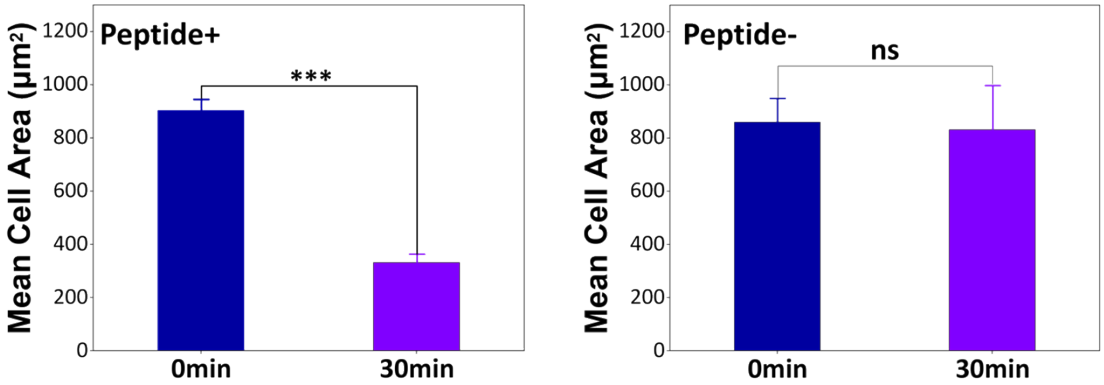

Figure S5. Mean cell area variations at different times after the addition of GAA to peptide+ and peptide- surfaces.

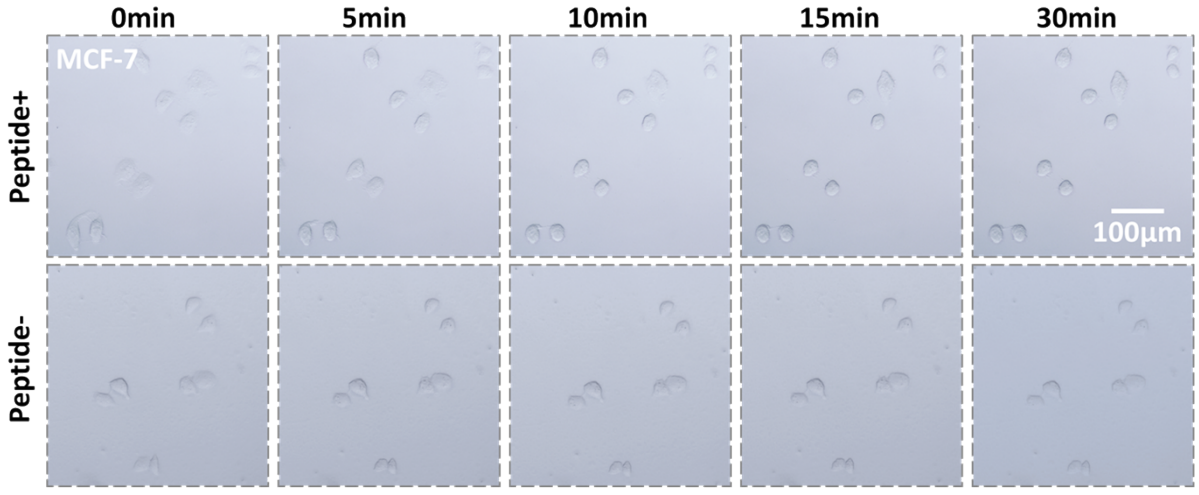

Figure S6. Microscopic images of cell morphology on peptide+ and peptide- surfaces with time after the addition of free AA (10mM).

