Ming Wah Wong

List of Publications by Citations

88 papers	3,643 citations	26 h-index	59 g-index
96 ext. papers	4,168 ext. citations	6.2 avg, IF	5.71 L-index

#	Paper	IF	Citations
88	Solvent effects. 1. The mediation of electrostatic effects by solvents. *Journal of the American Chemical Society*, **1991**, 113, 4776-4782	16.4	880
87	Solvent effects. 3. Tautomeric equilibria of formamide and 2-pyridone in the gas phase and solution: an ab initio SCRF study. *Journal of the American Chemical Society*, **1992**, 114, 1645-1652	16.4	484
86	Radical Addition to Alkenes:Further Assessment of Theoretical Procedures. *Journal of Physical Chemistry A*, **1998**, 102, 2237-2245	2.8	142
85	Synthesis of a chiral quaternary carbon center bearing a fluorine atom: enantio- and diastereoselective guanidine-catalyzed addition of fluorocarbon nucleophiles. *Angewandte Chemie - International Edition*, **2009**, 48, 3627-31	16.4	129
84	Prediction of a Metastable Helium Compound: HHeF. *Journal of the American Chemical Society*, **2000**, 122, 6289-6290	16.4	128
83	Oxyanion hole stabilization by C-H O interaction in a transition state--a three-point interaction model for Cinchona alkaloid-catalyzed asymmetric methanolysis of meso-cyclic anhydrides. *Journal of the American Chemical Society*, **2013**, 135, 5808-18	16.4	126
82	Multiphoton harvesting metal-organic frameworks. *Nature Communications*, **2015**, 6, 7954	17.4	122
81	Saturated hydrocarbon-benzene complexes: theoretical study of cooperative CH/pi interactions. *Journal of Physical Chemistry A*, **2006**, 110, 9702-9	2.8	109
80	Diallyl Trisulfide Is a Fast H2S Donor, but Diallyl Disulfide Is a Slow One: The Reaction Pathways and Intermediates of Glutathione with Polysulfides. *Organic Letters*, **2015**, 17, 4196-9	6.2	108
79	Fluoride Ion Receptors Based on Dipyrrolyl Derivatives Bearing Electron-Withdrawing Groups: Synthesis, Optical and Electrochemical Sensing, and Computational Studies. *Journal of Physical Chemistry A*, **2004**, 108, 11249-11259	2.8	107
78	Column Characterization and Selection Systems in Reversed-Phase High-Performance Liquid Chromatography. *Chemical Reviews*, **2019**, 119, 3674-3729	68.1	91
77	Anion Texturing Towards Dendrite-Free Zn Anode for Aqueous Rechargeable Batteries. *Angewandte Chemie - International Edition*, **2021**, 60, 7213-7219	16.4	68
76	Amino acid catalyzed asymmetric Michael additions: design of organocatalysts with catalytic acid/base dyad inspired by serine proteases. *Journal of Organic Chemistry*, **2011**, 76, 7399-405	4.2	65
75	Diastereo- and Atroposelective Synthesis of Bridged Biaryls Bearing an Eight-Membered Lactone through an Organocatalytic Cascade. *Journal of the American Chemical Society*, **2019**, 141, 17062-17067	16.4	54
74	Cinchona Alkaloid-Squaramide Catalyzed Sulfa-Michael Addition Reaction: Mode of Bifunctional Activation and Origin of Stereoinduction. *Journal of Organic Chemistry*, **2017**, 82, 4362-4368	4.2	48
73	Mechanistic insights into bicyclic guanidine-catalyzed reactions from microscopic and macroscopic perspectives. *Journal of Organic Chemistry*, **2015**, 80, 5745-52	4.2	47
