CURRICULUM VITAE

Wooram Park, Ph.D.

Assistant Professor
Department of Biomedical Science, College of Life Sciences
CHA University, 335, Pangyo-ro, Bundang-gu, Seongnam-si, Gyeonggi 13488, Korea
Tel: +82-31-881-7182, Fax: +82-31-881-7182
E-mail: wrpark@cha.ac.kr and demian0628@gmail.com

● *Education*

2008. 3. ~ 2015. 2.	**Ph.D. in Biotechnology (Engineering)** Department of Biotechnology The Catholic University of Korea, Korea (Thesis advisor: Prof. Kun Na)
2004. 3. ~ 2008. 2.	**B.S. in Biotechnology (Engineering)** The Catholic University of Korea, Korea

● *Professional Experiences*

2017. 9. ~ Present	**Assistant Professor** Department of Biomedical Science, College of Life Sciences CHA University, Korea
2015. 3. ~ 2017. 8.	**Research Associate (Postdoctoral fellow)** Department of Radiology Northwestern University Feinberg School of Medicine, USA (Advisor: Prof. Dong-Hyun Kim and Prof. Andrew C. Larson)

● *Honors and Awards*

2015	**Best Academic Article Award in Graduated school (Most Excellent Award)** The Catholic University of Korea, Korea.
2013	**Korean and Japanese Biomaterials Societies Young Scientist Exchange Program Award** The Korean and Japanese Society for Biomaterials, Korea and Japan.

● *Grants*

2018~2019	**Basic Science Research Program/First Innovative Laboratory** (National Research Foundation of Korea), Role: PI
2017~2019	**Basic Science Research Program** (National Research Foundation of Korea), Role: Co-PI
2018~2020	**Korea Health Technology R&D Project** (Korea Health Industry Development Institute), Role: Co-researcher

Sellected Publications

1) Kwang Soo Kim,† Jun-Hyeok Han,† Jung-Hoon Park, Hyung-Keun Kim, Dong Keun Han,* **Wooram Park**,* and Kyung Soon Park* (*Corresponding author), Multifunctional nanoparticles for genetic engineering and bioimaging of natural killer (NK) cell therapeutics. ***Biomaterials***, 2019, 221, 119418 (*Corresponding author) (IF: 10.273).

2) Sang-Woo Shin,† Yeon-Do Jang,† Kyoung-Won Ko, Eun Young Kang, Jun-Hyeok Han, Tarek M Bedair, Ik-Hwan Kim, Tae-IL Son, **Wooram Park**,* Dong Keun Han,* PCL Microspheres Containing Magnesium Hydroxide for Dermal Filler with Enhanced Physicochemical and Biological Performances. ***Journal of Industrial and Engineering Chemistry***, 2019 (In press). (*Corresponding author) (IF: 4.978)

3) Elias Gournaris,† **Wooram Park**,† Soojeong Cho, David J Bentrem, Andrew C Larson, Dong-Hyun Kim,* Near-Infrared Fluorescent Endoscopic Image-Guided Photothermal Ablation Therapy of Colorectal Cancer Using Dual-Modal Gold Nanorods Targeting Tumor-Infiltrating Innate Immune Cells in a Transgenic TS4 CRE/APC$^{lox\Delta 468}$ Mouse Model, ***ACS Applied Materials & Interfaces***, 11, 21353-31369. (†These authors contributed equally to this work) (IF: 8.456)

4) Soojeong Cho,† Nam Gi Min,† **Wooram Park**, Shin-Hyun Kim,* Dong-Hyun Kim,* Janus Microcarriers for Magnetic Field-Controlled Combination Chemotherapy of Hepatocellular Carcinoma. ***Advanced Functional Materials***, 2019, 29(26), 1901384 (†These authors contributed equally to this work). (IF: 15.621)

5) Da-Won Jeong,† **Wooram Park**,† Tarek Mosaid Bedair, Eun Young Kang, Ik Hwan Kim, Dae Sung Park, Doo Sun Sim, Young Joon Hong, Won-Gun Koh, Myung Ho Jeong, Dong Keun Han,* Augmented re-endothelialization and anti-inflammation of coronary drug-eluting stent by abluminal coating with magnesium hydroxide. ***Biomaterials Science***, 2019, 7(6), 2499-2510. (†These authors contributed equally to this work). (IF: 5.251)

