

# Wei-Ming Sun

## List of Publications by Year in descending order

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74  
papers

1,599  
citations

304743

22  
h-index

345221

36  
g-index

75  
all docs

75  
docs citations

75  
times ranked

1180  
citing authors

#	ARTICLE	IF	CITATIONS
1	A dual-modal aptasensor based on a multifunctional acridone derivate for exosomes detection. <i>Analytica Chimica Acta</i> , 2022, 1191, 339279.	5.4	19
2	Cucurbit[ <i>n</i> ]uril Supramolecular Assemblies-Regulated Charge Transfer for Luminescence Switching of Gold Nanoclusters. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 419-426.	4.6	12
3	On the Possibility of Using Aza-Cryptands to Design Superalkalis. <i>Organometallics</i> , 2022, 41, 412-417.	2.3	3
4	Non-metal-mediated <i>N</i> -oxyl radical (TEMPO)-induced acceptorless dehydrogenation of <i>N</i> -heterocycles <i>via</i> electrocatalysis. <i>RSC Advances</i> , 2022, 12, 5483-5488.	3.6	6
5	Sensitive, Highly Stable, and Anti-Fouling Electrode with Hexanethiol and Poly-A Modification for Exosomal microRNA Detection. <i>Analytical Chemistry</i> , 2022, 94, 5382-5391.	6.5	8
6	Designing Special Nonmetallic Superalkalis Based on a Cage-like Adamanzane Complexant. <i>Frontiers in Chemistry</i> , 2022, 10, 853160.	3.6	3
7	DIPEA-induced activation of OH <sup>•</sup> for the synthesis of amides <i>via</i> photocatalysis. <i>RSC Advances</i> , 2022, 12, 14724-14728.	3.6	1
8	Codelivery of $\text{Fe}^{2+}$ Stacked Dual Anticancer Drugs Based on Aloe-Derived Nanovesicles for Breast Cancer Therapy. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 27686-27702.	8.0	6
9	On the Role of Alkali-Metal-Like Superatom Al <sub>12</sub> P in Reduction and Conversion of Carbon Dioxide. <i>Chemistry - A European Journal</i> , 2021, 27, 1039-1045.	3.3	14
10	Colorimetric detection of exosomal microRNA through switching the visible-light-induced oxidase mimic activity of acridone derivate. <i>Biosensors and Bioelectronics</i> , 2021, 173, 112834.	10.1	40
11	Cisplatin under oriented external electric fields: A deeper insight into electrochemotherapy at the molecular level. <i>International Journal of Quantum Chemistry</i> , 2021, 121, e26578.	2.0	4
12	Electrochemical synthesis of quinazolinone <i>via</i> Ir <sub>2</sub> -catalyzed tandem oxidation in aqueous solution. <i>RSC Advances</i> , 2021, 11, 17721-17726.	3.6	12
13	Designing an alkali-metal-like superatom Ca <sub>3</sub> B for ambient nitrogen reduction to ammonia. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 18908-18915.	2.8	7
14	Effects of the nanowire length on large second-order nonlinear optical responses: a theoretical investigation of the thinnest doped beryllium nanowires with IR and UV working wavebands. <i>Dalton Transactions</i> , 2021, 50, 4613-4622.	3.3	1
15	On Close Parallels between the Zintl-Based Superatom Ge <sub>9</sub> Be and Chalcogen Elements. <i>Inorganic Chemistry</i> , 2021, 60, 3196-3206.	4.0	8
16	A systematic study of structures, stability, and electronic properties of alloy clusters AlBe ( <i>n</i> = 12): Comparison with pure beryllium clusters. <i>Polyhedron</i> , 2021, 196, 115005.	2.2	2
17	Electrochemical Trimming of Graphene Oxide Affords Graphene Quantum Dots for Fe <sup>3+</sup> Detection. <i>ACS Applied Nano Materials</i> , 2021, 4, 5220-5229.	5.0	13
18	A colorimetric sensor for acid phosphatase activity detection based on acridone derivative as visible-light-stimulated oxidase mimic. <i>Analytica Chimica Acta</i> , 2021, 1155, 338357.	5.4	18