72	Structures, bonding, and absorption spectra of amine-sulfur dioxide charge-transfer complexes. *Journal of the American Chemical Society*, **1992**, 114, 7527-7535	16.4	42

71	Desymmetrizing Enantio- and Diastereoselective Selenoetherification through Supramolecular Catalysis. *ACS Catalysis*, **2018**, 8, 850-858	13.1	41
70	Sequential catalytic role of bifunctional bicyclic guanidine in asymmetric phospha-Michael reaction. *Organic and Biomolecular Chemistry*, **2011**, 9, 4550-7	3.9	40
69	In Silico Design of Halogen-Bonding-Based Organocatalyst for Diels-Alder Reaction, Claisen Rearrangement, and Cope-Type Hydroamination. *Journal of Organic Chemistry*, **2016**, 81, 7459-70	4.2	37
68	Mechanistic studies of the influence of halogen substituents on the corrosion inhibitive efficiency of selected imidazole molecules: A synergistic computational and experimental approach. *Applied Surface Science*, **2019**, 471, 494-505	6.7	36
67	Asymmetric Michael Addition Using Bifunctional Bicyclic Guanidine Organocatalyst: A Theoretical Perspective. *Australian Journal of Chemistry*, **2014**, 67, 1100	1.2	34
66	Miscibility and Interactions in Blends and Complexes of Poly[2-(dimethylamino)ethyl methacrylate] with Poly(p-vinylphenol). *Macromolecules*, **1999**, 32, 4327-4331	5.5	32
65	Prediction of corrosion inhibition efficiency of pyridines and quinolines on an iron surface using machine learning-powered quantitative structure-property relationships. *Applied Surface Science*, **2020**, 512, 145612	6.7	31
64	Origin of asymmetric induction in bicyclic guanidine-catalyzed thio-Michael reaction: a bifunctional mode of Lewis acid-Brønsted acid activation. *Journal of Organic Chemistry*, **2012**, 77, 6553-62	4.2	31
63	Interpretation of ANN-based QSAR models for prediction of antioxidant activity of flavonoids. *Journal of Computational Chemistry*, **2018**, 39, 953-963	3.5	28
62	Three-component reactions of isocyanoacetates, amines and 3-formylchromones initiated by an unexpected aza-Michael addition. *Chemical Communications*, **2017**, 53, 9067-9070	5.8	24
61	Application of Halogen Bonding to Organocatalysis: A Theoretical Perspective. *Molecules*, **2020**, 25,	4.8	23
60	Rapid and Visual Detection and Quantitation of Ethylene Released from Ripening Fruits: The New Use of Grubbs Catalyst. *Journal of Agricultural and Food Chemistry*, **2019**, 67, 507-513	5.7	23
59	Access to Enantiopure Triarylmethanes and 1,1-Diarylalkanes by NHC-Catalyzed Acylative Desymmetrization. *Chemistry - A European Journal*, **2017**, 23, 2275-2281	4.8	22
58	Influence of Fluorine Substitution on the Unusual Solid-State [2 + 2] Photo-Cycloaddition Reaction between an Olefin and an Aromatic Ring. *Crystal Growth and Design*, **2015**, 15, 4055-4061	3.5	22
57	Anion Texturing Towards Dendrite-Free Zn Anode for Aqueous Rechargeable Batteries. *Angewandte Chemie*, **2021**, 133, 7289-7295	3.6	22
56	Halogen-Bonding-Induced Conjugate Addition of Thiophenes to Enones and Enals. *Chemistry - an Asian Journal*, **2019**, 14, 2656-2661	4.5	19
55	Non-Linear Quantitative Structure?Activity Relationships Modelling, Mechanistic Study and In-Silico Design of Flavonoids as Potent Antioxidants. *International Journal of Molecular Sciences*, **2019**, 20,	6.3	18
