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supplementary material for manuscript

Mesogen polarity effects on biaxial nematics. Centrally located dipoles

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$\langle T^* \rangle$	$\langle \rho^* \rangle$	$\langle E^* \rangle$	$\langle U^*_{\mathrm{GB}} \rangle$	$\langle U^*_{\mathrm{el}} \rangle$
2.6	0.349 ± 0.001	-8.8 ± 0.1	-16.5 ± 0.2	-0.02 ± 0.05
2.7	0.318 ± 0.003	-2.39 ± 0.07	-10.4 ± 0.2	-0.02 ± 0.04
2.8	0.304 ± 0.003	0.68 ± 0.05	-7.6 ± 0.1	-0.02 ± 0.04
2.9	0.294 ± 0.003	2.44 ± 0.08	-6.2 ± 0.1	-0.01 ± 0.04
3.0	0.287 ± 0.003	3.70 ± 0.06	-5.2 ± 0.1	-0.01 ± 0.04
3.1	0.280 ± 0.003	4.74 ± 0.07	-4.5 ± 0.1	-0.01 ± 0.04
3.2	0.273 ± 0.003	5.82 ± 0.08	-3.7 ± 0.1	-0.01 ± 0.04
3.3	0.267 ± 0.003	6.88 ± 0.09	-2.9 ± 0.1	-0.01 ± 0.04
3.4	0.263 ± 0.003	7.4 ± 0.1	-2.7 ± 0.1	-0.01 ± 0.03
3.5	0.261 ± 0.003	7.89 ± 0.09	-2.5 ± 0.1	-0.01 ± 0.03
3.6	0.258 ± 0.003	8.3 ± 0.1	-2.4 ± 0.1	-0.01 ± 0.03
$\langle T^* \rangle$	$\langle R^1_{0,0} \rangle$	$\langle R^2_{0,0} \rangle$	$\langle R^4_{0,0} \rangle$	
2.6	0.00 ± 0.01	0.97 ± 0.01	0.89 ± 0.01	
2.7	0.00 ± 0.02	0.90 ± 0.01	0.71 ± 0.01	
2.8	0.00 ± 0.01	0.82 ± 0.01	0.55 ± 0.02	
2.9	-0.02 ± 0.03	0.75 ± 0.02	0.44 ± 0.02	
3.0	0.00 ± 0.02	0.68 ± 0.02	0.34 ± 0.03	
3.1	0.01 ± 0.03	0.58 ± 0.03	0.25 ± 0.03	
3.2	-0.01 ± 0.03	0.44 ± 0.04	0.14 ± 0.03	
3.3	0.00 ± 0.02	0.15 ± 0.05	0.02 ± 0.02	
3.4	0.00 ± 0.02	0.12 ± 0.05	0.02 ± 0.02	
3.5	0.00 ± 0.02	0.09 ± 0.03	0.01 ± 0.01	
3.6	0.01 ± 0.02	0.08 ± 0.03	0.01 ± 0.01	
$\langle T^* \rangle$	$\langle R^2_{0,2} \rangle$	$\langle R^2_{2,0} \rangle$	$\langle R^2_{2,2} \rangle$	
2.6	0.01 ± 0.01	0.01 ± 0.01	0.47 ± 0.01	
2.7	0.02 ± 0.01	0.02 ± 0.01	0.36 ± 0.01	
2.8	0.03 ± 0.01	0.04 ± 0.01	0.27 ± 0.01	
2.9	0.03 ± 0.01	0.04 ± 0.01	0.16 ± 0.04	
3.0	0.02 ± 0.01	0.05 ± 0.01	0.07 ± 0.04	
3.1	0.02 ± 0.02	0.06 ± 0.01	0.06 ± 0.03	
3.2	0.03 ± 0.02	0.06 ± 0.01	0.05 ± 0.02	
3.3	0.01 ± 0.05	0.03 ± 0.01	0.03 ± 0.01	
3.4	0.01 ± 0.04	0.03 ± 0.02	0.03 ± 0.01	
3.5	0.00 ± 0.04	0.02 ± 0.01	0.02 ± 0.01	
3.6	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	

Table 1: Average number density, total and potential energies, and orientational order parameters for the cx system with $\mu^* = 0.5$.

$\langle T^* \rangle$	$\langle \rho^* \rangle$	$\langle E^* \rangle$	$\langle U^*_{\mathrm{GB}} \rangle$	$\langle U^*_{\mathrm{el}} \rangle$
2.6	0.348 ± 0.004	-8.8 ± 0.2	-16.4 ± 0.2	-0.1 ± 0.2
2.7	0.318 ± 0.003	-2.8 ± 0.2	-10.5 ± 0.2	-0.3 ± 0.2
2.8	0.306 ± 0.003	-0.0 ± 0.2	-8.1 ± 0.2	-0.2 ± 0.2
2.9	0.293 ± 0.003	2.3 ± 0.2	-6.1 ± 0.1	-0.2 ± 0.1
3.0	0.287 ± 0.003	3.5 ± 0.2	-5.3 ± 0.1	-0.2 ± 0.1
3.1	0.281 ± 0.003	4.5 ± 0.2	-4.6 ± 0.1	-0.1 ± 0.1
3.2	0.274 ± 0.003	5.5 ± 0.2	-3.9 ± 0.1	-0.1 ± 0.1
3.3	0.266 ± 0.003	6.8 ± 0.2	-3.0 ± 0.1	-0.1 ± 0.1
3.4	0.263 ± 0.003	7.3 ± 0.2	-2.7 ± 0.1	-0.1 ± 0.1
3.5	0.260 ± 0.003	7.8 ± 0.2	-2.5 ± 0.1	-0.1 ± 0.1
3.6	0.258 ± 0.003	8.2 ± 0.2	-2.4 ± 0.1	-0.1 ± 0.1
$\langle T^* \rangle$	$\langle R^1_{0,0} \rangle$	$\langle R^2_{0,0} \rangle$	$\langle R^4_{0,0} \rangle$	
2.6	0.00 ± 0.01	0.97 ± 0.01	0.89 ± 0.01	
2.7	0.01 ± 0.03	0.90 ± 0.01	0.72 ± 0.01	
2.8	0.01 ± 0.01	0.84 ± 0.01	0.59 ± 0.02	
2.9	0.01 ± 0.02	0.75 ± 0.02	0.44 ± 0.02	
3.0	0.00 ± 0.03	0.69 ± 0.02	0.36 ± 0.03	
3.1	0.00 ± 0.02	0.61 ± 0.02	0.27 ± 0.03	
3.2	0.01 ± 0.02	0.49 ± 0.03	0.18 ± 0.03	
3.3	0.00 ± 0.02	0.17 ± 0.05	0.02 ± 0.02	
3.4	0.00 ± 0.02	0.11 ± 0.04	0.01 ± 0.02	
3.5	0.00 ± 0.02	0.08 ± 0.03	0.01 ± 0.02	
3.6	0.00 ± 0.02	0.09 ± 0.04	0.01 ± 0.02	
$\langle T^* \rangle$	$\langle R^2_{0,2} \rangle$	$\langle R^2_{2,0} \rangle$	$\langle R^2_{2,2} \rangle$	
2.6	0.01 ± 0.01	0.01 ± 0.01	0.47 ± 0.01	
2.7	0.02 ± 0.01	0.02 ± 0.01	0.36 ± 0.01	
2.8	0.03 ± 0.01	0.03 ± 0.01	0.29 ± 0.01	
2.9	0.02 ± 0.01	0.04 ± 0.01	0.14 ± 0.03	
3.0	0.02 ± 0.01	0.05 ± 0.01	0.07 ± 0.03	
3.1	0.02 ± 0.01	0.06 ± 0.01	0.05 ± 0.02	
3.2	0.01 ± 0.02	0.06 ± 0.01	0.03 ± 0.02	
3.3	0.02 ± 0.05	0.04 ± 0.01	0.03 ± 0.01	
3.4	0.01 ± 0.04	0.03 ± 0.01	0.03 ± 0.01	
3.5	0.00 ± 0.04	0.02 ± 0.01	0.02 ± 0.01	
3.6	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	

Table 2: Average number density, total and potential energies, and orientational order parameters for the *cx* system with $\mu^* = 1$.

