

# Stanford

---



## Kostas Parkatzidis

Postdoctoral Scholar, Chemical Engineering

### Bio

---

#### HONORS AND AWARDS

- SNSF Postdoc Mobility Scholarship, Swiss National Science Foundation (2024-2026)
- PhD Scholarship, Onassis Foundation (2020-2023)
- Outstanding Reviewer, Royal Society of Chemistry (RSC) (2023)
- Chemistry Travel Award, Swiss Chemical Society (2022)
- ACS Best Poster Presentation Award, American Chemical Society (2022)
- Best Oral Presentation Award, Hellenic Polymer Society (2022)
- Best Poster Presentation Award, Merck (2021)
- MSc Thesis Scholarship, IESL-FoRTH Hellas Scholarship (2017)
- BSc Thesis Scholarship, IESL-FoRTH Hellas Scholarship (2016)

#### BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Community Board Member, Materials Horizons (2023 - present)

#### PROFESSIONAL EDUCATION

- Master of Science, University Of Crete (2018)
- Doctor of Philosophy, ETH Zurich (2023)
- Bachelor of Science, University Of Crete (2017)
- PhD, ETH Zurich , Polymer Chemistry (2023)
- MSc, University of Crete , Chemistry (2019)
- BSc, University of Crete , Materials Science and Technology (2017)

#### STANFORD ADVISORS

- Zhenan Bao, Postdoctoral Faculty Sponsor

### Publications

---

#### PUBLICATIONS

- **Photocatalytic ATRP Depolymerization: Temporal Control at Low ppm of Catalyst Concentration.** *Journal of the American Chemical Society*  
Parkatzidis, K., Truong, N. P., Matyjaszewski, K., Anastasaki, A.  
2023; 145 (39): 21146-21151

- **Oxygen-Enhanced Atom Transfer Radical Polymerization through the Formation of a Copper Superoxido Complex.** *Journal of the American Chemical Society*  
Parkatzidis, K., Truong, N. P., Whitfield, R., Campi, C. E., Grimm-Lebsanft, B., Buchenau, S., Rübhausen, M. A., Harrisson, S., Konkolewicz, D., Schindler, S., Anastasaki, A.  
2023; 145 (3): 1906-1915
- **Photoinduced Iron-Catalyzed ATRP of Renewable Monomers in Low-Toxicity Solvents: A Greener Approach.** *ACS macro letters*  
Parkatzidis, K., Boner, S., Wang, H. S., Anastasaki, A.  
2022; 11 (7): 841-846
- **Transformer-Induced Metamorphosis of Polymeric Nanoparticle Shape at Room Temperature.** *Angewandte Chemie (International ed. in English)*  
Parkatzidis, K., Truong, N. P., Rolland, M., Lutz-Bueno, V., Pilkington, E. H., Mezzenga, R., Anastasaki, A.  
2022; 61 (8): e202113424
- **Recent Developments and Future Challenges in Controlled Radical Polymerization: A 2020 Update** *CHEM*  
Parkatzidis, K., Wang, H., Truong, N. P., Anastasaki, A.  
2020; 6 (7): 1575-1588
- **Photocatalytic Upcycling and Depolymerization of Vinyl Polymers** *ANGEWANDTE CHEMIE-INTERNATIONAL EDITION*  
Parkatzidis, K., Wang, H., Anastasaki, A.  
2024: e202402436
- **Chemical recycling of bromine-terminated polymers synthesized by ATRP.** *RSC applied polymers*  
Mountaki, S. A., Whitfield, R., Parkatzidis, K., Antonopoulou, M., Truong, N. P., Anastasaki, A.  
2024; 2 (2): 275-283
- **RAFT polymerization of renewable monomers with dithiobenzoates: Effect of Z-group substituents and reaction conditions** *EUROPEAN POLYMER JOURNAL*  
Boner, S., Parkatzidis, K., Watuthanthrige, N., Anastasaki, A.  
2024; 205
- **Oxygen-enhanced superoxido copper-catalyzed ATRP accelerated by light** *JOURNAL OF POLYMER SCIENCE*  
Della Casa, S., Parkatzidis, K., Truong, N. P., Anastasaki, A.  
2023
- **Reversed Controlled Polymerization (RCP): Depolymerization from Well-Defined Polymers to Monomers.** *Journal of the American Chemical Society*  
Jones, G. R., Wang, H. S., Parkatzidis, K., Whitfield, R., Truong, N. P., Anastasaki, A.  
2023; 145 (18): 9898-9915
- **Cu(0)-RDRP of acrylates using an alkyl iodide initiator** *POLYMER CHEMISTRY*  
Parkatzidis, K., Amez, L., Truong, N. P., Anastasaki, A.  
2023; 14 (14): 1639-1645
- **Light-accelerated depolymerization catalyzed by Eosin Y.** *Polymer chemistry*  
Bellotti, V., Parkatzidis, K., Wang, H. S., De Alwis Watuthanthrige, N., Orfano, M., Monguzzi, A., Truong, N. P., Simonutti, R., Anastasaki, A.  
2023; 14 (3): 253-258
- **A general model for the ideal chain length distributions of polymers made with reversible deactivation** *POLYMER CHEMISTRY*  
Kearns, M. M., Morley, C. N., Parkatzidis, K., Whitfield, R., Sponza, A. D., Chakma, P., De Alwis Watuthanthrige, N., Chiu, M., Anastasaki, A., Konkolewicz, D.  
2022; 13 (7): 898-913
- **Shape-Controlled Nanoparticles from a Low-Energy Nanoemulsion.** *JACS Au*  
Rolland, M., Truong, N. P., Parkatzidis, K., Pilkington, E. H., Torzynski, A. L., Style, R. W., Dufresne, E. R., Anastasaki, A.  
2021; 1 (11): 1975-1986
- **Controlling dispersity in aqueous atom transfer radical polymerization: rapid and quantitative synthesis of one-pot block copolymers.** *Chemical science*  
Wang, H. S., Parkatzidis, K., Harrisson, S., Truong, N. P., Anastasaki, A.  
2021; 12 (43): 14376-14382
- **Tailoring polymer dispersity by mixing ATRP initiators** *POLYMER CHEMISTRY*

