14th October 2026

Erwin Reisner

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Website: https://reisnerlab.com/erwin_bio/

Current academic positions

2024 – present Royal Academy of Engineering Chair in Emerging Technologies, University of Cambridge
2017 – present Professor of Energy & Sustainability, Department of Chemistry, University of Cambridge
2011 – present Fellow at St. John's College, Cambridge

Current entrepreneurial positions

2024 – present Co-Founder & Chief Scientific Officer, waste-to-fuel technology start-up, Protonera Ltd

Previous academic positions

2015 – 2017 University Reader, Department of Chemistry, University of Cambridge
2012 – 2019 Director, Christian Doppler Laboratory for Sustainable SynGas Chemistry, Cambridge
2010 – 2015 University Lecturer, Department of Chemistry, University of Cambridge
2010 – 2015 EPSRC Career Acceleration Fellow, Department of Chemistry, University of Cambridge
2009 – 2010 EPSRC Career Acceleration Fellow, School of Chemistry, The University of Manchester, UK

Previous postdoc positions

2008 – 2009 BBSRC Research Associate, Inorganic Chemistry Laboratory, University Oxford, UK
Supervisor: Prof. Fraser A. Armstrong FRS
2008 – 2009 College Lecturer in Inorganic Chemistry at St. John's College, Oxford, UK
2005 – 2007 Erwin Schrödinger Research Fellow, Massachusetts Institute of Technology, MA, USA
Supervisor: Prof. Stephen J. Lippard

Education and degrees

2010 Habilitation (professorial qualification), Faculty of Chemistry, University of Vienna, Austria
Thesis Topic: 'Bio-inspired generation of sustainable energy carriers'
2002 – 2005 Doctorate with distinction (grade 1.0), Faculty of Chemistry, University of Vienna, Austria
(including 1-year research at Instituto Superior Técnico, Lisbon, Portugal)
Thesis Topic: 'Redox activated ruthenium anticancer drugs'
Supervisor: Prof. Bernhard K. Keppler
1998 – 2002 Diploma with distinction (grade 1.0), 5-year programme with integrated BSc and MSc,
Faculty of Chemistry, University of Vienna, Austria
(including Erasmus exchange semester, New University of Lisbon, Portugal)

Awards

2024 Tilden Prize, Royal Society of Chemistry, UK
2023 Hughes Medal, Royal Society, UK
2022 Galvani Prize, The Bioelectrochemical Society, International
2022 Runner-up, €5M EIC Horizon Prize for 'Fuel from the Sun: Artificial Photosynthesis', EU
2018 Corday Morgan Prize, Royal Society of Chemistry, UK
2018 Lee Hsun Young Scientist Award, Chinese Academy of Science, Shenyang, China
2017 Japan Society of Coordination Chemistry International Award for Creative Work, Japan
2016 Visiting Professor (Research Collaboration Award), University of Sydney, Australia
2014 Harrison-Meldola Memorial Prize, Royal Society of Chemistry, UK
2014 Grammaticakis-Neumann Prize, Swiss Chemical Society, Switzerland
2014 Young Investigator Award, Royal Society of Chemistry Bioinorganic Group, UK
2011 'Science Award', Federal State of Upper Austria, Austria
2009 Anton-Paar Science Award, Austrian Chemical Society, Austria
2003 National Award for academic excellence (Würdigungspreis), Ministry of Science, Austria
2000 – 2004 University Awards for academic excellence, University of Vienna, Austria

Research Funding & Fellowships (selected grants with a funded value >£1M)

Principal Investigator Grants:

