

Wei-Ming Sun

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3262894/publications.pdf>

Version: 2024-02-01

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	On the Potential Application of Superalkali Clusters in Designing Novel Alkalides with Large Nonlinear Optical Properties. <i>Inorganic Chemistry</i> , 2014, 53, 6170-6178.	4.0	125
2	Coordination mode engineering in stacked-nanosheet metal-organic frameworks to enhance catalytic reactivity and structural robustness. <i>Nature Communications</i> , 2019, 10, 2779.	12.8	89
3	Tunable photoluminescence and spectrum split from fluorinated to hydroxylated graphene. <i>Nanoscale</i> , 2014, 6, 3316.	5.6	84
4	A theoretical study on superalkali-doped nanocages: unique inorganic electrides with high stability, deep-ultraviolet transparency, and a considerable nonlinear optical response. <i>Dalton Transactions</i> , 2016, 45, 7500-7509.	3.3	78
5	Theoretical study on superalkali (Li ₃) in ammonia: novel alkalides with considerably large first hyperpolarizabilities. <i>Dalton Transactions</i> , 2014, 43, 486-494.	3.3	60
6	Designing Aromatic Superatoms. <i>Journal of Physical Chemistry C</i> , 2013, 117, 24618-24624.	3.1	57
7	Rational Design of High-Performance Donor-Linker-Acceptor Hybrids Using a Schiff Base for Enabling Photoinduced Electron Transfer. <i>Analytical Chemistry</i> , 2020, 92, 2019-2026.	6.5	54
8	Effective Extraction of Domoic Acid from Seafood Based on Postsynthetic-Modified Magnetic Zeolite Imidazolate Framework-8 Particles. <i>Analytical Chemistry</i> , 2019, 91, 2418-2424.	6.5	53
9	Can Coinage Metal Atoms Be Capable of Serving as an Excess Electron Source of Alkalides with Considerable Nonlinear Optical Responses?. <i>Inorganic Chemistry</i> , 2017, 56, 4594-4600.	4.0	47
10	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. <i>Organometallics</i> , 2017, 36, 3352-3359.	2.3	47
11	A theoretical study on novel alkaline earth-based excess electron compounds: unique alkalides with considerable nonlinear optical responses. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 4524-4532.	2.8	41
12	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
13	Stability and Nonlinear Optical Response of Alkalides that Contain a Completely Encapsulated Superalkali Cluster. <i>ChemPhysChem</i> , 2016, 17, 2672-2678.	2.1	39
14	Substituent Effects on the Structural Features and Nonlinear Optical Properties of the Organic Alkalide Li ⁺ (calix[4]pyrrole)Li ⁺ . <i>ChemPhysChem</i> , 2013, 14, 408-416.	2.1	38
15	Recent Progress on the Design, Characterization, and Application of Superalkalis. <i>Chemistry - A European Journal</i> , 2019, 25, 9568-9579.	3.3	37
16	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. <i>Talanta</i> , 2019, 191, 277-282.	5.5	34
17	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. <i>Journal of Physical Chemistry C</i> , 2014, 118, 23937-23945.	3.1	28
18	Superatom Compounds under Oriented External Electric Fields: Simultaneously Enhanced Bond Energies and Nonlinear Optical Responses. <i>Journal of Physical Chemistry C</i> , 2018, 122, 7867-7876.	3.1	27

