Chun-Hua Huang

List of Publications by Year
in descending order

45 papers	974 citations	567281 15 h-index	454955 30 g-index
46 all docs	46 docs citations	46 times ranked	817 citing authors

#	Article	IF	Citations
1	Free-Radical-Mediated Photoinduced Electron Transfer between 6-Thioguanine and Tryptophan Leading to DNAâ€“Protein-Like Cross-Link. Journal of Physical Chemistry B, 2022, 126, 14-22.	2.6	2
2	The critical role of superoxide anion radicals on delaying tetrachlorohydroquinone autooxidation by penicillamine. Free Radical Biology and Medicine, 2021, 163, 369-378.	2.9	4
3	Structureâ€“Activity Relationship Investigation on Reaction Mechanism between Chlorinated Quinoid Carcinogens and Clinically-Used Aldoxime Nerve-Agent Antidote under Physiological Condition. Chemical Research in Toxicology, 2021, 34, 1091-1100.	3.3	0
4	Ultrafast excited state dynamics and light-switching of [Ru(phen)2(dppz)]2+ in G-quadruplex DNA. Communications Chemistry, 2021, 4, .	4.5	9
5	Caffeic Acid Phenyl Ester (CAPE) Protects against Iron-Mediated Cellular DNA Damage through Its Strong Iron-Binding Ability and High Lipophilicity. Antioxidants, 2021, 10, 798.	5.1	10
6	Detecting and Quantifying Polyhaloaromatic Environmental Pollutants by Chemiluminescence-Based Analytical Method. Molecules, 2021, 26, 3365.	3.8	4
7	Mechanistic Study on Oxidative DNA Damage and Modifications by Haloquinoid Carcinogenic Intermediates and Disinfection Byproducts. Chemical Research in Toxicology, 2021, 34, 1701-1712.	3.3	5
8	The cell-impermeable Ru(II) polypyridyl complex as a potent intracellular photosensitizer under visible light irradiation via ion-pairing with suitable lipophilic counter-anions. Free Radical Biology and Medicine, 2021, 171, 69-79.	2.9	9
9	Potent oxidation of DNA by Ru(<scp>ii</scp>) tri(polypyridyl) complexes under visible light irradiation via a singlet oxygen-mediated mechanism. Inorganic Chemistry Frontiers, 2021, 8, 3421-3432.	6.0	7
10	The critical role of unique azido-substituted chloro-O-semiquinone radical intermediates in the synergistic toxicity between sodium azide and chlorocatecholic carcinogens. Free Radical Biology and Medicine, 2021, 177, 260-269.	2.9	0
11	An unexpected new pathway for nitroxide radical production via more reactve nitrogen-centered amidyl radical intermediate during detoxification of the carcinogenic halogenated quinones by N-alkyl hydroxamic acids. Free Radical Biology and Medicine, 2020, 146, 150-159.	2.9	8
12	Unexpected activation of N-alkyl hydroxamic acids to produce reactive N-centered free radicals and DNA damage by carcinogenic chlorinated quinones under normal physiological conditions. Free Radical Biology and Medicine, 2020, 146, 70-78.	2.9	10
13	Chiral Os(II) Polypyridyl Complexes as Enantioselective Nuclear DNA Imaging Agents Especially Suitable for Correlative High-Resolution Light and Electron Microscopy Studies. ACS Applied Materials & Interfaces, 2020, 12, 3465-3473.	8.0	12
14	An unexpected antioxidant and redox activity for the classic copper-chelating drug penicillamine. Free Radical Biology and Medicine, 2020, 147, 150-158.	2.9	14
15	First Direct and Unequivocal Electron Spin Resonance Spin-Trapping Evidence for pH-Dependent Production of Hydroxyl Radicals from Sulfate Radicals. Environmental Science & Technology, 2020, 54, 14046-14056.	10.0	110
16	Unexpected reversible and controllable nuclear uptake and efflux of the DNA â€œlight-switchingâ€• Ru(ii)-polypyridyl complex in living cellsviaion-pairing with chlorophenolate counter-anions. Journal of Materials Chemistry B, 2020, 8, 10327-10336.	5.8	5
17	Mechanism of synergistic DNA damage induced by caffeic acid phenethyl ester (CAPE) and Cu(II): Competitive binding between CAPE and DNA with Cu(II)/Cu(I). Free Radical Biology and Medicine, 2020, 159, 107-118.	2.9	10
18	Unusual Two-Step Claisen-type Rearrangement Reaction under Physiological Conditions. Journal of Organic Chemistry, 2020, 85, 14945-14953.	3.2	4