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19	Imidazolium ionic liquid bearing urea moiety as a new corrosion inhibitor of mild steel. Journal of Molecular Liquids, 2021, 334, 116484.	4.9	10
20	Highly Conductive Ligand-Free Cs <sub>2</sub> PtBr <sub>6</sub> Perovskite Nanocrystals with a Narrow Bandgap and Efficient Photoelectrochemical Performance. Small, 2021, 17, e2102149.	10.0	11
21	On the potential of all-boron fullerene B <sub>40</sub> as a carrier for anti-cancer drug nitrosourea. Journal of Molecular Liquids, 2021, 342, 117533.	4.9	18
22	Electro-oxidative cyclization: access to quinazolinones <i>via</i> K <sub>2</sub> S <sub>2</sub> O <sub>8</sub> without transition metal catalyst and base. RSC Advances, 2021, 11, 31650-31655.	3.6	7
23	Electrochemical oxidative synthesis of 2-benzoylquinazolin-4(3 <i>H</i> )-one <i>via</i> C(sp <sup>3</sup> )-H amination under metal-free conditions. Catalysis Science and Technology, 2021, 11, 6374-6379.	4.1	5
24	Editorial: Atomic Clusters: Theory & Experiments. Frontiers in Chemistry, 2021, 9, 795113.	3.6	3
25	Synthesis of benzimidazole by mortar "pestle grinding method. Green Chemistry Letters and Reviews, 2021, 14, 612-619.	4.7	9
26	DFT study on the adsorption of 5-fluorouracil on B <sub>40</sub> , B <sub>39</sub> M, and M@B <sub>40</sub> (M = Mg, Al, Si, Mn, Cu, Zn). RSC Advances, 2021, 11, 39508-39517.	3.6	14
27	Rational Design of High-Performance Donor-Linker-Acceptor Hybrids Using a Schiff Base for Enabling Photoinduced Electron Transfer. Analytical Chemistry, 2020, 92, 2019-2026.	6.5	54
28	Controllable Synthesis and Biological Application of Schiff Bases from <i>d</i> -Glucosamine and Terephthalaldehyde. ACS Omega, 2020, 5, 24864-24870.	3.5	20
29	Unveiling the potential of superalkali cation Li <sub>3</sub> <sup>+</sup> for capturing nitrogen. Physical Chemistry Chemical Physics, 2020, 22, 26536-26543.	2.8	6
30	Theoretical investigation of perfect fullerene-like borospherene Ih-B <sub>20</sub> protected by alkaline earth metal: multi-layered spherical electride molecules as electric field manipulated second-order nonlinear optical switches. Dalton Transactions, 2020, 49, 15267-15275.	3.3	5
31	Understanding the Linear and Second-Order Nonlinear Optical Properties of UiO-66-Derived Metal-Organic Frameworks: A Comprehensive DFT Study. Journal of Physical Chemistry C, 2020, 124, 11595-11608.	3.1	22
32	On the Interaction between Superatom Al <sub>12</sub> Be and DNA Nucleobases/Base Pairs: Bonding Nature and Potential Applications in O <sub>2</sub> Activation and CO Oxidation. ACS Omega, 2020, 5, 15325-15334.	3.5	5
33	Designing a new class of excess electron compounds with unique electronic structures and extremely large non-linear optical responses. New Journal of Chemistry, 2020, 44, 6411-6419.	2.8	22
34	Coinage metalides: a new class of excess electron compounds with high stability and large nonlinear optical responses. Physical Chemistry Chemical Physics, 2020, 22, 8476-8484.	2.8	26
35	Frontispiece: Recent Progress on the Design, Characterization, and Application of Superalkalis. Chemistry - A European Journal, 2019, 25, .	3.3	0
36	Nonlinear optical response of endohedral all-metal electride cages 2e <sup>+</sup> Mg <sub>2</sub> (M@E12)2 <sup>+</sup> Ca <sub>2</sub> (M = Ni, Tj) ETQq0,0,0 rgBT /Overlock 1	5.5	16

