Reiner Sebastian Sprick

List of Publications by Citations

62 papers	4,154 citations	26 h-index	64 g-index
82 ext. papers	5,564 ext. citations	11.7 avg, IF	5.85 L-index

#	Paper	IF	Citations
62	Tunable organic photocatalysts for visible-light-driven hydrogen evolution. *Journal of the American Chemical Society*, **2015**, 137, 3265-70	16.4	611
61	Sulfone-containing covalent organic frameworks for photocatalytic hydrogen evolution from water. *Nature Chemistry*, **2018**, 10, 1180-1189	17.6	526
60	Current understanding and challenges of solar-driven hydrogen generation using polymeric photocatalysts. *Nature Energy*, **2019**, 4, 746-760	62.3	326
59	Visible-Light-Driven Hydrogen Evolution Using Planarized Conjugated Polymer Photocatalysts. *Angewandte Chemie - International Edition*, **2016**, 55, 1792-6	16.4	288
58	A mobile robotic chemist. *Nature*, **2020**, 583, 237-241	50.4	239
57	Accelerated Discovery of Organic Polymer Photocatalysts for Hydrogen Evolution from Water through the Integration of Experiment and Theory. *Journal of the American Chemical Society*, **2019**, 141, 9063-9071	16.4	156
56	Understanding structure-activity relationships in linear polymer photocatalysts for hydrogen evolution. *Nature Communications*, **2018**, 9, 4968	17.4	153
55	Extended conjugated microporous polymers for photocatalytic hydrogen evolution from water. *Chemical Communications*, **2016**, 52, 10008-11	5.8	139
54	A stable covalent organic framework for photocatalytic carbon dioxide reduction. *Chemical Science*, **2020**, 11, 543-550	9.4	133
53	Visible-Light-Driven Hydrogen Evolution Using Planarized Conjugated Polymer Photocatalysts. *Angewandte Chemie*, **2016**, 128, 1824-1828	3.6	133
52	Photocatalytic Hydrogen Evolution from Water Using Fluorene and Dibenzothiophene Sulfone-Conjugated Microporous and Linear Polymers. *Chemistry of Materials*, **2019**, 31, 305-313	9.6	116
51	A Solution-Processable Polymer Photocatalyst for Hydrogen Evolution from Water. *Advanced Energy Materials*, **2017**, 7, 1700479	21.8	112
50	Structure-property relationships for covalent triazine-based frameworks: The effect of spacer length on photocatalytic hydrogen evolution from water. *Polymer*, **2017**, 126, 283-290	3.9	106
49	Tuning Photophysical Properties in Conjugated Microporous Polymers by Comonomer Doping Strategies. *Chemistry of Materials*, **2016**, 28, 3469-3480	9.6	90
48	Conjugated Polymers of Intrinsic Microporosity (C-PIMs). *Advanced Functional Materials*, **2014**, 24, 5219-5224	15.6	76
47	Maximising the hydrogen evolution activity in organic photocatalysts by co-polymerisation. *Journal of Materials Chemistry A*, **2018**, 6, 11994-12003	13	73
46	Nitrogen Containing Linear Poly(phenylene) Derivatives for Photo-catalytic Hydrogen Evolution from Water. *Chemistry of Materials*, **2018**, 30, 5733-5742	9.6	66

