Reiner Sebastian Sprick

List of Publications by Year
in descending order

68 papers	7,014 citations	109311 35 h-index	95259 68 g-index
82 all docs	82 docs citations	82 times ranked	5555 citing authors

#	Article	IF	Citations
1	Sulfone-containing covalent organic frameworks for photocatalytic hydrogen evolution from water. Nature Chemistry, 2018, 10, 1180-1189.	13.6	883
2	Tunable Organic Photocatalysts for Visible-Light-Driven Hydrogen Evolution. Journal of the American Chemical Society, 2015, 137, 3265-3270.	13.7	747
3	A mobile robotic chemist. Nature, 2020, 583, 237-241.	27.8	645
4	Current understanding and challenges of solar-driven hydrogen generation using polymeric photocatalysts. Nature Energy, 2019, 4, 746-760.	39.5	638
5	Visibleâ€Lightâ€Driven Hydrogen Evolution Using Planarized Conjugated Polymer Photocatalysts. Angewandte Chemie - International Edition, 2016, 55, 1792-1796.	13.8	372
6	A stable covalent organic framework for photocatalytic carbon dioxide reduction. Chemical Science, 2020, 11, 543-550.	7.4	265
7	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.	13.7	264
8	Understanding structure-activity relationships in linear polymer photocatalysts for hydrogen evolution. Nature Communications, 2018, 9, 4968.	12.8	244
9	Reconstructed covalent organic frameworks. Nature, 2022, 604, 72-79.	27.8	190
10	Extended conjugated microporous polymers for photocatalytic hydrogen evolution from water. Chemical Communications, 2016, 52, 10008-10011.	4.1	175
11	Photocatalytic Hydrogen Evolution from Water Using Fluorene and Dibenzothiophene Sulfone-Conjugated Microporous and Linear Polymers. Chemistry of Materials, 2019, 31, 305-313.	6.7	173
12	Visibleâ€Lightâ€Driven Hydrogen Evolution Using Planarized Conjugated Polymer Photocatalysts. Angewandte Chemie, 2016, 128, 1824-1828.	2.0	156
13	Structure-property relationships for covalent triazine-based frameworks: The effect of spacer length on photocatalytic hydrogen evolution from water. Polymer, 2017, 126, 283-290.	3.8	135
14	A Solutionâ€Processable Polymer Photocatalyst for Hydrogen Evolution from Water. Advanced Energy Materials, 2017, 7, 1700479.	19.5	135
15	Tracking Charge Transfer to Residual Metal Clusters in Conjugated Polymers for Photocatalytic Hydrogen Evolution. Journal of the American Chemical Society, 2020, 142, 14574-14587.	13.7	118
16	Structurally Diverse Covalent Triazine-Based Framework Materials for Photocatalytic Hydrogen Evolution from Water. Chemistry of Materials, 2019, 31, 8830-8838.	6.7	111
17	Tuning Photophysical Properties in Conjugated Microporous Polymers by Comonomer Doping Strategies. Chemistry of Materials, 2016, 28, 3469-3480.	6.7	106
18	Maximising the hydrogen evolution activity in organic photocatalysts by co-polymerisation. Journal of Materials Chemistry A, 2018, 6, 11994-12003.	10.3	93