$\langle T^* \rangle$	$\langle \rho^* \rangle$	$\langle E^* \rangle$	$\langle U^*_{\mathrm{GB}} \rangle$	$\langle U^*_{\mathrm{el}} \rangle$
2.6	0.344 ± 0.004	-8.5 ± 0.5	-15.7 ± 0.3	-0.6 ± 0.4
2.7	0.317 ± 0.003	-3.8 ± 0.4	-10.6 ± 0.2	-1.3 ± 0.4
2.8	0.307 ± 0.004	-1.9 ± 0.6	-9.3 ± 0.4	-1.1 ± 0.4
2.9	0.292 ± 0.003	1.8 ± 0.4	-6.1 ± 0.2	-0.8 ± 0.3
3.0	0.285 ± 0.003	3.1 ± 0.3	-5.2 ± 0.1	-0.7 ± 0.3
3.1	0.279 ± 0.003	4.1 ± 0.3	-4.5 ± 0.1	-0.6 ± 0.3
3.2	0.273 ± 0.003	5.2 ± 0.3	-3.8 ± 0.1	-0.6 ± 0.3
3.3	0.265 ± 0.003	6.5 ± 0.3	-2.9 ± 0.1	-0.5 ± 0.3
3.4	0.262 ± 0.003	7.0 ± 0.3	-2.7 ± 0.1	-0.5 ± 0.3
3.5	0.260 ± 0.003	7.5 ± 0.3	-2.5 ± 0.1	-0.5 ± 0.3
3.6	0.257 ± 0.003	8.0 ± 0.3	-2.3 ± 0.1	-0.5 ± 0.3
$\langle T^* \rangle$	$\langle R^1_{0,0} \rangle$	$\langle R^2_{0,0} \rangle$	$\langle R^4_{0,0} \rangle$	
2.6	0.00 ± 0.01	0.96 ± 0.01	0.88 ± 0.01	
2.7	0.02 ± 0.02	0.90 ± 0.01	0.72 ± 0.01	
2.8	0.00 ± 0.01	0.88 ± 0.01	0.67 ± 0.03	
2.9	-0.02 ± 0.02	0.75 ± 0.02	0.44 ± 0.03	
3.0	-0.01 ± 0.02	0.68 ± 0.02	0.35 ± 0.03	
3.1	-0.01 ± 0.03	0.60 ± 0.02	0.27 ± 0.02	
3.2	0.00 ± 0.02	0.48 ± 0.03	0.16 ± 0.03	
3.3	0.00 ± 0.02	0.14 ± 0.05	0.02 ± 0.02	
3.4	0.00 ± 0.02	0.10 ± 0.03	0.01 ± 0.02	
3.5	0.00 ± 0.02	0.10 ± 0.03	0.01 ± 0.02	
3.6	0.00 ± 0.02	0.07 ± 0.03	0.00 ± 0.01	
$\langle T^* \rangle$	$\langle R^2_{0,2} \rangle$	$\langle R^2_{2,0} \rangle$	$\langle R^2_{2,2} \rangle$	
2.6	0.01 ± 0.01	0.01 ± 0.01	0.46 ± 0.01	
2.7	0.02 ± 0.01	0.02 ± 0.01	0.36 ± 0.01	
2.8	0.02 ± 0.01	0.02 ± 0.01	0.32 ± 0.02	
2.9	0.02 ± 0.01	0.04 ± 0.01	0.13 ± 0.04	
3.0	0.02 ± 0.01	0.05 ± 0.01	0.07 ± 0.03	
3.1	0.01 ± 0.01	0.06 ± 0.01	0.05 ± 0.03	
3.2	0.01 ± 0.02	0.06 ± 0.01	0.03 ± 0.02	
3.3	0.01 ± 0.05	0.03 ± 0.02	0.03 ± 0.01	
3.4	0.00 ± 0.04	0.02 ± 0.01	0.02 ± 0.01	
3.5	0.01 ± 0.04	0.02 ± 0.01	0.03 ± 0.01	
3.6	0.00 ± 0.03	0.01 ± 0.01	0.02 ± 0.01	

Table 3: Average number density, total and potential energies, and orientational order parameters for the *cx* system with $\mu^* = 1.5$.

$\langle T^* \rangle$	$\langle \rho^* \rangle$	$\langle E^* \rangle$	$\langle U^*_{\mathrm{GB}} \rangle$	$\langle U^*_{\mathrm{el}} \rangle$
2.6	0.345 ± 0.004	-12 ± 1	-15.2 ± 0.2	-4.3 ± 0.7
2.7	0.337 ± 0.004	-14 ± 1	-15.1 ± 0.4	-6.5 ± 0.8
2.8	0.335 ± 0.004	-14 ± 1	-15.1 ± 0.3	-7.3 ± 0.9
2.9	0.327 ± 0.006	-12 ± 2	-13.9 ± 0.8	-8 ± 1
3.0	0.328 ± 0.004	-12 ± 1	-14.2 ± 0.3	-7 ± 1
3.1	0.280 ± 0.003	2.4 ± 0.6	-5.0 ± 0.1	-1.8 ± 0.6
3.2	0.272 ± 0.003	3.9 ± 0.6	-4.0 ± 0.1	-1.7 ± 0.6
3.3	0.265 ± 0.003	5.3 ± 0.6	-3.0 ± 0.1	-1.5 ± 0.6
3.4	0.262 ± 0.003	5.9 ± 0.6	-2.8 ± 0.1	-1.4 ± 0.6
3.5	0.259 ± 0.003	6.5 ± 0.6	-2.6 ± 0.1	-1.4 ± 0.6
3.6	0.256 ± 0.003	7.0 ± 0.6	-2.4 ± 0.1	-1.3 ± 0.6
$\langle T^* \rangle$	$\langle R^1_{0,0} \rangle$	$\langle R^2_{0,0} \rangle$	$\langle R^4_{0,0} \rangle$	
2.6	0.00 ± 0.01	0.96 ± 0.01	0.88 ± 0.01	
2.7	0.00 ± 0.01	0.95 ± 0.01	0.86 ± 0.01	
2.8	0.01 ± 0.01	0.96 ± 0.01	0.86 ± 0.01	
2.9	-0.02 ± 0.01	0.94 ± 0.02	0.82 ± 0.03	
3.0	0.04 ± 0.01	0.95 ± 0.01	0.84 ± 0.01	
3.1	0.00 ± 0.04	0.66 ± 0.02	0.33 ± 0.02	
3.2	0.01 ± 0.02	0.50 ± 0.03	0.19 ± 0.02	
3.3	0.00 ± 0.02	0.18 ± 0.06	0.03 ± 0.02	
3.4	0.00 ± 0.02	0.15 ± 0.05	0.02 ± 0.02	
3.5	0.00 ± 0.02	0.09 ± 0.03	0.01 ± 0.02	
3.6	0.00 ± 0.02	0.08 ± 0.03	0.01 ± 0.01	
$\langle T^* \rangle$	$\langle R^2_{0,2} \rangle$	$\langle R^2_{2,0} \rangle$	$\langle R^2_{2,2} \rangle$	
2.6	0.01 ± 0.01	0.01 ± 0.01	0.46 ± 0.01	
2.7	0.01 ± 0.01	0.01 ± 0.01	0.46 ± 0.01	
2.8	0.01 ± 0.01	0.01 ± 0.01	0.46 ± 0.01	
2.9	0.01 ± 0.01	0.01 ± 0.01	0.43 ± 0.02	
3.0	0.01 ± 0.01	0.01 ± 0.01	0.45 ± 0.01	
3.1	0.01 ± 0.01	0.05 ± 0.01	0.05 ± 0.02	
3.2	0.02 ± 0.02	0.06 ± 0.01	0.04 ± 0.02	
3.3	0.01 ± 0.05	0.04 ± 0.01	0.03 ± 0.01	
3.4	0.00 ± 0.03	0.03 ± 0.01	0.02 ± 0.01	
3.5	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	
3.6	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	

Table 4: Average number density, total and potential energies, and orientational order parameters for the *cx* system with $\mu^* = 2$.

