

# Yongfu Sun

## List of Publications by Year in descending order

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81  
papers

16,028  
citations

31976

53  
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51608

86  
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89  
all docs

89  
docs citations

89  
times ranked

14093  
citing authors

#	ARTICLE	IF	CITATIONS
1	Metal <sup>+</sup> -Metal <sup>+</sup> pair sites steer C-C coupling for selective CO <sub>2</sub> photoreduction to C <sub>2</sub> hydrocarbons. Nano Research, 2022, 15, 1882-1891.	10.4	31
2	Constructing artificial mimic-enzyme catalysts for carbon dioxide electroreduction. Science China Chemistry, 2022, 65, 106-113.	8.2	7
3	Catalysts design for CO <sub>2</sub> electroreduction. Science China Chemistry, 2022, 65, 425-427.	8.2	11
4	Photoconverting polyethylene terephthalate into exclusive carbon dioxide by heterostructured NiO/Fe <sub>2</sub> O <sub>3</sub> nanosheets under mild conditions. Science China Materials, 2022, 65, 985-991.	6.3	11
5	Plastics-to-syngas photocatalysed by Co-Ga <sub>2</sub> O <sub>3</sub> nanosheets. National Science Review, 2022, 9, .	9.5	42
6	Progress and perspectives for engineering and recognizing active sites of two-dimensional materials in CO <sub>2</sub> electroreduction. Science China Chemistry, 2022, 65, 428-440.	8.2	19
7	Rational design of electrocatalytic carbon dioxide reduction for a zero-carbon network. Chemical Society Reviews, 2022, 51, 1234-1252.	38.1	148
8	Surface Engineering on Commercial Cu Foil for Steering C <sub>2</sub> H <sub>4</sub> /CH <sub>4</sub> Ratio in CO <sub>2</sub> Electroreduction. Nano Letters, 2022, 22, 2988-2994.	9.1	16
9	Industrial-current-density CO <sub>2</sub> -to-formate conversion with low overpotentials enabled by disorder-engineered metal sites. Nano Research, 2022, 15, 6999-7007.	10.4	9
10	Selective CO <sub>2</sub> Photoreduction to CH <sub>4</sub> via Pd <sup>+</sup> -Assisted Hydrodeoxygenation over CeO <sub>2</sub> Nanosheets. Angewandte Chemie - International Edition, 2022, 61, .	13.8	48
11	Industrial-Current-Density CO <sub>2</sub> -to-C <sub>2+</sub> Electroreduction by Anti-swelling Anion-Exchange Ionomer-Modified Oxide-Derived Cu Nanosheets. Journal of the American Chemical Society, 2022, 144, 10446-10454.	13.7	87
12	Room-Temperature Photooxidation of CH <sub>4</sub> to CH <sub>3</sub> OH with Nearly 100% Selectivity over Hetero-ZnO/Fe <sub>2</sub> O <sub>3</sub> Porous Nanosheets. Journal of the American Chemical Society, 2022, 144, 12357-12366.	13.7	59
13	Probing reaction pathways for H <sub>2</sub> O-mediated HCHO photooxidation at room temperature. Nano Research, 2021, 14, 1471-1478.	10.4	12
14	Selective CO <sub>2</sub> Photoreduction into C <sub>2</sub> Product Enabled by Charge-Polarized Metal Pair Sites. Nano Letters, 2021, 21, 2324-2331.	9.1	71
15	In-plane heterostructured Ag <sub>2</sub> S-In <sub>2</sub> S <sub>3</sub> atomic layers enabling boosted CO <sub>2</sub> photoreduction into CH <sub>4</sub> . Nano Research, 2021, 14, 4520-4527.	10.4	24
16	Efficient Photooxidation of Methane to Liquid Oxygenates over ZnO Nanosheets at Atmospheric Pressure and Near Room Temperature. Nano Letters, 2021, 21, 4122-4128.	9.1	60
17	Conversion of Waste Plastics into Value-Added Carbonaceous Fuels under Mild Conditions. Advanced Materials, 2021, 33, e2005192.	21.0	74
18	Ultrastable and Efficient Visible-Light-Driven CO <sub>2</sub> Reduction Triggered by Regenerative Oxygen Vacancies in Bi <sub>2</sub> O <sub>3</sub> /CO <sub>3</sub> Nanosheets. Angewandte Chemie - International Edition, 2021, 60, 13840-13846.	13.8	152