- Source: Royal Academy of Engineering and UK Department of Science, Innovation & Technology
  Programme: Chair in Emerging Technologies
  Title: Solar-powered Upcycling of Biomass and Plastic Waste to Sustainable Chemicals
  Value: £2.5 million. Grant ID: CIET-2324-83. Duration: 2024-2034.
- Source: European Research Council (ERC) Advanced Grant (funded as UKRI Frontier Research Grant)
  Title: Semi-biological Domino Catalysis for Solar Chemical Synthesis
  Value: €2.5 million. Acronym: domino4chem. Grant ID: EP/X030563/1. Duration: 2023-2028.
- Source: European Union: FP7, Horizon 2020, UKRI underwrite; Marie Skłodowska-Curie Fellowships (17x)
  17 individual postdoctoral fellowships on solar chemistry projects
  Value: €4.5 million. Duration: 2013-2028.
- Source: ERC Consolidator Grant (CoG) and Proof of Concept (PoC)
  Title CoG: Semi-artificial photosynthesis with wired enzymes (Acronym: MatEnSAP; Grant ID: 682833)
  Title PoC: Solar-driven reforming of waste into hydrogen (Acronym: SolReGen, Grant ID: 966581)
  Value: €2.2 million (€2M CoG, €0.15M PoC). Duration: 2016-2023.
- Source: United Kingdom Research & Innovation (UKRI)
  Title: Cambridge Circular Plastics Centre (Circular Economy Approaches to Eliminate Plastic Waste)
  Value: £1 million. Acronym: CirPlas. Grant ID: EP/S025308/1. Duration: 2019-2021.
- Source: Biotechnology & Biological Sciences Research Council (BBSRC)
  3 projects on biohybrids for solar chemistry; Grant IDs: BB/S00159X/1, BB/K010220/1, BB/J000124/1
  Value: £1 million. Duration: 2013-2023.
- Source: Christian Doppler Research Association and OMV Group, Austria
  Title: Christian Doppler Laboratory for Sustainable SynGas Chemistry
  Value: €2.3 million. Duration: 2012–2019.
- Source: EPSRC Career Acceleration Fellowship and EPSRC Research Leaders Award
  Title: Bio-inspired Solar Light Driven Hydrogen Production, Grant ID: EP/H00338X
  Value: £1 million. Duration: 2009-2015.

Co-Investigator Grants (selected grants with a funded value >£2M)

- Source: UK Clean Energy Priority Programme Grant
  Title: Towards the sunlight-driven conversion of atmospheric CO_2 to fuels and chemicals
  Value: £8M. Acronym: Air2Fuel. Duration: 2026-2031
- Source: Advanced Research and Invention Agency (ARIA) Universal Fabricators Grant
  Title: Scalable Synthesis of Defect-Free Metal-Coordinated 2D Protein Frameworks
  Value: £5 million. Acronym: S-LATTICE. Duration: 2026-2029
- Source: European Union, Horizon Europe, European Innovation Council (EIC)
  Title: Solar synthesis of proteins and lipids via photoelectrochemistry of living organisms
  Value: €4 million. Acronym: Solarspoon. Grant ID: 101219355. Duration: 2025-2029
- Source: BBSRC with Japan Science & Technology Agency (JST)
  Title: Japan-UK collaboration for artificial photosynthetic cell systems
  Value: £2 million. Grant ID: UKRI251. Duration: 2025-2028
- Source: EPSRC Centres for Doctoral Training
  Title: EPSRC Centre for Doctoral Training in Integrated Functional Nano
  Value: £6 million. Acronym: nanoDTC (i4Nano). Grant ID: EP/S022953/1. Duration: 2019-2028
- Source: European Union, Horizon 2020, EU ITN Network
  Title: Solar chemicals for a sustainable Europe by hybrid molecule semiconductor devices
  Value: €4 million. Acronym: Solar2Chem. Grant ID: 861151. Duration: 2020-2024

- Source: European Union, Horizon 2020, EU FET OPEN
  Title: Soap Film based Artificial Photosynthesis
  Value: €3 million. Acronym: Sofia. Grant ID: 828838. Duration: 2019-2023
- Source: EPSRC Centres for Doctoral Training
  Title: EPSRC Centre for Doctoral Training in Sustainable and Functional Nano
  Value: £5 million. Acronym: nanoDTC. Grant ID: EP/L015978/1. Duration: 2014-2023

Support of research excellence (selected)

