Julien Bonin

List of Publications by Year
in descending order

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38	3,514	218677 26	302126 39
papers	citations	h-index	g-index

40	40	40	3719
all docs	docs citations	times ranked	citing authors

#	ARTICLE	IF	CITATIONS
1	Visible-light-driven methane formation from CO2 with a molecular iron catalyst. Nature, 2017, 548, 74-77.	27.8	730
2	Molecular Catalysis of the Electrochemical and Photochemical Reduction of CO₂ with Earth-Abundant Metal Complexes. Selective Production of CO vs HCOOH by Switching of the Metal Center. Journal of the American Chemical Society, 2015, 137, 10918-10921.	13.7	294
3	Selective and Efficient Photocatalytic CO₂ Reduction to CO Using Visible Light and an Iron-Based Homogeneous Catalyst. Journal of the American Chemical Society, 2014, 136, 16768-16771.	13.7	275
4	Highlights and challenges in the selective reduction of carbon dioxide to methanol. Nature Reviews Chemistry, 2021, 5, 564-579.	30.2	253
5	Molecular catalysis of CO₂ reduction: recent advances and perspectives in electrochemical and light-driven processes with selected Fe, Ni and Co aza macrocyclic and polypyridine complexes. Chemical Society Reviews, 2020, 49, 5772-5809.	38.1	233
6	Efficient Visible-Light-Driven CO₂ Reduction by a Cobalt Molecular Catalyst Covalently Linked to Mesoporous Carbon Nitride. Journal of the American Chemical Society, 2020, 142, 6188-6195.	13.7	199
7	Molecular catalysis of the electrochemical and photochemical reduction of CO2 with Fe and Co metal based complexes. Recent advances. Coordination Chemistry Reviews, 2017, 334, 184-198.	18.8	195
8	Visible-Light-Driven Conversion of CO₂ to CH₄ with an Organic Sensitizer and an Iron Porphyrin Catalyst. Journal of the American Chemical Society, 2018, 140, 17830-17834.	13.7	150
9	Homogeneous Photocatalytic Reduction of CO₂ to CO Using Iron(0) Porphyrin Catalysts: Mechanism and Intrinsic Limitations. ChemCatChem, 2014, 6, 3200-3207.	3.7	121
10	Non-sensitized selective photochemical reduction of CO₂ to CO under visible light with an iron molecular catalyst. Chemical Communications, 2017, 53, 2830-2833.	4.1	100
11	Hydrogen-Bond Relays in Concerted Protonâ€“Electron Transfers. Accounts of Chemical Research, 2012, 45, 372-381.	15.6	84
12	Visibleâ€•light Homogeneous Photocatalytic Conversion of CO₂ into CO in Aqueous Solutions with an Iron Catalyst. ChemSusChem, 2017, 10, 4447-4450.	6.8	83
13	2022 roadmap on low temperature electrochemical CO₂ reduction. JPhys Energy, 2022, 4, 042003.	5.3	76
14	Intrinsic reactivity and driving force dependence in concerted protonâ€“electron transfers to water illustrated by phenol oxidation. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 3367-3372.	7.1	71
15	Reaction of the Hydroxyl Radical with Phenol in Water Up to Supercritical Conditions. Journal of Physical Chemistry A, 2007, 111, 1869-1878.	2.5	69
16	Water (in Water) as an Intrinsically Efficient Proton Acceptor in Concerted Proton Electron Transfers. Journal of the American Chemical Society, 2011, 133, 6668-6674.	13.7	65
17	Hybridization of Molecular and Graphene Materials for CO₂ Photocatalytic Reduction with Selectivity Control. Journal of the American Chemical Society, 2021, 143, 8414-8425.	13.7	64
18	Light-driven catalytic conversion of CO2 with heterogenized molecular catalysts based on fourth period transition metals. Coordination Chemistry Reviews, 2021, 443, 214018.	18.8	43