$\langle T^* \rangle$	$\langle \rho^* \rangle$	$\langle E^* \rangle$	$\langle U^*_{\mathrm{GB}} \rangle$	$\langle U^*_{\mathrm{el}} \rangle$
2.6	0.309 ± 0.008	-16 ± 2	-11.5 ± 0.6	-13 ± 2
2.7	0.299 ± 0.006	-15 ± 4	-11 ± 1	-13 ± 2
2.8	0.291 ± 0.005	-14 ± 4	-10 ± 3	-13 ± 3
2.9	0.283 ± 0.005	-10 ± 4	-9 ± 2	-11 ± 2
3.0	0.278 ± 0.006	-8 ± 4	-8 ± 2	-10 ± 2
3.1	0.273 ± 0.006	-6 ± 4	-7 ± 2	-9 ± 2
3.2	0.266 ± 0.004	-3 ± 3	-5 ± 1	-8 ± 2
3.3	0.257 ± 0.003	1 ± 2	-3.1 ± 0.3	-6 ± 1
3.4	0.254 ± 0.003	2 ± 2	-2.8 ± 0.2	-6 ± 1
3.5	0.252 ± 0.003	2 ± 1	-2.5 ± 0.2	-6 ± 1
3.6	0.250 ± 0.003	3 ± 1	-2.4 ± 0.2	-5 ± 1
$\langle T^* \rangle$	$\langle R^1_{0,0} \rangle$	$\langle R^2_{0,0} \rangle$	$\langle R^4_{0,0} \rangle$	
2.6	0.00 ± 0.01	0.93 ± 0.02	0.79 ± 0.03	
2.7	-0.02 ± 0.02	0.91 ± 0.03	0.76 ± 0.05	
2.8	0.00 ± 0.02	0.90 ± 0.03	0.73 ± 0.06	
2.9	0.02 ± 0.02	0.85 ± 0.04	0.65 ± 0.08	
3.0	-0.01 ± 0.02	0.84 ± 0.08	0.6 ± 0.1	
3.1	-0.02 ± 0.01	0.8 ± 0.1	0.5 ± 0.2	
3.2	0.01 ± 0.02	0.6 ± 0.1	0.4 ± 0.1	
3.3	-0.01 ± 0.02	0.23 ± 0.09	0.05 ± 0.04	
3.4	0.00 ± 0.02	0.12 ± 0.05	0.01 ± 0.02	
3.5	-0.01 ± 0.02	0.09 ± 0.03	0.01 ± 0.02	
3.6	0.00 ± 0.02	0.09 ± 0.04	0.01 ± 0.02	
$\langle T^* \rangle$	$\langle R^2_{0,2} \rangle$	$\langle R^2_{2,0} \rangle$	$\langle R^2_{2,2} \rangle$	
2.6	0.01 ± 0.01	0.01 ± 0.01	0.40 ± 0.03	
2.7	0.01 ± 0.01	0.01 ± 0.01	0.37 ± 0.04	
2.8	0.01 ± 0.01	0.02 ± 0.01	0.33 ± 0.08	
2.9	0.01 ± 0.01	0.02 ± 0.01	0.2 ± 0.1	
3.0	0.01 ± 0.01	0.02 ± 0.01	0.2 ± 0.1	
3.1	0.01 ± 0.01	0.03 ± 0.01	0.2 ± 0.1	
3.2	0.01 ± 0.01	0.04 ± 0.01	0.06 ± 0.04	
3.3	0.00 ± 0.04	0.04 ± 0.01	0.03 ± 0.01	
3.4	-0.01 ± 0.04	0.02 ± 0.01	0.02 ± 0.01	
3.5	-0.01 ± 0.04	0.02 ± 0.01	0.02 ± 0.01	
3.6	-0.01 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	

Table 5: Average number density, total and potential energies, and orientational order parameters for the cx system with $\mu^* = 3$.

$\langle T^* \rangle$	$\langle \rho^* \rangle$	$\langle E^* \rangle$	$\langle U^*_{\mathrm{GB}} \rangle$	$\langle U^*_{\mathrm{el}} \rangle$
2.6	0.349 ± 0.001	-8.82 ± 0.07	-16.5 ± 0.1	-0.02 ± 0.05
2.7	0.318 ± 0.001	-2.45 ± 0.07	-10.4 ± 0.1	-0.06 ± 0.04
2.8	0.304 ± 0.001	0.5 ± 0.1	-7.7 ± 0.2	-0.03 ± 0.04
2.9	0.294 ± 0.001	2.44 ± 0.09	-6.1 ± 0.1	-0.03 ± 0.04
3.0	0.287 ± 0.001	3.67 ± 0.06	-5.2 ± 0.1	-0.02 ± 0.04
3.1	0.281 ± 0.001	4.68 ± 0.06	-4.5 ± 0.1	-0.02 ± 0.04
3.2	0.274 ± 0.001	5.7 ± 0.1	-3.8 ± 0.1	-0.02 ± 0.04
3.3	0.267 ± 0.001	6.82 ± 0.09	-3.0 ± 0.1	-0.02 ± 0.04
3.4	0.263 ± 0.001	7.41 ± 0.05	-2.7 ± 0.1	-0.02 ± 0.04
3.5	0.261 ± 0.001	7.89 ± 0.05	-2.5 ± 0.1	-0.02 ± 0.04
3.6	0.258 ± 0.001	8.34 ± 0.05	-2.4 ± 0.1	-0.01 ± 0.03
$\langle T^* \rangle$	$\langle R^1_{0,0} \rangle$	$\langle R^2_{0,0} \rangle$	$\langle R^4_{0,0} \rangle$	
2.6	0.00 ± 0.01	0.97 ± 0.01	0.89 ± 0.01	
2.7	0.00 ± 0.05	0.90 ± 0.01	0.71 ± 0.01	
2.8	0.00 ± 0.02	0.82 ± 0.01	0.56 ± 0.02	
2.9	0.01 ± 0.03	0.75 ± 0.02	0.44 ± 0.02	
3.0	0.00 ± 0.03	0.68 ± 0.02	0.35 ± 0.03	
3.1	0.00 ± 0.03	0.60 ± 0.03	0.26 ± 0.03	
3.2	0.00 ± 0.03	0.46 ± 0.05	0.15 ± 0.03	
3.3	0.00 ± 0.02	0.20 ± 0.07	0.03 ± 0.03	
3.4	0.00 ± 0.02	0.12 ± 0.04	0.01 ± 0.02	
3.5	0.00 ± 0.02	0.10 ± 0.04	0.01 ± 0.02	
3.6	0.00 ± 0.02	0.08 ± 0.03	0.01 ± 0.01	
$\langle T^* \rangle$	$\langle R^2_{0,2} \rangle$	$\langle R^2_{2,0} \rangle$	$\langle R^2_{2,2} \rangle$	
2.6	0.01 ± 0.01	0.01 ± 0.01	0.47 ± 0.01	
2.7	0.02 ± 0.01	0.02 ± 0.01	0.36 ± 0.01	
2.8	0.03 ± 0.01	0.03 ± 0.01	0.28 ± 0.02	
2.9	0.03 ± 0.01	0.04 ± 0.01	0.16 ± 0.04	
3.0	0.02 ± 0.01	0.05 ± 0.01	0.07 ± 0.03	
3.1	0.02 ± 0.01	0.06 ± 0.01	0.05 ± 0.02	
3.2	0.02 ± 0.02	0.06 ± 0.01	0.04 ± 0.02	
3.3	0.02 ± 0.04	0.04 ± 0.02	0.03 ± 0.01	
3.4	0.00 ± 0.04	0.03 ± 0.01	0.02 ± 0.01	
3.5	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	
3.6	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	

Table 6: Average number density, total and potential energies, and orientational order parameters for the *cy* system with $\mu^* = 0.5$.