2022 – present International expert for Ministry of Science and Higher Education in Poland, including the "Excellence Initiative – Research University" (IDUB) programme
2021 – present Member of Committee on Interdisciplinary Research, Novo Nordisk Foundation, Denmark
2021 – present Advisory Board, Solar Chemicals Network, UK
2019 – present Committee member for national funding bodies & research organisations, including A*STAR Singapore, Swedish Foundation for Strategic Research, Research Council of Norway, Swiss Federal Office of Energy, Max Planck Society, etc.
2012 – 2023 Member and providing support for EU solar fuel and chemistry initiatives (AMPEA, Energy-X, Sunrise, Sunergy and Suner-C, Mission Innovation on Clean Energy)
2019 – 2022 Director of Cambridge Creative Circular Plastics Centre (CirPlas)
2017 – 2021 Director of EPSRC UK Solar Fuels Network
2014 – 2024 Co-director of EPSRC Centre for Doctoral Training in Nanotechnology, Cambridge, UK

Membership in learned and scientific societies

2026 – present Fellow of the European Academy of Sciences
2014 – present Fellow of the Royal Society of Chemistry (FRSC), UK (Member from 2008–2014)
2017 – present Member of the German Chemical Society (GdCh), Germany
2006 – present Member of the American Chemical Society, USA

International advisory board membership of scientific journals

2025 – present *Accounts of Chemical Research*, American Chemical Society
2019 – present *Chemical Science*, Royal Society of Chemistry
2018 – present *Angewandte Chemie*, German Chemical Society
2011 – present *Chemical Communications*, Royal Society of Chemistry

Organisation and support of scientific meetings, colloquia and knowledge exchange since 2019

2025 Chair, Cambridge Circular Chemistry Symposium, Cambridge, UK
2023 Co-Chair, Biophotoelectrochemical Workshop, Cambridge, UK
2023 Theme committee member, IUPAC World Chemistry Congress, The Hague, The Netherlands
2021 Co-Chair, Royal Society of Chemistry Chemical Science Symposium (online)
2020 Co-organiser, 'Hybrids for Solar Fuel Generation' symposium, Pacifichem, USA (online)
2020 – present International Committee, Conference on Photochemical Conversion and Storage (IPS)
2019 Chair, 3rd Faraday Discussions on Artificial Photosynthesis in Cambridge, UK
2019 Chair, 7th UK Solar Fuels Network Symposium in Cambridge, UK
2019 Organiser, Christian Doppler Symposium, Cambridge, UK
2019 Co-Chair, nanoGE symposium on Solar Fuels in Berlin, Germany

Research Team & Alumni

- I currently lead a research team comprising of a personal assistant, a laboratory manager, a laboratory assistant, two senior postdoctoral researchers, 8 postdoctoral researchers and 12 PhD students
  https://reisnerlab.com/people/
- Alumni of my research team have pursued successful and diverse careers, including co-founding seven start-up companies and securing 35 independent academic positions
  https://reisnerlab.com/alumni/

Presentations. I have given more than 300 invited/keynote/plenary/named/award lectures

Selected recent in person lectures:

