# C-Br···Br interactions in various derivatives of benzenes and naphthalenes

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*gem*-Di­bromo­methyl aromatic derivatives are useful com­pounds for the synthesis of aromatic aldehydes [1], aromatic imines [2], aromatic acetals [3] or polymeric materials, such as poly(*p*-phenyl­ene­vinyl­ene) (PVP) [4]. 2,3-Di­cyanona­phthalenes can be synthesized from 1,2-bis­(di­bromo­meth­yl)ben­zene and its derivatives with fumaro­nitrile [5].

Earlier, performed research investigated the relationship between the structures of brominated mol­ecules, their crystal packing and the occurrence of such secondary inter­actions between mol­ecules in the solid state. This systematic study has included various simple organic com­pounds of a similar chemical nature. First reports concerned bromo­methyl­ben­zene and related derivatives, all isomers of xylene, durene and iso­durene [6], and bis­(bromo­meth­yl)naph­tha­lene derivatives [7]. Then the research was extended to com­pounds in which Br atoms are also attached directly to aromatic C atoms of ben­zene derivatives; this provided new opportunities to observe Br⋯Br and H⋯Br inter­actions [8, 9]. The next step was to study the interactions in the crystal structures of selected derivatives of benzenes and naphthalenes with at least one di­bromo­methyl unit in the mol­ecule [10].

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