6) Jiyoung Kim,† **Wooram Park**,† Dahye Kim, Eun Seong Lee, Don Haeng Lee, Seok Jeong, Jae Myung Park, and Kun Na*, Tumor-specific aptamer-conjugated polymeric photosensitizer for effective endo-laparoscopic photodynamic therapy. ***Advanced Functional Materials***, 2019, 29(23), 1900084 (†These authors contributed equally to this work). (Selected as a cover article, IF: 15.621)

7) Eugene Lih,† **Wooram Park**,† Ki Wan Park, So Young Chun, Hyuncheol Kim, Yoon Ki Joung, Tae Gyun Kwon, Jeffrey A. Hubbell,* and Dong Keun Han*, A bioinspired scaffold with anti-inflammatory magnesium hydroxide and decellularized extracellular matrix for renal tissue regeneration. ***ACS Central Science***, 2019, 5(3), 458-467, DOI: 10.1021/acscentsci.8b00812 (†These authors contributed equally to this work). (IF: 12.837)

8) **Wooram Park,*** Young-Jae Heo, and Dong Keun Han*. New opportunities for nanoparticles in cancer immunotherapy. ***Biomaterials Research***, 2018, 22(24). DOI: 10.1186/s40824-018-0133-y (*Corresponding author).

9) Jung-Hoon Park,† **Wooram Park**,† Soojeong Cho, Kun Yung Kim, Jiaywei Tsauo, Sung Hwan Yoon, Woo Chan Son, Dong-Hyun Kim,* and Ho-Young Song*, Nano Functionalized Stent Mediated Local Heat Treatment for the Suppression of Stent Induced Tissue Hyperplasia. ***ACS Applied Materials & Interfaces***, 2018, 10(35), 29357-29366 (†These authors contributed equally to this work). (IF: 8.456)

10) Soojeong Cho, Byeongdu Lee, **Wooram Park**, Xiaoke Huang, and Dong-Hyun Kim*, Photoperiodic Flower Mimicking Metallic Nanoparticles for Image Guided Medicine Applications. ***ACS Applied Materials & Interfaces***, 2018, 10(33), 27570-27577. (IF: 8.456)

HBP Surgery Week 2020 Secretariat: P&M
3F, MS B/D 12, Eonju-ro 79-gil, Yeoksam-dong, Gangnam-gu, Seoul 06222, Republic of Korea
Tel: +82-2-557-8422, 8423 Fax : +82-2-557-8428 E-mail: hbpsurgery@khbps.org

11) Eugene Lih,† Chang Hun Kum,† **Wooram Park**,† So Young Chun, Youngjin Cho, Yoon Ki Joung, Kwang-Sook Park, Young Joon Hong, Dong June Ahn, Byung-Soo Kim, Tae Gyun Kwon, Myung Ho Jeong, Jeffrey A. Hubbell,* and Dong Keun Han*, Modified Magnesium Hydroxide Nanoparticles Inhibit the Inflammatory Response to Biodegradable Poly(lactide-co-glycolide) Implants. ***ACS Nano***, 2018, 12, 6917-6925 (†These authors contributed equally to this work). (IF: 13.903)

12) Kwang-Sook Park, Byoung-Ju Kim, Eugene Lih, **Wooram Park**, Soo-Hong Lee, Yoon Ki Joung,* and Dong Keun Han*,Versatile effects of magnesium hydroxide nanoparticles in PLGA scaffold–mediated chondrogenesis, ***Acta Biomaterialia***, 2018, 73, 204-216. (IF: 6.638)

13) **Wooram Park**, Soojeong Cho, Jieun Han, Heejun Shin, Kun Na,* Byeongdu Lee,* and Dong-Hyun Kim*, Advanced Smart-photosensitizers for More Effective Cancer Treatment. ***Biomaterials Science***, 2018, 6, 79-90 (DOI: 10.1039/C7BM00872D). (IF: 5.251)

14) Ji Sun Park,† **Wooram Park**,† Sin-jung Park, Andrew C. Larson, Dong-Hyun Kim, and Keun-Hong Park*, Multimodal Magnetic Nanoclusters for Gene Delivery, Directed Migration, and Tracking of Stem Cells. ***Advanced Functional Materials***, 2017, 27(25), 1700396 (†These authors contributed equally to this work). (Selected as a cover article, IF: 15.621)

