## Supporting information

## Supramolecular Self-Assembly Built by Weak Hydrogen, Chalcogen and Unorthodox Nonbonded Motifs in 4-(4-chlorophenyl)-3-[(4fluorobenzyl)sulfanyl]-5-(thiophen-2-yl)-4*H*-1,2,4-triazole, a Selective COX-2 Inhibitor: Insights from X-ray and Theoretical Studies

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Figure S1. Molecular graphs showing the intermolecular interactions in different molecular pairs (I-VI) of the title compound.



Figure S2. The distribution of C–H $\cdots$ F contacts (distance and angle) for three different cases (see Scheme 2).



Figure S3. The distribution of  $C-F\cdots Cg(\pi)$  contacts



Figure S4. The distribution of C–S…Cl contacts.