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37	On the Possibility of Using the Jellium Model as a Guide To Design Bimetallic Superalkali Cations. Chemistry - A European Journal, 2019, 25, 4358-4366.	3.3	21
38	Coordination mode engineering in stacked-nanosheet metal-organic frameworks to enhance catalytic reactivity and structural robustness. Nature Communications, 2019, 10, 2779.	12.8	89
39	Small Janus dimer as electric field manipulated molecular clam switch and electric information storage unit. International Journal of Quantum Chemistry, 2019, 119, e26005.	2.0	1
40	Acridone Derivate Simultaneously Featuring Multiple Functions and Its Applications. Analytical Chemistry, 2019, 91, 8406-8414.	6.5	14
41	Recent Progress on the Design, Characterization, and Application of Superalkalis. Chemistry - A European Journal, 2019, 25, 9568-9579.	3.3	37
42	Effect of (super)alkali doping on the electronic and second-order nonlinear optical properties of graphitic C <sub>3</sub> N <sub>4</sub> . Optik, 2019, 183, 455-462.	2.9	18
43	Hyperbranched rolling circle amplification (HRCA)-based fluorescence biosensor for ultrasensitive and specific detection of single-nucleotide polymorphism genotyping associated with the therapy of chronic hepatitis B virus infection. Talanta, 2019, 191, 277-282.	5.5	34
44	Theoretical investigation on the low-energy isomer identification, structural evolution, stability, and electronic properties of Al <sub>10</sub> Be (xÅ= 1) nanoalloys. Journal of Molecular Graphics and Modelling, 2019, 87, 56-67.	2.4	0
45	Effective Extraction of Domoic Acid from Seafood Based on Postsynthetic-Modified Magnetic Zeolite Imidazolate Framework-8 Particles. Analytical Chemistry, 2019, 91, 2418-2424.	6.5	53
46	An ultrasensitive fluorescence aptasensor for carcino-embryonic antigen detection based on fluorescence resonance energy transfer from upconversion phosphors to Au nanoparticles. Analytical Methods, 2018, 10, 1552-1559.	2.7	20
47	Finding all-nonmetal transition-metal-like superatom and its magnetic building block. International Journal of Quantum Chemistry, 2018, 118, e25570.	2.0	2
48	Superatom Compounds under Oriented External Electric Fields: Simultaneously Enhanced Bond Energies and Nonlinear Optical Responses. Journal of Physical Chemistry C, 2018, 122, 7867-7876.	3.1	27
49	Decorating Zintl polyanions with alkali metal cations: A novel strategy to design superatom cations with low electron affinity. Journal of Alloys and Compounds, 2018, 740, 400-405.	5.5	19
50	Boron-Substituted Coronene: Intriguing Geometric and Electronic Properties, and Large Nonlinear Optical Response. ChemPhysChem, 2018, 19, 2518-2524.	2.1	11
51	Can Coinage Metal Atoms Be Capable of Serving as an Excess Electron Source of Alkalides with Considerable Nonlinear Optical Responses?. Inorganic Chemistry, 2017, 56, 4594-4600.	4.0	47
52	Hyperhalogen properties of early-transition-metal borates. RSC Advances, 2017, 7, 47073-47082.	3.6	4
53	Designing Alkalides with Considerable Nonlinear Optical Responses and High Stability Based on the Facially Polarized Janus <i>cis</i> -1,2,3,4,5,6-Hexafluorocyclohexane. Organometallics, 2017, 36, 3352-3359.	2.3	47
54	On the feasibility of designing hyperalkali cations using superalkali clusters as ligands. Journal of Chemical Physics, 2016, 145, 194303.	3.0	22

