

Supporting Information

Hygroscopic Properties of NaCl Nanoparticles on the Surface: A Scanning Force Microscopy Study

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Table S1. Measured side length (L_m) of different particles at the lowest RH conditions. Values of L should be calculated by Equation 1 or Equation 2 in the main text.

Larger particles		
	X (nm)	Y (nm)
Particle 1	236	247
Particle 2	276	252
Particle 3	289	248
Particle 4	258	282
Particle 5	268	237
Particle 6	340	334
Particle 7	279	291
Smaller particles		
	X (nm)	Y (nm)
Particle 1	38	39
Particle 2	28	30
Particle 3	34	30
Particle 4	31	33
Particle 5	31	30

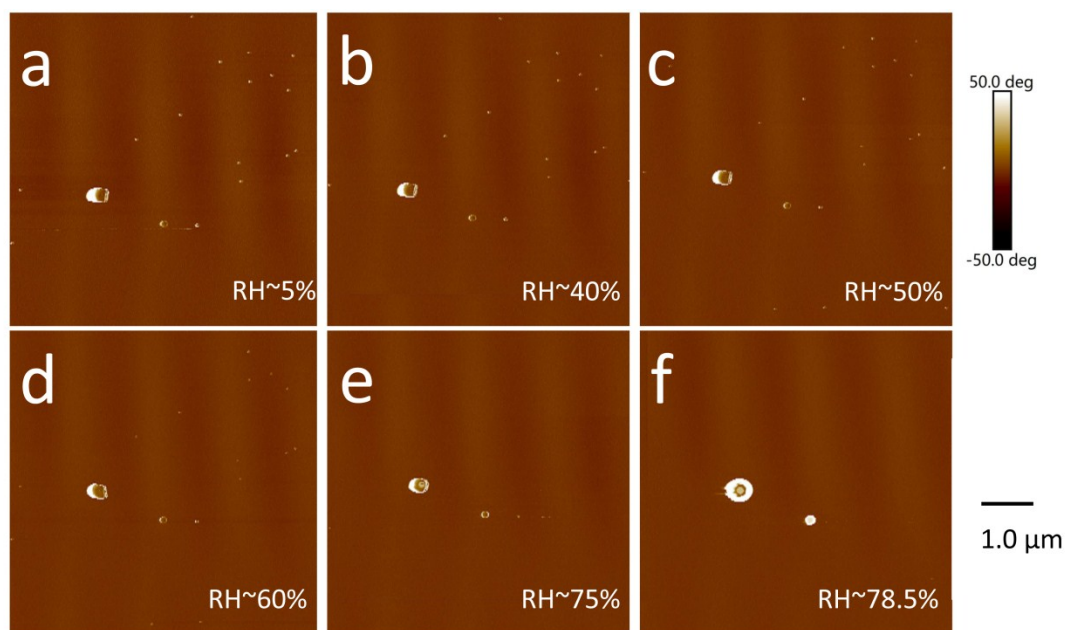


Figure S1. Phase images of NaCl particles with different sizes on the same substrate at different RH conditions.

Table S3. Growth factors based on the $D_{\text{curvature}}$ of smaller particles (~10 nm).

Particle 1		Particle 2		Particle 3		Particle 4		Particle 5	
RH	GF	RH	GF	RH	GF	RH	GF	RH	GF
13.8	1	13.8	1	15.6	1	15.6	1	15.6	1
26.5	1	26.5	1.0005	26.8	1.00211	62.3	1.01167	45.5	1.11741
34.2	1.07826	34.2	0.9816	62.3	0.99577	82.0	1.07275	82.0	1.22497
41.1	1.09937	41.1	0.9864	82.0	0.89619	85.9	1.69992	85.9	2.05171
43.3	0.98698	43.3	0.99876	85.9	1.33618	88.4	1.51513		
53.7	0.99733	53.7	0.99991	88.4	2.05648				
63.4	1.15141	63.4	0.98454						
82.2	1.14462	73.2	0.99444						
86.6	1.39693	82.2	1.12476						
90.2	1.40198	90.2	2.08534						

Table S5. Growth factors based on the volume of smaller particles (~10 nm).

Particle 1		Particle 2		Particle 3		Particle 4		Particle 5	
RH	GF	RH	GF	RH	GF	RH	GF	RH	GF
13.8	1	13.8	1	15.6	1	15.6	1	15.6	1
26.5	1.05347	26.5	1.03513	26.8	1.001	62.3	1.1537	45.5	0.98115
34.2	1.04207	34.2	1.02396	62.3	1.13123	82.0	0.98279	82.0	1.09387
41.1	1.00786	41.1	1.00253	82.0	1.01811	85.9	1.46149	85.9	1.89332
43.3	1.00158	43.3	1.00085	85.9	1.01347	88.4	1.51678		
53.7	1.01677	53.7	1.02797	88.4	1.58052				
63.4	0.93457	63.4	1.00922						
82.2	1.1199	73.2	1.01582						
86.6	1.60946	82.2	1.07098						
90.2	1.58443	90.2	1.46781						

