Tiddo Jonathan Mooibroek

List of Publications by Year
in descending order

78 papers	6,038 citations	109321 35 h-index	69250 77 g-index
86 all docs	86 docs citations	86 times ranked	4202 citing authors

#	Article	IF	Citations
1	Putting Anionâ€“Ï€ Interactions Into Perspective. Angewandte Chemie - International Edition, 2011, 50, 9564-9583.	13.8	591
2	Tetrelâ€Bonding Interaction: Rediscovered Supramolecular Force?. Angewandte Chemie - International Edition, 2013, 52, 12317-12321.	13.8	575
3	The Bright Future of Unconventional Ïƒ/Ï€â€Hole Interactions. ChemPhysChem, 2015, 16, 2496-2517.	2.1	569
4	Anion Binding Involving Ï€-Acidic Heteroaromatic Rings. Accounts of Chemical Research, 2007, 40, 435-444.	15.6	522
5	Lone pairâ€“Ï€ interactions: a new supramolecular bond?. CrystEngComm, 2008, 10, 1501.	2.6	492
6	Whatâ€™s New in the Realm of Anionâˆ’Ï€ Binding Interactions? Putting the Anionâˆ’Ï€ Interaction in Perspective. Crystal Growth and Design, 2008, 8, 1082-1093.	3.0	202
7	Tetrel Bonding Interactions. Chemical Record, 2016, 16, 473-487.	5.8	188
8	The s-triazine ring, a remarkable unit to generate supramolecular interactions. Inorganica Chimica Acta, 2007, 360, 381-404.	2.4	151
9	Spodium Bonds: Noncovalent Interactions Involving Groupâ€…12 Elements. Angewandte Chemie - International Edition, 2020, 59, 17482-17487.	13.8	136
10	Directionality of Ï€-holes in nitro compounds. Chemical Communications, 2015, 51, 1491-1493.	4.1	130
11	A threading receptor for polysaccharides. Nature Chemistry, 2016, 8, 69-74.	13.6	119
12	Towards design strategies for anionâ€“Ï€ interactions in crystal engineering. CrystEngComm, 2016, 18, 10-23.	2.6	101
13	Small Cycloalkane (CN)₂Cï£¿C(CN)₂ Structures Are Highly Directional Nonâ€covalent Carbonâ€Bond Donors. Chemistry - A European Journal, 2014, 20, 10245-10248.	3.3	89
14	Non-covalent sp³carbon bonding with ArCF₃is analogous to CHâ€“Ï€ interactions. Chemical Communications, 2014, 50, 12626-12629.	4.1	86
15	Synthetic Receptors for the Highâ€Affinity Recognition of Oâ€GlcNAc Derivatives. Angewandte Chemie - International Edition, 2016, 55, 3387-3392.	13.8	86
16	Crystallographic and Theoretical Evidence of Acetonitrileâˆ’Ï€ Interactions with the Electron-Deficient 1,3,5-Triazine Ring. Crystal Growth and Design, 2006, 6, 1569-1574.	3.0	76
17	NO3âˆ’ anions can act as Lewis acid in the solid state. Nature Communications, 2017, 8, 14522.	12.8	72
18	Ïƒâ€Hole Opposite to a Lone Pair: Unconventional Pnicogen Bonding Interactions between ZF₃ (Z=N, P, As, and Sb) Compounds and Several Donors. ChemPhysChem, 2016, 17, 1608-1614.	2.1	68

#	Article	IF	Citations
19	Anionâ€“arene and lone pairâ€“arene interactions are directional. CrystEngComm, 2012, 14, 1027-1030.	2.6	67
20	Ï€-Hole Interactions Involving Nitro Compounds: Directionality of Nitrate Esters. Crystal Growth and Design, 2016, 16, 5520-5524.	3.0	67
21	Disaggregation is a Mechanism for Emission Turn-On of ortho-Aminomethylphenylboronic Acid-Based Saccharide Sensors. Journal of the American Chemical Society, 2017, 139, 5568-5578.	13.7	60
22	Transition Metal Catalysis Controlled by Hydrogen Bonding in the Second Coordination Sphere. Chemical Reviews, 2022, 122, 12308-12369.	47.7	60
23	Affinity Enhancement by Dendritic Side Chains in Synthetic Carbohydrate Receptors. Angewandte Chemie - International Edition, 2015, 54, 2057-2061.	13.8	58
24	Enantioselective carbohydrate recognition by synthetic lectins in water. Chemical Science, 2017, 8, 4056-4061.	7.4	56
25	1,1,2,2-Tetracyanocyclopropane (TCCP) as supramolecular synthon. Physical Chemistry Chemical Physics, 2016, 18, 1693-1698.	2.8	49
26	Halogen bonding versus hydrogen bonding: what does the Cambridge Database reveal?. CrystEngComm, 2013, 15, 4565.	2.6	45
27	Platform Synthetic Lectins for Divalent Carbohydrate Recognition in Water. Angewandte Chemie - International Edition, 2016, 55, 9311-9315.	13.8	45
28	Observations of tetrel bonding between sp3-carbon and THF. Chemical Science, 2020, 11, 5289-5293.	7.4	43
29	Efficient, stable, tunable, and easy to synthesize, handle and recycle luminescent materials: [H2NMe2]3[Ln(iii)(2,6-dipicolinolate)3] (Ln = Eu, Tb, or its solid solutions). Dalton Transactions, 2010, 39, 6483.	3.3	42
30	Directional character of solvent- and anion-pentafluorophenyl supramolecular interactions. CrystEngComm, 2012, 14, 3902.	2.6	41
31	Influence of ring size on the strength of carbon bonding complexes between anions and perfluorocycloalkanes. Physical Chemistry Chemical Physics, 2014, 16, 19192-19197.	2.8	41
32	Intramolecular Spodium Bonds in Zn(II) Complexes: Insights from Theory and Experiment. International Journal of Molecular Sciences, 2020, 21, 7091.	4.1	41
33	Halogenâ‹¯phenyl supramolecular interactions in the solid state: hydrogen versus halogen bonding and directionality. CrystEngComm, 2013, 15, 1802.	2.6	39
34	Synthetic Receptors for the Highâ€Affinity Recognition of Oâ€GlcNAc Derivatives. Angewandte Chemie, 2016, 128, 3448-3453.	2.0	36
35	Coordinated nitrate anions can be directional Ï€-hole donors in the solid state: a CSD study. CrystEngComm, 2017, 19, 4485-4488.	2.6	36
36	Ï€â€Hole Interactions Involving Nitro Aromatic Ligands in Protein Structures. Chemistry - A European Journal, 2019, 25, 13436-13443.	3.3	34

