

Yoon Juyoung CURRICULUM VITAE



Juyoung Yoon

PERSONAL

Work Address Department of Chemistry and Nano Science
Ewha Womans University, Seoul 03760, Korea
Telephone +82-2-3277-2400
E-mail jyoon@ewha.ac.kr

EDUCATION

1983-1987 B.Sc., Seoul National University (Applied Chemistry)
1990-1994 Ph.D., The Ohio State University (Organic Chemistry)

PROFESSIONAL CAREER

1994.09 – 1996.08 Postdoctoral Fellow, UCLA (Prof. Donald J. Cram)
1996.09 – 1998.02 Postdoctoral Fellow, Scripps Research Institute (Prof. Kim D. Janda)
1998.02 – 2002.08 Full Time Lecturer, Assistant Professor, Silla University
2002.09 – Present Assistant, Associate, and Full Professor, Ewha Womans University

专家 姓名 Yoon Juyoung

出生 年月 1964-06-23

性别 男 国别 地区 韩国

职务职称/教授

专业 化学

国外工 作单位 韩国梨花女子大学

学位 博士

通信 地址 Department of Chemistry and Nano Science, Ewha Womans University, 52 Ewhaycodae-gil, Seodaemun-gu, Seoul 03760, South Korea

教育经历

- 1990 - 1994 俄亥俄州立大学, 有机化学博士学位, 导师 Dr. Anthony W. Czarnik
- 1983 - 1987 首尔国立大学, 工业化学硕士学位 工作经历

工作经历

- 2014 - Present 终身教授, 化学纳米科学系, 梨花女子大学
- 2009 - Present 教授, 化学纳米科学系, 梨花女子大学
- 2002 - 2009 助教/副教授, 化学纳米科学系, 梨花女子大学
- 1998 - 2002 助理教授, 化学系, 新罗大学
- 1996 - 1998 博士后, 化学系, 斯克利普斯研究所, 合作导师 Kim D. Janda
- 1994 - 1996 博士后, 化学系, 加州大学洛杉矶分校合作导师 Doanld J. Cram

1. 主持项目

Multidimensional Organic Materials, National Creative Research Initiative Programs, National Research Foundation of Korea (NRF), 01/09/2012- 31/08/2021; 799,000,000 KRW per year

Smart Organic Sensitizers for Imaging Guided Therapy, National Research Foundation of Korea (NRF), 03/01/2022- 28/02/2027; 303,210,000 KRW per year

Juyoung Yoon was born in Busan in 1964. He was graduated with a B.S. from Seoul National University (1987) and received his Ph.D. (1994) from The Ohio State University (Advisor: Dr. Anthony W. Czarnik). After completing postdoctoral research at the University of California, Los Angeles (1994-1996; Advisor: Prof. Donald J. Cram) and at The Scripps Research Institute (1996-1998; Advisor: Prof. Kim D. Janda), he joined the faculty at Silla University in 1998. In 2002, he moved to Ewha Womans University, where he is currently Professor of Department of Chemistry and Nano Science. He is a member of Korean Academy of Science and Technology, Fellow of Royal Society of Chemistry and currently a Distinguished Professor of Ewha. He is serving as an Associate Editor of *Coordination Chemical Reviews* and as an Executive Editor of *Dyes and Pigments*. He is also serving as an Advisory Editorial Board Member of *Chemical Society Reviews* (Royal Society of Chemistry, UK), *Chem* (Cell Press), *ACS Applied Materials & Interfaces* (ACS), *ACS Sensors* (ACS), *Sensors and Actuators B* (Elsevier), *ACS Omega* (ACS), *ACS Applied Bio Materials* (ACS), *Materials Chemistry Frontiers* (RSC), *Chinese Chemical Letters* (Elsevier), *Aggregate* (Wiley) and *ACS Measurement Science Au* (ACS). His research interests include investigations of fluorescent probes, molecular recognition, activatable photosensitizers, new organic functional materials and theranostics. He published 445 SCI research papers (h-index: 119, ~56000 citations). His scientific awards include “Shim Sang Chul Award” from Organic Division of Korean Chemical Society (2008), “Monthly Best Scientist Award” by Ministry of Science and Technology of Korea, “Knowledge Creation Grand Prize” by Ministry of Science and Technology of Korea (2012), Korean Chemical Society Award (2016), Ewha Academic Award (2016), 2nd Korea Toray Science Award (2019), 13th Kyung-Ahm Academic Award (2020) and MSMLG Carnik Award (2022).