$\langle T^* \rangle$	$\langle \rho^* \rangle$	$\langle E^* \rangle$	$\langle U^*_{\mathrm{GB}} \rangle$	$\langle U^*_{\mathrm{el}} \rangle$
2.6	0.347 ± 0.001	-8.8 ± 0.2	-16.2 ± 0.2	-0.4 ± 0.2
2.7	0.337 ± 0.006	-9 ± 1	-14.3 ± 0.8	-2.6 ± 0.4
2.8	0.335 ± 0.007	-8 ± 2	-14 ± 1	-2.5 ± 0.4
2.9	0.296 ± 0.001	1.4 ± 0.3	-6.6 ± 0.2	-0.6 ± 0.2
3.0	0.287 ± 0.001	3.1 ± 0.2	-5.3 ± 0.1	-0.4 ± 0.2
3.1	0.280 ± 0.001	4.3 ± 0.2	-4.6 ± 0.1	-0.4 ± 0.1
3.2	0.273 ± 0.001	5.4 ± 0.2	-3.7 ± 0.1	-0.3 ± 0.1
3.3	0.266 ± 0.001	6.6 ± 0.2	-3.0 ± 0.1	-0.3 ± 0.1
3.4	0.263 ± 0.001	7.1 ± 0.1	-2.7 ± 0.1	-0.3 ± 0.1
3.5	0.260 ± 0.001	7.6 ± 0.1	-2.5 ± 0.1	-0.3 ± 0.1
3.6	0.258 ± 0.001	8.1 ± 0.1	-2.4 ± 0.1	-0.3 ± 0.1
$\langle T^* \rangle$	$\langle R^1_{0,0} \rangle$	$\langle R^2_{0,0} \rangle$	$\langle R^4_{0,0} \rangle$	
2.6	0.00 ± 0.01	0.96 ± 0.01	0.89 ± 0.01	
2.7	0.00 ± 0.04	0.95 ± 0.01	0.84 ± 0.03	
2.8	0.00 ± 0.04	0.95 ± 0.02	0.85 ± 0.05	
2.9	0.01 ± 0.03	0.77 ± 0.02	0.48 ± 0.03	
3.0	0.00 ± 0.03	0.69 ± 0.02	0.36 ± 0.03	
3.1	0.00 ± 0.03	0.60 ± 0.03	0.27 ± 0.03	
3.2	0.00 ± 0.02	0.44 ± 0.05	0.14 ± 0.03	
3.3	0.00 ± 0.02	0.17 ± 0.06	0.03 ± 0.02	
3.4	0.00 ± 0.02	0.12 ± 0.05	0.01 ± 0.02	
3.5	0.00 ± 0.02	0.10 ± 0.04	0.01 ± 0.02	
3.6	0.00 ± 0.02	0.08 ± 0.03	0.01 ± 0.01	
$\langle T^* \rangle$	$\langle R^2_{0,2} \rangle$	$\langle R^2_{2,0} \rangle$	$\langle R^2_{2,2} \rangle$	
2.6	0.01 ± 0.01	0.01 ± 0.01	0.46 ± 0.01	
2.7	0.01 ± 0.01	0.01 ± 0.01	0.45 ± 0.02	
2.8	0.01 ± 0.01	0.01 ± 0.01	0.45 ± 0.03	
2.9	0.03 ± 0.01	0.04 ± 0.01	0.20 ± 0.03	
3.0	0.02 ± 0.01	0.05 ± 0.01	0.08 ± 0.04	
3.1	0.02 ± 0.01	0.06 ± 0.01	0.05 ± 0.02	
3.2	0.02 ± 0.02	0.06 ± 0.01	0.04 ± 0.02	
3.3	0.01 ± 0.04	0.04 ± 0.02	0.03 ± 0.01	
3.4	0.01 ± 0.04	0.03 ± 0.01	0.03 ± 0.01	
3.5	0.00 ± 0.04	0.02 ± 0.01	0.02 ± 0.01	
3.6	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	

Table 7: Average number density, total and potential energies, and orientational order parameters for the *cy* system with $\mu^* = 1$.

$\langle T^* \rangle$	$\langle \rho^* \rangle$	$\langle E^* \rangle$	$\langle U^*_{\mathrm{GB}} \rangle$	$\langle U^*_{\mathrm{el}} \rangle$
2.6	0.342 ± 0.005	-16 ± 1	-15.5 ± 0.8	-8.4 ± 0.6
2.7	0.331 ± 0.004	-15 ± 1	-14.5 ± 0.8	-8.7 ± 0.7
2.8	0.330 ± 0.007	-15 ± 2	-14.8 ± 1.1	-8.2 ± 0.7
2.9	0.324 ± 0.006	-13 ± 2	-13.4 ± 1.1	-8.0 ± 0.8
3.0	0.326 ± 0.009	-13 ± 2	-13.9 ± 1.6	-7.7 ± 0.9
3.1	0.325 ± 0.002	-12.8 ± 0.6	-14.1 ± 0.3	-7.8 ± 0.5
3.2	0.271 ± 0.002	3.3 ± 0.5	-3.9 ± 0.3	-2.4 ± 0.3
3.3	0.264 ± 0.001	4.8 ± 0.3	-3.0 ± 0.1	-2.1 ± 0.3
3.4	0.261 ± 0.001	5.5 ± 0.3	-2.7 ± 0.1	-1.9 ± 0.3
3.5	0.259 ± 0.001	6.1 ± 0.3	-2.5 ± 0.1	-1.8 ± 0.3
3.6	0.256 ± 0.001	6.7 ± 0.3	-2.4 ± 0.1	-1.6 ± 0.3
$\langle T^* \rangle$	$\langle R^1_{0,0} \rangle$	$\langle R^2_{0,0} \rangle$	$\langle R^4_{0,0} \rangle$	
2.6	0.02 ± 0.01	0.96 ± 0.01	0.88 ± 0.03	
2.7	0.05 ± 0.01	0.93 ± 0.01	0.84 ± 0.03	
2.8	-0.04 ± 0.01	0.95 ± 0.05	0.86 ± 0.07	
2.9	0.01 ± 0.03	0.91 ± 0.05	0.80 ± 0.07	
3.0	0.01 ± 0.06	0.94 ± 0.07	0.8 ± 0.1	
3.1	0.00 ± 0.03	0.95 ± 0.01	0.85 ± 0.01	
3.2	0.00 ± 0.02	0.44 ± 0.07	0.15 ± 0.05	
3.3	0.00 ± 0.02	0.17 ± 0.06	0.03 ± 0.02	
3.4	0.00 ± 0.02	0.11 ± 0.04	0.01 ± 0.02	
3.5	0.00 ± 0.02	0.09 ± 0.03	0.01 ± 0.02	
3.6	0.00 ± 0.02	0.08 ± 0.03	0.01 ± 0.01	
$\langle T^* \rangle$	$\langle R^2_{0,2} \rangle$	$\langle R^2_{2,0} \rangle$	$\langle R^2_{2,2} \rangle$	
2.6	0.01 ± 0.01	0.01 ± 0.01	0.47 ± 0.01	
2.7	0.01 ± 0.01	0.01 ± 0.01	0.46 ± 0.02	
2.8	0.01 ± 0.01	0.01 ± 0.01	0.46 ± 0.04	
2.9	0.02 ± 0.01	0.01 ± 0.01	0.44 ± 0.05	
3.0	0.01 ± 0.01	0.01 ± 0.01	0.45 ± 0.06	
3.1	0.01 ± 0.01	0.01 ± 0.01	0.46 ± 0.01	
3.2	0.02 ± 0.02	0.07 ± 0.01	0.05 ± 0.02	
3.3	0.02 ± 0.04	0.04 ± 0.02	0.03 ± 0.02	
3.4	0.00 ± 0.04	0.03 ± 0.01	0.03 ± 0.01	
3.5	0.00 ± 0.04	0.02 ± 0.01	0.02 ± 0.01	
3.6	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	

Table 8: Average number density, total and potential energies, and orientational order parameters for the *cy* system with $\mu^* = 1.5$.