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19	Ultrastable and Efficient Visible-Light-Driven CO <sub>2</sub> Reduction Triggered by Regenerative Oxygen Vacancies in Bi <sub>2</sub> O <sub>3</sub> /CO <sub>3</sub> Nanosheets. <i>Angewandte Chemie</i> , 2021, 133, 13959-13965.	2.0	14
20	Atmospheric CO <sub>2</sub> capture and photofixation to near-unity CO by Ti <sup>3+</sup> -V <sub>o</sub> -Ti <sup>3+</sup> sites confined in TiO <sub>2</sub> ultrathin layers. <i>Science China Chemistry</i> , 2021, 64, 953-958.	8.2	12
21	Asymmetric Triple-Atom Sites Confined in Ternary Oxide Enabling Selective CO <sub>2</sub> Photothermal Reduction to Acetate. <i>Journal of the American Chemical Society</i> , 2021, 143, 18233-18241.	13.7	130
22	Conversion of Waste Plastics into Value-Added Carbonaceous Fuels under Mild Conditions (Adv.). <i>Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50</i>	21.0	4
23	Selective CH <sub>4</sub> Partial Photooxidation by Positively Charged Metal Clusters Anchored on Carbon Aerogel under Mild Conditions. <i>Nano Letters</i> , 2021, 21, 10368-10376.	9.1	21
24	Efficient infrared light induced CO <sub>2</sub> reduction with nearly 100% CO selectivity enabled by metallic CoN porous atomic layers. <i>Nano Energy</i> , 2020, 69, 104421.	16.0	88
25	Opportunity of Atomically Thin Two-Dimensional Catalysts for Promoting CO <sub>2</sub> Electroreduction. <i>Accounts of Chemical Research</i> , 2020, 53, 2964-2974.	15.6	72
26	Fundamentals and challenges of ultrathin 2D photocatalysts in boosting CO <sub>2</sub> photoreduction. <i>Chemical Society Reviews</i> , 2020, 49, 6592-6604.	38.1	220
27	Photocatalytic Conversion of Waste Plastics into C <sub>2</sub> Fuels under Simulated Natural Environment Conditions. <i>Angewandte Chemie</i> , 2020, 132, 15627-15631.	2.0	17
28	Progress and Perspective for In Situ Studies of CO <sub>2</sub> Reduction. <i>Journal of the American Chemical Society</i> , 2020, 142, 9567-9581.	13.7	125
29	Broad-Spectral-Response Photocatalysts for CO <sub>2</sub> Reduction. <i>ACS Central Science</i> , 2020, 6, 653-660.	11.3	79
30	Photocatalytic Conversion of Waste Plastics into C <sub>2</sub> Fuels under Simulated Natural Environment Conditions. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 15497-15501.	13.8	198
31	Visible-Light-Driven Overall Water Splitting Boosted by Tetrahedrally Coordinated Blende Cobalt(II) Oxide Atomic Layers. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 3032-3036.	13.8	41
32	Visible-Light-Driven Overall Water Splitting Boosted by Tetrahedrally Coordinated Blende Cobalt(II) Oxide Atomic Layers. <i>Angewandte Chemie</i> , 2019, 131, 3064-3068.	2.0	17
33	Selective visible-light-driven photocatalytic CO <sub>2</sub> reduction to CH <sub>4</sub> mediated by atomically thin CuIn <sub>5</sub> S <sub>8</sub> layers. <i>Nature Energy</i> , 2019, 4, 690-699.	39.5	948
34	Photocatalytic CO <sub>2</sub> Conversion of M <sub>0.33</sub> WO <sub>3</sub> Directly from the Air with High Selectivity: Insight into Full Spectrum-Induced Reaction Mechanism. <i>Journal of the American Chemical Society</i> , 2019, 141, 5267-5274.	13.7	224
35	Efficient and Robust Carbon Dioxide Electroreduction Enabled by Atomically Dispersed Sn <sup>+</sup> Sites. <i>Advanced Materials</i> , 2019, 31, e1808135.	21.0	321
36	Ultrathin Conductor Enabling Efficient IR Light CO <sub>2</sub> Reduction. <i>Journal of the American Chemical Society</i> , 2019, 141, 423-430.	13.7	146

