

# Wei-Lin Chen

## List of Publications by Year in descending order

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95  
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citations

147801

31  
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168389

53  
g-index

100  
all docs

100  
docs citations

100  
times ranked

3347  
citing authors

#	ARTICLE	IF	CITATIONS
1	Polyoxometalates in dye-sensitized solar cells. <i>Chemical Society Reviews</i> , 2019, 48, 260-284.	38.1	261
2	Incorporating Polyoxometalates into a Porous MOF Greatly Improves Its Selective Adsorption of Cationic Dyes. <i>Chemistry - A European Journal</i> , 2014, 20, 6927-6933.	3.3	237
3	Dimeric [Mo <sub>2</sub> S <sub>12</sub> ] <sup>2+</sup> Cluster: A Molecular Analogue of MoS <sub>2</sub> Edges for Superior Hydrogen Evolution Electrocatalysis. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 15181-15185.	13.8	160
4	Membrane-Inspired Acidically Stable Dye-Sensitized Photocathode for Solar Fuel Production. <i>Journal of the American Chemical Society</i> , 2016, 138, 1174-1179.	13.7	122
5	Polyoxometalate-assisted synthesis of transition-metal cubane clusters as artificial mimics of the oxygen-evolving center of photosystem II. <i>Coordination Chemistry Reviews</i> , 2016, 313, 94-110.	18.8	111
6	Building block approach to nanostructures: step-by-step assembly of large lanthanide-containing polytungstoarsenate aggregates. <i>Dalton Transactions</i> , 2007, , 4293.	3.3	101
7	A new polyoxometalate-based 3d <sup>4f</sup> heterometallic aggregate: a model for the design and synthesis of new heterometallic clusters. <i>Dalton Transactions</i> , 2008, , 865-867.	3.3	99
8	Enhanced Visible Photovoltaic Response of TiO <sub>2</sub> Thin Film with an All-Inorganic Donor-Acceptor Type Polyoxometalate. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 13714-13721.	8.0	78
9	Ag/Ag <sub>3</sub> H <sub>3</sub> PMo <sub>12</sub> O <sub>40</sub> Nanowires with Enhanced Visible-Light-Driven Photocatalytic Performance. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 422-430.	8.0	75
10	A Novel Carboxyethyltin Functionalized Sandwich-type Germanotungstate: Synthesis, Crystal Structure, Photosensitivity, and Application in Dye-Sensitized Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 7876-7884.	8.0	71
11	An Inorganic Aggregate Based on a Sandwich-Type Polyoxometalate with Lanthanide and Potassium Cations: From 1D Chiral Ladder-Like Chains to a 3D Open Framework. <i>European Journal of Inorganic Chemistry</i> , 2007, 2007, 2216-2220.	2.0	61
12	A new electrodeposition approach for preparing polyoxometalates-based electrochromic smart windows. <i>Journal of Materials Chemistry A</i> , 2013, 1, 216-220.	10.3	59
13	Keggin-Type Polyoxometalate-Based ZIF-67 for Enhanced Photocatalytic Nitrogen Fixation. <i>ChemSusChem</i> , 2020, 13, 2769-2778.	6.8	59
14	Polyoxometalate-anatase TiO <sub>2</sub> composites are introduced into the photoanode of dye-sensitized solar cells to retard the recombination and increase the electron lifetime. <i>Dalton Transactions</i> , 2013, 42, 2691.	3.3	58
15	Two carboxyethyltin functionalized polyoxometalates for assembly on carbon nanotubes as efficient counter electrode materials in dye-sensitized solar cells. <i>Chemical Communications</i> , 2014, 50, 14678-14681.	4.1	56
16	A strategy for highly dispersed Mo <sub>2</sub> C/MoN hybrid nitrogen-doped graphene via ion-exchange resin synthesis for efficient electrocatalytic hydrogen reduction. <i>Nano Research</i> , 2018, 11, 4535-4548.	10.4	51
17	Keplerate-type polyoxometalate/semiconductor composite electrodes with light-enhanced conductivity towards highly efficient photoelectronic devices. <i>Journal of Materials Chemistry A</i> , 2016, 4, 14025-14032.	10.3	49
18	Graphene with cobalt oxide and tungsten carbide as a low-cost counter electrode catalyst applied in Pt-free dye-sensitized solar cells. <i>Journal of Power Sources</i> , 2018, 380, 18-25.	7.8	49