54	povel isomers of hexasulfur: Prediction of a stable prism isomer and implications for the thermal reactivity of elemental sulfur. *Journal of Chemical Physics*, **2004**, 121, 5899-907	3.9	18

53	Structures and vibrational spectra of the sulfur-rich oxides SnO (n = 4-9): the importance of pi*-pi* interactions. *Chemistry - A European Journal*, **2007**, 13, 502-14	4.8	17
52	Nature of halogen bonding involving π-systems, nitroxide radicals and carbenes: a highlight of the importance of charge transfer. *Physical Chemistry Chemical Physics*, **2018**, 20, 26463-26478	3.6	17
51	Isomers of cyclo-heptasulfur and their coordination to Li(+): an ab initio molecular orbital study. *Inorganic Chemistry*, **2005**, 44, 8908-15	5.1	16
50	Characterization of New Sulfide Ions ($C_2S_3^-$) from Ethenedithione by Ion−Molecule Reactions. *Journal of Physical Chemistry A*, **1999**, 103, 3666-3671	2.8	16
49	Cu-Catalyzed [3 + 3] Cycloaddition of Isocyanoacetates with Aziridines and Stereoselective Access to β,γ-Diamino Acids. *Organic Letters*, **2018**, 20, 5112-5115	6.2	15
48	Substituent Effects on Ring Opening of 2-Furylcarbenes: An ab Initio Study. *Journal of Organic Chemistry*, **1999**, 64, 9170-9174	4.2	14
47	Atmosphere- and Temperature-Controlled Regioselective Aminobromination of Olefins. *Advanced Synthesis and Catalysis*, **2017**, 359, 234-239	5.6	13
46	Iodoimidazolinium-Catalyzed Reduction of Quinoline by Hantzsch Ester: Halogen Bond or Brønsted Acid Catalysis. *Journal of Organic Chemistry*, **2019**, 84, 10338-10348	4.2	13
45	Roles of C-H...O=S and pi-stacking interactions in the 2-bromoacrolein complex with N-tosyl-(S)-tryptophan-derived oxazaborolidinone catalyst. *Journal of Organic Chemistry*, **2005**, 70, 5487-93	4.2	13
44	Site specificity of halogen bonding involving aromatic acceptors. *Physical Chemistry Chemical Physics*, **2018**, 20, 8685-8694	3.6	12
43	Coordination of Li+, Ca+, V+, and Cu+ to the Molecules S8 and S4N4. A Computational Study. *European Journal of Inorganic Chemistry*, **2005**, 2005, 2514-2525	2.3	12
42	Specific Interactions in Miscible Poly(p-vinylphenol)/Poly(N-methyl-3-piperidinemethyl methacrylate) Blends. *Macromolecular Chemistry and Physics*, **2001**, 202, 31-35	2.6	12
41	Structures of the trisulfur oxides S3O and S3O.+: branched rings, not open chains. *Chemical Communications*, **2005**, 3712-4	5.8	11
40	Target-based drug discovery through inversion of quantitative structure-drug-property relationships and molecular simulation: CA IX-sulphonamide complexes. *Journal of Enzyme Inhibition and Medicinal Chemistry*, **2018**, 33, 1430-1443	5.6	11
39	Pentanidium-Catalyzed Asymmetric Phase-Transfer Conjugate Addition: Prediction of Stereoselectivity via DFT Calculations and Docking Sampling of Transition States, and Origin of Stereoselectivity. *Australian Journal of Chemistry*, **2016**, 69, 983	1.2	10
38	Does Halogen Bonding Promote Intersystem Crossing and Phosphorescence in Benzaldehyde?. *Journal of Physical Chemistry C*, **2018**, 122, 12441-12447	3.8	10
37	Singlet oxygen probes made simple: Anthracenylmethyl substituted fluorophores as reaction-based probes for detection and imaging of cellular $^1O_2$. *Sensors and Actuators B: Chemical*, **2018**, 271, 346-352	8.5	10
