

**Electronic Supplementary Information for**

# Solid-state separation of hypoxanthine tautomers through a doping strategy

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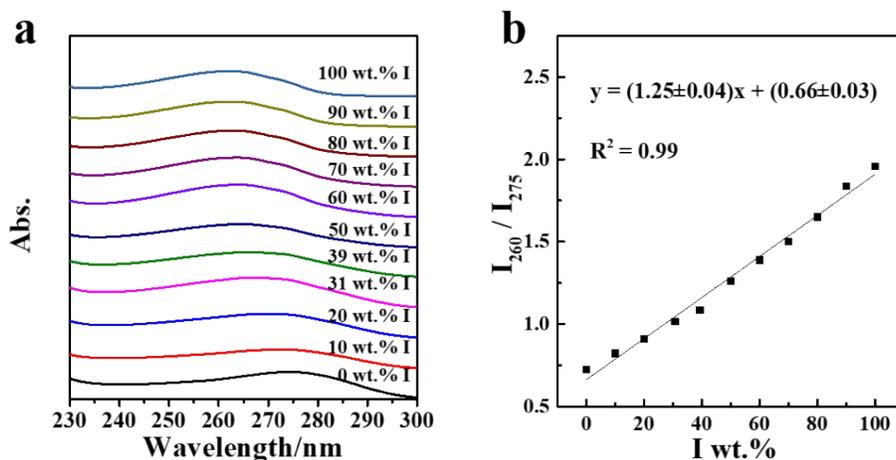
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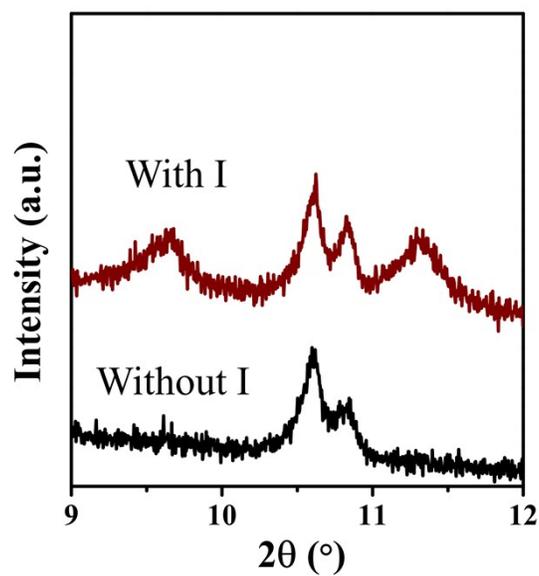
**Figure S1.** The working curves of a series of standard mixed samples with different hypoxanthine (*I*) wt% (in the range from 0 to 100 wt%). a) The UV-vis absorption spectroscopy results, b) the linear fit result between the intensity ratio of peak at 260 to 275 nm  $I_{260}/I_{275}$  and *I* wt%.

**Table S1.** The method errors of the working curves in the range from 0 to 100 of *I* wt%.

Sample	<i>I</i> wt%	<i>I</i> wt% (Measure)	Error
Standard-1	0 %	5.3 %	+5.3 %
Standard-2	10 %	12.9 %	+2.9 %
Standard-3	20 %	20.0 %	0.0 %
Standard-4	31 %	28.4 %	-2.6 %
Standard-5	39 %	34.0 %	-5.0 %
Standard-6	50 %	48.0 %	-2.0 %
Standard-7	60 %	58.2 %	-1.8 %
Standard-8	70 %	67.2 %	-2.8 %
Standard-9	80 %	79.1 %	-0.9 %
Standard-10	90 %	94.1 %	+4.1 %
Standard-11	100 %	103.8 %	+3.8 %

**Table S2.** The method errors of the working curves in the range from 0 to 40 of *I* wt%.

Sample	<i>I</i> wt%	<i>I</i> wt% (Measure)	Error
Standard-1	0 %	-0.1 %	-0.1 %
Standard-2	10 %	10.3 %	+0.3 %
Standard-3	20 %	19.9 %	-0.1 %
Standard-4	31 %	31.3 %	+0.3 %
Standard-5	39 %	39.0 %	0.0 %



**Figure S2.** The PXR D patterns of the recrystallized guanine crystals with or without hypoxanthine in DMSO.