- *Hans Tuppy Lecture.* Austrian Academy of Sciences, Vienna, Austria (upcoming)
- *Plenary.* 8th Intern. Symposium on Solar Fuels and Solar Cells, Westlake, Hangzhou, China (upcoming)
- *Seaborg Lecturer.* College of Chemistry, University of California, Berkeley, CA, USA
- *Barré Lecturer.* Department of Chemistry, University of Montreal, Canada
- *Distinguished Lecturer.* Catalysis Research Centre, Technical University of Munich, Germany
- *Plenary.* Austrian Chemistry Days, Krems, Austria (upcoming)
- *Plenary.* 46th International Conference on Coordination Chemistry, Odense, Denmark
- *Plenary.* 1st International Symposium on Artificial Photosynthesis, Chengdu, China
- *Plenary.* 9th International Meeting of Institute of Metals in Biology on Fuel Synthesis, Grenoble, France
- *Plenary.* 22nd International Conference on Carbon Dioxide Utilization, Lisbon Portugal
- *Plenary.* 5th International Solar Fuels Conference (ISF2025), Newcastle, UK
- *Tilden Prize Lecturer.* Universities of Oxford, Bristol, Warwick & Liverpool, UK
- *Plenary.* 7th International Symposium on Solar Fuels and Solar Cells, Dalian, China
- *Distinguished lecturer.* German Chemical Society, University of Ulm, Germany
- *Distinguished lecturer.* Annual St. John's College Lecturer, University of Hull, UK
- *Plenary*. 22nd Cardiff Chemistry Conference, Cardiff, UK
- *Plenary.* 25th Netherlands' Catalysis and Chemistry Conference (N3C), Noordwijkerhout, The Netherlands
- *Plenary.* 8th International Conference on Semiconductor Photochemistry, Strasbourg, France
- *Plenary.* EuChemS European Inorganic Chemistry Conference (EICC), Vienna, Austria
- *Opening lecture.* 'Electrocatalysis Meets Organic Electrosynthesis' Summerschool, Interlaken, Switzerland
- *Gerhard Schmidt Lecturer.* Faculty of Chemistry, Weizmann Institute of Science, Israel
- *Silliman Lecturer.* Department of Chemistry, Yale University, USA
- *Plenary.* 'Frontiers in renewable fuels and chemicals' symposium, Tarragona (ICIQ), Spain
- *Plenary.* Annual Meeting of German Catalysis Society, Weimer, Germany
- *Plenary.* 38th Biennial Meeting of the Spanish Royal Society of Chemistry (RSEQ), Granada, Spain
- *Plenary.* 4th Small Molecule Activation Conference, Cancun, Mexico
- *Galvani Prize Lecture.* 27th International Symposium on Bioelectrochemistry, Antwerp, Belgium
- *Plenary.* RSC Chemical Nanoscience and Nanotechnology Annual Symposium, London, UK

Public Engagement. I coordinate public engagement events, often together with my team, and deliver lectures to communicate my research to a broad audience. My activities range from visits to local schools and hosting children at the chemistry department to presentations at the Cambridge Science Festival, local festivals, and alumni events. Through interactive scientific demonstrations, I aim to make science accessible and engaging, while highlighting the opportunities that scientific innovation offers for addressing major global challenges.

Online resources include:

- News about public outreach: https://tinyurl.com/ub9hauj and https://tinyurl.com/uzxu8xmc
- Videos: https://reisnerlab.com/outreach_videos/
- Press articles about our work: https://reisnerlab.com/outreach_press_releases/
- Cambridge Festival: https://reisnerlab.com/outreach_camfest-2/

Selected in-person outreach presentations and public engagement since 2022

- *Primary School Lecture with Experiments.* Newham Croft Primary School (Year 6, age: 10 years)
- *Secondary School Lecture with Experiments.* Parkside Community College (Year 10, age: 14 years)
- *Sixth Form College Lecture and Discussion*. Hills Road Sixth Form College (A-level students, age: 16-17 years)
- *Student Society Lectures.* Kelvin Club, Peterhouse College; Churchill Science Society, Churchill College; Cambridge University Chemistry Society; *Student Society Lecture.* Cambridge University Scientific Society
- *Public Lectures.* Cambridge Festival; Pint of Science Festival
- *Alumni Lectures.* Yusuf Hamied Department of Chemistry; St. John's College
- *After Dinner Speech with Device Display at Annual Cambridge Chemistry Dinner*. Salters' Hall, London, UK
- *Climate Change and Sustainability presentation with Device Display.* Judge Business School
- *After dinner presentation with Device Display.* London Engagement Series of Cambridge University, London
- *Lab visit, Demonstrations and Discussions with Nick Thomas-Symonds MP* (EU minister)

Publications

https://reisnerlab.com/papers/
Total: 275 peer-reviewed journal publications & 8 patents. ORCID: 0000-0002-7781-1616
Citation metrics (google scholar): H-index, 110; citation rate, >5'000 pa; total citations, >35'000.
Clarivate™ Highly Cited Researcher since 2024

