

Sangyong Jon

Education

1999: Ph.D, Chemistry, KAIST

1995: M.S, Chemistry, KAIST

1993: B.S, Chemistry, KAIST

Professional Career

2018 – present: Director, Center for Precision Bio-Nanomedicine

2018 – present: KAIST Chair Professor

2012 – present: KAIST, Professor

2010 – 2012: GIST, Professor

2007 – 2010: GIST, Associate Professor

2004 – 2007: GIST, Assistant Professor

2002 - 2004: MIT, Postdoctoral Associate

1999 - 2002: POSTECH, Postdoctoral Research Scientist



Research Interests

My research interest lies at the interface of medicine, biotechnology, nanotechnology, and biomaterials. A major research focus is on biomedical applications toward disease diagnostics and therapy as listed below.

- (1) Novel aptide (high-affinity peptides)-based biologics:
- (2) Multifunctional nanoparticles for combined cancer imaging and therapy.
- (3) Smart drug delivery systems for targeted drug or siRNA delivery
- (4) Nanoparticle vaccines for various diseases targets

Selected Publications (from > 150 peer-reviewed papers, > 80 patents, > 14,000 citation, H-index of 54)

1. Yu B, Hwang D, Jeon H, Kim H, Lee Y, Keum H, Kim J, Lee DY, Kim Y, Chung J and Jon S*, “A Hybrid Platform Based on a Bispecific Peptide-Antibody Complex for Targeted Cancer Therapy”, *Angew. Chem. Int. Ed.* 2019; 58(7), 2005-2010.
2. Kim JY, Ahn J, Kim J, Choi M, Jeon H, Choe K, Lee DY, Kim P and Jon S*, “Nanoparticle-Assisted Transcutaneous Delivery of a Signal Transducer and Activation of Transcription 3-Inhibiting Peptide Ameliorates Psoriasis-like Skin Inflammation”, *ACS Nano.* 2018; 12(7), 6904-6916.
3. Choi M, Yu SJ, Choi Y, Lee HR, Lee E, Lee E, Lee Y, Song J, Son JG, Lee TG, Kim JY, Kang S, Baek J, Lee D, Im SG* and Jon S*, “Polymer thin film-induced tumor spheroids acquire cancer stem cell-like properties”, *Cancer Res.* 2018; 78(24), 6890-6902.
4. Lee DY, Kim JY, Lee S, Miao W, Kim HS, Min JJ and Jon S*, “Black pigment gallstone-inspired platinum-chelated bilirubin nanoparticles for combined photoacoustic imaging and photothermal therapy of cancers”, *Angew. Chem. Int. Ed.* 2017; 56(44): 13684-13688. (IF: 11.994)
5. Lee Y, Lee S, Lee DY, Yu B, Miao W and Jon S*, “Multi-stimul-responsive bilirubin nanoparticles for anticancer therapy”, *Angew. Chem. Int. Ed.* **2016**: 55(36), 10676-80. *Selected as ‘Hot Paper’.*
6. Lee Y, Kim H, Kang S, Lee J, Park J and Jon S*, “Bilirubin Nanoparticles as a Nanomedicine for Anti-inflammation Therapy”, *Angew. Chem. Int. Ed.* **2016**: 55(26), 7460-3.
7. Gujrati V, Lee M, Ko YJ, Lee S, Kim D, Kim H, Kang S, Lee S, Kim J, Jeon H, Kim SC, Jun Y* and Jon S*, “Bioengineered Yeast-derived Vacuoles with Enhanced Tissue Penetrating Ability for Targeted Cancer Therapy”, *Proc Natl Acad Sci* **2016**; 113(3): 710-715.