#	ARTICLE	IF	CITATIONS
19	Coinage metalides: a new class of excess electron compounds with high stability and large nonlinear optical responses. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 8476-8484.	2.8	26
20	Quasi-Chalcogen Characteristics of Al ₁₂ Be: A New Member of the Three-Dimensional Periodic Table. <i>Journal of Physical Chemistry C</i> , 2016, 120, 2464-2471.	3.1	25
21	All-metal electroneutral molecules CuAg@Ca ₇ 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. <i>Dalton Transactions</i> , 2016, 45, 2656-2665.	3.3	24
22	Trivalent acid radical-centered YLi ₄ ⁺ (Y = PO ₄ , AsO ₄) Tj ETQq0 0 0 rgBT /Overlock 1 Transactions, 2014, 43, 18066-18073.	3.3	23
23	On the feasibility of designing hyperalkali cations using superalkali clusters as ligands. <i>Journal of Chemical Physics</i> , 2016, 145, 194303.	3.0	22
24	Understanding the Linear and Second-Order Nonlinear Optical Properties of UiO-66-Derived Metal-Organic Frameworks: A Comprehensive DFT Study. <i>Journal of Physical Chemistry C</i> , 2020, 124, 11595-11608.	3.1	22
25	Designing a new class of excess electron compounds with unique electronic structures and extremely large non-linear optical responses. <i>New Journal of Chemistry</i> , 2020, 44, 6411-6419.	2.8	22
26	On the Possibility of Using the Jellium Model as a Guide To Design Bimetallic Superalkali Cations. <i>Chemistry - A European Journal</i> , 2019, 25, 4358-4366.	3.3	21
27	An ultrasensitive fluorescence aptasensor for carcino-embryonic antigen detection based on fluorescence resonance energy transfer from upconversion phosphors to Au nanoparticles. <i>Analytical Methods</i> , 2018, 10, 1552-1559.	2.7	20
28	Controllable Synthesis and Biological Application of Schiff Bases from α -Glucosamine and Terephthalaldehyde. <i>ACS Omega</i> , 2020, 5, 24864-24870.	3.5	20
29	Decorating Zintl polyanions with alkali metal cations: A novel strategy to design superatom cations with low electron affinity. <i>Journal of Alloys and Compounds</i> , 2018, 740, 400-405.	5.5	19
30	A dual-modal aptasensor based on a multifunctional acridone derivative for exosomes detection. <i>Analytica Chimica Acta</i> , 2022, 1191, 339279.	5.4	19
31	Effect of (super)alkali doping on the electronic and second-order nonlinear optical properties of graphitic C ₃ N ₄ . <i>Optik</i> , 2019, 183, 455-462.	2.9	18
32	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
33	On the potential of all-boron fullerene B ₄₀ as a carrier for anti-cancer drug nitrosourea. <i>Journal of Molecular Liquids</i> , 2021, 342, 117533.	4.9	18
34	Theoretical characterization of a series of N ₅ -based aromatic hyperhalogen anions. <i>Dalton Transactions</i> , 2015, 44, 19901-19908.	3.3	17
35	Nonlinear optical response of endohedral all-metal electroneutral cages 2e ⁻ Mg ₂ (M@E ₁₂) ₂ ⁺ Ca ₂ ⁺ (M = Ni, Tj ETQq1_1 0.784314 rgBT /D	5.5	16
36	Theoretical Study of the Substituent Effects on the Nonlinear Optical Properties of a Room-Temperature-Stable Organic Electride. <i>ChemPhysChem</i> , 2016, 17, 3907-3915.	2.1	15

#	ARTICLE	IF	CITATIONS
37	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
38	Acridone Derivate Simultaneously Featuring Multiple Functions and Its Applications. <i>Analytical Chemistry</i> , 2019, 91, 8406-8414.	6.5	14
39	On the Role of Alkali-Metal-Like Superatom Al_{12}P in Reduction and Conversion of Carbon Dioxide. <i>Chemistry - A European Journal</i> , 2021, 27, 1039-1045.	3.3	14
40	DFT study on the adsorption of 5-fluorouracil on B_{40} , B_{39}M , and M@B_{40} ($\text{M} = \text{Mg}, \text{Al}, \text{Si}, \text{Mn}, \text{Cu}, \text{Zn}$). <i>RSC Advances</i> , 2021, 11, 39508-39517.	3.6	14
41	Electrochemical Trimming of Graphene Oxide Affords Graphene Quantum Dots for Fe^{3+} Detection. <i>ACS Applied Nano Materials</i> , 2021, 4, 5220-5229.	5.0	13
42	Can Fluorinated Molecular Cages Be Utilized as Building Blocks of Hyperhalogens?. <i>ChemPhysChem</i> , 2016, 17, 1468-1474.	2.1	12
43	Electrochemical synthesis of quinazolinone <i>via</i> I_2 -catalyzed tandem oxidation in aqueous solution. <i>RSC Advances</i> , 2021, 11, 17721-17726.	3.6	12
44	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
45	Boron-Substituted Coronene: Intriguing Geometric and Electronic Properties, and Large Nonlinear Optical Response. <i>ChemPhysChem</i> , 2018, 19, 2518-2524.	2.1	11
46	Highly Conductive Ligand-Free Cs_2PtBr_6 Perovskite Nanocrystals with a Narrow Bandgap and Efficient Photoelectrochemical Performance. <i>Small</i> , 2021, 17, e2102149.	10.0	11
47	Evolution of structure, stability, and nonlinear optical properties of the heterodinuclear CN_{1n} ($n=1-10$) clusters. <i>Journal of Molecular Graphics and Modelling</i> , 2015, 59, 92-99.	2.4	10
48	Imidazolium ionic liquid bearing urea moiety as a new corrosion inhibitor of mild steel. <i>Journal of Molecular Liquids</i> , 2021, 334, 116484.	4.9	10
49	A upconversion luminescence biosensor based on dual-signal amplification for the detection of short DNA species of <i>c-erbB-2</i> oncogene. <i>Scientific Reports</i> , 2016, 6, 24813.	3.3	9
50	Synthesis of benzimidazole by mortar-pestle grinding method. <i>Green Chemistry Letters and Reviews</i> , 2021, 14, 612-619.	4.7	9
51	On Close Parallels between the Zintl-Based Superatom Ge_9Be and Chalcogen Elements. <i>Inorganic Chemistry</i> , 2021, 60, 3196-3206.	4.0	8
52	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
53	Designing an alkali-metal-like superatom Ca_3B for ambient nitrogen reduction to ammonia. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 18908-18915.	2.8	7
54	Electro-oxidative cyclization: access to quinazolinones <i>via</i> $\text{K}_2\text{S}_2\text{O}_8$ without transition metal catalyst and base. <i>RSC Advances</i> , 2021, 11, 31650-31655.	3.6	7

