Wonyong Choi

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Education
1991 – 1996 Ph. D.   California Institute of Technology (Chemistry)
1988 – 1990 M. S.   Pohang University of Science and Technology (Chemistry)
1984 – 1988 B. S.   Seoul National University (Chemical technology)

Professional Career
2022.02– Present   Distinguished Professor, Korea Institute of Energy Technology (KENTECH)
1998.02 – 2022.01   Professor, Pohang University of Science and Technology (POSTECH)
1996.06 – 1998.02   Post-doctoral researcher, Jet Propulsion Laboratory (JPL), USA

Selected Publications
1. Y.-X. Li, Y. Hu, H.-S. Bae, J. Du, S. Zhao, D. Pan, W. Choi*, "Designing 1 nm-thick MOF nanosheets with donor-acceptor complexes for photosynthesis of H_2O_2 using water and dioxygen only", *ACS Nano* 2024, *18*, 29233
2. D. Pan, M. Austeria P, S. Lee, H.-S. Bae, F. He, G. H. Gu, W. Choi*, "Integrated Electrocatalytic Synthesis of Ammonium Nitrate from Dilute NO Gas on Metal Organic Frameworks-Modified Gas Diffusion Electrodes", *Nature Commun.* 2024, 15:7243.
3. S. Zhao, W. Choi*, "Ti^{3+} Sites on Mesoporous Titania Enable Selective Photocatalytic Decomposition of NO to N_2 and O_2 under Visible Light," *Chem Catal.* 2024, *4*, 101058
4. S. Lee, H.-S. Bae, W. Choi*, "Selective Control and Characteristics of Water Oxidation and Dioxygen Reduction in Environmental Photo(electro)catalytic Systems", *Acc. Chem. Res.* 2023, *56*, 867

Research Interests
1. Semiconductor photo(electro)catalysis for environmental and energy applications
2. Photochemical purification of water and air; Advanced oxidation processes (AOPs)
3. Environmental redox processes

Awards
1. Korea Toray Science and Technology Prize (2024)
2. International member, *U.S. National Academy of Engineering (NAE)*
3. Highly Cited Researcher (Clarivate Analytics, 2019-2024)
4. Korea Engineering Award (2018)
5. Young Scientist Award (2005)