$\langle T^* \rangle$	$\langle \rho^* \rangle$	$\langle E^* \rangle$	$\langle U^*_{\mathrm{GB}} \rangle$	$\langle U^*_{\mathrm{el}} \rangle$
2.6	0.348 ± 0.003	-8.6 ± 0.1	-16.4 ± 0.2	-0.02 ± 0.05
2.7	0.318 ± 0.003	-2.5 ± 0.2	-10.5 ± 0.2	-0.02 ± 0.05
2.8	0.304 ± 0.003	0.7 ± 0.2	-7.7 ± 0.3	-0.01 ± 0.04
2.9	0.293 ± 0.003	2.6 ± 0.1	-6.0 ± 0.2	-0.01 ± 0.04
3.0	0.286 ± 0.003	3.8 ± 0.1	-5.1 ± 0.1	-0.01 ± 0.04
3.1	0.280 ± 0.003	4.9 ± 0.1	-4.4 ± 0.1	-0.01 ± 0.04
3.2	0.273 ± 0.003	5.9 ± 0.1	-3.7 ± 0.1	-0.01 ± 0.04
3.3	0.266 ± 0.003	6.99 ± 0.09	-2.9 ± 0.1	-0.01 ± 0.03
3.4	0.263 ± 0.003	7.51 ± 0.09	-2.7 ± 0.1	0.00 ± 0.03
3.5	0.260 ± 0.003	8.00 ± 0.09	-2.5 ± 0.1	-0.01 ± 0.03
3.6	0.258 ± 0.003	8.43 ± 0.09	-2.4 ± 0.1	0.00 ± 0.03
$\langle T^* \rangle$	$\langle R^1_{0,0} \rangle$	$\langle R^2_{0,0} \rangle$	$\langle R^4_{0,0} \rangle$	
2.6	0.00 ± 0.01	0.97 ± 0.01	0.89 ± 0.01	
2.7	0.00 ± 0.02	0.90 ± 0.01	0.72 ± 0.02	
2.8	-0.02 ± 0.03	0.82 ± 0.02	0.56 ± 0.03	
2.9	0.00 ± 0.02	0.74 ± 0.02	0.43 ± 0.02	
3.0	0.01 ± 0.02	0.67 ± 0.02	0.35 ± 0.02	
3.1	-0.01 ± 0.03	0.58 ± 0.03	0.24 ± 0.03	
3.2	0.00 ± 0.03	0.43 ± 0.04	0.13 ± 0.03	
3.3	0.00 ± 0.02	0.17 ± 0.05	0.03 ± 0.02	
3.4	0.00 ± 0.02	0.11 ± 0.04	0.01 ± 0.02	
3.5	0.00 ± 0.02	0.08 ± 0.03	0.01 ± 0.01	
3.6	0.00 ± 0.02	0.08 ± 0.03	0.01 ± 0.01	
$\langle T^* \rangle$	$\langle R^2_{0,2} \rangle$	$\langle R^2_{2,0} \rangle$	$\langle R^2_{2,2} \rangle$	
2.6	0.01 ± 0.01	0.01 ± 0.01	0.47 ± 0.01	
2.7	0.02 ± 0.01	0.02 ± 0.01	0.36 ± 0.01	
2.8	0.03 ± 0.01	0.03 ± 0.01	0.27 ± 0.02	
2.9	0.03 ± 0.01	0.04 ± 0.01	0.16 ± 0.03	
3.0	0.01 ± 0.01	0.05 ± 0.01	0.06 ± 0.03	
3.1	0.01 ± 0.01	0.06 ± 0.01	0.04 ± 0.02	
3.2	0.02 ± 0.02	0.06 ± 0.01	0.04 ± 0.02	
3.3	0.02 ± 0.04	0.04 ± 0.01	0.03 ± 0.01	
3.4	0.01 ± 0.04	0.02 ± 0.01	0.03 ± 0.01	
3.5	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	
3.6	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	

Table 9: Average number density, total and potential energies, and orientational order parameters for the cz system with $\mu^* = 0.5$.

$\langle T^* \rangle$	$\langle \rho^* \rangle$	$\langle E^* \rangle$	$\langle U^*_{\mathrm{GB}} \rangle$	$\langle U^*_{\mathrm{el}} \rangle$
2.6	0.348 ± 0.004	-8.8 ± 0.2	-16.4 ± 0.2	-0.1 ± 0.2
2.7	0.318 ± 0.003	-2.8 ± 0.3	-10.6 ± 0.3	-0.2 ± 0.2
2.8	0.304 ± 0.003	0.4 ± 0.2	-7.8 ± 0.2	-0.2 ± 0.2
2.9	0.294 ± 0.003	2.3 ± 0.2	-6.2 ± 0.1	-0.1 ± 0.2
3.0	0.287 ± 0.003	3.6 ± 0.2	-5.2 ± 0.1	-0.1 ± 0.2
3.1	0.280 ± 0.003	4.6 ± 0.2	-4.5 ± 0.1	-0.1 ± 0.2
3.2	0.273 ± 0.003	5.8 ± 0.2	-3.7 ± 0.2	-0.1 ± 0.1
3.3	0.267 ± 0.003	6.8 ± 0.2	-3.0 ± 0.1	-0.1 ± 0.1
3.4	0.263 ± 0.003	7.4 ± 0.2	-2.7 ± 0.1	-0.1 ± 0.1
3.5	0.260 ± 0.003	7.8 ± 0.2	-2.5 ± 0.1	-0.1 ± 0.1
3.6	0.258 ± 0.003	8.3 ± 0.2	-2.4 ± 0.1	-0.1 ± 0.1
$\langle T^* \rangle$	$\langle R^1_{0,0} \rangle$	$\langle R^2_{0,0} \rangle$	$\langle R^4_{0,0} \rangle$	
2.6	0.00 ± 0.01	0.97 ± 0.01	0.89 ± 0.01	
2.7	0.00 ± 0.02	0.90 ± 0.01	0.73 ± 0.02	
2.8	0.01 ± 0.01	0.82 ± 0.01	0.57 ± 0.02	
2.9	-0.01 ± 0.02	0.75 ± 0.02	0.44 ± 0.02	
3.0	0.00 ± 0.03	0.68 ± 0.02	0.36 ± 0.02	
3.1	0.01 ± 0.02	0.60 ± 0.03	0.27 ± 0.03	
3.2	0.00 ± 0.02	0.43 ± 0.06	0.14 ± 0.04	
3.3	0.00 ± 0.02	0.18 ± 0.07	0.03 ± 0.03	
3.4	0.00 ± 0.02	0.10 ± 0.03	0.01 ± 0.02	
3.5	0.00 ± 0.02	0.08 ± 0.03	0.01 ± 0.02	
3.6	0.00 ± 0.02	0.08 ± 0.03	0.01 ± 0.01	
$\langle T^* \rangle$	$\langle R^2_{0,2} \rangle$	$\langle R^2_{2,0} \rangle$	$\langle R^2_{2,2} \rangle$	
2.6	0.01 ± 0.01	0.01 ± 0.01	0.47 ± 0.01	
2.7	0.02 ± 0.01	0.02 ± 0.01	0.36 ± 0.01	
2.8	0.03 ± 0.01	0.03 ± 0.01	0.28 ± 0.02	
2.9	0.03 ± 0.01	0.04 ± 0.01	0.18 ± 0.02	
3.0	0.02 ± 0.01	0.05 ± 0.01	0.07 ± 0.03	
3.1	0.01 ± 0.01	0.06 ± 0.01	0.04 ± 0.02	
3.2	0.02 ± 0.02	0.06 ± 0.01	0.03 ± 0.02	
3.3	0.02 ± 0.05	0.04 ± 0.02	0.03 ± 0.01	
3.4	0.01 ± 0.05	0.02 ± 0.01	0.03 ± 0.01	
3.5	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	
3.6	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	

Table 10: Average number density, total and potential energies, and orientational order parameters for the cz system with $\mu^* = 1$.

