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	Selective binding of ReO4â€“ And PtCl42â€“ By a Pd2L4 cage in water. Inorganic Chemistry Communication, 2022, 139, 109284.	3.9	4
2	Transition Metal Catalysis Controlled by Hydrogen Bonding in the Second Coordination Sphere. Chemical Reviews, 2022, 122, 12308-12369.	47.7	60
3	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
4	Intermolecular Ï€â€“Ï€ Stacking Interactions Made Visible. Journal of Chemical Education, 2021, 98, 540-545.	2.3	12
5	Spodium bonding in five coordinated Zn(<scp>ii</scp>): a new player in crystal engineering?. CrystEngComm, 2021, 23, 3084-3093.	2.6	33
6	Ï€-Hole spodium bonding in tri-coordinated Hg(<scp>ii</scp>) complexes. Dalton Transactions, 2021, 50, 7545-7553.	3.3	14
7	Anion binding properties of a hollow PdL-cage. Chemical Communications, 2021, 57, 7184-7187.	4.1	12
8	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
9	Molecular Recognition. ChemPhysChem, 2021, 22, 433-434.	2.1	4
10	An Octaâ€Urea [Pd₂L₄]⁴⁺ Cage that Selectively Binds to <i>nâ€</i>octylâ€Î±â€Ðâ€Mannoside. ChemPhysChem, 2021, 22, 1187-1192.	2.1	10
11	A Synthetic Galectin Mimic. Angewandte Chemie - International Edition, 2021, 60, 16178-16183.	13.8	12
12	A Synthetic Galectin Mimic. Angewandte Chemie, 2021, 133, 16314-16319.	2.0	5
13	A Simple Strategy to Obtain Synthetic Ca 2+ â€Dependent Lectin Mimics. European Journal of Organic Chemistry, 2021, 2021, 4218-4223.	2.4	2
14	Computational Evaluation of Me 2 TCCP as Lewis acid. ChemPhysChem, 2021, 22, 2099-2106.	2.1	2
15	A Water Soluble Pd₂L₄ Cage for Selective Binding of Neu5Ac. Chemistry - A European Journal, 2021, 27, 13719-13724.	3.3	12
16	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
17	Comparison of [Pd₂L₄][BF₄]₄ cages for binding of <i>n</i>-octyl glycosides and nitrate (L = isophthalamide or dipicolinamide linked dipyridyl ligand). Organic and Biomolecular Chemistry, 2021, 19, 6633-6637.	2.8	4
18	A combined theoretical and CSD perspective on Ïƒ-hole interactions with tetrels, pnictogens, chalcogens, halogens, and noble gases. , 2021, , 119-155.		4

#	ARTICLE	IF	CITATIONS
19	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
20	Intramolecular Spodium Bonds in Zn(II) Complexes: Insights from Theory and Experiment. International Journal of Molecular Sciences, 2020, 21, 7091.	4.1	41
21	Observations of tetrel bonding between sp3-carbon and THF. Chemical Science, 2020, 11, 5289-5293.	7.4	43
22	A [Pd2L4]4+ cage complex for n-octyl-Î²-d-glycoside recognition. Organic and Biomolecular Chemistry, 2020, 18, 4734-4738.	2.8	17
23	Spodium Bonds: Noncovalent Interactions Involving Groupâ€…12 Elements. Angewandte Chemie, 2020, 132, 17635-17640.	2.0	21
24	Spodium Bonds: Noncovalent Interactions Involving Groupâ€…12 Elements. Angewandte Chemie - International Edition, 2020, 59, 17482-17487.	13.8	136
25	Engineering Crystals Using sp 3 â€€ Centred Tetrel Bonding Interactions. Chemistry - A European Journal, 2020, 26, 10126-10132.	3.3	28
26	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
27	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
28	Intramolecular Ï€â€“hole interactions with nitro aromatics. CrystEngComm, 2019, 21, 5410-5417.	2.6	16
29	Ï€â€Hole Interactions Involving Nitro Aromatic Ligands in Protein Structures. Chemistry - A European Journal, 2019, 25, 13436-13443.	3.3	34
30	Intermolecular Non-Covalent Carbon-Bonding Interactions with Methyl Groups: A CSD, PDB and DFT Study. Molecules, 2019, 24, 3370.	3.8	34
31	Intermolecular Ï€-hole/nâ†'Ï€* interactions with carbon monoxide ligands in crystal structures. Chemical Communications, 2018, 54, 12049-12052.	4.1	31
32	Ï€-Hole/nâ†'Ï€* interactions with acetonitrile in crystal structures. Chemical Communications, 2018, 54, 10742-10745.	4.1	27
33	Maltodextrin recognition by a macrocyclic synthetic lectin. Chemical Communications, 2018, 54, 8649-8652.	4.1	25
34	NO3âˆ' anions can act as Lewis acid in the solid state. Nature Communications, 2017, 8, 14522.	12.8	72
35	Disaggregation is a Mechanism for Emission Turn-On of <i>ortho</i>-Aminomethylphenylboronic Acid-Based Saccharide Sensors. Journal of the American Chemical Society, 2017, 139, 5568-5578.	13.7	60
36	Enantioselective carbohydrate recognition by synthetic lectins in water. Chemical Science, 2017, 8, 4056-4061.	7.4	56

