

Sumin Park

A-1015, 324, Suyeong-ro, Nam-gu, Busan, Republic of Korea, 48508

A12-1201, Pukyong National University, 45 Yongso-ro, Nam-gu, Busan, Republic of Korea, 48513

Email: suminp0309@gmail.com, **Mobile:** (+82) 10-7669-7136

EDUCATION

○ Pukyong National University (Republic of Korea), Sep. 2020 – Aug. 2022

Master of Biomedical Engineering

Dissertation: Design, Synthesis, and Functionalization of Nanoparticles with Biological Assessment for Potential Diagnostic Imaging and Therapeutic Applications

Advisor: Junghwan Oh

○ Pukyong National University (Republic of Korea), March 2017 – Aug. 2020

Bachelor of Biomedical Engineering

Advisor: Junghwan Oh

RESEARCH/TEACHING EXPERIENCE

○ Research Assistant, Pukyong National University, June. 2018 – Present

- Participated Research Grant Project

Grant Project Information	Role	Period
Smart Gym-based Translational Research Center for Active Senior's Healthcare – Regional Leading Research Center	- Researcher - Planning and writing a grant proposal	June 2022 – Current
Development of Welding Inspection Automation and Monitoring System Based on AI laser vision sensor	- Researcher - Planning and writing a grant proposal	June 2021 – May 2022
Development of defect inspection automation robotics system with high- speed for semiconductor wafers based on AI deep learning	- Researcher - Planning and writing a grant proposal	April 2021 – Dec. 2022
Development of Ultrasonic Test Automation system based on the collaborative robot for smart factory	- Researcher - Planning and writing a grant proposal	April 2020 – March 2021

Research & Development for Commercial Marine-Integrated Bionics Materials and Technology	- Researcher	June 2018 – Dec. 2019
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- Design and setup the photoacoustic microscopy
- Synthesis of nanoparticles for tissue engineering applications
- Synthesis of nanoparticles for cancer treatment and bioimaging
- Fabrication of ultrasonic transducer for imaging purpose (30 ~ 50 MHz)
- **Teaching Assistant, Pukyong National University, Sep. 2020 – Present**
 - Capstone Design class (using SolidWorks Program)

SCHOLARSHIPS, FELLOWSHIPS

- **Brain Korea 21 (BK21) RA/TA Scholarships, Korea Research Foundation, at Pukyong National University, Sep.2020 – Present**

PUBLICATIONS

Publications SCI / SCIE: 27 Book Chapter: 1 (30 th Oct. 2022)	Total h-index: 6	Total i-10 index: 3	Total Citations: 118	Total impact factor: 135.208
First Author: 4 (1 is accepted)	Google Scholar: https://scholar.google.com/citations?user=MH0kNmKAAAAJ&hl=ko Lab website: https://www.nbmlab.com/members ORCID id: https://orcid.org/0000-0001-5910-6211			

- **Sumin Park**, Jaeyeop Choi, Vu Hoang Minh Doan, Se Hwi O, Biodegradable Manganese-Doped Hydroxyapatite Antitumor Adjuvant as A promising Chemo-Photo-Therapeutic for Cancer Treatment. Frontiers in Molecular Biosciences, 2022. **(IF: 6.113)**
- [**Sumin Park**, Jaeyeop Choi, Thi Mai Thien Vo], Sudip Mondal, Tan Hung Vo, Namsuk Ko, Chang-seok Kim, Se Hwi O, Junghwan Oh. In vivo mimicking injectable self-setting composite bio-cement: Scanning acoustic diagnosis and biological property evaluation for tissue engineering applications. Colloids and Surfaces B: Biointerfaces, 2022, 218: 112722. **(IF: 5.999)**
- [Sudip Mondal, **Sumin Park**, Tan Hung Vo], Jaeyeop Choi, Vu Hoang Minh Doan, Duc Tri Phan, Chang-Seok Kim, Byeong-il Lee, Junghwan Oh. Smart inexpensive quantitative urine glucose and contaminant bromide ion

sensor based on metal nanoparticles with deep learning approach. Materials Chemistry and Physics, 2022, 126289.

(IF: 4.094)

○ **Sumin Park**, Jaeyeop Choi, Sudip Mondal, Thi Mai Thien Vo, Van Hiep Pham, Hoyeol Lee, Seung Yun Nam, Chang-Seok Kim, Junghwan Oh. The impact of Cu (II) ions doping in nanostructured hydroxyapatite powder: A finite element modelling study for physico-mechanical and biological property evaluation. Advanced Powder Technology, 2022, 33.2: 103405. (IF: 4.833)

PRESENTATIONS

- SPIE ABC 2021 (November 4–6 2021)
- 2021 The Korean Society for Nondestructive Testing (October 28–29 2021)
- 2020 The Korean Society for Nondestructive Testing (November 5–6 2020)
- 2019 The Korean Society for Nondestructive Testing (May 23–24 2019)

PROFESSIONAL LICENSES, CERTIFICATIONS

- **Designing**: ICDL - Graphic Technology Qualification illustration (GTQi)
- **Computer Documenting**: Word processing, Spreadsheets, Presentation, Web Browsing and Communication

TECHNICAL, COMPUTER, and LANGUAGE SKILLS

- **Programming languages and mathematical packages**: Matlab
- **Designing**: Adobe Illustrator, Adobe Photoshop, Adobe Premiere
- **English**: Fluent / **Korean**: Mother-tongue

AWARDS and HONORS

- **Honors Student**, Pukyong National University, 2022
- **Outstanding poster award** - 2020 The Korean Society for Nondestructive Testing, 2020
- **Outstanding poster award** - 2019 The Korean Society for Nondestructive Testing, 2019

REFERENCES

- **Junghwan Oh, Professor**
Department of Biomedical Engineering, Pukyong National University
(+82) 51-629-5771, jungoh@pknu.ac.kr

Date: 10th November 2022

Place: Busan, South Korea

Sumin Park