Supporting Information

Thermodynamic analyses of critical nuclei and crystallization entropy using size distributions of small cluster of two-dimensional colloidal crystals

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1. Table S1 (data for Fig. 1A)

Table S1 Number of particles in each cluster with time *t* (raw data for Figure 1A)

t / min.	Blue triangle	Orange triangle	Gray triangle	Yellow circle	Blue circle
0					
1					11
2					13
3					17
4					18
5					18
6					21
7					22
8					24
9					26
10				11	30
11				19	31
12				21	34
13				21	36
14				23	37
15			11	23	36
16			13	23	43
17			15	23	48

18			18	22	
19			19	20	
20			19	22	
21		12	18	22	
22		13	21	23	
23		13	19	26	
24		14	16	31	
25		17	10	34	
26		18	9	32	
27		17	9	35	
28		10	10	41	
29		17		45	
30		17		45	
31		20		49	
32		19		48	
33		21		48	
34		22		50	
35		25			
36		26			
37		24			
38		26			
39		28			
40		25			
41	12	20			
42	20	18			
43	18	11			
44	17				
45	10				
46	16				
47	16				

2. Table S2 (data for Fig. 3B)

Table S2 Average number of clusters $N_{cluster}$ from seven snapshots with the number of particles in clusters n

n / -	$N_{cluster}$ / -
2	112.00
3	33.43
4	13.29
5	5.71
6	2.86
7	1.57
8	1.71
9	0.86
10	0.43

3. Table S3 (data for Fig. 4)

Table S3 Difference in Gibbs energy of formation between adjacent clusters $g_n - g_{n-1}$ with respect to the inverse of the square root of the number of particles in clusters $1/\sqrt{n}$

$1/\sqrt{n}$ / -	$g_n - g_{n-1} / kT$
0.58	1.21
0.50	0.92
0.45	0.84
0.41	0.69
0.38	0.60

4. Table S4 (data for Fig. 5B)

Table S2 Number of apparent dangling bonds around clusters n_d with square roots of numbers of particles in clusters $\sqrt{n}$

$\sqrt{n}$ / -	n_d / -
1.41	10
1.73	12
2	14
2.24	16
2.65	18
3	22
3.46	24
4	28
4.34	30