$\langle T^* \rangle$	$\langle \rho^* \rangle$	$\langle E^* \rangle$	$\langle U^*_{\mathrm{GB}} \rangle$	$\langle U^*_{\mathrm{el}} \rangle$
2.6	0.328 ± 0.007	-6 ± 2	-13 ± 1	-1.4 ± 0.5
2.7	0.321 ± 0.004	-4.8 ± 0.9	-11.7 ± 0.7	-1.3 ± 0.5
2.8	0.307 ± 0.004	-1.4 ± 0.7	-9.1 ± 0.4	-0.8 ± 0.4
2.9	0.293 ± 0.003	1.9 ± 0.4	-6.2 ± 0.1	-0.6 ± 0.4
3.0	0.286 ± 0.003	3.2 ± 0.4	-5.3 ± 0.1	-0.5 ± 0.4
3.1	0.280 ± 0.003	4.2 ± 0.3	-4.6 ± 0.1	-0.5 ± 0.3
3.2	0.273 ± 0.003	5.4 ± 0.3	-3.8 ± 0.2	-0.4 ± 0.3
3.3	0.266 ± 0.003	6.6 ± 0.3	-2.9 ± 0.1	-0.4 ± 0.3
3.4	0.263 ± 0.003	7.1 ± 0.3	-2.7 ± 0.1	-0.4 ± 0.3
3.5	0.260 ± 0.003	7.6 ± 0.3	-2.5 ± 0.1	-0.3 ± 0.3
3.6	0.257 ± 0.003	8.1 ± 0.3	-2.4 ± 0.1	-0.3 ± 0.3
$\langle T^* \rangle$	$\langle R^1_{0,0} \rangle$	$\langle R^2_{0,0} \rangle$	$\langle R^4_{0,0} \rangle$	
2.6	-0.01 ± 0.03	0.94 ± 0.02	0.82 ± 0.04	
2.7	0.00 ± 0.03	0.93 ± 0.01	0.78 ± 0.03	
2.8	0.03 ± 0.01	0.87 ± 0.02	0.66 ± 0.03	
2.9	0.02 ± 0.03	0.75 ± 0.02	0.45 ± 0.02	
3.0	0.00 ± 0.03	0.69 ± 0.02	0.36 ± 0.02	
3.1	0.01 ± 0.02	0.61 ± 0.02	0.28 ± 0.03	
3.2	0.01 ± 0.02	0.46 ± 0.06	0.16 ± 0.04	
3.3	0.00 ± 0.02	0.17 ± 0.05	0.02 ± 0.02	
3.4	0.00 ± 0.02	0.12 ± 0.05	0.01 ± 0.02	
3.5	0.00 ± 0.02	0.09 ± 0.03	0.01 ± 0.02	
3.6	0.00 ± 0.02	0.07 ± 0.02	0.01 ± 0.01	
$\langle T^* \rangle$	$\langle R^2_{0,2} \rangle$	$\langle R^2_{2,0} \rangle$	$\langle R^2_{2,2} \rangle$	
2.6	0.01 ± 0.01	0.01 ± 0.01	0.42 ± 0.03	
2.7	0.01 ± 0.01	0.01 ± 0.01	0.39 ± 0.02	
2.8	0.02 ± 0.01	0.02 ± 0.01	0.31 ± 0.02	
2.9	0.02 ± 0.01	0.04 ± 0.01	0.15 ± 0.04	
3.0	0.02 ± 0.01	0.05 ± 0.01	0.07 ± 0.03	
3.1	0.01 ± 0.01	0.06 ± 0.01	0.04 ± 0.02	
3.2	0.02 ± 0.02	0.06 ± 0.01	0.04 ± 0.02	
3.3	0.02 ± 0.04	0.04 ± 0.01	0.03 ± 0.01	
3.4	0.01 ± 0.04	0.03 ± 0.01	0.03 ± 0.01	
3.5	0.00 ± 0.04	0.02 ± 0.01	0.02 ± 0.01	
3.6	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	

Table 11: Average number density, total and potential energies, and orientational order parameters for the cz system with $\mu^* = 1.5$.

$\langle T^* \rangle$	$\langle \rho^* \rangle$	$\langle E^* \rangle$	$\langle U^*_{\mathrm{GB}} \rangle$	$\langle U^*_{\mathrm{el}} \rangle$
2.6	0.337 ± 0.005	-10 ± 1	-14.9 ± 0.5	-3 ± 1
2.7	0.326 ± 0.009	-10 ± 2	-14 ± 2	-4 ± 1
2.8	0.32 ± 0.01	-7 ± 3	-12 ± 2	-3 ± 1
2.9	0.302 ± 0.009	-2 ± 3	-9 ± 2	-2.4 ± 0.9
3.0	0.285 ± 0.004	2.1 ± 0.7	-5.4 ± 0.3	-1.5 ± 0.6
3.1	0.279 ± 0.003	3.3 ± 0.7	-4.7 ± 0.3	-1.4 ± 0.6
3.2	0.272 ± 0.003	4.5 ± 0.6	-3.8 ± 0.2	-1.2 ± 0.6
3.3	0.266 ± 0.003	5.7 ± 0.6	-3.1 ± 0.2	-1.1 ± 0.6
3.4	0.262 ± 0.003	6.4 ± 0.6	-2.7 ± 0.1	-1.0 ± 0.6
3.5	0.259 ± 0.003	7.0 ± 0.6	-2.5 ± 0.1	-1.0 ± 0.6
3.6	0.257 ± 0.003	7.4 ± 0.6	-2.4 ± 0.1	-0.9 ± 0.5
$\langle T^* \rangle$	$\langle R^1_{0,0} \rangle$	$\langle R^2_{0,0} \rangle$	$\langle R^4_{0,0} \rangle$	
2.6	0.00 ± 0.01	0.96 ± 0.01	0.87 ± 0.02	
2.7	0.00 ± 0.02	0.95 ± 0.02	0.85 ± 0.05	
2.8	0.01 ± 0.01	0.92 ± 0.04	0.8 ± 0.1	
2.9	0.00 ± 0.01	0.86 ± 0.07	0.6 ± 0.1	
3.0	0.00 ± 0.02	0.70 ± 0.03	0.38 ± 0.04	
3.1	0.00 ± 0.02	0.61 ± 0.05	0.28 ± 0.05	
3.2	0.01 ± 0.02	0.46 ± 0.05	0.15 ± 0.04	
3.3	0.01 ± 0.02	0.23 ± 0.08	0.04 ± 0.03	
3.4	0.00 ± 0.02	0.11 ± 0.04	0.01 ± 0.02	
3.5	0.00 ± 0.02	0.09 ± 0.03	0.01 ± 0.01	
3.6	0.00 ± 0.02	0.08 ± 0.03	0.01 ± 0.01	
$\langle T^* \rangle$	$\langle R^2_{0,2} \rangle$	$\langle R^2_{2,0} \rangle$	$\langle R^2_{2,2} \rangle$	
2.6	0.01 ± 0.01	0.01 ± 0.01	0.45 ± 0.01	
2.7	0.01 ± 0.01	0.01 ± 0.01	0.43 ± 0.03	
2.8	0.01 ± 0.01	0.01 ± 0.01	0.39 ± 0.07	
2.9	0.02 ± 0.01	0.02 ± 0.01	0.28 ± 0.09	
3.0	0.02 ± 0.01	0.05 ± 0.01	0.08 ± 0.04	
3.1	0.02 ± 0.01	0.06 ± 0.01	0.06 ± 0.02	
3.2	0.02 ± 0.02	0.06 ± 0.01	0.04 ± 0.02	
3.3	0.01 ± 0.04	0.04 ± 0.02	0.03 ± 0.01	
3.4	0.00 ± 0.04	0.02 ± 0.01	0.02 ± 0.01	
3.5	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	
3.6	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	

Table 12: Average number density, total and potential energies, and orientational order parameters for the cz system with $\mu^* = 2$.