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19	Encapsulation of tungstophosphoric acid into harmless MIL-101(Fe) for effectively removing cationic dye from aqueous solution. <i>RSC Advances</i> , 2016, 6, 81622-81630.	3.6	48
20	Reduced State of the Graphene Oxide@Polyoxometalate Nanocatalyst Achieving High-Efficiency Nitrogen Fixation under Light Driving Conditions. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 37927-37938.	8.0	45
21	rGO Functionalized with a Highly Electronegative Keggin-Type Polyoxometalate for High-Energy-Density Aqueous Asymmetric Supercapacitors. <i>Chemistry - an Asian Journal</i> , 2018, 13, 3304-3313.	3.3	38
22	Controllable assembly of four new POM-based supramolecular compounds by altering the POM secondary building units from pseudo-Keggin to classical Keggin. <i>CrystEngComm</i> , 2011, 13, 2687.	2.6	37
23	Pure inorganic D <sup>4</sup> -A type polyoxometalate/reduced graphene oxide nanocomposite for the photoanode of dye-sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2016, 4, 3297-3303.	10.3	37
24	Resolution of chiral polyoxoanion [P2Mo18O62]6 <sup>-</sup> with histidine. <i>CrystEngComm</i> , 2010, 12, 2044.	2.6	36
25	Electropolymerization Polyoxometalate (POM)-Doped PEDOT Film Electrodes with Mastoid Microstructure and Its Application in Dye-Sensitized Solar Cells (DSSCs). <i>Industrial &amp; Engineering Chemistry Research</i> , 2013, 52, 6694-6703.	3.7	36
26	A Reusable N-Doped Carbon-Coated Mo <sub>2</sub> C Composite Counter Electrode for High-Efficiency Dye-Sensitized Solar Cells. <i>Chemistry - A European Journal</i> , 2017, 23, 17311-17317.	3.3	36
27	Multimetal-based nitrogen doped carbon nanotubes bifunctional electrocatalysts for triiodide reduction and water-splitting synthesized from polyoxometalate- intercalated layered double hydroxide pyrolysis strategy. <i>Applied Catalysis B: Environmental</i> , 2021, 280, 119421.	20.2	36
28	Polyoxometalate/TiO <sub>2</sub> Interfacial Layer with the Function of Accelerating Electron Transfer and Retarding Recombination for Dye-Sensitized Solar Cells. <i>Industrial &amp; Engineering Chemistry Research</i> , 2014, 53, 150-156.	3.7	35
29	A long-term stable Pt counter electrode modified by POM-based multilayer film for high conversion efficiency dye-sensitized solar cells. <i>Dalton Transactions</i> , 2012, 41, 2227.	3.3	32
30	Dawson-type polyoxometalate-based vacancies <i>g</i> -C <sub>3</sub> N <sub>4</sub> composite-nanomaterials for efficient photocatalytic nitrogen fixation. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 3315-3326.	6.0	32
31	The composite material based on Dawson-type polyoxometalate and activated carbon as the supercapacitor electrode. <i>Inorganic Chemistry Communication</i> , 2015, 55, 149-152.	3.9	31
32	The improved efficiency of quantum-dot-sensitized solar cells with a wide spectrum and pure inorganic donor-acceptor type polyoxometalate as a collaborative cosensitizer. <i>Journal of Materials Chemistry A</i> , 2016, 4, 4125-4133.	10.3	31
33	A Strategy for Breaking Polyoxometalate-based MOFs To Obtain High Loading Amounts of Nanosized Polyoxometalate Clusters to Improve the Performance of Dye-Sensitized Solar Cells. <i>Chemistry - A European Journal</i> , 2017, 23, 8871-8878.	3.3	31
34	Spontaneous resolution of a new diphosphonate-functionalized polyoxomolybdate. <i>CrystEngComm</i> , 2010, 12, 4017.	2.6	30
35	The assembly of vanadium( <i>iv</i> )-substituted Keggin-type polyoxometalate/graphene nanocomposite and its application in photovoltaic system. <i>Journal of Materials Chemistry A</i> , 2015, 3, 10174-10178.	10.3	30
36	Hierarchical Structure Superlattice P <sub>2</sub> Mo <sub>18</sub> /MoS <sub>2</sub> @C Nanocomposites: A Kind of Efficient Counter Electrode Materials for Dye-Sensitized Solar Cells. <i>ACS Applied Energy Materials</i> , 2019, 2, 5824-5834.	5.1	30