List of Peer-Reviewed Publications

[number] unnamed co-authors, *****corresponding authors

Publications as Principal Investigator in Cambridge

275. Yeung & **Reisner***, *Nature Synth.*, **2027**, accepted
"Photosynthesis-inspired organic photoelectrodes for solar chemical synthesis"

274. Quek, Chua, Liu, Han, Martins, Pereira, Stranks & **Reisner***, *Chem.*, **2027**, *13*, 103262
"Molecular engineering of conjugated polyelectrolyte-enzyme biohybrid sheets for CO_2 conversion"

273. Mitra, Vahey, Bonke* & **Reisner***, *Angew. Chem. Int. Ed.*, **2026**, e5220236
"One-Pot Biphasic Photocatalytic CO_2-to-Carbonylation Cascades"

272. Mittal, Mitra, Bonvin, Spring, Bonke* & **Reisner***, *J. Am. Chem. Soc.*, **2026**, *148*, 38153–62
"Biphasic Solar Reforming of Lignin to Aromatics and CO for In Situ Carbonylation of Organics"

271. **Reisner***, *Chem. Rev.*, **2026**, *126*, 7339–40
"Introduction to semi-artificial photosynthesis"

270. Annuar, Liu, Han, Rahaman & **Reisner***, *Energy Environ. Sci.*, **2026**, *19*, 4983–98
"Bifunctional Pd-Al:$SrTiO_3$ photocatalyst sheet for m^2-scale waste PET photoreforming and feasibility study"

269. Liu, Low, Robinson, [2], Pereira & **Reisner***, *Chem. Rev.*, **2026**, *126*, 8034–88
"Semiartificial CO_2 Fixation Using Metal-Dependent Formate Dehydrogenase"

268. Annuar, Liu, [4], Grey, Wright & **Reisner***, *Nature Chem. Eng.*, **2026**, *3*, 351–62
"Photoreforming of solid waste on 1 m^2 scale using single-source precursor-derived co-catalyst films"

267. Su, Yeung, Milshtein, Low, Liu, Milo & **Reisner***, *J. Am. Chem. Soc.*, **2026**, *148*, 21198–203
"Toward Solar-Powered Growth of Autotrophic Escherichia coli Using Photoelectrochemistry"

266. Kim, Kwarteng & **Reisner***, *Chem. Sci.*, **2026**, *17*, 13416–22
"Air-tolerant solar reforming of pre-treated biomass and plastics in viscous sustainable solvents"

265. Kwarteng, Naceruddin & **Reisner***, *Angew. Chem. Int. Ed.*, **2026**, *65*, e4324362
"Photocatalytic Transfer Hydrogenation Using Plastic Hydrolysates as Hydrogen Donor"

264. Shi, Liu, Annuar, Webb, Milton, Li, Li & **Reisner***, *J. Am. Chem. Soc.*, **2026**, *148*, 18608–14
"*Interfacing Broad-Spectrum Semiconductors with Hydrogenases for Semi-Artificial Solar Reforming of Cellulose*"

263. Rogolino & **Reisner***, *Energy Environ. Sci.*, **2026**, *19*, 3021–36
"Biphasic valorization of byproducts from biodiesel synthesis using floating photochemoenzymatic domino catalysis"

262. Kwarteng, Liu, Han, [2], Pulignani & **Reisner***, *Joule*, **2026**, *10,* 102347
"Solar reforming of plastics using acid-catalyzed depolymerization"

261. Song, Queck, Short, Li, **Reisner*** & Liu*, *Chem. Rev.*., **2026**, *126*, 4656–4705
"Designing Microbe–Semiconductor Interfaces for Semibiological Photosynthesis"

260. Quek, Low, Angerlini, [3], Stranks & **Reisner***, *J. Am. Chem. Soc.*, **2026**, *148*, 16019–16031
"Organic Semiconducting Hydrogel with Integrated Microbes and Enzymes for Selective Solar CO_2 Conversion"