He was listed as highly cited researcher in chemistry of 2014-2022.

RESEARCH INTERESTS

Fluorescent Probes; Photodynamic Therapy; Activatable Photosensitizers; Phototherapy; Molecular Recognition; Theranostics

PUBLICATIONS

445 SCI research papers. (h-index: 119)

CURRENT SCIENTIFIC ACTIVITIES

2013 – Present	Editorial Advisory Board; <i>Chemical Society Reviews</i> (RSC)
2015 – Present	Editorial Advisory Board; <i>ACS Applied Materials & Interfaces</i> (ACS)
2015 – 2021	Editorial Advisory Board; <i>ACS Sensors</i> (ACS)
2015 – Present	Executive Editor; <i>Dyes & Pigments</i> (Elsevier)
2016 – Present	Editorial Advisory Board; <i>Chem</i> (Cell Press)
2016 – Present	Editorial Advisory Board; <i>Sensors and Actuators B</i> (Elsevier)
2016 – Present	Editorial Advisory Board; <i>Materials Chemistry Frontiers</i> (RSC)
2016 – Present	Editorial Advisory Board; <i>Chinese Chemical Letters</i> (Elsevier)
2017 – Present	Editorial Advisory Board; <i>ACS Omega</i> (ACS)
2017 – Present	Associate Editor; <i>Coordination Chemistry Reviews</i> (Elsevier)
2018 – Present	Editorial Advisory Board; <i>ACS Applied Bio Materials</i> (ACS)
2020 – Present	Editorial Advisory Board; <i>Aggregate</i> (Wiley)
2021 – Present	Editorial Advisory Board; <i>ACS Measurement Science Au</i> (ACS)
2022 – Present	Associate Editor; <i>Smart Molecules</i> (Wiley)
2014 – Present	Fellow of Royal Society of Chemistry (RSC)
2014 – Present	a member of Korean Academy of Science and Technology

AWARDS

2022.07: 2022 MSMLG Czarnik Award (7th International Conference on Molecular Sensors and Logic Gates)
2020.11: 13th Kyung-Ahm Academic Award (Kyung-Ahm Education & Culture Foundation)
2019.10: 2nd Korea Toray Science Award (Korea Toray Science Foundation)
2016. 5: Ewha Academic Award
2016. 4: Korean Chemical Society Award
2014.3 - present: “Distinguished Professorship” by Ewha Womans University
2012. 11: “Knowledge Creation Grand Prize” by Ministry of Science and Technology of Korea
2012.9-2014.2: “Future Distinguished Professorship” by Ewha Womans University
2011. 10: “Monthly Best Scientist Award” by Ministry of Science and Technology of Korea
2008: “Shim Sang Chul Award” from Organic Division of Korean Chemical Society
2006 & 2010: “Excellent Research Award” by Ewha Womans University

SELECTIVE PUBLICATIONS

1. Ji Young Kwon, Yun Jung Jang, Yun Joo Lee, Kwan-Mook Kim, Mi-Sook Seo, Wonwoo Nam* and Juyoung Yoon* “A Highly Selective Fluorescent Chemosensor for Pb²⁺” *J. Am. Chem. Soc.* **2005**, *127*, 10107-10111. -

Hot Paper (IF: 16.383)