#	Article	IF	Citations
19	Side-chain tuning in conjugated polymer photocatalysts for improved hydrogen production from water. Energy and Environmental Science, 2020, 13, 1843-1855.	30.8	92
20	Conjugated Polymers of Intrinsic Microporosity (Câ€PIMs). Advanced Functional Materials, 2014, 24, 5219-5224.	14.9	89
21	Nitrogen Containing Linear Poly(phenylene) Derivatives for Photo-catalytic Hydrogen Evolution from Water. Chemistry of Materials, 2018, 30, 5733-5742.	6.7	88
22	Emulsion polymerization derived organic photocatalysts for improved light-driven hydrogen evolution. Journal of Materials Chemistry A, 2019, 7, 2490-2496.	10.3	84
23	Covalent Organic Framework Nanosheets Embedding Single Cobalt Sites for Photocatalytic Reduction of Carbon Dioxide. Chemistry of Materials, 2020, 32, 9107-9114.	6.7	79
24	Integrated Covalent Organic Framework/Carbon Nanotube Composite as Liâ€Ion Positive Electrode with Ultraâ€High Rate Performance. Advanced Energy Materials, 2021, 11, 2101880.	19.5	73
25	Reprogramming bacterial protein organelles as a nanoreactor for hydrogen production. Nature Communications, 2020, 11, 5448.	12.8	69
26	Conjugated polymer donorâ€“molecular acceptor nanohybrids for photocatalytic hydrogen evolution. Chemical Communications, 2020, 56, 6790-6793.	4.1	62
27	Acid catalyzed synthesis of carbonyl-functionalized microporous ladder polymers with high surface area. Polymer Chemistry, 2010, 1, 283.	3.9	55
28	Water Oxidation with Cobaltâ€Loaded Linear Conjugated Polymer Photocatalysts. Angewandte Chemie - International Edition, 2020, 59, 18695-18700.	13.8	55
29	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.	10.3	52
30	Organic materials as photocatalysts for water splitting. Journal of Materials Chemistry A, 2021, 9, 16222-16232.	10.3	50
31	Hydrogen evolution from water using heteroatom substituted fluorene conjugated co-polymers. Journal of Materials Chemistry A, 2020, 8, 8700-8705.	10.3	47
32	Photocatalytic proton reduction by a computationally identified, molecular hydrogen-bonded framework. Journal of Materials Chemistry A, 2020, 8, 7158-7170.	10.3	45
33	Structureâ€“activity relationships in well-defined conjugated oligomer photocatalysts for hydrogen production from water. Chemical Science, 2020, 11, 8744-8756.	7.4	41
34	Photocatalytic hydrogen production performance of 1-D ZnO nanostructures: Role of structural properties. International Journal of Hydrogen Energy, 2020, 45, 31942-31951.	7.1	40
35	Photocatalytic Overall Water Splitting Under Visible Light Enabled by a Particulate Conjugated Polymer Loaded with Palladium and Iridium**. Angewandte Chemie - International Edition, 2022, 61, .	13.8	40
36	Rational design of covalent organic frameworks for efficient photocatalytic hydrogen peroxide production. Environmental Science: Nano, 2022, 9, 2464-2469.	4.3	38