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37	Methanol Oxidation Reaction Performance on Graphene-Supported PtAg Alloy Nanocatalyst: Contrastive Study of Electronic and Geometric Effects Induced from Ag Doping. ChemistrySelect, 2018, 3, 3615-3620.	1.5	6
38	Ni-doped ZnCo <sub>2</sub> O <sub>4</sub> atomic layers to boost the selectivity in solar-driven reduction of CO <sub>2</sub> . Nano Research, 2018, 11, 2897-2908.	10.4	55
39	Infrared Light-Driven CO <sub>2</sub> Overall Splitting at Room Temperature. Joule, 2018, 2, 1004-1016.	24.0	258
40	Efficient Visible-Light-Driven CO <sub>2</sub> Reduction Mediated by Defect-Engineered BiOBr Atomic Layers. Angewandte Chemie, 2018, 130, 8855-8859.	2.0	124
41	Efficient Visible-Light-Driven CO <sub>2</sub> Reduction Mediated by Defect-Engineered BiOBr Atomic Layers. Angewandte Chemie - International Edition, 2018, 57, 8719-8723.	13.8	439
42	Atomic layer confined vacancies for atomic-level insights into carbon dioxide electroreduction. Nature Communications, 2017, 8, 14503.	12.8	365
43	Highly Efficient and Exceptionally Durable CO <sub>2</sub> Photoreduction to Methanol over Freestanding Defective Single-Unit-Cell Bismuth Vanadate Layers. Journal of the American Chemical Society, 2017, 139, 3438-3445.	13.7	508
44	Carbon Dioxide Electroreduction into Syngas Boosted by a Partially Delocalized Charge in Molybdenum Sulfide Selenide Alloy Monolayers. Angewandte Chemie, 2017, 129, 9249-9253.	2.0	154
45	Defect-Mediated Electron-Hole Separation in One-Unit-Cell ZnIn <sub>2</sub> S <sub>4</sub> Layers for Boosted Solar-Driven CO <sub>2</sub> Reduction. Journal of the American Chemical Society, 2017, 139, 7586-7594.	13.7	764
46	Carbon Dioxide Electroreduction into Syngas Boosted by a Partially Delocalized Charge in Molybdenum Sulfide Selenide Alloy Monolayers. Angewandte Chemie - International Edition, 2017, 56, 9121-9125.	13.8	205
47	Partially Oxidized SnS <sub>2</sub> Atomic Layers Achieving Efficient Visible-Light-Driven CO <sub>2</sub> Reduction. Journal of the American Chemical Society, 2017, 139, 18044-18051.	13.7	368
48	Ultrathin Co <sub>3</sub> O <sub>4</sub> Layers Realizing Optimized CO <sub>2</sub> Electroreduction to Formate. Angewandte Chemie - International Edition, 2016, 55, 698-702.	13.8	424
49	Ultrathin TiO <sub>2</sub> flakes optimizing solar light driven CO <sub>2</sub> reduction. Nano Energy, 2016, 26, 692-698.	16.0	107
50	Metallic tin quantum sheets confined in graphene toward high-efficiency carbon dioxide electroreduction. Nature Communications, 2016, 7, 12697.	12.8	522
51	Partially oxidized atomic cobalt layers for carbon dioxide electroreduction to liquid fuel. Nature, 2016, 529, 68-71.	27.8	1,565
52	Innentitelbild: Metallic Single-Unit-Cell Orthorhombic Cobalt Diselenide Atomic Layers: Robust Water-Electrolysis Catalysts (Angew. Chem. 41/2015). Angewandte Chemie, 2015, 127, 12046-12046.	2.0	1
53	Metallic Single-Unit-Cell Orthorhombic Cobalt Diselenide Atomic Layers: Robust Water-Electrolysis Catalysts. Angewandte Chemie - International Edition, 2015, 54, 12004-12008.	13.8	166
54	Atomic-Layer-Confined Doping for Atomic-Level Insights into Visible-Light Water Splitting. Angewandte Chemie - International Edition, 2015, 54, 9266-9270.	13.8	158