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19	A Case for Electrofuels. ACS Energy Letters, 2016, 1, 1062-1064.	17.4	39
20	Toward Visible-Light Photochemical CO₂-to-CH₄ Conversion in Aqueous Solutions Using Sensitized Molecular Catalysis. Journal of Physical Chemistry C, 2018, 122, 13834-13839.	3.1	38
21	Photoinduced Protonâ€Coupled Electron Transfers in Biorelevant Phenolic Systems. Photochemistry and Photobiology, 2011, 87, 1190-1203.	2.5	36
22	Highly efficient photocatalytic hydrogen evolution from nickel quinolinethiolate complexes under visible light irradiation. Journal of Power Sources, 2016, 324, 253-260.	7.8	34
23	Proton-Coupled Electron Transfers: pH-Dependent Driving Forces? Fundamentals and Artifacts. Journal of the American Chemical Society, 2013, 135, 14359-14366.	13.7	33
24	Absorption spectrum of the hydrated electron paired with nonreactive metal cations. Radiation Physics and Chemistry, 2005, 74, 288-296.	2.8	29
25	Pyridine as proton acceptor in the concerted proton electron transfer oxidation of phenol. Organic and Biomolecular Chemistry, 2011, 9, 4064.	2.8	29
26	Solvation Dynamics of the Electron Produced by Two-Photon Ionization of Liquid Polyols. 1. Ethylene Glycol. Journal of Physical Chemistry A, 2006, 110, 1705-1717.	2.5	26
27	Solvation Dynamics of Electron Produced by Two-Photon Ionization of Liquid Polyols. II. Propanediols. Journal of Physical Chemistry A, 2007, 111, 4902-4913.	2.5	18
28	Solvation Dynamics of Electron Produced by Two-Photon Ionization of Liquid Polyols. III. Glycerol. Journal of Physical Chemistry A, 2008, 112, 1880-1886.	2.5	18
29	Solvated Electron Pairing with Earth Alkaline Metals in THF 2Reactivity of the (MgII, es-) Pair with Aromatic and Halogenated Hydrocarbon Compounds. Journal of Physical Chemistry A, 2003, 107, 6587-6593.	2.5	17
30	Photoremoval of Protecting Groups: Mechanistic Aspects of 1,3-Dithiane Conversion to a Carbonyl Group. Journal of Organic Chemistry, 2015, 80, 2733-2739.	3.2	17
31	First Observation of Electron Paired with Divalent and Trivalent Nonreactive Metal Cations in Water. Journal of Physical Chemistry A, 2004, 108, 6817-6819.	2.5	16
32	Small-molecule activation with iron porphyrins using electrons, photons and protons: some recent advances and future strategies. Dalton Transactions, 2019, 48, 5869-5878.	3.3	15
33	Transient absorption spectroscopy studies of proton-coupled electron transfers. Neuroscience of Decision Making, 2013, 1, .	1.3	10
34	Formation and solvation dynamics of electrons in polyols. Journal of Molecular Liquids, 2008, 141, 124-129.	4.9	9
35	Phenoxazineâ€Sensitized CO₂â€toâ€CO Reduction with an Iron Porphyrin Catalyst: A Redox Propertiesâ€Catalytic Performance Study. ChemPhotoChem, 2022, 6, .	3.0	8
36	Photoinduced reductive cleavage of some chlorobenzylic compounds. New insights from comparison with electrochemically induced reactions. Physical Chemistry Chemical Physics, 2009, 11, 10275.	2.8	6

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37	Comparison of solvation dynamics of electrons in four polyols. Radiation Physics and Chemistry, 2008, 77, 1183-1189.	2.8	5
38	Carbon Dioxide Reduction to Methanol with a Molecular Cobaltâ€Catalystâ€Loaded Porous Carbon Electrode Assisted by a CIGS Photovoltaic Cell**. ChemPhotoChem, 2021, 5, 705-710.	3.0	4