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37	Coordinated nitrate anions can be directional Ï€-hole donors in the solid state: a CSD study. CrystEngComm, 2017, 19, 4485-4488.	2.6	36
38	Platform Synthetic Lectins for Divalent Carbohydrate Recognition in Water. Angewandte Chemie, 2016, 128, 9457-9461.	2.0	24
39	Platform Synthetic Lectins for Divalent Carbohydrate Recognition in Water. Angewandte Chemie - International Edition, 2016, 55, 9311-9315.	13.8	45
40	Synthetic Receptors for the Highâ€Affinity Recognition of Oâ€GlcNAc Derivatives. Angewandte Chemie - International Edition, 2016, 55, 3387-3392.	13.8	86
41	Synthetic Receptors for the Highâ€Affinity Recognition of Oâ€GlcNAc Derivatives. Angewandte Chemie, 2016, 128, 3448-3453.	2.0	36
42	Ï€-Hole Interactions Involving Nitro Compounds: Directionality of Nitrate Esters. Crystal Growth and Design, 2016, 16, 5520-5524.	3.0	67
43	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
44	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
45	1,1,2,2-Tetracyanocyclopropane (TCCP) as supramolecular synthon. Physical Chemistry Chemical Physics, 2016, 18, 1693-1698.	2.8	49
46	Tetrel Bonding Interactions. Chemical Record, 2016, 16, 473-487.	5.8	188
47	A threading receptor for polysaccharides. Nature Chemistry, 2016, 8, 69-74.	13.6	119
48	Towards design strategies for anionâ€“Ï€ interactions in crystal engineering. CrystEngComm, 2016, 18, 10-23.	2.6	101
49	The Bright Future of Unconventional Ïƒ/Ï€â€Hole Interactions. ChemPhysChem, 2015, 16, 2496-2517.	2.1	569
50	Affinity Enhancement by Dendritic Side Chains in Synthetic Carbohydrate Receptors. Angewandte Chemie - International Edition, 2015, 54, 2057-2061.	13.8	58
51	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
52	Directionality of Ï€-holes in nitro compounds. Chemical Communications, 2015, 51, 1491-1493.	4.1	130
53	A Practical, Large-Scale Synthesis of Pyrene-2-Carboxylic Acid. Synlett, 2014, 25, 2591-2594.	1.8	9
54	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

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55	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
56	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
57	Non-covalent sp³carbon bonding with ArCF₃is analogous to CHâ€“Ï€ interactions. Chemical Communications, 2014, 50, 12626-12629.	4.1	86
58	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
59	Tetrelâ€Bonding Interaction: Rediscovered Supramolecular Force?. Angewandte Chemie - International Edition, 2013, 52, 12317-12321.	13.8	575
60	Halogenâ‹¯phenyl supramolecular interactions in the solid state: hydrogen versus halogen bonding and directionality. CrystEngComm, 2013, 15, 1802.	2.6	39
61	Halogen bonding versus hydrogen bonding: what does the Cambridge Database reveal?. CrystEngComm, 2013, 15, 4565.	2.6	45
62	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
63	How directional are Dâ€“Hâ‹¯phenyl interactions in the solid state (D = C, N, O)?. CrystEngComm, 2012, 14, 8462.	2.6	29
64	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
65	Anionâ€“arene and lone pairâ€“arene interactions are directional. CrystEngComm, 2012, 14, 1027-1030.	2.6	67
66	Directional character of solvent- and anion-pentafluorophenyl supramolecular interactions. CrystEngComm, 2012, 14, 3902.	2.6	41
67	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
68	Putting Anionâ€“Ï€ Interactions Into Perspective. Angewandte Chemie - International Edition, 2011, 50, 9564-9583.	13.8	591
69	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
70	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
71	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
72	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

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73	A Mixed-Valent Pentanuclear Cu^{II}₄Cu^I Compound Containing a Radical-Anion Ligand. Inorganic Chemistry, 2009, 48, 10643-10651.	4.0	20
74	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
75	Lone pairâ€“Ï€ interactions: a new supramolecular bond?. CrystEngComm, 2008, 10, 1501.	2.6	492
76	Anion Binding Involving Ï€-Acidic Heteroaromatic Rings. Accounts of Chemical Research, 2007, 40, 435-444.	15.6	522
77	The s-triazine ring, a remarkable unit to generate supramolecular interactions. Inorganica Chimica Acta, 2007, 360, 381-404.	2.4	151
78	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