---

Parkatzidis, K., Rolland, M., Truong, N. P., Anastasaki, A.

2021; 12 (39): 5583-5588

- **Low ppm CuBr-Triggered Atom Transfer Radical Polymerization under Mild Conditions** *MACROMOLECULES*  
Whitfield, R., Parkatzidis, K., Bradford, K. E., Truong, N. P., Konkolewicz, D., Anastasaki, A.  
2021; 54 (7): 3075-3083
- **Tailoring polymer dispersity by mixing chain transfer agents in PET-RAFT polymerization** *POLYMER CHEMISTRY*  
Parkatzidis, K., Truong, N. P., Antonopoulou, M., Whitfield, R., Konkolewicz, D., Anastasaki, A.  
2020; 11 (31): 4968-4972
- **Multi-photon polymerization of bio-inspired, thymol-functionalized hybrid materials with biocompatible and antimicrobial activity** *POLYMER CHEMISTRY*  
Parkatzidis, K., ChatziniKolaidou, M., Koufakis, E., Kaliva, M., Farsari, M., Vamvakaki, M.  
2020; 11 (25): 4078-4083
- **Tailoring Polymer Dispersity by RAFT Polymerization: A Versatile Approach** *CHEM*  
Whitfield, R., Parkatzidis, K., Truong, N. P., Junkers, T., Anastasaki, A.  
2020; 6 (6): 1340-1352
- **Effect of Polymerization Components on Oxygen-Tolerant Photo-ATRP.** *ACS macro letters*  
Rolland, M., Whitfield, R., Messmer, D., Parkatzidis, K., Truong, N. P., Anastasaki, A.  
2019; 8 (12): 1546-1551
- **Multiphoton 3D Printing of Biopolymer-Based Hydrogels.** *ACS biomaterials science & engineering*  
Parkatzidis, K., ChatziniKolaidou, M., Kaliva, M., Bakopoulou, A., Farsari, M., Vamvakaki, M.  
2019; 5 (11): 6161-6170
- **Tailoring polymer dispersity and shape of molecular weight distributions: methods and applications.** *Chemical science*  
Whitfield, R., Truong, N. P., Messmer, D., Parkatzidis, K., Rolland, M., Anastasaki, A.  
2019; 10 (38): 8724-8734
- **Tuning Dispersity by Photoinduced Atom Transfer Radical Polymerisation: Monomodal Distributions with ppm Copper Concentration.** *Angewandte Chemie (International ed. in English)*  
Whitfield, R., Parkatzidis, K., Rolland, M., Truong, N. P., Anastasaki, A.  
2019; 58 (38): 13323-13328
- **Initiator-Free, Multiphoton Polymerization of Gelatin Methacrylamide** *MACROMOLECULAR MATERIALS AND ENGINEERING*  
Parkatzidis, K., Kabouraki, E., Selimis, A., Kaliva, M., Ranella, A., Farsari, M., Vamvakaki, M.  
2018; 303 (12)