15) **Wooram Park**, Andrew C. Gordon, Soojeong Cho, Xiaoke Huang, Kathleen R. Harris, Andrew C. Larson,* and Dong-Hyun Kim*, Immunomodulatory Magnetic Microspheres for Augmenting Tumor-Specific Infiltration of Natural Killer (NK) Cells. ***ACS Applied Materials & Interfaces***, 2017, 9 (16), 13819-13824. (IF: 8.456)

16) Ji Sun Park,† **Wooram Park**,† A Young Kang, Andrew C. Larson, Dong-Hyun Kim, and Keun-Hong Park*, Multi-functional nanotracers for image-guided stem cell gene therapy. ***Nanoscale***, 2017, 9, 4665-4676 (†These authors contributed equally to this work). (Selected as a cover article, IF: 6.970)

17) **Wooram Park**, Soojeong Cho, Xiaoke Huang, Andrew C Larson,* and Dong-Hyun Kim*, Branched gold nanoparticle coating of *Clostridium novyi*-NT spores for CT-guided intratumoral injection. ***Small***, 2017, 13 (5), 1602722. (Selected as a cover article, IF: 10.856)

18) Soojeong Cho, **Wooram Park**, and Dong-Hyun Kim*, Silica-coated metal chelating-melanin nanoparticles as a dual-modal contrast enhancement imaging and therapeutic agent. ***ACS Applied Materials & Interfaces***, 2017, 9 (1), 101-111. (IF: 8.456)

19) Young-seok Jung,† **Wooram Park**,† Hyejin Park, Deok-Keun Lee, and Kun Na*, Thermo-sensitive injectable hydrogel based on the physical mixing of hyaluronic acid and Pluronic F-127 for sustained NSAID delivery. ***Carbohydrate Polymers***, 2017, 156, 403-408 (†These authors contributed equally to this work). (IF: 6.044)

20) **Wooram Park**, Sin-jung Park, Soojeong Cho, Heejun Shin, Young-seok Jung, Byeongdu Lee*, Kun Na*, and Dong-Hyun Kim*, Intermolecular structural change for thermoswitchable polymeric photosensitizer. ***Journal of The American Chemical Society***, 2016, 138(34), 10734-10737. (IF: 14.695)

21) Hongping Xia,† Fangyuan Li,† Xi Hu,† **Wooram Park**, Shuaifei Wang, Youngjin Jang, Yang Du, Seungmin Baik, Soojeong Cho, Taegyu Kang, Dong-Hyun Kim, Daishun Ling,* Kam Man Hui,* and Taeghwan Hyeon*, pH-sensitive Pt nanocluster assembly overcomes Cisplatin resistance and heterogeneous stemness of hepatocellular carcinoma. ***ACS Central Science***, 2016, 2 (11), 802-811 (†These authors contributed equally to this work). (IF: 12.837)

22) Joonsok Lee, Andrew C. Gordon, Hacksung Kim, **Wooram Park**, Soojeong Cho, Byeongdu Lee, Andrew C. Larson, Elena A. Rozhkova*, and Dong-Hyun Kim*, Targeted multimodal nano-reporters for pre-procedural MRI and intra-operative image-guidance. ***Biomaterials***, 2016, 109, 69-77. (IF: 10.273)

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3F, MS B/D 12, Eonju-ro 79-gil, Yeoksam-dong, Gangnam-gu, Seoul 06222, Republic of Korea
Tel: +82-2-557-8422, 8423 Fax : +82-2-557-8428 E-mail: hbpsurgery@khbps.org

23) **Wooram Park**, Jeane Chen, Soojeong Cho, Sin-jung Park, Andrew C. Larson*, Kun Na*, and Dong-Hyun Kim*, Acidic pH-triggered drug-eluting nanocomposites for magnetic resonance imaging-monitored intra-arterial drug delivery to hepatocellular carcinoma. ***ACS Applied Materials and Interfaces,*** 2016, 8(20), 12711-12719. (IF: 8.456)