259. Pulignani, Annuar, Cobb, [4], Bhattacharjee & **Reisner***, *J. Am. Chem. Soc.*, **2026**, *148*, 12839–48
"Stabilizing Carbon Nitride Photoanodes for Alcohol Reforming and CO_2 Reduction under Concentrated Sunlight"

258. Vahey, Mu, [4], García-Melchor* & **Reisner***, *Nature Synth.*, **2026**, *5*, 871–84
"Anti-Friedel-Crafts alkylation via electron donor-acceptor photoinitiaton"

257. Kar & **Reisner***, *J. Am. Chem. Soc.,* **2026**, *148*, 10267–85
"Solar Air-to-Fuel Technologies for a Circular Carbon Economy"

256. Linley*, Pornrungroj* & **Reisner***, *Nature Chem. Eng.*, **2026**, *3*, 34–46
"Floating solar technologies for sustainable chemical synthesis on open water"

255. Rogolino, Linley, Kwarteng, Bonke, Pulignani & **Reisner***, *Chem*, **2026**, *12*, 102827
"Floatable carbon nitride-plastic composite for paired photocatalysis at the liquid-liquid interface"

254. Karak, Liu, Annuar & **Reisner***, *Adv. Mater.*, **2026**, *38*, e13457
"Covalent Organic Framework and Carbon Nitride Composite for Scalable Solar Reforming"

253. Chen, Liu, Mitra, Kim, Huang, Vahey, Annuar & **Reisner***, *J. Am. Chem. Soc.*, **2025**, *147*, 43509–16
"Solar Lignin Reforming with Tunable Selectivity Using a Hybrid Photocatalyst in Aqueous Solution"

252. Yeung, Liu, Vahey, Cobb, [4], Pereira & **Reisner***, *Joule,* **2025**, *9*, 102165
"Semi-artificial leaf interfacing organic semiconductors and enzymes for solar chemical synthesis"

251. Low, Rodríguez-Jiménez, Rogolino, [3], Pereira & **Reisner***, *Angew. Chem. Int. Ed.*, **2025**, *64*, e202515810
"Enzymatic Flow Electrolyzer for CO_2 and Waste Comproportionation and Its Use in Alkene Hydrocarboxylation"

250. Su, Rodríguez-Jiménez, Short & **Reisner***, *Chem. Sci.*, **2025**, *16*, 11801–08
"Adapting gas fermenting bacteria for light-driven domino valorisation of CO_2"

249. Bouwens, Cobb, Yeung, Liu, Martins, Pereira & **Reisner***, *J. Am. Chem. Soc.*, **2025**, *147*, 13114–19
"Semiartificial photoelectrochemistry for CO_2-mediated enantioselective organic synthesis"

248. Liu, Yeung & **Reisner***, *Energy Environ. Sci.*, **2025**, *18*, 7023–33
"Photoelectrochemical comproportionation of pre-treated PET plastics and CO_2 to formate"

247. Ciotti, Rahaman, Yeung, Li*, **Reisner*** & García-Melchor*, *J. Am. Chem. Soc.,* **2025**, *147*, 13158–68
"Driving electrochemical organic hydrogenations on metal catalysts by tailoring hydrogen surface coverages"

246. Rahaman, Pulignani, Miller, [3], Pereira & **Reisner***, *J. Am. Chem. Soc.,* **2025**, *147*, 8168–77
"Solar CO_2 Reduction–Alcohol Oxidation Using Semiartificial Suspension, Photocatalyst Sheet and PEC Devices"

245. Liu, Rodríguez-Jiménez, [11], Hammarström & **Reisner***, *Angew. Chem. Int. Ed.,* **2025**, *64*, e202424222
"Bio-Inspired Self-Assembly of Enzyme-Micelle Systems for Semi-Artificial Photosynthesis"

244. Kar, Kim, Annuar, Sarma, Stanton, [2], Karak, Greer & **Reisner***, *Nature Energy,* **2025**, *10*, 448–59
"Direct air carbon capture for solar fuels production in flow"