45	Emulsion polymerization derived organic photocatalysts for improved light-driven hydrogen evolution. *Journal of Materials Chemistry A*, **2019**, 7, 2490-2496	13	64
44	Structurally Diverse Covalent Triazine-Based Framework Materials for Photocatalytic Hydrogen Evolution from Water. *Chemistry of Materials*, **2019**, 31, 8830-8838	9.6	62
43	Tracking Charge Transfer to Residual Metal Clusters in Conjugated Polymers for Photocatalytic Hydrogen Evolution. *Journal of the American Chemical Society*, **2020**, 142, 14574-14587	16.4	56
42	Acid catalyzed synthesis of carbonyl-functionalized microporous ladder polymers with high surface area. *Polymer Chemistry*, **2010**, 1, 283	4.9	53
41	Side-chain tuning in conjugated polymer photocatalysts for improved hydrogen production from water. *Energy and Environmental Science*, **2020**, 13, 1843-1855	35.4	51
40	Covalent Organic Framework Nanosheets Embedding Single Cobalt Sites for Photocatalytic Reduction of Carbon Dioxide. *Chemistry of Materials*, **2020**, 32, 9107-9114	9.6	32
39	Photocatalyst Z-scheme system composed of a linear conjugated polymer and BiVO4 for overall water splitting under visible light. *Journal of Materials Chemistry A*, **2020**, 8, 16283-16290	13	32
38	Conjugated polymer donor-molecular acceptor nanohybrids for photocatalytic hydrogen evolution. *Chemical Communications*, **2020**, 56, 6790-6793	5.8	28
37	Photocatalytic proton reduction by a computationally identified, molecular hydrogen-bonded framework. *Journal of Materials Chemistry A*, **2020**, 8, 7158-7170	13	26
36	Hydrogen evolution from water using heteroatom substituted fluorene conjugated co-polymers. *Journal of Materials Chemistry A*, **2020**, 8, 8700-8705	13	26
35	Mapping binary copolymer property space with neural networks. *Chemical Science*, **2019**, 10, 4973-4984	9.4	24
34	Water Oxidation with Cobalt-Loaded Linear Conjugated Polymer Photocatalysts. *Angewandte Chemie - International Edition*, **2020**, 59, 18695-18700	16.4	24
33	Polymer photocatalysts with plasma-enhanced activity. *Journal of Materials Chemistry A*, **2020**, 8, 7125-7139	13	22
32	Photocatalytic hydrogen production performance of 1-D ZnO nanostructures: Role of structural properties. *International Journal of Hydrogen Energy*, **2020**, 45, 31942-31951	6.7	22
31	Structure–activity relationships in well-defined conjugated oligomer photocatalysts for hydrogen production from water. *Chemical Science*, **2020**, 11, 8744-8756	9.4	21
30	Structural Elucidation of Amorphous Photocatalytic Polymers from Dynamic Nuclear Polarization Enhanced Solid State NMR. *Macromolecules*, **2018**, 51, 3088-3096	5.5	17
29	Reprogramming bacterial protein organelles as a nanoreactor for hydrogen production. *Nature Communications*, **2020**, 11, 5448	17.4	17
28	Photocatalytically active ladder polymers. *Faraday Discussions*, **2019**, 215, 84-97	3.6	16

