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Contributors

Fuller, Watson, 1935-

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Hydrogen-bond radii

(Less-well-established values in parentheses)

Donor groups	Acceptor groups						
(Å)	(Å)	(Å)	(Å)	(Å)	(Å)	(Å)	
NH _n	1.55	N ⁻	(1.52)	O ⁻	1.43	F ⁻	(1.35)
NH _n ⁺	1.41	N	1.51	O	1.40	Cl ⁻	1.79
OH _n	1.30	NH _n	1.59	OH _n	1.48	Br ⁻	1.98
		NH _n ⁺	(1.68)				

used to predict the acceptor radii for other atoms, e.g. sulphur might be expected to have a value of about 1.85 Å, or possibly less in view of shorter van der Waals radii for sulphur adopted by some authors. Eighteen NH_n . . . S contacts which might be hydrogen bonds have been found in the literature. They range in length from 3.23 to 3.51 Å and have a mean value of 3.40 Å, which is the distance expected for hydrogen bonds of this type if the acceptor radius for sulphur is 1.85 Å. Five of these distances—3.26

inform
sulphu