#	ARTICLE	IF	CITATIONS
55	Unveiling the potential of superalkali cation Li_3^+ for capturing nitrogen. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 26536-26543.	2.8	6
56	Non-metal-mediated N -oxyl radical (TEMPO)-induced acceptorless dehydrogenation of N -heterocycles <i>via</i> electrocatalysis. <i>RSC Advances</i> , 2022, 12, 5483-5488.	3.6	6
57	Codelivery of π -Stacked Dual Anticancer Drugs Based on Aloe-Derived Nanovesicles for Breast Cancer Therapy. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 27686-27702.	8.0	6
58	Theoretical investigation of perfect fullerene-like borospherene Ih-B_{20} protected by alkaline earth metal: multi-layered spherical electride molecules as electric field manipulated second-order nonlinear optical switches. <i>Dalton Transactions</i> , 2020, 49, 15267-15275.	3.3	5
59	On the Interaction between Superatom Al_{12}Be and DNA Nucleobases/Base Pairs: Bonding Nature and Potential Applications in O_2 Activation and CO Oxidation. <i>ACS Omega</i> , 2020, 5, 15325-15334.	3.5	5
60	Electrochemical oxidative synthesis of 2-benzoylquinazolin-4(3 <i>H</i>)-one <i>via</i> $\text{C}(\text{sp}^3)\text{-H}$ amination under metal-free conditions. <i>Catalysis Science and Technology</i> , 2021, 11, 6374-6379.	4.1	5
61	Theoretical study on alkali-metal doped N_3H_3 complexes: an in-depth understanding of the origin of electride and alkali and their large nonlinear optical properties. <i>Journal of Molecular Modeling</i> , 2015, 21, 311.	1.8	4
62	Hyperhalogen properties of early-transition-metal borates. <i>RSC Advances</i> , 2017, 7, 47073-47082.	3.6	4
63	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
64	Editorial: Atomic Clusters: Theory & Experiments. <i>Frontiers in Chemistry</i> , 2021, 9, 795113.	3.6	3
65	On the Possibility of Using Aza-Cryptands to Design Superalkalis. <i>Organometallics</i> , 2022, 41, 412-417.	2.3	3
66	Designing Special Nonmetallic Superalkalis Based on a Cage-like Adamantane Complexant. <i>Frontiers in Chemistry</i> , 2022, 10, 853160.	3.6	3
67	Finding π -nonmetal transition-metal-like superatom and its magnetic building block. <i>International Journal of Quantum Chemistry</i> , 2018, 118, e25570.	2.0	2
68	A systematic study of structures, stability, and electronic properties of alloy clusters AlBe ($n=12$): Comparison with pure beryllium clusters. <i>Polyhedron</i> , 2021, 196, 115005.	2.2	2
69	Small Janus dimer as electric field manipulated molecular clam switch and electric information storage unit. <i>International Journal of Quantum Chemistry</i> , 2019, 119, e26005.	2.0	1
70	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
71	DIPEA-induced activation of OH^+ for the synthesis of amides <i>via</i> photocatalysis. <i>RSC Advances</i> , 2022, 12, 14724-14728.	3.6	1
72	Frontispiece: Recent Progress on the Design, Characterization, and Application of Superalkalis. <i>Chemistry - A European Journal</i> , 2019, 25, .	3.3	0

#	ARTICLE	IF	CITATIONS
73	Theoretical investigation on the low-energy isomer identification, structural evolution, stability, and electronic properties of Al ₁₀ Be (x = 1) nanoalloys. Journal of Molecular Graphics and Modelling, 2019, 87, 56-67.	2.4	0
74	A Systematic Study of Structures, Stability, and Electronic Properties of Alloy Clusters Al _n Be _n (N = 1-10). Journal of Molecular Graphics and Modelling, 2019, 87, 56-67.	0.4	0