243. Andrei, Roh, Lin, Lee, Shan, Lin, Shelton, **Reisner** & Yang*, *Nature Catal.,* **2025**, *8*, 137–46
"Perovskite-driven solar C_2 hydrocarbon synthesis from CO_2"

242. Andrei, Chiang, Rahaman, [3], Stranks* & **Reisner***, *Energy Environ. Sci.*, **2025**, *18*, 3623–32
"Modular perovskite-$BiVO_4$ artificial leaves towards syngas synthesis on a m^2 scale"

241. Ming, Cobb, Rahaman, Sammy, **Reisner** & Wheatley*, *Adv. Funct. Mater.,* **2024**, *34*, 2411006
"Anisotropic Heterobimetallic Nanomaterials with Controlled Composition for O_2 Reduction at Low Loading"

240. Zhang, Jaenecke, [6], Butt, **Reisner** & Jeuken*, *J. Am. Chem. Soc.,* **2024**, *146*, 34260–64
"Semiartificial Photosynthetic Nanoreactors for H_2 Generation"

249. Hisatomi, [3], **Reisner**, Nishiyama, Kudo, Yamada & Domen*, *Front. Sci.,* **2024**, *2*, 1411644
"Photocatalytic water splitting for large-scale solar-to-chemical conversion and storage"

238. Liu, Annuar, [4], Manuel, Pereira & **Reisner***, *J. Am. Chem. Soc.,* **2024**, *146*, 29865–76
"Solar Fuel Synthesis Using a Semiartificial Colloidal Z-scheme"

237. Cobb, Pornrungroj, Andrei, Badiani, Su, Manuel, Pereira & **Reisner***, *Device,* **2024**, *2*, 100505
"Photoelectrochemical-thermoelectric device for semi-artificial CO_2 fixation employing full solar spectrum utilization"

236. Kalathil, Rahaman, Lam, Augustin, Greer & **Reisner***, *Angew. Chem. Int. Ed.,* **2024**, *63*, e202409192
"Solar-driven Methanogenesis through Microbial Ecosystem Engineering on Carbon Nitride"

235. Macpherson, Lawson, [3], **Reisner**, Euser*, Stranks* & Gentleman*, *ACS Catal.,* **2024**, *14*, 12006–15
"Influence of Electron Donors on the Charge Transfer Dynamics of Carbon Nanodots in Photocatalytic Systems"

234. Yeung, Andrei, Lee, Durrant & **Reisner***, *Adv. Mater.*, **2024**, *36*, 2404110
"Organic Semiconductor-$BiVO_4$ Tandem Devices for Solar-Driven H_2O and CO_2 Splitting"

233. Robertson, Zhang, **Reisner**, Butt & Jeuken*, *Chem. Sci.*, **2024**, *15*, 9893–914
"Engineering of bespoke photosensitiser–microbe interfaces for enhanced semi-artificial photosynthesis"

232. Bonke, Trezza, Bergamasco, [3], Chiavazzo* & **Reisner***, *J. Am. Chem. Soc.,* **2024**, *146*, 15648–58
"Optimization of Self-Assembled Photocatalytic CO_2 Reduction Performance Using Machine Learning Algorithms"

231. Pan, Dai, [14], **Reisner,** [2], Hagfeldt*, Grätzel* & Stranks*, *Nature*, **2024**, *628*, 765–70
"High carrier mobility along the [111] orientation in Cu_2O photoelectrodes"

230. Kim, Bhattacharjee, Lam, Casadevall, Rodríguez-Jiménez & **Reisner***, *Small*, **2024**, *20*, 2400057
"Photocatalytic CO_2 reduction using homogeneous carbon dots with a molecular cobalt catalyst"

229. Liu, Pulignani, Webb, Cobb, [2], Milton & **Reisner***, *Chem. Sci.,* **2024**, *15*, 6088–94
"Electrostatic [FeFe]-hydrogenase–carbon nitride assemblies for efficient solar hydrogen production"

228. Sun, Bhattacharjee, Xiao*, Li, [4], **Reisner**, MacManus-Driscoll*, *J. Mater. Chem. C*, **2024**, *12*, 4779–91
"Low-temperature open-atmosphere growth of WO_3 thin films with tunable and high-performance photoresponse"

