# 若い男性の顔 自動的に生成された説明Curriculum Vitae

# Heading

# Publications

# Presentations

# Patents

# Press

# Funding

# Awards

1 Daoping He\*, Hideshi Ooka, Yamei Li, Yujeong Kim, Akira Yamaguchi, Kiyohiro Adachi, Daisuke Hashizume, Naohiro Yoshida, Sakae Toyoda, Sun Hee Kim, Ryuhei Nakamura\* "Regulation Of The Electrocatalytic Nitrogen Cycle Based On Sequential Proton--Electron Transfer", *Nat. Catal.*, **2022**, 798-806.

2 Ailong Li, Shuang Kong, Chenxi Guo, Hideshi Ooka, Kiyohiro Adachi, Daisuke Hashizume, Qike Jiang, Hongxian Han, Jianping Xiao\*, Ryuhei Nakamura\* "Enhancing The Stability Of Cobalt Spinel Oxide Towards Sustainable Oxygen Evolution In Acid", *Nat. Catal.*, **2022**, 109-118.

3 Hideshi Ooka\*, Jun Huang, Kai S Exner "The Sabatier Principle In Electrocatalysis: Basics, Limitations, And Extensions", *Front. Energ. Res.*, **2021**, 155.

4 Thomas Kadyk\*, Jianping Xiao, Hideshi Ooka, Jun Huang, Kai S Exner\* "Material And Composition Screening Approaches In Electrocatalysis And Battery Research", *Front. Energ. Res.*, **2021**, 227.

5 Hideshi Ooka\*, Marie E Wintzer, Ryuhei Nakamura "Non-Zero Binding Enhances Kinetics Of Catalysis: Machine Learning Analysis On The Experimental Hydrogen Binding Energy Of Platinum", *ACS Catal.*, **2021**, 6298-6303.

6 Ji-Eun Lee, Akira Yamaguchi, Hideshi Ooka, Tomohiro Kazami, Masahiro Miyauchi, Norio Kitadai, Ryuhei Nakamura\* "In Situ FTIR Study Of CO2 Reduction On Inorganic Analogues Of Carbon Monoxide Dehydrogenase", *Chem. Commun.*, **2021**, 3267-3270.

7 Daoping He, Hideshi Ooka, Yujeong Kim, Yamei Li, Fangming Jin\*, Sun Hee Kim\*, Ryuhei Nakamura\* "Atomic-Scale Evidence For Highly Selective Electrocatalytic N- N Coupling On Metallic MoS2", *Proc. Natl. Acad. Sci.*, **2020**, 31631-31638.

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9 Hideshi Ooka\*, Ryuhei Nakamura "Shift Of The Optimum Binding Energy At Higher Rates Of Catalysis", *J. Phys. Chem. Lett.*, **2019**, 6706-6713.

10 Ailong Li, Hideshi Ooka, Nad{\`e}ge Bonnet, Toru Hayashi, Yimeng Sun, Qike Jiang, Can Li, Hongxian Han\*, Ryuhei Nakamura\* "Stable Potential Windows For Long-Term Electrocatalysis By Manganese Oxides Under Acidic Conditions", *Angew. Chem. Int. Ed.*, **2019**, 5108-5112.

11 Daoping He, Hideshi Ooka, Yamei Li, Fangming Jin\*, Ryuhei Nakamura\* "Phase-Selective Hydrothermal Synthesis Of Metallic MoS2 At High Temperature", *Chem. Lett.*, **2019**, 5054-5058.

12 Hideshi Ooka, Shawn E McGlynn, Ryuhei Nakamura\* "Electrochemistry At Deep-Sea Hydrothermal Vents: Utilization Of The Thermodynamic Driving Force Towards The Autotrophic Origin Of Life", *ChemElectroChem*, **2019**, 1316-1323.

13 Hideshi Ooka, Kazuhito Hashimoto, Ryuhei Nakamura\* "Design Strategy Of Multi-Electron Transfer Catalysts Based On A Bioinformatic Analysis Of Oxygen Evolution And Reduction Enzymes", *Mol. Inform.*, **2018**, 1700139.

14 Hirotaka Kakizaki, Hideshi Ooka, Toru Hayashi, Akira Yamaguchi, Nad{\`e}ge Bonnet-Mercier, Kazuhito Hashimoto, Ryuhei Nakamura\* "Evidence That Crystal Facet Orientation Dictates Oxygen Evolution Intermediates On Rutile Manganese Oxide", *Adv. Funct. Mater.*, **2018**, 1706319.

15 Daoping He, Yamei Li, Hideshi Ooka, Yoo Kyung Go, Fangming Jin\*, Sun Hee Kim\*, Ryuhei Nakamura\* "Selective Electrocatalytic Reduction Of Nitrite To Dinitrogen Based On Decoupled Proton--Electron Transfer", *J. Am. Chem. Soc.*, **2018**, 2012-2015.

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20 Hideshi Ooka, Takumi Ishii, Kazuhito Hashimoto\*, Ryuhei Nakamura\* "Light-Induced Cell Aggregation Of Euglena Gracilis Towards Economically Feasible Biofuel Production", *RSC Adv.*, **2014**, 20693-20698.