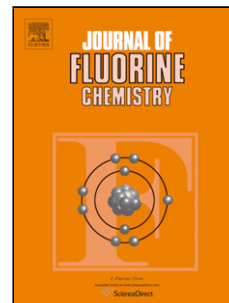


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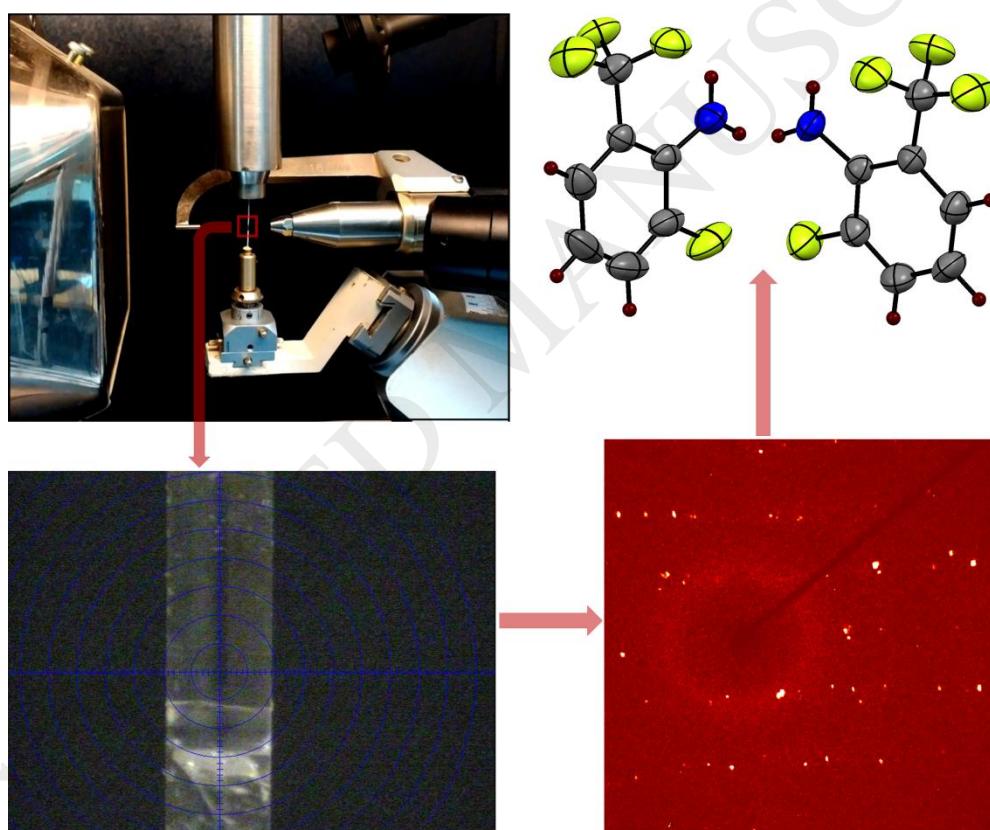
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Graphical Abstract



Experimental in situ cryo-crystallization studies performed on –F and –CF₃ substituted anilines reveals the electronic characteristics and energetics of the molecular packing of these compounds through the utilization of C_{sp3/sp2}–F···F–C_{sp3/sp2}, N–H···F–C_{sp3/sp2}, and C–H···F–C_{sp3/sp2} interactions in the presence of strong N–H···N hydrogen bonds.

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