24) **Wooram Park**†, Byoung-chan Bae†, and Kun Na*, A highly tumor-specific light-triggerable drug carrier responds to hypoxic tumor conditions for effective tumor treatment. ***Biomaterials***, 2016, 77, 227-234 (†These authors contributed equally to this work). (IF: 10.273)

25) Jieun Han†, **Wooram Park**†, Sin-jung Park, and Kun Na*, Photosensitizer-conjugated hyaluronic acid-shielded polydopamine nanoparticles for targeted photo-mediated tumor therapy. ***ACS Applied Materials and Interfaces,*** 2016, 8(12), 7739-7747 (†These authors contributed equally to this work). (IF: 8.456)

26) Sin-jung Park†, **Wooram Park**†, and Kun Na*, Tumour intracellular-environment responsive materials shielded nano-complexes for highly efficient light-triggered gene delivery without cargo gene damage. ***Advanced Functional Materials***, 2015, 25(23), 3472-3482 (†These authors contributed equally to this work). (Selected as a cover article, IF: 15.621)

27) Kyoung Sub Kim, **Wooram Park**, and Kun Na* Gadolinium-chelate nanoparticle entrapped human mesenchymal stem cell via photochemical internalization for cancer diagnosis. ***Biomaterials***, 2015, 36, 90-97. (IF: 10.273)

28) **Wooram Park** and Kun Na*, Advances in the synthesis and application of nanoparticles for drug delivery. ***Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology***, 2015, 7(4), 494-508 (DOI: 10.1002/wnan.1325) (IF: 6.14).

29) Hyeona Yim†, **Wooram Park**†, Dongin Kim, Tarek M. Fahmy, and Kun Na*, A self-assembled polymeric micellar immunomodulator for cancer treatment based on cationic amphiphilic polymers. ***Biomaterials***, 2014, 35(37), 9912-9919 (†These authors contributed equally to this work). (IF: 10.273)

30) Daishun Ling, Hongping Xia, **Wooram Park**, Michael J. Hackett, Changyeong Song, Kun Na, Kam Man Hui,* and Taeghwan Hyeon*, pH-Sensitive nanoformulated triptolide as a targeted therapeutic strategy for hepatocellular carcinoma. ***ACS Nano***, 2014, 8(8), 8027-8039. (IF: 13.903)

31) Han Na Yang, Ji Sun Park, Su Yeon Jeon, **Wooram Park**, Kun Na, and Keun-Hong Park*, The effect of quantum dot size and poly(ethylenimine) coating on the efficiency of gene delivery into human mesenchymal stem cells. ***Biomaterials***, 2014, 35(29), 8439-8449. (IF: 10.273)

32) **Wooram Park**†, Han Na Yang†, Daishun Ling, Hyeona Yim, Kyoung Sub Kim, Taeghwan Hyeon, Kun Na,* and Keun-Hong Park*, Multi-modal transfection agent based on monodisperse magnetic nanoparticles for stem cell gene delivery and tracking. ***Biomaterials***, 2014, 35(25), 7239–7247 (†These authors contributed equally to this work). (IF: 10.273)

33) Hyung Park†, **Wooram Park**†, and Kun Na*, Doxorubicin loaded singlet-oxygen producible polymeric micelle based on chlorine e6 conjugated Pluronic F127 for overcoming drug resistance in cancer. ***Biomaterials***, 2014, 35(27), 7963-7969 (†These authors contributed equally to this work). (IF: 10.273)

34) Daishun Ling†, **Wooram Park**†, Sin-jung Park, Yang Lu, Kyoung sub Kim, Byung Hyo Kim, Hyeona Yim, Yong Sun Jeon, Kun Na* and Taeghwan Hyeon*, Multifunctional Tumor pH-Sensitive Self-Assembled Nanoparticles for Bimodal Imaging and Treatment of Resistant Heterogeneous Tumors. ***Journal of the American Chemical Society***, 2014, 136(15), 5647-5655 (†These authors contributed equally to this work). (IF: 14.695)

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Tel: +82-2-557-8422, 8423 Fax : +82-2-557-8428 E-mail: hbpsurgery@khbps.org

35) Chung-Sung Lee†, **Wooram Park**†, Young Um Jo and Kun Na*, A charge-switchable, four-armed polymeric photosensitizer for photodynamic cancer therapy. ***Chemical Communications***, 2014, 50(33), 4354-4357 (†These authors contributed equally to this work). (IF: 6.154)