#	Article	IF	Citations
37	Intermolecular Non-Covalent Carbon-Bonding Interactions with Methyl Groups: A CSD, PDB and DFT Study. Molecules, 2019, 24, 3370.	3.8	34
38	Carbonylation of Nitrobenzene in Methanol with Palladium Bidentate Phosphane Complexes: An Unexpectedly Complex Network of Catalytic Reactions, Centred around a Pdâ€“imido Intermediate. Chemistry - A European Journal, 2011, 17, 13318-13333.	3.3	33
39	Spodium bonding in five coordinated Zn(<scp>ii</scp>): a new player in crystal engineering?. CrystEngComm, 2021, 23, 3084-3093.	2.6	33
40	Intermolecular Ï€-hole/nâ†'Ï€* interactions with carbon monoxide ligands in crystal structures. Chemical Communications, 2018, 54, 12049-12052.	4.1	31
41	How directional are Dâ€“Hâ‹¯phenyl interactions in the solid state (D = C, N, O)?. CrystEngComm, 2012, 14, 8462.	2.6	29
42	Mechanistic Study of the L₂Pd-Catalyzed Reduction of Nitrobenzene with CO in Methanol: Comparative Study between Diphosphane and 1,10-Phenanthroline Complexes. Organometallics, 2012, 31, 4142-4156.	2.3	28
43	A catalytic role for methionine revealed by a combination of computation and experiments on phosphite dehydrogenase. Chemical Science, 2014, 5, 2191-2199.	7.4	28
44	Engineering Crystals Using sp 3 â€€ Centred Tetrel Bonding Interactions. Chemistry - A European Journal, 2020, 26, 10126-10132.	3.3	28
45	Synthesis, X-ray characterization and regium bonding interactions of a trichlorido(1-hexylcytosine)gold(<scp>iii</scp>) complex. Chemical Communications, 2020, 56, 3524-3527.	4.1	28
46	Homogeneous Hydrogenation and Isomerization of 1-Octene Catalyzed by Nickel(II) Complexes with Bidentate Diarylphosphane Ligands. Inorganic Chemistry, 2013, 52, 8190-8201.	4.0	27
47	Ï€-Hole/nâ†'Ï€* interactions with acetonitrile in crystal structures. Chemical Communications, 2018, 54, 10742-10745.	4.1	27
48	Maltodextrin recognition by a macrocyclic synthetic lectin. Chemical Communications, 2018, 54, 8649-8652.	4.1	25
49	Easy Demonstration of the Marangoni Effect by Prolonged and Directional Motion: â€œSoap Boat 2.0â€. Journal of Chemical Education, 2013, 90, 1353-1357.	2.3	24
50	Platform Synthetic Lectins for Divalent Carbohydrate Recognition in Water. Angewandte Chemie, 2016, 128, 9457-9461.	2.0	24
51	Synthesis and evaluation of a desymmetrised synthetic lectin: an approach to carbohydrate receptors with improved versatility. Organic and Biomolecular Chemistry, 2016, 14, 1930-1933.	2.8	22
52	Spodium Bonds: Noncovalent Interactions Involving Groupâ€…12 Elements. Angewandte Chemie, 2020, 132, 17635-17640.	2.0	21
53	A Mixed-Valent Pentanuclear Cu^{II}₄Cu^I Compound Containing a Radical-Anion Ligand. Inorganic Chemistry, 2009, 48, 10643-10651.	4.0	20
54	NMR Spectroscopic Studies of Palladium(II) Complexes of Bidentate Diphenylphosphane Ligands with Acetate and Tosylate Anions: Complex Formation and Structures. European Journal of Inorganic Chemistry, 2010, 2010, 298-310.	2.0	20

