Davin Tan

List of Publications by Year
in descending order

49 papers	3,537 citations	218677 26 h-index	189892 50 g-index
66 all docs	66 docs citations	66 times ranked	3402 citing authors

#	Article	IF	Citations
1	Main group mechanochemistry: from curiosity to established protocols. Chemical Society Reviews, 2019, 48, 2274-2292.	38.1	361
2	Towards medicinal mechanochemistry: evolution of milling from pharmaceutical solid form screening to the synthesis of active pharmaceutical ingredients (APIs). Chemical Communications, 2016, 52, 7760-7781.	4.1	303
3	An Airâ€Stable Copper Reagent for Nucleophilic Trifluoromethylthiolation of Aryl Halides. Angewandte Chemie - International Edition, 2013, 52, 1548-1552.	13.8	281
4	Mechanochemistry for Organic Chemists: An Update. European Journal of Organic Chemistry, 2018, 2018, 18-33.	2.4	245
5	Twisted intramolecular charge transfer (TICT) and twists beyond TICT: from mechanisms to rational designs of bright and sensitive fluorophores. Chemical Society Reviews, 2021, 50, 12656-12678.	38.1	221
6	Stable Tetrabenzo-Chichibabinâ€™s Hydrocarbons: Tunable Ground State and Unusual Transition between Their Closed-Shell and Open-Shell Resonance Forms. Journal of the American Chemical Society, 2012, 134, 14513-14525.	13.7	218
7	Direct Asymmetric Vinylogous Aldol Reaction of Allyl Ketones with Isatins: Divergent Synthesis of 3â€Hydroxyâ€2â€Oxindole Derivatives. Angewandte Chemie - International Edition, 2013, 52, 6666-6670.	13.8	158
8	Mechanochemical Ruthenium-Catalyzed Olefin Metathesis. Journal of the American Chemical Society, 2015, 137, 2476-2479.	13.7	134
9	Quantitative Design of Bright Fluorophores and AIEgens by the Accurate Prediction of Twisted Intramolecular Charge Transfer (TICT). Angewandte Chemie - International Edition, 2020, 59, 10160-10172.	13.8	131
10	Highly Enantioâ€•and Diastereoselective Reactions of Î³â€Substituted Butenolides Through Direct Vinylogous Conjugate Additions. Angewandte Chemie - International Edition, 2012, 51, 10069-10073.	13.8	124
11	Mechanosynthesis of pharmaceutically relevant sulfonyl-(thio)ureas. Chemical Communications, 2014, 50, 5248-5250.	4.1	114
12	Development of Cï£¿N Coupling Using Mechanochemistry: Catalytic Coupling of Arylsulfonamides and Carbodiimides. Angewandte Chemie - International Edition, 2014, 53, 9321-9324.	13.8	103
13	An enantioconvergent halogenophilic nucleophilic substitution (S _N 2X) reaction. Science, 2019, 363, 400-404.	12.6	100
14	Completely Solvent-free Protocols to Access Phase-Pure, Metastable Metal Halide Perovskites and Functional Photodetectors from the Precursor Salts. IScience, 2019, 16, 312-325.	4.1	80
15	An Approach to Developing Cyanines with Simultaneous Intersystem Crossing Enhancement and Excited-State Lifetime Elongation for Photodynamic Antitumor Metastasis. Journal of the American Chemical Society, 2021, 143, 12345-12354.	13.7	80
16	A concise, efficient synthesis of sugar-based benzothiazoles through chemoselective intramolecular Câ€“S coupling. Chemical Science, 2012, 3, 2388.	7.4	67
17	(Guanidine)copper Complex-Catalyzed Enantioselective Dynamic Kinetic Allylic Alkynylation under Biphasic Condition. Journal of the American Chemical Society, 2018, 140, 8448-8455.	13.7	54
18	Oxidative Mechanochemistry: Direct, Roomâ€Temperature, Solventâ€Free Conversion of Palladium and Gold Metals into Soluble Salts and Coordination Complexes. Angewandte Chemie - International Edition, 2018, 57, 2667-2671.	13.8	52