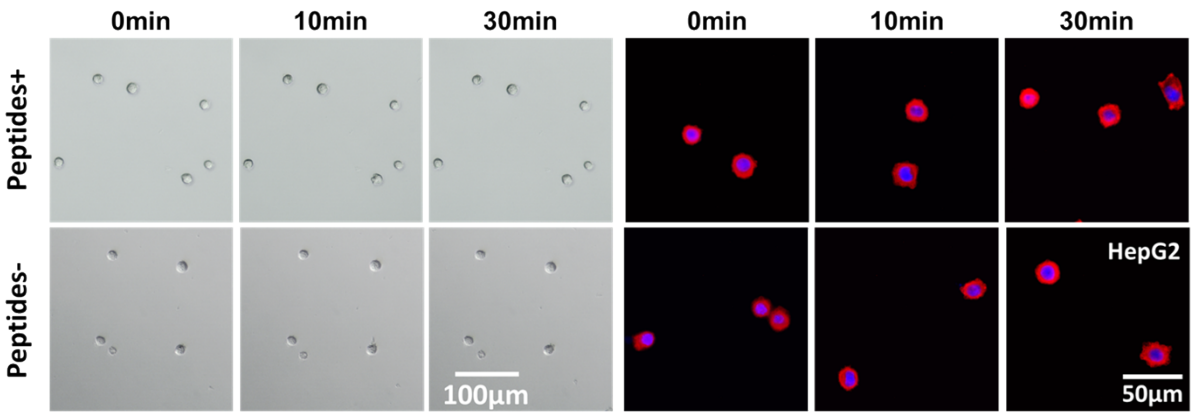

Figure S7. Real-time morphological changes of HepG2 cells on peptide+ and peptide- surfaces after the addition of free AA (10 mM). F-acin and nuclear were prestained by phalloidine (red) and DAPI (blue), respectively.

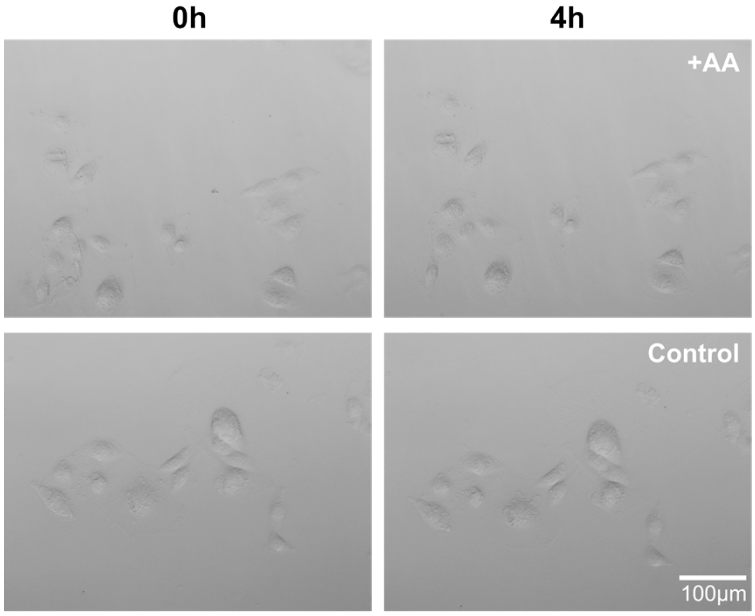

Figure S8. Cell morphology of MCF-7 co-cultured with free AA for 4h.

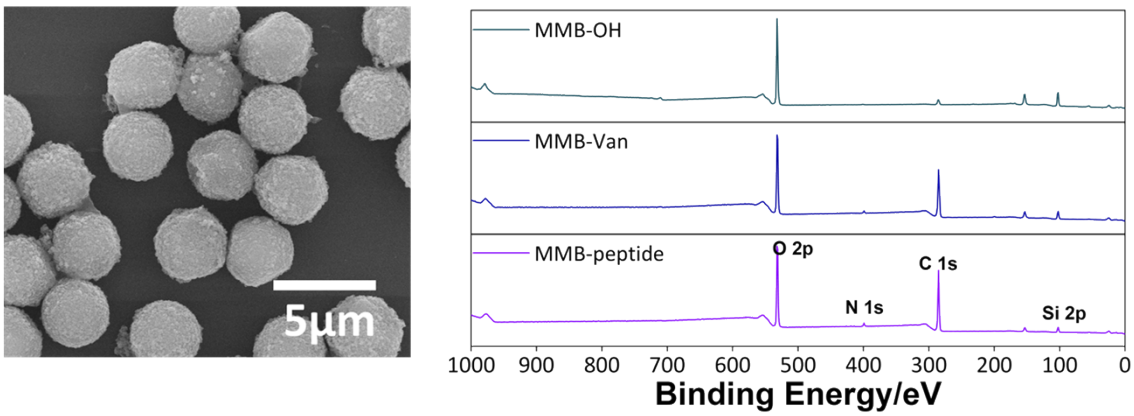

Figure S9. The SEM image and XPS spectrum of MMB-peptide.