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37	New extended poly(oxomolybdophosphates) based on strontium(ii) linkers. CrystEngComm, 2011, 13, 3417.	2.6	28
38	Keggin and Dawson polyoxometalates as electrodes for flexible and transparent piezoelectric nanogenerators to efficiently utilize mechanical energy in the environment. Science Bulletin, 2020, 65, 35-44.	9.0	28
39	Three new multidimensional organic-inorganic hybrids based on polyoxometalates and copper coordination polymers with 4,4'-bipyridine ligands. Inorganica Chimica Acta, 2009, 362, 1412-1420.	2.4	26
40	A photovoltaic system composed of a keplerate-type polyoxometalate and a water-soluble poly(p-phenylenevinylene) derivative. Journal of Materials Chemistry A, 2013, 1, 6727.	10.3	26
41	A Series of [MnMo <sub>9</sub> O <sub>32</sub> ] <sup>6-</sup> Based Solids: Homochiral Transferred from Adjacent Polyoxoanions to One-, Two-, and Three-Dimensional Frameworks. Crystal Growth and Design, 2012, 12, 1111-1117.	3.0	25
42	The research of a new polyoxometalates based photosensitizer on dye sensitized solar cell. Inorganic Chemistry Communication, 2013, 38, 78-82.	3.9	25
43	A strategy for breaking the MOF template to obtain small-sized and highly dispersive polyoxometalate clusters loaded on solid films. Journal of Materials Chemistry A, 2015, 3, 14573-14577.	10.3	25
44	A Strategy to Obtain Long-Term Stable Heteropoly Blues for Photosensitive Property Investigations. Advanced Optical Materials, 2018, 6, 1800225.	7.3	25
45	TiO <sub>2</sub> film decorated with highly dispersed polyoxometalate nanoparticles synthesized by micelle directed method for the efficiency enhancement of dye-sensitized solar cells. Journal of Power Sources, 2016, 328, 1-7.	7.8	24
46	Two Chain Like B-Type-Anderson-Based Hybrids Synthesized in Choline Chloride/Urea Eutectic Mixture. Journal of Cluster Science, 2010, 21, 133-145.	3.3	22
47	The Application of ZnO Nanoparticles Containing Polyoxometalates in Dye-Sensitized Solar Cells. European Journal of Inorganic Chemistry, 2013, 2013, 1951-1959.	2.0	22
48	Three Keggin-Type Transition Metal-Substituted Polyoxometalates as Pure Inorganic Photosensitizers for p-Type Dye-Sensitized Solar Cells. Chemistry - A European Journal, 2016, 22, 3234-3238.	3.3	22
49	Sandwich-type silicotungstate modified TiO <sub>2</sub> microspheres for enhancing light harvesting and reducing electron recombination in dye-sensitized solar cells. Inorganic Chemistry Frontiers, 2017, 4, 559-565.	6.0	22
50	Polyoxometalate supported complexes as effective electron-transfer mediators in dye-sensitized solar cells. Dalton Transactions, 2014, 43, 1493-1497.	3.3	21
51	Micelle-Directing Synthesis of Ag-Doped WO <sub>3</sub> and MoO <sub>3</sub> Composites for Photocatalytic Water Oxidation and Organic Dye Adsorption. Chemistry - an Asian Journal, 2017, 12, 2597-2603.	3.3	21
52	A Strategy to Enhance the Efficiency of Quantum Dot-Sensitized Solar Cells by Decreasing Electron Recombination with Polyoxometalate/TiO <sub>2</sub> as the Electronic Interface Layer. ChemSusChem, 2017, 10, 2945-2954.	6.8	19
53	Review: The chirality and bionic studies of polyoxometalates: the synthetic strategy and structural chemistry. Journal of Coordination Chemistry, 2012, 65, 1-18.	2.2	18
54	The photovoltaic performance of dye-sensitized solar cells enhanced by using Dawson-type heteropolyacid and heteropoly blue-TiO <sub>2</sub> composite films as photoanode. Inorganic Chemistry Communication, 2014, 47, 138-143.	3.9	18