#	Article	IF	Citations
19	Descriptor Î”G_{Câ€Ō} Enables the Quantitative Design of Spontaneously Blinking Rhodamines for Liveâ€Cell Superâ€Resolution Imaging. Angewandte Chemie - International Edition, 2020, 59, 20215-20223.	13.8	50
20	Highly Enantio- and Diastereoselective Allylic Alkylation of Moritaâ€“Baylisâ€“Hillman Carbonates with Allyl Ketones. Journal of Organic Chemistry, 2013, 78, 5067-5072.	3.2	40
21	Quantitative Design of Bright Fluorophores and AIEgens by the Accurate Prediction of Twisted Intramolecular Charge Transfer (TICT). Angewandte Chemie, 2020, 132, 10246-10258.	2.0	36
22	A unified fluorescence quenching mechanism of tetrazine-based fluorogenic dyes: energy transfer to a dark state. Materials Chemistry Frontiers, 2021, 5, 7012-7021.	5.9	28
23	Fluorinated azobenzenes with highly strained geometries for halogen bond-driven self-assembly in the solid state. CrystEngComm, 2015, 17, 73-80.	2.6	27
24	Direct Asymmetric Allylic Alkenylation of N-Itaconimides with Moritaâ€“Baylisâ€“Hillman Carbonates. Journal of Organic Chemistry, 2012, 77, 6600-6607.	3.2	26
25	Enantioselective 1,2-Anionotropic Rearrangement of Acylsilane through a Bisguanidinium Silicate Ion Pair. Journal of the American Chemical Society, 2018, 140, 1952-1955.	13.7	26
26	Orthogonality in main group compounds: a direct one-step synthesis of air- and moisture-stable cyclophosphazanes by mechanochemistry. Chemical Communications, 2018, 54, 6800-6803.	4.1	23
27	Mechanosynthesis of Higherâ€Order Cocrystals: Tuning Order, Functionality and Size in Cocrystal Design**. Angewandte Chemie - International Edition, 2021, 60, 17481-17490.	13.8	22
28	Molecular Recognition of Steroid Hormones in the Solid State: Stark Differences in Cocrystallization of Î²-Estradiol and Estrone. Crystal Growth and Design, 2015, 15, 1492-1501.	3.0	21
29	High-fidelity imaging of amyloid-beta deposits with an ultrasensitive fluorescent probe facilitates the early diagnosis and treatment of Alzheimer's Disease. Theranostics, 2022, 12, 2549-2559.	10.0	20
30	Carbodiimide insertion into sulfonimides: one-step route to azepine derivatives via a two-atom saccharin ring expansion. Chemical Communications, 2017, 53, 901-904.	4.1	19
31	Restriction of Twisted Intramolecular Charge Transfer Enables the Aggregation-Induced Emission of 1-(N,N-Dialkylamino)-naphthalene Derivatives. Journal of Physical Chemistry A, 2021, 125, 8397-8403.	2.5	19
32	Descriptor Î”G_{Câ€Ō} Enables the Quantitative Design of Spontaneously Blinking Rhodamines for Liveâ€Cell Superâ€Resolution Imaging. Angewandte Chemie, 2020, 132, 20390-20398.	2.0	18
33	Oxidative Mechanochemistry: Direct, Roomâ€Temperature, Solventâ€Free Conversion of Palladium and Gold Metals into Soluble Salts and Coordination Complexes. Angewandte Chemie, 2018, 130, 2697-2701.	2.0	17
34	Catalytic Roomâ€Temperature Câ€“N Coupling of Amides and Isocyanates by Using Mechanochemistry. ChemSusChem, 2020, 13, 2966-2972.	6.8	17
35	A Descriptor for Accurate Predictions of Host Molecules Enabling Ultralong Roomâ€Temperature Phosphorescence in Guest Emitters. Angewandte Chemie - International Edition, 2022, 61, .	13.8	17
36	cis-Cyclodiphosph(<scp>v</scp>/<scp>v</scp>)azanes as highly stable and robust main group supramolecular building blocks. CrystEngComm, 2018, 20, 5998-6004.	2.6	10

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37	A route to hydroxylfluorenes: TsOH-mediated condensation reactions of 1,3-diketones with propargylic alcohols. RSC Advances, 2012, 2, 7594.	3.6	9
38	Synthesis of Unique Phosphazane Macrocycles via Steric Activation of Câ€“N Bonds. Inorganic Chemistry, 2018, 57, 10993-11004.	4.0	9
39	Catalytic Diastereoselective Tandem Conjugate Additionâ€“Elimination Reaction of Moritaâ€“Baylisâ€“Hillman Câ€…Adducts by Cï£¿C Bond Cleavage. Chemistry - an Asian Journal, 2012, 7, 771-777.	3.3	6
40	Mechanochemical nanoparticle functionalization for liquid crystal nanocomposites based on COOH-pyridine heterosynthons. Journal of Materials Chemistry C, 2018, 6, 1789-1796.	5.5	6
41	Importance of thorough conformational analysis in modelling transition metal-mediated reactions: Case studies on pincer complexes containing phosphine groups. Journal of Saudi Chemical Society, 2019, 23, 1206-1218.	5.2	6
42	A Descriptor for Accurate Predictions of Host Molecules Enabling Ultralong Roomâ€Temperature Phosphorescence in Guest Emitters. Angewandte Chemie, 0, , .	2.0	6
43	Thermal equilibria between conformers enable highly reliable single-fluorophore ratiometric thermometers. Analyst, The, 2021, 146, 4219-4225.	3.5	5
44	Real-Time Observation of â€œSoftâ€•Magic-Size Clusters during Hydrolysis of the Model Metallodrug Bismuth Disalicylate. Journal of the American Chemical Society, 2021, 143, 16332-16336.	13.7	5
45	DFT mechanistic study of the selective terminal Câ€“H activation of n -pentane with a tungsten allyl nitrosyl complex. Journal of Saudi Chemical Society, 2017, 21, 558-562.	5.2	3
46	Mechanosynthesis of Higherâ€Order Cocrystals: Tuning Order, Functionality and Size in Cocrystal Design**. Angewandte Chemie, 2021, 133, 17622-17631.	2.0	2
47	Cover Feature: Mechanochemistry for Organic Chemists: An Update (Eur. J. Org. Chem. 1/2018). European Journal of Organic Chemistry, 2018, 2018, 2-2.	2.4	1
48	InnenrÃ¼cktitelbild: Direct Asymmetric Vinylogous Aldol Reaction of Allyl Ketones with Isatins: Divergent Synthesis of 3-Hydroxy-2-Oxindole Derivatives (Angew. Chem. 26/2013). Angewandte Chemie, 2013, 125, 6919-6919.	2.0	0
49	Investigating the solid-state assembly of pharmaceutically-relevant N,N-dimethyl-O-thiocarbamates in the absence of labile hydrogen bonds. CrystEngComm, 2020, 22, 8290-8298.	2.6	0