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19	First unequivocal identification of the critical acyl radicals from the anti-tuberculosis drug isoniazid and its hydrazide analogs by complementary applications of ESR spin-trapping and HPLC/MS methods. Free Radical Biology and Medicine, 2020, 154, 1-8.	2.9	11
20	Molecular mechanisms and potential applications of the intrinsic chemiluminescence produced from the degradation of haloaromatic pollutants during environmentally-friendly advanced oxidation processes. Environmental Science: Water Research and Technology, 2020, 6, 2259-2274.	2.4	3
21	Unprecedented strong intrinsic chemiluminescence generation from degradation of halogenated hydroxy-quinoid pollutants by Co(II)-mediated advanced oxidation processes: The critical role of site-specific production of hydroxyl radicals. Chemical Engineering Journal, 2020, 394, 125023.	12.7	10
22	Potent Oxidation of DNA by Haloquinoid Disinfection Byproducts to the More Mutagenic Imidazolone dIz via an Unprecedented Haloquinone-Enoxy Radical-Mediated Mechanism. Environmental Science & Technology, 2020, 54, 6244-6253.	10.0	12
23	Reactive Nitrogen Species Are Also Involved in the Transformation of Micropollutants by the UV/Monochloramine Process. Environmental Science & Technology, 2019, 53, 11142-11152.	10.0	127
24	Molecular mechanism for the activation of the anti-tuberculosis drug isoniazid by Mn(III): First detection and unequivocal identification of the critical N-centered isoniazidyl radical and its exact location. Free Radical Biology and Medicine, 2019, 143, 232-239.	2.9	10
25	What Are the Major Physicochemical Factors in Determining the Preferential Nuclear Uptake of the DNA â€œLight-Switchingâ€•Ru(II)-Polypyridyl Complex in Live Cells via Ion-Pairing with Chlorophenolate Counter-Anions?. Journal of Physical Chemistry Letters, 2019, 10, 4123-4128.	4.6	10
26	Targeted live-cell nuclear delivery of the DNA â€˜light-switchingâ€™ Ru(II) complex via ion-pairing with chlorophenolate counter-anions: the critical role of binding stability and lipophilicity of the ion-pairing complexes. Nucleic Acids Research, 2019, 47, 10520-10528.	14.5	18
27	Sulfur-centered hemi-bond radicals as active intermediates in S-DNA phosphorothioate oxidation. Nucleic Acids Research, 2019, 47, 11514-11526.	14.5	12
28	Enantioselective and Differential Fluorescence Lifetime Imaging of Nucleus and Nucleolus by the Two Enantiomers of Chiral Os(II) Polypyridyl Complex. Journal of Physical Chemistry Letters, 2019, 10, 5909-5916.	4.6	8
29	Mechanism of unprecedented hydroxyl radical production and site-specific oxidative DNA damage by photoactivation of the classic arylhydroxamic acid carcinogens. Carcinogenesis, 2019, , .	2.8	6
30	An unusual double radical homolysis mechanism for the unexpected activation of the aldoxime nerve-agent antidotes by polyhalogenated quinoid carcinogens under normal physiological conditions. Free Radical Biology and Medicine, 2019, 130, 1-7.	2.9	12
31	Mechanism of synergistic DNA damage induced by the hydroquinone metabolite of brominated phenolic environmental pollutants and Cu(II): Formation of DNA-Cu complex and site-specific production of hydroxyl radicals. Free Radical Biology and Medicine, 2017, 104, 54-63.	2.9	40
32	Mechanism of Intrinsic Chemiluminescence Production from the Degradation of Persistent Chlorinated Phenols by the Fenton System: A Structureâ€“Activity Relationship Study and the Critical Role of Quinoid and Semiquinone Radical Intermediates. Environmental Science & Technology, 2017, 51, 2934-2943.	10.0	27
33	Unusual Double Beckmann Fragmentation Reaction under Physiological Conditions. Journal of Organic Chemistry, 2017, 82, 13084-13092.	3.2	9
34	An Exceptionally Facile Two-Step Structural Isomerization and Detoxication via a Water-Assisted Double Lossen Rearrangement. Scientific Reports, 2016, 6, 39207.	3.3	11
35	Delivering the cell-impermeable DNA â€˜light-switchingâ€™ Ru(<scp>ii</scp>) complexes preferentially into live-cell nucleus via an unprecedented ion-pairing method. Chemical Science, 2016, 7, 4016-4023.	7.4	50
36	Why Does 2,3,5,6-Tetrachlorophenol Generate the Strongest Intrinsic Chemiluminescence among All Nineteen Chlorophenolic Persistent Organic Pollutants during Environmentally-friendly Advanced Oxidation Process?. Scientific Reports, 2016, 6, 33159.	3.3	15

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37	Intrinsic Chemiluminescence Generation during Advanced Oxidation of Persistent Halogenated Aromatic Carcinogens. Environmental Science & Technology, 2015, 49, 7940-7947.	10.0	29
38	Molecular Mechanism of Metal-Independent Decomposition of Organic Hydroperoxides by Halogenated Quinoid Carcinogens and the Potential Biological Implications. Chemical Research in Toxicology, 2015, 28, 831-837.	3.3	44
39	A Combined Experimental and Computational Investigation on the Unusual Molecular Mechanism of the Lossen Rearrangement Reaction Activated by Carcinogenic Halogenated Quinones. Journal of Organic Chemistry, 2015, 80, 180-189.	3.2	24
40	Detoxifying Polyhalogenated Catechols through a Copperâ€Chelating Agent by Forming Stable and Redoxâ€Inactive Hydrogenâ€Bonded Complexes with an Unusual Perpendicular Structure. Chemistry - A European Journal, 2014, 20, 13028-13033.	3.3	5
41	Molecular mechanism of metal-independent decomposition of lipid hydroperoxide 13-HPODE by halogenated quinoid carcinogens. Free Radical Biology and Medicine, 2013, 63, 459-466.	2.9	20
42	The first purification and unequivocal characterization of the radical form of the carbon-centered quinone ketoxy radical adduct. Chemical Communications, 2013, 49, 6436.	4.1	29
43	Potent methyl oxidation of 5-methyl-2â€²-deoxycytidine by halogenated quinoid carcinogens and hydrogen peroxide via a metal-independent mechanism. Free Radical Biology and Medicine, 2013, 60, 177-182.	2.9	40
44	Unprecedented hydroxyl radical-dependent two-step chemiluminescence production by polyhalogenated quinoid carcinogens and H ₂ O ₂. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 16046-16051.	7.1	89
45	Metal-independent decomposition of hydroperoxides by halogenated quinones: Detection and identification of a quinone ketoxy radical. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 11466-11471.	7.1	80