36	Anion recognition by azophenol thiourea-based chromogenic sensors: a combined DFT and molecular dynamics investigation. *Journal of Molecular Modeling*, **2013**, 19, 205-13	2	9

35	Unconventional Bifunctional Lewis-Brønsted Acid Activation Mode in Bicyclic Guanidine-Catalyzed Conjugate Addition Reactions. *Molecules*, **2015**, 20, 15108-21	4.8	9
34	Machine learning in prediction of intrinsic aqueous solubility of drug-like compounds: Generalization, complexity, or predictive ability?. *Journal of Chemometrics*, **2021**, 35, e3349	1.6	9
33	Coupling Reactions of Alkynyl Indoles and CO by Bicyclic Guanidine: Origin of Catalytic Activity?. *Chemistry - an Asian Journal*, **2017**, 12, 1780-1789	4.5	9
32	Improved synthesis dimethylhomoecoerdianthrone (HOCD) and its functionalization through facile amination reactions. *Dyes and Pigments*, **2016**, 130, 154-161	4.6	7
31	Roles of electrostatic interaction and dispersion in CH■■CH, CH■■and ■■ethylene dimers. *Journal of Molecular Modeling*, **2014**, 20, 2185	2	7
30	Mesoions and ketene valence isomers. Pyrrolo[1,2-a]pyridinylium olates and (2-pyridyl)carbonylketenes. *Journal of the Chemical Society, Perkin Transactions 1*, **2000**, 401-406		7
29	Dietary Flavonoids Scavenge Hypochlorous Acid via Chlorination on A- and C-Rings as Primary Reaction Sites: Structure and Reactivity Relationship. *Journal of Agricultural and Food Chemistry*, **2019**, 67, 4346-4354	5.7	6
28	Modeling halogen bonding with planewave density functional theory: Accuracy and challenges. *Journal of Computational Chemistry*, **2019**, 40, 1829-1835	3.5	6
27	Mechanistic Chromatographic Column Characterization for the Analysis of Flavonoids Using Quantitative Structure-Retention Relationships Based on Density Functional Theory. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	6
26	Photo-induced C■H bond activation of N,N?-dialkylethylenediamine upon aza-Michael addition to 1,8-pyrenedione: facile synthesis of fluorescent pyrene derivatives. *Organic Chemistry Frontiers*, **2018**, 5, 1679-1683	5.2	6
25	Gehorcht Ethendithion (S=C=C=S) der Hundschen Regel?. *Angewandte Chemie*, **1998**, 110, 3587-3589	3.6	6
24	The thermal fragmentation of 1,6-dioxa-6a■4-thiapentalenes: formation of acylthioketenes and thioacylketenes. *Perkin Transactions II RSC*, **2001**, 2047-2052		6
23	Guanidine-catalyzed asymmetric Strecker reaction: modes of activation and origin of stereoselectivity. *Canadian Journal of Chemistry*, **2016**, 94, 1099-1108	0.9	5
22	Quantitative Structure-Retention Relationships with Non-Linear Programming for Prediction of Chromatographic Elution Order. *International Journal of Molecular Sciences*, **2019**, 20,	6.3	5
21	Automatic Conformational Search of Transition States for Catalytic Reactions Using Genetic Algorithm. *Journal of Physical Chemistry A*, **2019**, 123, 10303-10314	2.8	5
20	■Complexed polyfluoroarenes: a reactivity, bonding and spectroscopic study of (■6-C6F6)Cr(■6-C6H6) and related molecules. *New Journal of Chemistry*, **2011**, 35, 2066	3.6	5
19	Interactions of zinc aqua complexes with ovalbumin at the forefront of the Zn2+/ZnO-OVO hybrid complex formation mechanism. *Applied Surface Science*, **2021**, 542, 148641	6.7	5