#	Article	IF	Citations
55	Cyanamides as Ï€-Hole Donor Components of Structure-Directing (Cyanamide)Â·Â·Â·Arene Noncovalent Interactions. Crystal Growth and Design, 2020, 20, 4783-4793.	3.0	19
56	The N-atom in [N(PR₃)₂]⁺ cations (R = Ph, Me) can act as electron donor for (pseudo) anti-electrostatic interactions. CrystEngComm, 2015, 17, 3768-3771.	2.6	17
57	A [Pd2L4]4+ cage complex for n-octyl-Î²-d-glycoside recognition. Organic and Biomolecular Chemistry, 2020, 18, 4734-4738.	2.8	17
58	Intramolecular Ï€â€“hole interactions with nitro aromatics. CrystEngComm, 2019, 21, 5410-5417.	2.6	16
59	Ï€-Hole spodium bonding in tri-coordinated Hg(<scp>ii</scp>) complexes. Dalton Transactions, 2021, 50, 7545-7553.	3.3	14
60	Mechanistic Study of the Oxidative Carbonylation of Methanol Catalyzed by Palladium Diphosphane Complexes with Nitrobenzene as Oxidant. European Journal of Inorganic Chemistry, 2012, 2012, 1403-1412.	2.0	13
61	Intermolecular Ï€â€“Ï€ Stacking Interactions Made Visible. Journal of Chemical Education, 2021, 98, 540-545.	2.3	12
62	Anion binding properties of a hollow PdL-cage. Chemical Communications, 2021, 57, 7184-7187.	4.1	12
63	A Synthetic Galectin Mimic. Angewandte Chemie - International Edition, 2021, 60, 16178-16183.	13.8	12
64	A Water Soluble Pd₂L₄ Cage for Selective Binding of Neu5Ac. Chemistry - A European Journal, 2021, 27, 13719-13724.	3.3	12
65	Ï€-Hole Interactions with Various Nitro Compounds Relevant for Medicine: DFT Calculations and Surveys of the Cambridge Structural Database (CSD) and the Protein Data Bank (PDB). Synthesis, 2020, 52, 521-528.	2.3	11
66	An Octaâ€Urea [Pd₂L₄]⁴⁺ Cage that Selectively Binds to nâ€‹octylâ€Î±â€Dâ€Mannoside. ChemPhysChem, 2021, 22, 1187-1192.	2.1	10
67	A Practical, Large-Scale Synthesis of Pyrene-2-Carboxylic Acid. Synlett, 2014, 25, 2591-2594.	1.8	9
68	DFT and IsoStar Analyses to Assess the Utility of Ïƒâ€•and Ï€â€Hole Interactions for Crystal Engineering. ChemPhysChem, 2021, 22, 141-153.	2.1	9
69	A Synthetic Galectin Mimic. Angewandte Chemie, 2021, 133, 16314-16319.	2.0	5
70	Structure elucidation of the unprecedented asymmetric bis-chelate complex [Pd(1,3-bis(di(o-methoxy-m-methylphenyl)phosphino)propane)2]2+ in the solid state and in solution. Dalton Transactions, 2010, 39, 11027.	3.3	4
71	Molecular Recognition. ChemPhysChem, 2021, 22, 433-434.	2.1	4
72	Comparison of [Pd₂L₄][BF₄]₄ cages for binding of n-octyl glycosides and nitrate (L = isophthalamide or dipicolinamide linked dipyridyl ligand). Organic and Biomolecular Chemistry, 2021, 19, 6633-6637.	2.8	4

#	Article	IF	Citations
73	A combined theoretical and CSD perspective on Ïƒ-hole interactions with tetrels, pnictogens, chalcogens, halogens, and noble gases. , 2021, , 119-155.		4
74	Selective binding of ReO4â€“ And PtCl42â€“ By a Pd2L4 cage in water. Inorganic Chemistry Communication, 2022, 139, 109284.	3.9	4
75	Frustrated Lewis Pairs based on CarbonÂ·Â·Â·Carbon+ tetrel bonds: A DFT study. MarÃa de las Nieves PiÃ±a[a], Antonio Frontera[a], Tiddo. J. Mooibroek[b],* and Antonio BauzÃ¡*[a]. ChemPhysChem, 2021, 22, 2478-2483.	2.1	3
76	A Simple Strategy to Obtain Synthetic Ca 2+ â€Dependent Lectin Mimics. European Journal of Organic Chemistry, 2021, 2021, 4218-4223.	2.4	2
77	Computational Evaluation of Me 2 TCCP as Lewis acid. ChemPhysChem, 2021, 22, 2099-2106.	2.1	2
78	Cover Feature: DFT and IsoStar Analyses to Assess the Utility of Ïƒâ€•and Ï€â€Hole Interactions for Crystal Engineering (2/2021). ChemPhysChem, 2021, 22, 140-140.	2.1	0