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55	Can Fluorinated Molecular Cages Be Utilized as Building Blocks of Hyperhalogens?. ChemPhysChem, 2016, 17, 1468-1474.	2.1	12
56	Theoretical Study of the Substituent Effects on the Nonlinear Optical Properties of a Room-Temperature Stable Organic Electride. ChemPhysChem, 2016, 17, 3907-3915.	2.1	15
57	A upconversion luminescence biosensor based on dual-signal amplification for the detection of short DNA species of c-erbB-2 oncogene. Scientific Reports, 2016, 6, 24813.	3.3	9
58	Stability and Nonlinear Optical Response of Alkalides that Contain a Completely Encapsulated Superalkali Cluster. ChemPhysChem, 2016, 17, 2672-2678.	2.1	39
59	A theoretical study on superalkali-doped nanocages: unique inorganic electrides with high stability, deep-ultraviolet transparency, and a considerable nonlinear optical response. Dalton Transactions, 2016, 45, 7500-7509.	3.3	78
60	Quasi-Chalcogen Characteristics of $\text{Al}_{12}\text{Be}$ : A New Member of the Three-Dimensional Periodic Table. Journal of Physical Chemistry C, 2016, 120, 2464-2471.	3.1	25
61	All-metal electride molecules $\text{CuAg@Ca}_7\text{M}$ (M = Be, Mg, and Ca) with multi-excess electrons and all-metal polyanions: molecular structures and bonding modes as well as large infrared nonlinear optical responses. Dalton Transactions, 2016, 45, 2656-2665.	3.3	24
62	Evolution of structure, stability, and nonlinear optical properties of the heterodinuclear CNLin ( $n=1-10$ ) clusters. Journal of Molecular Graphics and Modelling, 2015, 59, 92-99.	2.4	10
63	Theoretical study on alkali-metal doped $\text{N}_3\text{H}_3$ complexes: an in-depth understanding of the origin of electride and alkalide and their large nonlinear optical properties. Journal of Molecular Modeling, 2015, 21, 311.	1.8	4
64	A theoretical study on novel alkaline earth-based excess electron compounds: unique alkalides with considerable nonlinear optical responses. Physical Chemistry Chemical Physics, 2015, 17, 4524-4532.	2.8	41
65	Theoretical characterization of a series of N5-based aromatic hyperhalogen anions. Dalton Transactions, 2015, 44, 19901-19908.	3.3	17
66	Trivalent acid radical-centered $\text{YLi}_4^+$ ( $\text{Y} = \text{PO}_4, \text{AsO}_4$ ) Tj ETQq0 0 0 rgBT /Overlock 1 Transactions, 2014, 43, 18066-18073.	3.3	23
67	Theoretical study on superalkali ( $\text{Li}_3$ ) in ammonia: novel alkalides with considerably large first hyperpolarizabilities. Dalton Transactions, 2014, 43, 486-494.	3.3	60
68	Tunable photoluminescence and spectrum split from fluorinated to hydroxylated graphene. Nanoscale, 2014, 6, 3316.	5.6	84
69	Unusual Manipulative Effects of Spin Multiplicity and Excess Electron Number on the Structure and Nonlinear Optical Response in New Linear and Cyclic Electride Molecules with Multiexcess Electrons. Journal of Physical Chemistry C, 2014, 118, 23937-23945.	3.1	28
70	On the Potential Application of Superalkali Clusters in Designing Novel Alkalides with Large Nonlinear Optical Properties. Inorganic Chemistry, 2014, 53, 6170-6178.	4.0	125
71	Designing Aromatic Superatoms. Journal of Physical Chemistry C, 2013, 117, 24618-24624.	3.1	57
72	Substituent Effects on the Structural Features and Nonlinear Optical Properties of the Organic Alkalide $\text{Li}^+(\text{calix}[4]\text{pyrrole})\text{Li}^+$ . ChemPhysChem, 2013, 14, 408-416.	2.1	38

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73	Evolution of the structural and electronic properties of beryllium-doped aluminum clusters: comparison with neutral and cationic aluminum clusters. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 16467.	2.8	14
74	A Systematic Study of Structures, Stability, and Electronic Properties of Alloy Clusters Al <sub>n</sub> Be <sub>n</sub> (N =) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.4	0