$\langle T^* \rangle$	$\langle \rho^* \rangle$	$\langle E^* \rangle$	$\langle U^*_{\mathrm{GB}} \rangle$	$\langle U^*_{\mathrm{el}} \rangle$
2.6	0.31 ± 0.01	-18 ± 2	-13.2 ± 0.5	-13 ± 2
2.7	0.305 ± 0.008	-18 ± 2	-13.0 ± 0.4	-13 ± 2
2.8	0.321 ± 0.003	-19 ± 2	-14.1 ± 0.8	-13 ± 2
2.9	0.313 ± 0.007	-18 ± 3	-14 ± 1	-14 ± 2
3.0	0.291 ± 0.009	-11 ± 5	-10 ± 2	-11 ± 3
3.1	0.28 ± 0.01	-9 ± 5	-9 ± 2	-10 ± 2
3.2	0.28 ± 0.01	-5 ± 5	-7 ± 2	-8 ± 3
3.3	0.265 ± 0.003	0 ± 2	-4.1 ± 0.5	-6 ± 1
3.4	0.258 ± 0.002	2 ± 1	-3.0 ± 0.2	-5 ± 1
3.5	0.255 ± 0.002	3 ± 1	-2.7 ± 0.1	-5 ± 1
3.6	0.253 ± 0.002	4 ± 1	-2.5 ± 0.1	-4 ± 1
$\langle T^* \rangle$	$\langle R^1_{0,0} \rangle$	$\langle R^2_{0,0} \rangle$	$\langle R^4_{0,0} \rangle$	
2.6	0.00 ± 0.01	0.94 ± 0.02	0.81 ± 0.06	
2.7	0.00 ± 0.01	0.92 ± 0.03	0.79 ± 0.06	
2.8	0.01 ± 0.01	0.96 ± 0.01	0.87 ± 0.02	
2.9	0.00 ± 0.01	0.95 ± 0.02	0.86 ± 0.04	
3.0	0.00 ± 0.01	0.88 ± 0.06	0.7 ± 0.1	
3.1	0.00 ± 0.01	0.82 ± 0.09	0.6 ± 0.1	
3.2	-0.01 ± 0.02	0.7 ± 0.1	0.5 ± 0.2	
3.3	0.00 ± 0.01	0.52 ± 0.09	0.21 ± 0.08	
3.4	0.00 ± 0.02	0.18 ± 0.09	0.03 ± 0.04	
3.5	0.00 ± 0.02	0.12 ± 0.04	0.01 ± 0.02	
3.6	0.00 ± 0.02	0.10 ± 0.04	0.01 ± 0.02	
$\langle T^* \rangle$	$\langle R^2_{0,2} \rangle$	$\langle R^2_{2,0} \rangle$	$\langle R^2_{2,2} \rangle$	
2.6	0.01 ± 0.01	0.01 ± 0.01	0.46 ± 0.01	
2.7	0.02 ± 0.01	0.01 ± 0.01	0.45 ± 0.01	
2.8	0.01 ± 0.01	0.01 ± 0.01	0.46 ± 0.01	
2.9	0.01 ± 0.01	0.01 ± 0.01	0.46 ± 0.02	
3.0	0.01 ± 0.01	0.02 ± 0.01	0.4 ± 0.1	
3.1	0.02 ± 0.01	0.03 ± 0.01	0.3 ± 0.1	
3.2	0.02 ± 0.01	0.03 ± 0.01	0.2 ± 0.1	
3.3	0.01 ± 0.02	0.05 ± 0.01	0.04 ± 0.03	
3.4	0.00 ± 0.04	0.03 ± 0.02	0.03 ± 0.01	
3.5	0.00 ± 0.05	0.03 ± 0.01	0.03 ± 0.01	
3.6	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	

Table 13: Average number density, total and potential energies, and orientational order parameters for the cz system with $\mu^* = 3$.

$\langle T^* \rangle$	$\langle \rho^* \rangle$	$\langle E^* \rangle$	$\langle U^*_{\mathrm{GB}} \rangle$	$\langle U^*_{\mathrm{el}} \rangle$
2.6	0.349 ± 0.004	-8.8 ± 0.1	-16.5 ± 0.2	-0.01 ± 0.04
2.7	0.318 ± 0.003	-2.31 ± 0.05	-10.3 ± 0.2	-0.02 ± 0.04
2.8	0.303 ± 0.003	0.80 ± 0.06	-7.5 ± 0.1	-0.01 ± 0.04
2.9	0.294 ± 0.003	2.48 ± 0.06	-6.1 ± 0.1	-0.01 ± 0.04
3.0	0.286 ± 0.003	3.71 ± 0.07	-5.2 ± 0.1	-0.01 ± 0.04
3.1	0.281 ± 0.003	4.69 ± 0.07	-4.5 ± 0.1	-0.01 ± 0.04
3.2	0.274 ± 0.003	5.77 ± 0.08	-3.8 ± 0.1	-0.01 ± 0.04
3.3	0.267 ± 0.003	6.87 ± 0.09	-2.9 ± 0.1	-0.01 ± 0.03
3.4	0.263 ± 0.003	7.41 ± 0.09	-2.7 ± 0.1	-0.01 ± 0.03
3.5	0.261 ± 0.003	7.90 ± 0.09	-2.5 ± 0.1	-0.01 ± 0.03
3.6	0.258 ± 0.003	8.4 ± 0.1	-2.4 ± 0.1	0.00 ± 0.03
$\langle T^* \rangle$	$\langle R^1_{0,0} \rangle$	$\langle R^2_{0,0} \rangle$	$\langle R^4_{0,0} \rangle$	
2.6	0.00 ± 0.01	0.97 ± 0.01	0.89 ± 0.01	
2.7	0.00 ± 0.02	0.90 ± 0.01	0.71 ± 0.01	
2.8	0.02 ± 0.01	0.81 ± 0.01	0.54 ± 0.02	
2.9	-0.03 ± 0.03	0.75 ± 0.02	0.45 ± 0.02	
3.0	-0.02 ± 0.03	0.68 ± 0.02	0.35 ± 0.03	
3.1	0.00 ± 0.02	0.60 ± 0.03	0.27 ± 0.03	
3.2	-0.01 ± 0.03	0.46 ± 0.04	0.15 ± 0.03	
3.3	0.00 ± 0.02	0.18 ± 0.06	0.02 ± 0.02	
3.4	0.00 ± 0.02	0.12 ± 0.03	0.01 ± 0.02	
3.5	-0.01 ± 0.02	0.09 ± 0.03	0.01 ± 0.01	
3.6	0.00 ± 0.02	0.09 ± 0.04	0.01 ± 0.02	
$\langle T^* \rangle$	$\langle R^2_{0,2} \rangle$	$\langle R^2_{2,0} \rangle$	$\langle R^2_{2,2} \rangle$	
2.6	0.01 ± 0.01	0.01 ± 0.01	0.47 ± 0.01	
2.7	0.02 ± 0.01	0.02 ± 0.01	0.36 ± 0.01	
2.8	0.03 ± 0.01	0.04 ± 0.01	0.26 ± 0.02	
2.9	0.03 ± 0.01	0.04 ± 0.01	0.16 ± 0.03	
3.0	0.02 ± 0.01	0.05 ± 0.01	0.07 ± 0.03	
3.1	0.02 ± 0.01	0.06 ± 0.01	0.05 ± 0.02	
3.2	0.02 ± 0.02	0.06 ± 0.01	0.03 ± 0.02	
3.3	0.02 ± 0.04	0.04 ± 0.02	0.03 ± 0.01	
3.4	0.00 ± 0.04	0.03 ± 0.01	0.03 ± 0.01	
3.5	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	
3.6	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	

Table 14: Average number density, total and potential energies, and orientational order parameters for the *ct1* system with $\mu^* = 0.5$.

