

## Seonki Hong, Ph.D. (Last updated: 2018-09-13)

Department of Emerging Materials Science, DGIST (Daegu Gyeongbuk Institute of Science and Technology)

333 Techno Jungang-Daero, Hyeonpung-myeon, Dalseong-gun, Daegu, 42988, Republic of Korea

E-mail: [seonkihong@dgist.ac.kr](mailto:seonkihong@dgist.ac.kr) / Homepage: <http://bbel.dgist.ac.kr>

### Education

2009. 02 - 2015. 02      **Ph.D.** in Chemistry, KAIST, Daejeon, Korea  
Dissertation: Study on Nature-Inspired Catecholamine Chemistry to Develop Multifunctional Biomaterials (Advisor: Prof. Haeshin Lee)
2005. 03 - 2009. 01      **B.S.** in Chemistry, *Summa Cum Laude*, KAIST, Daejeon, Korea

### Professional Experience

2017. 06 – Current      **Assistant Professor**, Department of Emerging Materials Science, DGIST (Daegu Gyeongbuk Institute of Science and Technology), Daegu, Korea
2015. 02 – 2017. 04      **Postdoctoral Research Fellow**, Center for Systems Biology, Massachusetts General Hospital / Harvard Medical School, Boston, MA, USA (Advisor: Prof. Hakho Lee and Prof. Ralph Weissleder)
2014. 05 - 2015. 02      **Predoctoral Research Fellow**, Department of Medicine, Brigham and Women's Hospital / Harvard Medical School, Cambridge, MA, USA (Advisor: Prof. Ali Khademhosseini)

### Research Interest

1. Nature-driven adhesive biomaterials & polyphenol-based multifunctional materials
2. Surface biofunctionalization & bioassay development

### Selected Publications

1. **S. Hong**<sup>†,\*</sup>, Y. Wang<sup>†</sup>, S. Y. Park, H. Lee\*, "Progressive fuzzy cation- $\pi$  assembly of biological catecholamines" *Sci. Adv.*, 4(9), eaat7457 (2018)
2. K. S. Yang<sup>†</sup>, H. Im<sup>†</sup>, **S. Hong**<sup>†</sup>, I. Pergolini, A. F. del Castillo, R. Wang, S. Clardy, C.-H. Huang, C. Pille, S. Ferrone, R. Yang, C. M. Castro, H. Lee, C. F. del Castillo, R. Weissleder\*, "Multiparametric plasma EV profiling facilitates diagnosis of pancreatic malignancy" *Sci. Transl. Med.*, 9, eaal3226 (2017)
3. **S. Hong**, K. S. Park, R. Weissleder, C. M. Castro\*, H. Lee\*, "Facile silicification of plastic surface for bioassays" *Chem. Commun.*, 53(13), 2134-2137 (2017)
4. **S. Hong**, D. Pirovich, A. Kilcoyne, C.-H. Huang, H. Lee, R. Weissleder\*, "Supramolecular Metallo-bioadhesive for Minimally Invasive Use" *Adv. Mater.*, 28(39), 8675-8680 (2016)
5. K. Kim, M. Shin, M.-Y. Koh, J. H. Ryu, M. S. Lee, **S. Hong**<sup>\*</sup>, H. Lee\*, "TAPE: A Medical Adhesive Inspired by a Ubiquitous Compound in Plants" *Adv. Funct. Mater.*, 25(16), 2402-2410 (2015)
6. **S. Hong**, C. F. Schaber, K. Dening, E. Appel, S. N. Gorb\*, H. Lee\*, "Air/Water Interfacial Formation of Freestanding, Stimuli-responsive, Self-healing Catecholamine Janus-faced Microfilms" *Adv. Mater.*, 26(45), 7581-7587 (2014) (Selected as an inside front cover)
7. **S. Hong**<sup>†</sup>, J. Kim<sup>†</sup>, Y. S. Na, J. Park, S. Kim, K. Singha, G.-I. Im, W. J. Kim\*, H. Lee\*, "Poly(norepinephrine): Ultrasoother Material-independent Surface Chemistry and Nanodepot for Nitric Oxide" *Angew. Chem. Int. Ed.*, 52(35) 9187-9191(2013)