227. Seif-Eddine, Cobb, Dang, Abdiaziz, Bajada, **Reisner** & Roessler*, *Nature Chem.*, **2024**, *16*, 1015–23
"Operando film-electrochemical EPR spectroscopy tracks radical intermediates in surface-immobilized catalysts"

226. Bhattacharjee, Linley & **Reisner***, *Nature Rev. Chem.,* **2024**, *8,* 87-105
"Solar reforming as an emerging technology for circular chemical industries"

225. Cobb, Rodríguez-Jiménez & **Reisner***, *Angew. Chem. Int. Ed.,* **2024**, *63*, e202310547
"Connecting Biological and Synthetic Approaches for Electrocatalytic CO_2 Reduction"

224. Rodríguez-Jiménez, Lam, Bhattacharjee & **Reisner***, *Green Chem.,* **2023,** *25*, 10611–21
"Valorisation of lignocellulose and low concentration CO_2 using fractionation–photocatalysis–electrolysis process"

223. Pornrungroj, Annuar, Wang, [2], Andrei & **Reisner***, *Nature Water*, **2023**, *1*, 952–60
"Hybrid photothermal-photocatalyst sheets for solar-driven overall water splitting coupled to water purification"

222. Bhattacharjee, Guo, Lam, [6], Hollfelder* & **Reisner***, *J. Am. Chem. Soc.,* **2023**, *145*, 20355–64
"Chemoenzymatic Photoreforming: A Sustainable Approach for Solar Fuel Generation from Plastic Feedstocks"

221. Casadevall, Lage, Mu, Greer, [4], García-Melchor* & **Reisner***, *Nanoscale*, **2023**, *15*, 15775-15784
"Size-dependent activity of carbon dots for photocatalytic H_2 generation with a molecular Ni cocatalyst"

220. Bonchio, Bonin*, [4], **Reisner**, Sarkar, Toma & Robert*, *Nature Catal.*, **2023**, *6*, 657–65
"Best practices for experiments and reporting in photocatalytic CO_2 reduction"

219. Fang, Rahaman, Bharti, **Reisner**, Robert, Ozin & Hu*, *Nature Rev. Methods Primers*, **2023**, *3*, 61
"Photocatalytic CO_2 reduction"

218. Zhang, Casadevall, [2], Butt*, **Reisner*** & Jeuken*, *Adv. Funct. Mater.*, **2023**, *33*, 202302204.
"Rational Design of Covalent Multiheme Cytochrome-Carbon Dot Biohybrids for Photoinduced Electron Transfer"

217. Lawson, Gentleman, [3], Petit, Frosz, **Reisner*** & Euser*, *ACS Catal.*, **2023**, *13*, 2300077
"Low-Volume Reaction Monitoring of Carbon Dot Light Absorbers in Optofluidic Microreactors"

216. Kar, Rahaman, Andrei, Bhattacharjee, Roy & **Reisner***, *Joule*, **2023**, *7*, 1496–514
"Integrated capture and solar-driven utilization of CO_2 from flue gas and air"

215. Pornrungroj, Andrei & **Reisner***, *J. Am. Chem. Soc.*, **2023**, *145*, 13709–14
"Thermoelectric–Photoelectrochemical Water Splitting under Concentrated Solar Irradiation"

214. Galushchinski, Pulignani, Szalad, **Reisner**, [4], Savateev* & Antonietti, *Solar RRL*, **2023**, *7*, 2300077
"Heterostructured PHI-PTI/Li^+Cl^- Carbon Nitrides for Multiple Photocatalytic Applications"

214. Rahaman, Andrei, Wright, [5], Baumberg & **Reisner***, *Nature Energy*, **2023**, *8*, 629–38
"Solar-driven liquid multicarbon fuel production using a standalone perovskite-$BiVO_4$ artificial leaf"

212. Linley & **Reisner***, *Adv. Sci.*, **2023**, *10*, 2207314
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End