18	Affinity of Antifungal Isoxazolo[3,4-]pyridine-3(1)-Ones to Phospholipids in Immobilized Artificial Membrane (IAM) Chromatography. *Molecules*, **2020**, 25,	4.8	4

17	Potency Increase of Spiroketal Analogs of Membrane Inserting Indolyl Mannich Base Antimycobacterials Is Due to Acquisition of MmpL3 Inhibition. *ACS Infectious Diseases*, **2020**, 6, 1882-1893	5.5	4
16	S3O2--an unusual structure with pi*-pi* interaction. *Physical Chemistry Chemical Physics*, **2006**, 8, 1292-7	3.6	4
15	Gauche/Trans Equilibria of 2,2Bi-1,3-dioxanyl, 2,2Dimethyl-2,2bi-1,3-dioxanyl, 2,2Bi-1,3-dithianyl, and 2,2Dimethyl-2,2bi-1,3-dithianyl in Different Media. Theory and Experiment. *Journal of Physical Chemistry A*, **2003**, 107, 6714-6719	2.8	4
14	Rotational isomerism and crystal structures of 2,2?-diphenyl-2,2?-bi-1,3-dithianyl and 2,2?-diphenyl-2,2?-bi-1,3-dioxolanyl. *Perkin Transactions II RSC*, **2000**, 2090-2095		4
13	Gauche/Trans Equilibria of 2,2Bi-1,3-dioxepanyl and 2,2Bi-1,3-dithiepanyl in Different MediaTheory and Experiment. *Journal of Physical Chemistry A*, **2004**, 108, 6874-6878	2.8	3
12	Gauche/trans equilibria of 2,2?-bi-1,3-dioxolanyl, 2,2?-dimethyl-2,2?-bi-1,3-dioxolanyl, 2,2?-bi-1,3-dithiolanyl and 2,2?-dimethyl-2,2?-bi-1,3-dithiolanyl in different mediaTheory and experiment. *New Journal of Chemistry*, **2002**, 26, 1686-1692	3.6	3
11	Radical Addition to Alkenes: A Theoretical Perspective. *ACS Symposium Series*, **1998**, 31-49	0.4	3
10	Machine Learning in Prediction of Intrinsic Aqueous Solubility of Drug-like Compounds: Generalization, Complexity or Predictive Ability?		3
9	Bicyclic Guanidine-Catalyzed Asymmetric Cycloaddition Reaction of Anthrones-Bifunctional Binding Modes and Origin of Stereoselectivity. *Journal of Organic Chemistry*, **2020**, 85, 15139-15153	4.2	3
8	Manifold dynamic non-covalent interactions for steering molecular assembly and cyclization. *Chemical Science*, **2021**, 12, 11659-11667	9.4	3
7	Prediction of Chromatographic Elution Order of Analytical Mixtures Based on Quantitative Structure-Retention Relationships and Multi-Objective Optimization. *Molecules*, **2020**, 25,	4.8	2
6	Asymmetric Nucleophilic Allylation of Chloro Glycinate via Squaramide Anion-Abstraction Catalysis: S1 or S2 Mechanism, or Both?. *Journal of Organic Chemistry*, **2021**, 86, 8414-8424	4.2	2
5	Halogen Bonding in Haspin-Halogenated Tubercidin Complexes: Molecular Dynamics and Quantum Chemical Calculations.. *Molecules*, **2022**, 27,	4.8	1
4	Enhanced anti-corrosive properties of thiabendazoles: A computational study. *Progress in Organic Coatings*, **2021**, 161, 106551	4.8	1
3	Tailoring long-range superlattice chirality in molecular self-assemblies weak fluorine-mediated interactions. *Physical Chemistry Chemical Physics*, **2021**, 23, 21489-21495	3.6	0
2	In silico characterization and prediction of thiourea-like neutral bidentate halogen bond catalysts. *Organic and Biomolecular Chemistry*, **2021**, 19, 7051-7060	3.9	0
1	The study of the molecular mechanism of Lactobacillus paracasei clumping via divalent metal ions by electrophoretic separation. *Journal of Chromatography A*, **2021**, 1652, 462127	4.5	0