2. Ha Na Lee, Zhaochao Xu, Sook Kyung Kim, K. M. K. Swamy, Youngmee Kim, Sung-Jin Kim and Juyoung Yoon* “Pyrophosphate-Selective Fluorescent Chemosensor at Physiological pH: Formation of a Unique Excimer upon Addition of Pyrophosphate” *J. Am. Chem. Soc.* **2007**, *129*, 3828-3829. (IF: 16.383)
3. Zhaochao Xu, N. Jiten Singh, Jeeseun Lim, Jie Pan, Ha Na Kim, Sungsu Park, Kwang S. Kim* and Juyoung Yoon* “Unique Sandwich Stacking of Pyrene-Adenine-Pyrene for Selective and Ratiometric Fluorescent Sensing of ATP at Physiological pH” *J. Am. Chem. Soc.* **2009**, *131*, 15528-15533. - JACS Select #10: Supramolecular Chemical Cascade Approaches to Molecular Sensing. (IF: 16.383)
4. Zhaochao Xu*, Kyung-Hwa Back, Ha Na Kim, Jingnan Cui, Xuhong Qian, David R. Spring, Injae Shin* and Juyoung Yoon* “Zn²⁺ – Triggered Amide Tautomerization Produces a Highly Zn²⁺ – Selective, Cell – Permeable, and Ratiometric Fluorescent Sensor” *J. Am. Chem. Soc.* **2010**, *132*, 601-610. (IF: 16.383)
5. Xiaoqiang Chen, Sunwoo Kang, Min Jung Kim, Joohee Kim, Youn Sang Kim, Heejin Kim, Bo Chi, Sung-Jin Kim, Jin Yong Lee* and Juyoung Yoon* “Thin-Film Formation of Imidazolium-Based Conjugated Polydiacetylenes and Their Application for Sensing Anionic Surfactants” *Angew. Chem. Int. Ed.* **2010**, *49*, 1422-1425. - *Inside Cover* (IF: 16.823)
6. Ha Na Kim, Wen Xiu Ren, Jong Seung Kim* and Juyoung Yoon* “Fluorescent and Colorimetric Sensors for Detection of Lead, Cadmium, and Mercury Ions” *Chem. Soc. Rev.* **2012**, *41*, 3210-3244. - *Cover* (IF: 60.615)
7. Zhiqian Guo, Na Ri Song, Jong Hun Moon, Myounwoo Kim, Eun Jin Jun, Jiyoung Choi, Jin Yong Lee*, Christopher W. Bielawski*, Jonathan L. Sessler* and Juyoung Yoon* “A Benzobisimidazolium-Based Fluorescent and Colorimetric Chemosensor for CO₂” *J. Am. Chem. Soc.* **2012**, *134*, 17846-17849. - *Cover, Spotlights* (IF: 16.383)
8. Xiaoqiang Chen, Tuhin Pradhan, Fang Wang, Jong Seung Kim* and Juyoung Yoon* “Fluorescent Chemosensors Based on Spiroring-Opening of Xanthenes and Related Derivatives” *Chem. Rev.* **2012**, *112*, 1910-1956. (IF: 72.087)
9. Qingling Xu, Kyung-Ah Lee, Songyi Lee, Kyung Mi Lee, Won-Jae Lee* and Juyoung Yoon* “A Highly Specific Fluorescent Probe for Hypochlorous Acid and Its Application in Imaging Microbe-Induced HOCl Production” *J. Am. Chem. Soc.* **2013**, *135*, 9944-9949. (IF: 16.383)
10. Qingling Xu, Songyi Lee, Yookyung Cho, Myung Hwa Kim, Jean Bouffard* and Juyoung Yoon* “Polydiacetylene-Based Colorimetric and Fluorescent Chemosensor for the Detection of Carbon Dioxide” *J. Am. Chem. Soc.* **2013**, *135*, 17751-17754. (IF: 16.383)