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55	Single Unit Cell Bismuth Tungstate Layers Realizing Robust Solar CO <sub>2</sub> Reduction to Methanol. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 13971-13974.	13.8	342
56	Ultrathin Two-Dimensional Inorganic Materials: New Opportunities for Solid State Nanochemistry. <i>Accounts of Chemical Research</i> , 2015, 48, 3-12.	15.6	255
57	Atomically-thin two-dimensional sheets for understanding active sites in catalysis. <i>Chemical Society Reviews</i> , 2015, 44, 623-636.	38.1	872
58	Ultrahigh Energy Density Realized by a Single Layer $\text{Co}(\text{OH})_2$ All-Solid State Asymmetric Supercapacitor. <i>Angewandte Chemie</i> , 2014, 126, 13003-13007.	2.0	32
59	All-Surface Atomic Metal Chalcogenide Sheets for High Efficiency Visible Light Photoelectrochemical Water Splitting. <i>Advanced Energy Materials</i> , 2014, 4, 1300611.	19.5	154
60	Sandwich-like carbon-anchored ultrathin TiO <sub>2</sub> nanosheets realizing ultrafast lithium storage. <i>Inorganic Chemistry Frontiers</i> , 2014, 1, 58-64.	6.0	39
61	Atomically-thick two-dimensional crystals: electronic structure regulation and energy device construction. <i>Chemical Society Reviews</i> , 2014, 43, 530-546.	38.1	309
62	Free-floating ultrathin tin monoxide sheets for solar-driven photoelectrochemical water splitting. <i>Journal of Materials Chemistry A</i> , 2014, 2, 10647.	10.3	54
63	Photoelectrochemical Reactions: All-Surface Atomic Metal Chalcogenide Sheets for High Efficiency Visible Light Photoelectrochemical Water Splitting ( <i>Adv. Energy Mater.</i> 1/2014). <i>Advanced Energy Materials</i> , 2014, 4, .	19.5	3
64	Aligned Fe <sub>2</sub> TiO <sub>5</sub> -containing nanotube arrays with low onset potential for visible-light water oxidation. <i>Nature Communications</i> , 2014, 5, 5122.	12.8	161
65	Atomically-thin non-layered cobalt oxide porous sheets for highly efficient oxygen-evolving electrocatalysts. <i>Chemical Science</i> , 2014, 5, 3976.	7.4	332
66	Oxygen Vacancies Confined in Ultrathin Indium Oxide Porous Sheets for Promoted Visible-Light Water Splitting. <i>Journal of the American Chemical Society</i> , 2014, 136, 6826-6829.	13.7	1,178
67	Atomically Thin Tin Dioxide Sheets for Efficient Catalytic Oxidation of Carbon Monoxide. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 10569-10572.	13.8	155
68	Pits confined in ultrathin cerium(IV) oxide for studying catalytic centers in carbon monoxide oxidation. <i>Nature Communications</i> , 2013, 4, 2899.	12.8	326
69	Atomically Thick Bismuth Selenide Freestanding Single Layers Achieving Enhanced Thermoelectric Energy Harvesting. <i>Journal of the American Chemical Society</i> , 2012, 134, 20294-20297.	13.7	279
70	Sodium vanadium oxide Na <sub>2</sub> V <sub>6</sub> O <sub>16</sub> ·3H <sub>2</sub> O nanobelts and nanorings: A new room-temperature ferromagnetic semiconductor. <i>Journal of Materials Chemistry</i> , 2012, 22, 2560-2565.	6.7	26
71	Innentitelbild: Freestanding Tin Disulfide Single-Layers Realizing Efficient Visible-Light Water Splitting ( <i>Angew. Chem.</i> 35/2012). <i>Angewandte Chemie</i> , 2012, 124, 8798-8798.	2.0	4
72	Fabrication of flexible and freestanding zinc chalcogenide single layers. <i>Nature Communications</i> , 2012, 3, 1057.	12.8	470

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73	Freestanding Tin Disulfide Single-Layers Realizing Efficient Visible-Light Water Splitting. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 8727-8731.	13.8	545
74	Highly efficient visible-light-driven photocatalytic activities in synthetic ordered monoclinic BiVO <sub>4</sub> quantum tubes-graphene nanocomposites. <i>Nanoscale</i> , 2012, 4, 3761.	5.6	121
75	Highly depressed temperature-induced metal-insulator transition in synthetic monodisperse 10-nm V <sub>2</sub> O <sub>3</sub> pseudocubes enclosed by {012} facets. <i>Nanoscale</i> , 2011, 3, 2609.	5.6	32
76	New aspects of size-dependent metal-insulator transition in synthetic single-domain monoclinic vanadium dioxide nanocrystals. <i>Nanoscale</i> , 2011, 3, 4394.	5.6	67
77	Aqueous synthesis of mesostructured BiVO <sub>4</sub> quantum tubes with excellent dual response to visible light and temperature. <i>Nano Research</i> , 2010, 3, 620-631.	10.4	109
78	Sonochemical synthesis of nanostructured VOPO <sub>4</sub> ·2H <sub>2</sub> O/carbon nanotube composites with improved lithium ion battery performance. <i>Journal of Nanoparticle Research</i> , 2010, 12, 417-427.	1.9	19
79	Macroscaled mesoporous calcium carbonate tetragonal prisms: top-down solid-phase fabrication and applications of phase-change material support matrices. <i>CrystEngComm</i> , 2010, 12, 3571.	2.6	20
80	Synthetic loosely packed monoclinic BiVO <sub>4</sub> nanoellipsoids with novel multiresponses to visible light, trace gas and temperature. <i>Chemical Communications</i> , 2009, , 4542.	4.1	86
81	Selective CO <sub>2</sub> Photoreduction to CH <sub>4</sub> via Pd-assisted Hydrodeoxygenation over CeO <sub>2</sub> Nanosheets. <i>Angewandte Chemie</i> , 0, , .	2.0	0