

Stanford

Uiyoung Han

Postdoctoral Scholar, Ophthalmology

Bio

STANFORD ADVISORS

- David Myung, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- Secured delivery of basic fibroblast growth factor using human serum albumin-based protein nanoparticles for enhanced wound healing and regeneration. *Journal of nanobiotechnology*
Son, B., Kim, M., Won, H., Jung, A., Kim, J., Koo, Y., Lee, N. K., Baek, S. H., Han, U., Park, C. G., Shin, H., Gweon, B., Joo, et al
2023; 21 (1): 310
- A small-data-driven model for predicting adsorption properties in polymeric thin films *CHEMICAL COMMUNICATIONS*
Han, U., Kang, T., Im, J., Hong, J.
2022
- Potential threats of nanoplastic accumulation in human induced pluripotent stem cells *CHEMICAL ENGINEERING JOURNAL*
Jeong, H., Kim, W., Choi, D., Heo, J., Han, U., Jung, S., Park, H., Hong, S., Park, J., Hong, J.
2022; 427
- Nano-structure of vitronectin/heparin on cell membrane for stimulating single cell in iPSC-derived embryoid body *ISCIENCE*
Han, U., Kim, W., Cha, H., Park, J., Hong, J.
2021; 24 (4): 102297
- 2D graphene oxide particles induce unwanted loss in pluripotency and trigger early differentiation in human pluripotent stem cells *JOURNAL OF HAZARDOUS MATERIALS*
Heo, J., Choi, J., Kim, J., Jeong, H., Choi, D., Han, U., Park, J., Park, H., Hong, J.
2021; 414: 125472
- Enhanced salt removal performance of flow electrode capacitive deionization with high cell operational potential *SEPARATION AND PURIFICATION TECHNOLOGY*
Ha, Y., Lee, H., Yoon, H., Shin, D., Ahn, W., Cho, N., Han, U., Hong, J., Nguyen Anh Thu Tran, Yoo, C., Kang, H., Cho, Y.
2021; 254
- Controlling physicochemical properties of graphene oxide for efficient cellular delivery *JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY*
Heo, J., Tanum, J., Park, S., Choi, D., Jeong, H., Han, U., Hong, J.
2020; 88: 312-318
- Transmission and regulation of biochemical stimulus via a nanoshell directly adsorbed on the cell membrane to enhance chondrogenic differentiation of mesenchymal stem cell *BIOTECHNOLOGY AND BIOENGINEERING*
Han, U., Hwang, J., Lee, J., Kim, H., Jung, H., Hong, J., Hong, J.
2020; 117 (1): 184-193
- Construction of nano-scale cellular environments by coating a multilayer nanofilm on the surface of human induced pluripotent stem cells *NANOSCALE*
Han, U., Kim, Y., Kim, W., Park, J., Hong, J.
2019; 11 (28): 13541-13551

- **Artificial cellular nano-environment composed of collagen-based nanofilm promotes osteogenic differentiation of mesenchymal stem cells** *ACTA BIOMATERIALIA*
Hwang, J., Han, U., Yang, M., Choi, Y., Choi, J., Lee, J., Jung, H., Hong, J., Hong, J.
2019; 86: 247-256
- **Structure of a Multilayer Nanofilm To Increase the Encapsulation Efficiency of Basic Fibroblast Growth Factor** *MOLECULAR PHARMACEUTICS*
Han, U., Hong, J.
2018; 15 (3): 1277-1283
- **Preparation of multifunctional micelles from two different amphiphilic block copolymers** *COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS*
Tanum, J., Han, U., Shin, J., Hong, J.
2018; 537: 566-571
- **Layer-by-layer assembled polymeric thin films as prospective drug delivery carriers: design and applications.** *Biomaterials research*
Park, S., Han, U., Choi, D., Hong, J.
2018; 22: 29
- **Chemical and physical modification of layer-by-layer assembled nanofilms composed of block copolymer micelles and graphene oxide for controlled drug release** *JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY*
Jung, S., Han, U., Hong, J.
2017; 56: 413-421
- **Immobilization of basic fibroblast growth factor on heparin/EDC-methiodide nano-aggregates to maintain its continuous signaling** *JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY*
Han, U., Choi, M., Hong, J.
2017; 53: 404-410
- **Efficient Encapsulation and Sustained Release of Basic Fibroblast Growth Factor in Nanofilm: Extension of the Feeding Cycle of Human Induced Pluripotent Stem Cell Culture** *ACS APPLIED MATERIALS & INTERFACES*
Han, U., Park, H., Kim, Y., Park, T., Park, J., Hong, J.
2017; 9 (30): 25087-25097
- **Multilayer Nanofilms via Inkjet Printing for Stabilizing Growth Factor and Designing Desired Cell Developments** *ADVANCED HEALTHCARE MATERIALS*
Choi, M., Park, H., Choi, D., Han, U., Park, T., Lee, H., Park, J., Hong, J.
2017; 6 (14)
- **Inkjet-based multilayered growth factor-releasing nanofilms for enhancing proliferation of mesenchymal stem cells in vitro** *JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY*
Choi, M., Choi, D., Han, U., Hong, J.
2017; 50: 36-40
- **Effect of pH on the structure and drug release profiles of layer-by-layer assembled films containing polyelectrolyte, micelles, and graphene oxide** *SCIENTIFIC REPORTS*
Han, U., Seo, Y., Hong, J.
2016; 6: 24158