11. Jun Yin, Younghee Kwon, Dabin Kim, Dayoung Lee, Gyoungmi Kim, Ying Hu, Ji-Hwan Ryu* and Juyoung Yoon* “Cyanine-Based Fluorescent Probe for Highly Selective Detection of Glutathione in Cell Cultures and Live Mouse Tissues” *J. Am. Chem. Soc.* **2014**, *136*, 5351-5358. (IF: 16.383)
12. Qingling Xu, Cheol Ho Heo, Gyoungmi Kim, Hyo Won Lee, Hwan Myung Kim* and Juyoung Yoon* “Development of Imidazoline-2-Thiones Based Two-Photon Fluorescence Probes for Imaging Hypochlorite Generation in a Co-Culture System” *Angew. Chem. Int. Ed.* **2015**, *54*, 4890-4894. (IF: 16.823)
13. Xin Zhou, Yiyang Zeng, Chen Liyan, Xue Wu* and Juyoung Yoon* “A Fluorescent Sensor for Dual Channel Discrimination between Phosgene and a Nerve gas mimic” *Angew. Chem. Int. Ed.* **2016**, *55*, 4729-4733. (IF: 16.823)
14. Xiaoqiang Chen, Kyung-Ah Lee, Xintong Ren, Jae-Chan Ryu, Gyoungmi Kim, Ji-Hwan Ryu*, Won-Jae Lee* and Juyoung Yoon* “Synthesis of a highly HOCl -selective fluorescent probe and its use for imaging HOCl in cells and organisms” *Nat. Protocol.* **2016**, *11*(7), 1219-1228. (IF: 17.021) (Cover)
15. Zhixue Liu, Xin Zhou,* Yu Miao, Ying Hu, Nahyun Kwon, Xue Wu,* Juyoung Yoon* “A Reversible Fluorescent Probe for Real-time Quantitative Monitoring of Cellular Glutathione” *Angew. Chem. Int. Ed.* **2017**, *56*, 5812 – 5816. (IF: 16.823)
16. Xingshu Li, C-yoon Kim, Seunghyun Lee, Dayoung Lee, Hyung-Min Chung, Gyoungmi Kim, Si-Hyun Heo, Chulhong Kim,* Ki Sung Hong,* and Juyoung Yoon* “Nanostructured Phthalocyanine Assemblies with Protein-Driven Switchable Photoactivities for Biophotonic Imaging and Therapy” *J. Am. Chem. Soc.* **2017**, *139*, 10880-10886. (IF: 16.383)
17. Yen Leng Pak, Sang Jun Park, Di Wu, BoHyun Cheon, Hwan Myung Kim,* Jean Bouffard,* and Juyoung Yoon*, “N-Heterocyclic Carbene Boranes as Reactive Oxygen Species-Responsive Materials: Application to the Two-Photon Imaging of Hypochlorous Acid in Living Cells and Tissues” *Angew. Chem. Int. Ed.* **2018**, *57*, 1567 – 1571. (IF: 16.823)
18. Zhiqiang Xu, Xiaoting Huang, Xie Han, Di Wu, Bibo Zhang, Ying Tan,* Meijiao Cao, Sheng Hua Liu, Jun Yin,* Juyoung Yoon*, “A Visible and Near-Infrared, Dual Channel Fluorescence-On Probe for Highly Selective Tracking of Mitochondrial Glutathione” *Chem* **2018**, *4*, 1609-1628. (IF: 25.832)
19. Xingshu Li, Sungsook Yu, Dayoung Lee, Gyoungmi Kim, Buhyun Lee, Yejin Cho, Bi-Yuan Zheng, Mei-Rong Ke, Jian-Dong Huang*, Ki Taek Nam*, Xiaoyuan Chen,* and Juyoung Yoon* “Facile Supramolecular Approach to Nucleic-Acid-Driven Activatable Nanotheranostics That Overcome Drawbacks of Photodynamic Therapy” *ACS Nano* **2018**, *12*(1), 681-688. (IF: 18.027)