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55	Co-sensitization promoted light harvesting with a new mixed-addenda polyoxometalate $[Cu(C_{12}H_8N_2)_2]_2[V_2W_4O_{19}]_2$ in dye-sensitized solar cells. Dalton Transactions, 2015, 44, 18553-18562.	16.0	18
56	Polyoxometalate film simultaneously converts multiple low-value all-weather environmental energy to electricity. Nano Energy, 2020, 68, 104349.	3.3	17
57	Polyoxometalate-Derived Multi-Component $X/W_2C@X,N$ (X=Co, Si, Ge, B, and P) Nanoelectrocatalysts for Efficient Triiodide Reduction in Dye-Sensitized Solar Cells. Chemistry - A European Journal, 2020, 26, 4104-4111.	6.0	17
58	Highly dispersed redox-active polyoxometalates <sup>TM</sup> periodic deposition on multi-walled carbon nanotubes for boosting electrocatalytic triiodide reduction in dye-sensitized solar cells. Inorganic Chemistry Frontiers, 2020, 7, 1676-1684.	4.0	17
59	Heteropoly Blue/Protonation-Defective Graphitic Carbon Nitride Heterojunction for the Photo-Driven Nitrogen Reduction Reaction. Inorganic Chemistry, 2021, 60, 5829-5839.	8.0	17
60	Strategic Design of a Bifunctional NiFeCoW@NC Hybrid to Replace the Noble Platinum for Dye-Sensitized Solar Cells and Hydrogen Evolution Reactions. ACS Applied Materials & Interfaces, 2021, 13, 25010-25023.	2.2	16
61	Structural characterization of two lanthanide compounds based on polyoxometalate building units. Journal of Coordination Chemistry, 2009, 62, 347-357.	3.9	14
62	Synthesis and catalytic properties of novel POM@TiO <sub>2</sub> composite materials. Inorganic Chemistry Communication, 2013, 38, 96-99.	3.9	13
63	Synthesis and photocatalytic hydrogen evolution activity of three Keggin-type polyoxometalates with different central atoms. Inorganic Chemistry Communication, 2015, 61, 184-186.	6.0	13
64	Low-cost p-type dye-sensitized solar cells based on Dawson-type transition metal-substituted polyoxometalate inorganic co-sensitizers. Inorganic Chemistry Frontiers, 2017, 4, 1187-1191.	6.0	13
65	Ferroelectric polyoxometalate-modified nano semiconductor TiO <sub>2</sub> for increasing electron lifetime and inhibiting electron recombination in dye-sensitized solar cells. Inorganic Chemistry Frontiers, 2020, 7, 3072-3080.	5.2	12
66	Polyoxometalate modified all-weather solar cells for energy harvesting. Electrochimica Acta, 2020, 330, 135215.	2.0	12
67	Polyoxometalate-Based Metal-Organic Framework/Polypyrrole Composites toward Enhanced Supercapacitor Performance. European Journal of Inorganic Chemistry, 2021, 2021, 2063-2069.	3.3	11
68	A New Molybdophosphate Constructed From $\{Mo_2VO_4(H_2O)_6\}^{2+}$ and 1-Hydroxyethylidenediphosphonate. Journal of Cluster Science, 2010, 21, 147-154.	3.3	11
69	Two New Extended Frameworks Constructed from the Sandwiching Polytungstoantimonate Clusters. Journal of Cluster Science, 2011, 22, 73-85.	3.9	11
70	Multi-functional rare earth-containing polyoxometalates achieving high-efficiency tumor therapy and visual fluorescence monitoring. Inorganic Chemistry Communication, 2019, 104, 40-47.	3.3	11
71	Interfacial self-assembly engineering for constructing a 2D flexible superlattice polyoxometalate/rGO heterojunction for high-performance photovoltaic devices. Dalton Transactions, 2020, 49, 3766-3774.	6.0	11
72	Keggin-type polyoxometalate/thiospinel octahedron heterostructures for photoelectronic devices. Inorganic Chemistry Frontiers, 2020, 7, 2621-2628.		