27	Reconstructed covalent organic frameworks.. *Nature*, **2022**, 604, 72-79	50.4	14
26	Triarylamine polymers of bridged phenylenes by (N-heterocyclic carbene)-palladium catalysed C–N coupling. *Journal of Materials Chemistry C*, **2013**, 1, 3327	7.1	13
25	Photocatalytic syngas production using conjugated organic polymers. *Journal of Materials Chemistry A*, **2021**, 9, 4291-4296	13	13
24	Integrated Covalent Organic Framework/Carbon Nanotube Composite as Li-Ion Positive Electrode with Ultra-High Rate Performance. *Advanced Energy Materials*, **2021**, 11, 2101880	21.8	12
23	Organic materials as photocatalysts for water splitting. *Journal of Materials Chemistry A*, **2021**, 9, 16222-16232	13	12
22	Metal–organic conjugated microporous polymer containing a carbon dioxide reduction electrocatalyst. *Sustainable Energy and Fuels*, **2019**, 3, 2990-2994	5.8	11
21	(N-heterocyclic carbene)-Pd catalyzed synthesis of poly(triarylamine)s by Buchwald-Hartwig coupling of aryl chlorides. *Journal of Polymer Science Part A*, **2012**, 50, 4155-4160	2.5	11
20	Conjugated nanomaterials for solar fuel production. *Nanoscale*, **2021**, 13, 634-646	7.7	11
19	Photocatalytic polymers of intrinsic microporosity for hydrogen production from water. *Journal of Materials Chemistry A*, **2021**, 9, 19958-19964	13	11
18	Extended conjugation in poly(triarylamine)s: synthesis, structure and impact on field-effect mobility. *Journal of Materials Chemistry C*, **2014**, 2, 6520-6528	7.1	10
17	Synthesis of poly(triarylamine)s by C–N coupling catalyzed by (N-heterocyclic carbene)-palladium complexes. *Reactive and Functional Polymers*, **2012**, 72, 337-340	4.6	10
16	Crosslinked Polyimide and Reduced Graphene Oxide Composites as Long Cycle Life Positive Electrode for Lithium-Ion Cells. *ChemSusChem*, **2020**, 13, 5571-5579	8.3	9
15	Bottom-up wet-chemical synthesis of a two-dimensional porous carbon material with high supercapacitance using a cascade coupling/cyclization route. *Journal of Materials Chemistry A*, **2021**, 9, 3303-3308	13	8
14	(N-Heterocyclic carbene)Pd(triethylamine)Cl2 as precatalyst for the synthesis of Poly(triarylamine)s. *Journal of Polymer Science Part A*, **2013**, 51, 4904-4911	2.5	7
13	Water Oxidation with Cobalt-Loaded Linear Conjugated Polymer Photocatalysts. *Angewandte Chemie*, **2020**, 132, 18854-18859	3.6	6
12	Nano-assemblies of a soluble conjugated organic polymer and an inorganic semiconductor for sacrificial photocatalytic hydrogen production from water. *Nanoscale*, **2020**, 12, 24488-24494	7.7	6
11	Acetylene-linked conjugated polymers for sacrificial photocatalytic hydrogen evolution from water. *Journal of Materials Chemistry A*, **2021**, 9, 17242-17248	13	5
10	Aromatic polymers made by reductive polydehalogenation of oligocyclic monomers as conjugated polymers of intrinsic microporosity (C-PIMs). *Polymer Chemistry*, **2019**, 10, 5200-5205	4.9	4

9	Synthetic approaches to artificial photosynthesis: general discussion. *Faraday Discussions*, **2019**, 215, 242-281	3.6	4
8	Photocatalytic Hydrogen Evolution from Water Using Heterocyclic Conjugated Microporous Polymers: Porous or Non-Porous?		3
7	Impact of Chemical Structure on the Dynamics of Mass Transfer of Water in Conjugated Microporous Polymers: A Neutron Spectroscopy Study. *ACS Applied Polymer Materials*, **2021**, 3, 765-776	4.3	3
6	Berichtigung: Visible-Light-Driven Hydrogen Evolution Using Planarized Conjugated Polymer Photocatalysts. *Angewandte Chemie*, **2018**, 130, 2546-2546	3.6	2
5	Time-Resolved Raman Spectroscopy of Polaron Formation in a Polymer Photocatalyst. *Journal of Physical Chemistry Letters*, **2021**, 12, 10899-10905	6.4	2
4	Photocatalytic Hydrogen Evolution from Water Using Heterocyclic Conjugated Microporous Polymers: Porous or Non-Porous?		2
3	Effect of substituting non-polar chains with polar chains on the structural dynamics of small organic molecule and polymer semiconductors. *Physical Chemistry Chemical Physics*, **2021**, 23, 7462-7471	3.6	2
2	Demonstrator devices for artificial photosynthesis: general discussion. *Faraday Discussions*, **2019**, 215, 345-363	3.6	1
1	Probing Dynamics of Water Mass Transfer in Organic Porous Photocatalyst Water-Splitting Materials by Neutron Spectroscopy. *Chemistry of Materials*, **2021**, 33, 1363-1372	9.6	1