20. Xingshu Li, Dayoung Lee, Jian-Dong Huang* and Juyoung Yoon* “Phthalocyanine-Assembled Nanodots as Photosensitizers for Highly Efficient Type I Photoreactions in PDT” *Angew. Chem. Int. Ed.* **2018**, *57*, 9885-9890. (Hot Paper) (IF: 16.823)
21. Xingshu Li, Sungsook Yu, Yoonji Lee, Tian Guo, Nahyun Kwon, Dayoung Lee, Su Cheong Yeom, Yejin Cho, Gyoungmi Kim, Jian-Dong Huang* Sun Choi,* Ki Taek Nam,* and Juyoung Yoon*, “In Vivo Albumin Traps Photosensitizer Monomers from Self-Assembled Phthalocyanine Nanovesicles: A Facile and Switchable Theranostic Approach” *J. Am. Chem. Soc.* **2019**, *141*, 1366 – 1372. (Cover) (IF: 16.383)
22. Di Wu, Liyan Chen, Qingling Xu*, Xiaoqiang Chen* and Juyoung Yoon* “Design Principles, Sensing Mechanisms and Applications of Highly Specific Fluorescent Probes for HOCl/OCl⁻” *Acc. Chem. Res.* **2019**, *52*(8), 2158-2168. (IF: 24.466)
23. Van-Nghia Nguyen, Sujie Qi, Sangin Kim, Nahyun Kwon, Gyoungmi Kim, Yubin Yim, Sungnam Park,* and Juyoung Yoon*, “An Emerging Molecular Design Approach to Heavy-Atom-Free Photosensitizers for Enhanced Photodynamic Therapy under Hypoxia” *J. Am. Chem. Soc.* **2019**, *141*(41), 16243-16248. (2019.10.08) (IF: 16.383)
24. Xingshu Li, Eun-Yeong Park, Youngnam Kang, Nahyun Kwon, Mengyao Yang, Seunghyun Lee, Won Jong Kim,* Chulhong Kim,* and Juyoung Yoon* “Supramolecular Phthalocyanine Assemblies for Improved Photoacoustic Imaging and Photothermal Therapy” *Angew. Chem. Int. Ed.* **2020**, *59*(22), 8630 – 8634. (IF: 16.823)
25. Van-Nghia Nguyen, Yubin Yim, Sangin Kim, Bokyeong Ryu, K. M. K. Swamy, Gyoungmi Kim, Nahyun Kwon, C-Yoon Kim,* Sungnam Park* and Juyoung Yoon* “Molecular Design of Highly Efficient Heavy-Atom-Free Triplet BODIPYs for Photodynamic Therapy and Bioimaging” *Angew. Chem. Int. Ed.* **2020**, *59*(23), 8957-8962. (IF: 16.823)
26. Haidong Li, Qichao Yao, Feng Xu, Yueqing Li, Dayeh Kim, Jeewon Chung, Gain Baek, Xiaofeng Wu, Prima Fitria Hillman, Eun Young Lee, Haoying Ge, Jiangli Fan, Jingyun Wang, Sang-Jip Nam, Xiaojun Peng,* Juyoung Yoon* “An Activatable AIEgen Probe for High - Fidelity Monitoring of Overexpressed Tumor Enzyme Activity and Its Application to Surgical Tumor Excision” *Angew. Chem. Int. Ed.* **2020**, *59*(25), 10186-10195. (IF: 16.823)
27. Xingshu Li, Jonathan F. Lovell*, Juyoung Yoon*, and Xiaoyuan Chen*, “Clinical Development and Potential of Photothermal and Photodynamic Cancer Therapy” *Nat. Rev. Clin. Oncol.* **2020**, *17*, 657-674. (IF: 65.011)
28. Xiaofeng Wu, Rui Wang, Sujie Qi, Nahyun Kwon, Jingjing Han, Heejeong Kim, Haidong Li, Fabiao Yu,* Juyoung Yoon* “Rational Design of Highly Selective Near-Infrared Two-Photon Fluorogenic Probe for Imaging

Orthotopic Hepatocellular Carcinoma Chemotherapy” *Angew. Chem. Int. Ed.* **2021**, *60*(28), 15418-15425. (IF: 16.823)

29. Rui Wang, Kyu-Hwan Kim, Jiyeon Yoo, Xingshu Li,* Nahyun Kwon, Yun-Hui Jeon, Suk-kyung Shin, Seung Seok Han, Dong-Sup Lee,* Juhyoung Yoon*, “A Nanostructured Phthalocyanine/Albumin Supramolecular Assembly for Fluorescence Turn-on Imaging and Photodynamic Immunotherapy” *ACS Nano* **2022**, *16*(2), 3045–3058. (IF: 18.027)

30. Xiaofeng Wu, Mengyao Yang, Ji Seon Kim, Rui Wang, Gyoungmi Kim, Jeongsun Ha, Heejeong Kim, Yejin Cho, Ki Taek Nam,* Juhyoung Yoon* “Reactivity Differences Enable ROS for Selective Ablation of Bacteria” *Angew. Chem. Int. Ed.* **2022**, *61*(17), e202200808. (IF: 16.823) (Hot Paper)