#	Article	IF	Citations
37	Mapping binary copolymer property space with neural networks. Chemical Science, 2019, 10, 4973-4984.	7.4	36
38	Photocatalytic polymers of intrinsic microporosity for hydrogen production from water. Journal of Materials Chemistry A, 2021, 9, 19958-19964.	10.3	36
39	Photocatalytic syngas production using conjugated organic polymers. Journal of Materials Chemistry A, 2021, 9, 4291-4296.	10.3	33
40	Structural Elucidation of Amorphous Photocatalytic Polymers from Dynamic Nuclear Polarization Enhanced Solid State NMR. Macromolecules, 2018, 51, 3088-3096.	4.8	32
41	Polymer photocatalysts with plasma-enhanced activity. Journal of Materials Chemistry A, 2020, 8, 7125-7129.	10.3	31
42	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.	10.3	23
43	Conjugated nanomaterials for solar fuel production. Nanoscale, 2021, 13, 634-646.	5.6	21
44	Photocatalytically active ladder polymers. Faraday Discussions, 2019, 215, 84-97.	3.2	20
45	Acetylene-linked conjugated polymers for sacrificial photocatalytic hydrogen evolution from water. Journal of Materials Chemistry A, 2021, 9, 17242-17248.	10.3	18
46	Triarylamine polymers of bridged phenylenes by (N-heterocyclic carbene)-palladium catalysed Câ€“N coupling. Journal of Materials Chemistry C, 2013, 1, 3327.	5.5	17
47	Metalâ€“organic conjugated microporous polymer containing a carbon dioxide reduction electrocatalyst. Sustainable Energy and Fuels, 2019, 3, 2990-2994.	4.9	16
48	Water Oxidation with Cobaltâ€Loaded Linear Conjugated Polymer Photocatalysts. Angewandte Chemie, 2020, 132, 18854-18859.	2.0	16
49	Nano-assemblies of a soluble conjugated organic polymer and an inorganic semiconductor for sacrificial photocatalytic hydrogen production from water. Nanoscale, 2020, 12, 24488-24494.	5.6	14
50	Crosslinked Polyimide and Reduced Graphene Oxide Composites as Long Cycle Life Positive Electrode for Lithiumâ€Ion Cells. ChemSusChem, 2020, 13, 5571-5579.	6.8	14
51	(<i>N</i>â€heterocyclic carbene)â€Pd catalyzed synthesis of poly(triarylamine)s by Buchwaldâ€Hartwig coupling of aryl chlorides. Journal of Polymer Science Part A, 2012, 50, 4155-4160.	2.3	13
52	Extended conjugation in poly(triarylamine)s: synthesis, structure and impact on field-effect mobility. Journal of Materials Chemistry C, 2014, 2, 6520-6528.	5.5	13
53	Synthesis of poly(triarylamine)s by Câ€“N coupling catalyzed by (N-heterocyclic carbene)-palladium complexes. Reactive and Functional Polymers, 2012, 72, 337-340.	4.1	11
54	Time-Resolved Raman Spectroscopy of Polaron Formation in a Polymer Photocatalyst. Journal of Physical Chemistry Letters, 2021, 12, 10899-10905.	4.6	11

#	Article	IF	Citations
55	(<i>N</i> -Heterocyclic carbene)Pd(triethylamine)Cl₂ as precatalyst for the synthesis of Poly(triarylamine)s. Journal of Polymer Science Part A, 2013, 51, 4904-4911.	2.3	10
56	Organic heterojunctions for direct solar fuel generation. Communications Chemistry, 2020, 3, .	4.5	9
57	Aromatic polymers made by reductive polydehalogenation of oligocyclic monomers as conjugated polymers of intrinsic microporosity (C-PIMs). Polymer Chemistry, 2019, 10, 5200-5205.	3.9	7
58	Photocatalytic Overall Water Splitting Under Visible Light Enabled by a Particulate Conjugated Polymer Loaded with Palladium and Iridium**. Angewandte Chemie, 2022, 134, .	2.0	7
59	Synthetic approaches to artificial photosynthesis: general discussion. Faraday Discussions, 2019, 215, 242-281.	3.2	5
60	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.	2.8	5
61	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.	4.4	5
62	Probing Dynamics of Water Mass Transfer in Organic Porous Photocatalyst Water-Splitting Materials by Neutron Spectroscopy. Chemistry of Materials, 2021, 33, 1363-1372.	6.7	5
63	Berichtigung: Visibleâ€Lightâ€Driven Hydrogen Evolution Using Planarized Conjugated Polymer Photocatalysts. Angewandte Chemie, 2018, 130, 2546-2546.	2.0	3
64	Demonstrator devices for artificial photosynthesis: general discussion. Faraday Discussions, 2019, 215, 345-363.	3.2	2
65	The potential scarcity, or not, of polymeric overall water splitting photocatalysts. Sustainable Energy and Fuels, 2022, 6, 2233-2242.	4.9	2
66	Conjugated Porphyrin Materials for Solar Fuel Generation. Current Organic Chemistry, 2022, 26, 596-605.	1.6	2
67	Understanding Hydrogen Evolution Activity of Linear Organic Photocatalysts. , 0, , .		0
68	Understanding Hydrogen Evolution Activity of Linear Organic Photocatalysts. , 0, , .		0