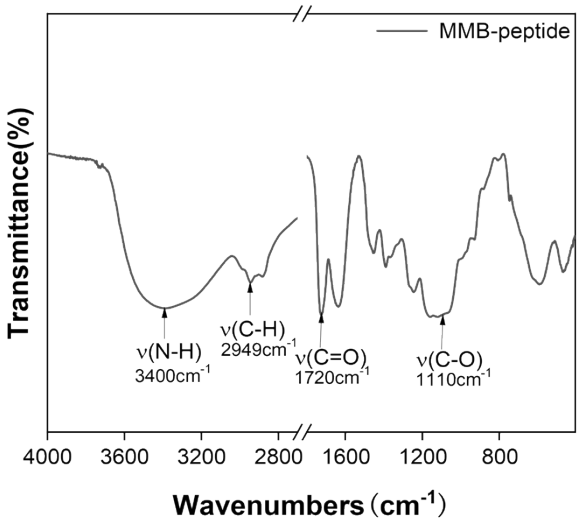

Figure S10. FT-IR spectrum of MMB-peptide.

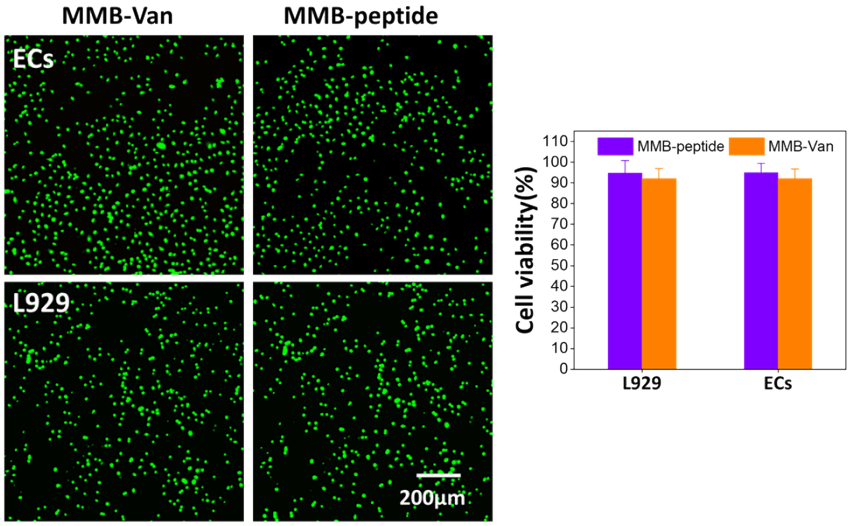

Figure S11. Live/dead staining and cytotoxicity of L929 and ECs co-cultured with different modified MMB.

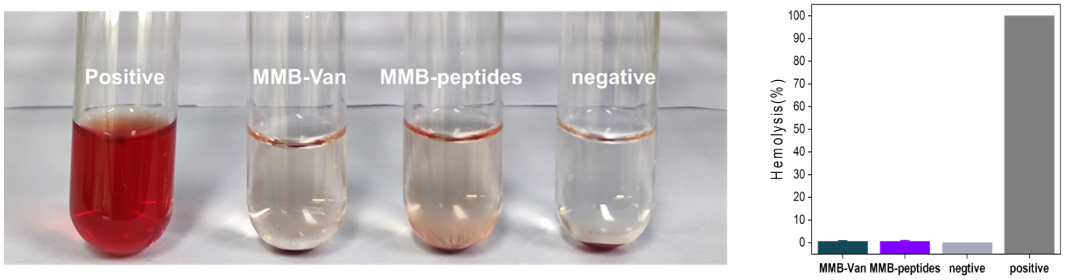

Figure S12. Hemolysis images of MMB after modification and their hemolysis rates.