

# Wei-Chih Liao

## List of Publications by Year in descending order

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Version: 2024-02-01

28  
papers

1,418  
citations

471509

17  
h-index

477307

29  
g-index

29  
all docs

29  
docs citations

29  
times ranked

2037  
citing authors

#	ARTICLE	IF	CITATIONS
1	CO <sub>2</sub> →Methanol Hydrogenation on Zirconia-Supported Copper Nanoparticles: Reaction Intermediates and the Role of the Metal-Support Interface. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 2318-2323.	13.8	435
2	Active Sites in Supported Single-Site Catalysts: An NMR Perspective. <i>Journal of the American Chemical Society</i> , 2017, 139, 10588-10596.	13.7	103
3	Metathesis Activity Encoded in the Metallacyclobutane Carbon-13 NMR Chemical Shift Tensors. <i>ACS Central Science</i> , 2017, 3, 759-768.	11.3	84
4	Molecular and Silica-Supported Molybdenum Alkyne Metathesis Catalysts: Influence of Electronics and Dynamics on Activity Revealed by Kinetics, Solid-State NMR, and Chemical Shift Analysis. <i>Journal of the American Chemical Society</i> , 2017, 139, 17597-17607.	13.7	80
5	Exploiting and Understanding the Selectivity of Ru-N-Heterocyclic Carbene Metathesis Catalysts for the Ethenolysis of Cyclic Olefins to $\pm$ -Dienes. <i>Journal of the American Chemical Society</i> , 2017, 139, 13117-13125.	13.7	70
6	Dynamic Nuclear Polarization Surface Enhanced NMR spectroscopy (DNP SENS): Principles, protocols, and practice. <i>Current Opinion in Colloid and Interface Science</i> , 2018, 33, 63-71.	7.4	58
7	Orbital Analysis of Carbon-13 Chemical Shift Tensors Reveals Patterns to Distinguish Fischer and Schrock Carbenes. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 10127-10131.	13.8	57
8	Ionic Conduction Mechanism in the Na <sub>2</sub> (B <sub>12</sub> H <sub>12</sub> ) <sub>0.5</sub> (B <sub>10</sub> H <sub>10</sub> ) <sub>0.5</sub> <i>closo</i> -Borate Solid-State Electrolyte: Interplay of Disorder and Ion-Ion Interactions. <i>Chemistry of Materials</i> , 2019, 31, 3449-3460.	6.7	54
9	Atomistic Description of Reaction Intermediates for Supported Metathesis Catalysts Enabled by DNP SENS. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 4743-4747.	13.8	52
10	CO <sub>2</sub> →Methanol Hydrogenation on Zirconia-Supported Copper Nanoparticles: Reaction Intermediates and the Role of the Metal-Support Interface. <i>Angewandte Chemie</i> , 2017, 129, 2358-2363.	2.0	51
11	Discerning $\gamma$ -Alumina Surface Sites with Nitrogen-15 Dynamic Nuclear Polarization Surface Enhanced NMR Spectroscopy of Adsorbed Pyridine. <i>Journal of Physical Chemistry C</i> , 2018, 122, 10871-10882.	3.1	45
12	Identifying Sn Site Heterogeneities Prevalent Among Sn $\beta$ Zeolites. <i>Helvetica Chimica Acta</i> , 2016, 99, 916-927.	1.6	44
13	Molecular Structure and Confining Environment of Sn Sites in Single-Site Chabazite Zeolites. <i>Chemistry of Materials</i> , 2017, 29, 8824-8837.	6.7	44
14	<i>In Situ</i> XRD and Dynamic Nuclear Polarization Surface Enhanced NMR Spectroscopy Unravel the Deactivation Mechanism of CaO-Based, Ca <sub>3</sub> Al <sub>2</sub> O <sub>6</sub> -Stabilized CO <sub>2</sub> Sorbents. <i>Chemistry of Materials</i> , 2018, 30, 1344-1352.	6.7	40
15	Dendritic polarizing agents for DNP SENS. <i>Chemical Science</i> , 2017, 8, 416-422.	7.4	35
16	Silicate-Phenolic Networks: Coordination-Mediated Deposition of Bioinspired Tannic Acid Coatings. <i>Chemistry - A European Journal</i> , 2019, 25, 9870-9874.	3.3	20
17	Protein-nucleotide contacts in motor proteins detected by DNP-enhanced solid-state NMR. <i>Journal of Biomolecular NMR</i> , 2017, 69, 157-164.	2.8	19
18	Structural Role and Spatial Distribution of Carbonate Ions in Amorphous Calcium Phosphate. <i>Journal of Physical Chemistry C</i> , 2021, 125, 4675-4693.	3.1	18

#	ARTICLE	IF	CITATIONS
19	One- and Two-Dimensional High-Resolution NMR from Flat Surfaces. ACS Central Science, 2019, 5, 515-523.	11.3	17
20	The Carbonate and Sodium Environments in Precipitated and Biomimetic Calcium Hydroxy-Carbonate Apatite Contrasted with Bone Mineral: Structural Insights from Solid-State NMR. Journal of Physical Chemistry C, 2021, 125, 10572-10592.	3.1	16
21	DNP-SENS Formulation Protocols To Study Surface Sites in Ziegler-Natta Catalyst $MgCl_2$ Supports Modified with Internal Donors. Journal of Physical Chemistry C, 2021, 125, 15994-16003.	3.1	16
22	Orbital Analysis of Carbon-13 Chemical Shift Tensors Reveals Patterns to Distinguish Fischer and Schrock Carbenes. Angewandte Chemie, 2017, 129, 10261-10265.	2.0	13
23	DNP NMR spectroscopy of cross-linked organic polymers: rational guidelines towards optimal sample preparation. Physical Chemistry Chemical Physics, 2020, 22, 3184-3190.	2.8	13
24	Metal-Surface Interactions and Surface Heterogeneity in "Well-Defined" Silica-Supported Alkene Metathesis Catalysts: Evidences and Consequences. Helvetica Chimica Acta, 2020, 103, e2000072.	1.6	10
25	Electronic Structure-Reactivity Relationship on Ruthenium Step-Edge Sites from Carbonyl $^{13}C$ Chemical Shift Analysis. Journal of Physical Chemistry Letters, 2018, 9, 3348-3353.	4.6	9
26	Atomistic Description of Reaction Intermediates for Supported Metathesis Catalysts Enabled by DNP SENS. Angewandte Chemie, 2016, 128, 4821-4825.	2.0	6
27	Molecular and Silica-Supported Mo and W $d^{0/sup>0</sup>}$ Imido-Methoxybenzylidene Complexes: Structure and Metathesis Activity. Helvetica Chimica Acta, 2019, 102, e1900190.	1.6	5
28	Nucleation and crystal formation in lithium disilicate-apatite glass-ceramic from a combined use of X-ray diffraction, solid-state NMR, and microscopy. Helvetica Chimica Acta, 2018, 102, e1800210.	1.6	2