36) Kyoung Sub Kim†, **Wooram Park**†, Jun Hu, You Han Bae* and Kun Na*, A cancer-recognizable MRI contrast agents using pH-responsive polymeric micelle. ***Biomaterials***, 2014, 35(1), 337-343 (†These authors contributed equally to this work). (IF: 10.273)

37) Chung-Sung Lee†, **Wooram Park**†, Sin-jung Park, and Kun Na*, Endolysosomal environment-responsive photodynamic nanocarrier to enhance cytosolic drug delivery via photosensitizer-mediated membrane disruption. ***Biomaterials***, 2013, 34(36), 9227-9236 (†These authors contributed equally to this work). (IF: 10.273)

38) Sin-jung Park†, **Wooram Park**†, and Kun Na*, Photo-activatable ternary complex based on a multifunctional shielding material for targeted shRNA delivery in cancer treatment. ***Biomaterials***, 2013, 34(35), 8991-8999 (†These authors contributed equally to this work). (IF: 10.273)

39) Young-seok Jung†, **Wooram Park**†, and Kun Na*, Temperature-modulated noncovalent interaction controllable complex for the long-term delivery of etanercept to treat rheumatoid arthritis. ***Journal of Controlled Release***, 2013, 171(2), 143-151 (†These authors contributed equally to this work). (IF: 7.901)

40) Fangyuan Li, Sin-Jung Park, Daishun Ling, **Wooram Park**, Jung Yeon Han, Kun Na, and Kookheon Char*, Hyaluronic acid-conjugated graphene oxide/photosensitizer nanohybrids for cancer targeted photodynamic therapy. ***Journal of Materials Chemistry B***, 2013, 1, 1678-1686. (Selected as a cover article, IF: 5.047)

41) **Wooram Park**, Dongin Kim, Han Chang Kang, You Han Bae*, and Kun Na*, Multi-arm histidine copolymer for controlled release of insulin from poly(lactide-co-glycolide) microsphere. ***Biomaterials***, 2012, 33(34), 8848-8857. (IF: 10.273)

42) Yong Il Park, Hyung Min Kim, Jeong Hyun Kim, Kyung Chul Moon, Byeongjun Yoo, Kang Taek Lee, Nohyun Lee, Yoonseok Choi, **Wooram Park**, Daishun Ling, Kun Na, Woo Kyung Moon, Seung Hong Choi, Hong Seok Park, Soo-Young Yoon*, Yung Doug Suh, Sung Ho Lee*, and Taeghwan Hyeon*, Theranostic probe based on lanthanide-doped nanoparticles for simultaneous *in vivo* dual-modal imaging and photodynamic therapy. ***Advanced Materials***, 2012, 24(42), 5755-5761. (IF: 25.809)

43) Daishun Ling†, Byoung-chan Bae†, **Wooram Park**, and Kun Na*, Photodynamic efficacy of photosensitizers under an attenuated light dose via lipid nano-carrier-mediated nuclear targeting. ***Biomaterials***, 2012, 33(21), 5478-5486 (†These authors contributed equally to this work). (IF: 10.273)

44) Daishun Ling†, **Wooram Park**†, Yong Il Park, Nohyun Lee, Fangyuan Li, Changyeong Song, Su-Geun Yang, Seung Hong Choi, Kun Na* and Taeghwan Hyeon*, Mussel adhesive protein inspired multi-interaction ligands for highly stable and biocompatible nanoparticles. ***Angewandte Chemie International Edition***, 2011, 50(48), 11360-11365 (†These authors contributed equally to this work) (Selected as a cover article, IF: 12.257)

45) **Wooram Park**, Sin-jung Park, and Kun Na*, The controlled photoactivity of nanoparticles derived from ionic interactions between a water soluble polymeric photosensitizer and polysaccharide quencher. ***Biomaterials***, 2011, 32(32), 8261-8270. (IF: 10.273)

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3F, MS B/D 12, Eonju-ro 79-gil, Yeoksam-dong, Gangnam-gu, Seoul 06222, Republic of Korea
Tel: +82-2-557-8422, 8423 Fax : +82-2-557-8428 E-mail: hbpsurgery@khbps.org