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73	Polyoxometalate-assisted synthesis of the ZnO polyhedra in an alkali solution and their photoelectrical properties. <i>Materials Letters</i> , 2012, 87, 39-42.	2.6	10
74	The research of employing polyoxometalates as pure-inorganic electron-transfer mediators on dye-sensitized solar cells. <i>Inorganic Chemistry Communication</i> , 2014, 46, 89-93.	3.9	10
75	A strategy for utilizing hollow polyoxometalate nanocrystals to improve the efficiency of photovoltaic cells. <i>Inorganic Chemistry Communication</i> , 2018, 96, 73-80.	3.9	10
76	Synthesis of copper(II)-imidazole complex modified sandwich-type polyoxometalates for enhancing the power conversion efficiency in dye-sensitized solar cells. <i>Dyes and Pigments</i> , 2019, 168, 151-159.	3.7	10
77	Two new methylimidazole modified H <sub>2</sub> V <sub>10</sub> O <sub>40</sub> -sandwich-type polytungstoantimonates. <i>Journal of Coordination Chemistry</i> , 2011, 64, 71-81.	2.2	9
78	Multifunctional keplerate-type polyoxometalate-organic polymer composite films for interface engineering in perovskite photodetectors. <i>Dyes and Pigments</i> , 2019, 166, 174-180.	3.7	9
79	Two New One-Dimensional Chain-Like Compounds Constructed from the Sandwich-Type Polyoxotungstate Clusters. <i>Journal of Cluster Science</i> , 2008, 19, 401-410.	3.3	8
80	One polyoxometalate-based hybrid 3-D network: synthesis, structure, photo- and electro-catalytic properties. <i>Journal of Coordination Chemistry</i> , 2012, 65, 3254-3263.	2.2	8
81	Polyoxometalates-Based Semi-flexible Metal-Semiconductor Triboelectric Nanogenerators for Low Frequency and Small Amplitude Mechanical Energy Harvesting. <i>Chemistry - A European Journal</i> , 2021, 27, 10115-10122.	3.3	8
82	One-Pot Assembly of a New Mixed-Valent Aggregate Based on Inorganic Polyoxometalate Ligands. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2009, 635, 1678-1687.	1.2	7
83	Transparent photodetectors based on polyoxometalate modified electrospun ZnO homojunction nanowire intersection arrays. <i>Materials Chemistry Frontiers</i> , 2021, 6, 15-23.	5.9	7
84	Light induced ammonia synthesis by crystalline polyoxometalate-based hybrid frameworks coupled with the Sv-IT MoS <sub>2</sub> cocatalyst. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 3828-3838.	6.0	7
85	Photosensitive polyoxometalate-induced formation of thermotropic liquid crystal nanomaterial and its photovoltaic effect. <i>RSC Advances</i> , 2015, 5, 8194-8198.	3.6	6
86	A tri-vanadium-capped Keggin phosphomolybdate: synthesis, characterization, photocatalytic and bifunctional electrocatalytic properties. <i>Tungsten</i> , 2022, 4, 99-108.	4.8	6
87	Theoretical studies on redox properties, protonation sites, and electronic spectrum of a new type of polyoxometalate [Ti <sub>12</sub> Nb <sub>6</sub> O <sub>44</sub> ] <sup>10+</sup> by DFT. <i>International Journal of Quantum Chemistry</i> , 2009, 109, 1560-1565.	2.0	5
88	Two new polyoxometalate-based organic-inorganic hybrids: synthesis, crystal structure and characterization. <i>Journal of Coordination Chemistry</i> , 2009, 62, 1035-1050.	2.2	5
89	The dual effect of inorganic fullerene-like {Mo <sub>132</sub> } doped with SnO <sub>2</sub> for efficient perovskite-based photodetectors. <i>Materials Chemistry Frontiers</i> , 2021, 5, 6931-6940.	5.9	5
90	Synthesis, structures and electrochemical properties of four organic-inorganic hybrid polyoxometalates constructed from polyoxotungstate clusters and transition metal complexes. <i>Transition Metal Chemistry</i> , 2009, 34, 281-288.	1.4	4

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91	Nitrogen-doped carbon encapsulating $\hat{\text{I}}^3\text{-MoC/Ni}$ nanoparticles as efficient counter electrodes for dye-sensitized solar cells. <i>Journal of Coordination Chemistry</i> , 2020, 73, 2621-2631.	2.2	3
92	Defected $\text{MoS}_2$ Modified by Vanadium-Substituted Keggin-Type Polyoxometalates as Electrocatalysts for Triiodide Reduction in Dye-Sensitized Solar Cells. <i>Inorganic Chemistry</i> , 2022, 61, 422-430.	4.0	3
93	Two new compounds with microporous constructed by Waugh-type polyoxoanion and transition metal ions. <i>Science China Chemistry</i> , 2011, 54, 1418-1422.	8.2	2
94	A $\text{TiO}_2@ \{\text{Mo}_3\text{68}\}$ composite: synthesis, characterization, and application in dye-sensitized solar cells. <i>Journal of Coordination Chemistry</i> , 2014, 67, 3873-3883.	2.2	2
95	Theoretical study of the electronic and redox properties of different metal-substituted Lindqvist-type polyanions. <i>Molecular Physics</i> , 2009, 107, 53-58.	1.7	1