$\langle T^* \rangle$	$\langle \rho^* \rangle$	$\langle E^* \rangle$	$\langle U^*_{\mathrm{GB}} \rangle$	$\langle U^*_{\mathrm{el}} \rangle$
2.6	0.348 ± 0.004	-8.8 ± 0.2	-16.4 ± 0.2	-0.1 ± 0.2
2.7	0.317 ± 0.003	-2.5 ± 0.2	-10.3 ± 0.2	-0.2 ± 0.2
2.8	0.303 ± 0.003	0.6 ± 0.2	-7.5 ± 0.2	-0.2 ± 0.2
2.9	0.294 ± 0.003	2.3 ± 0.2	-6.1 ± 0.2	-0.1 ± 0.1
3.0	0.286 ± 0.003	3.6 ± 0.2	-5.2 ± 0.1	-0.1 ± 0.1
3.1	0.280 ± 0.003	4.6 ± 0.2	-4.5 ± 0.1	-0.1 ± 0.1
3.2	0.273 ± 0.003	5.7 ± 0.2	-3.7 ± 0.1	-0.1 ± 0.1
3.3	0.267 ± 0.003	6.7 ± 0.2	-3.0 ± 0.1	-0.1 ± 0.1
3.4	0.263 ± 0.003	7.3 ± 0.2	-2.7 ± 0.1	-0.1 ± 0.1
3.5	0.260 ± 0.003	7.8 ± 0.2	-2.5 ± 0.1	-0.1 ± 0.1
3.6	0.258 ± 0.003	8.3 ± 0.2	-2.4 ± 0.1	-0.1 ± 0.1
$\langle T^* \rangle$	$\langle R^1_{0,0} \rangle$	$\langle R^2_{0,0} \rangle$	$\langle R^4_{0,0} \rangle$	
2.6	0.00 ± 0.01	0.97 ± 0.01	0.89 ± 0.01	
2.7	0.00 ± 0.01	0.90 ± 0.01	0.71 ± 0.01	
2.8	-0.02 ± 0.01	0.81 ± 0.01	0.54 ± 0.02	
2.9	0.00 ± 0.03	0.74 ± 0.02	0.44 ± 0.03	
3.0	0.01 ± 0.03	0.68 ± 0.02	0.35 ± 0.02	
3.1	0.01 ± 0.02	0.58 ± 0.03	0.25 ± 0.03	
3.2	0.01 ± 0.02	0.44 ± 0.04	0.14 ± 0.03	
3.3	-0.01 ± 0.02	0.23 ± 0.07	0.04 ± 0.02	
3.4	0.00 ± 0.02	0.11 ± 0.04	0.01 ± 0.02	
3.5	0.00 ± 0.02	0.10 ± 0.04	0.01 ± 0.02	
3.6	0.00 ± 0.02	0.08 ± 0.03	0.01 ± 0.01	
$\langle T^* \rangle$	$\langle R^2_{0,2} \rangle$	$\langle R^2_{2,0} \rangle$	$\langle R^2_{2,2} \rangle$	
2.6	0.01 ± 0.01	0.01 ± 0.01	0.47 ± 0.01	
2.7	0.02 ± 0.01	0.02 ± 0.01	0.36 ± 0.01	
2.8	0.03 ± 0.01	0.04 ± 0.01	0.27 ± 0.02	
2.9	0.03 ± 0.01	0.04 ± 0.01	0.17 ± 0.03	
3.0	0.02 ± 0.01	0.05 ± 0.01	0.06 ± 0.02	
3.1	0.02 ± 0.01	0.06 ± 0.01	0.05 ± 0.02	
3.2	0.02 ± 0.02	0.06 ± 0.01	0.04 ± 0.02	
3.3	0.03 ± 0.04	0.05 ± 0.01	0.04 ± 0.02	
3.4	0.00 ± 0.04	0.02 ± 0.01	0.03 ± 0.01	
3.5	0.00 ± 0.04	0.02 ± 0.01	0.02 ± 0.01	
3.6	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	

Table 15: Average number density, total and potential energies, and orientational order parameters for the *ct1* system with $\mu^* = 1$.

$\langle T^* \rangle$	$\langle \rho^* \rangle$	$\langle E^* \rangle$	$\langle U^*_{\mathrm{GB}} \rangle$	$\langle U^*_{\mathrm{el}} \rangle$
2.6	0.345 ± 0.004	-8.7 ± 0.4	-15.9 ± 0.2	-0.6 ± 0.4
2.7	0.317 ± 0.003	-3.4 ± 0.4	-10.4 ± 0.2	-1.0 ± 0.4
2.8	0.303 ± 0.003	-0.3 ± 0.5	-8.0 ± 0.3	-0.8 ± 0.3
2.9	0.293 ± 0.003	1.9 ± 0.3	-6.1 ± 0.1	-0.6 ± 0.3
3.0	0.285 ± 0.003	3.3 ± 0.3	-5.1 ± 0.1	-0.6 ± 0.3
3.1	0.279 ± 0.003	4.3 ± 0.3	-4.4 ± 0.1	-0.6 ± 0.3
3.2	0.272 ± 0.003	5.4 ± 0.3	-3.7 ± 0.1	-0.5 ± 0.3
3.3	0.266 ± 0.003	6.4 ± 0.3	-3.0 ± 0.1	-0.5 ± 0.3
3.4	0.262 ± 0.003	7.1 ± 0.3	-2.7 ± 0.1	-0.5 ± 0.3
3.5	0.260 ± 0.003	7.6 ± 0.3	-2.5 ± 0.1	-0.4 ± 0.3
3.6	0.257 ± 0.003	8.1 ± 0.3	-2.3 ± 0.1	-0.4 ± 0.3
$\langle T^* \rangle$	$\langle R^1_{0,0} \rangle$	$\langle R^2_{0,0} \rangle$	$\langle R^4_{0,0} \rangle$	
2.6	0.00 ± 0.01	0.96 ± 0.01	0.88 ± 0.01	
2.7	0.00 ± 0.01	0.90 ± 0.01	0.72 ± 0.01	
2.8	0.03 ± 0.02	0.83 ± 0.02	0.59 ± 0.03	
2.9	0.00 ± 0.02	0.75 ± 0.02	0.44 ± 0.03	
3.0	-0.02 ± 0.03	0.67 ± 0.02	0.34 ± 0.03	
3.1	-0.01 ± 0.03	0.57 ± 0.04	0.24 ± 0.04	
3.2	-0.01 ± 0.03	0.44 ± 0.04	0.14 ± 0.03	
3.3	0.01 ± 0.02	0.22 ± 0.05	0.04 ± 0.02	
3.4	0.00 ± 0.02	0.13 ± 0.04	0.01 ± 0.02	
3.5	0.00 ± 0.02	0.09 ± 0.04	0.01 ± 0.02	
3.6	0.00 ± 0.02	0.08 ± 0.02	0.01 ± 0.01	
$\langle T^* \rangle$	$\langle R^2_{0,2} \rangle$	$\langle R^2_{2,0} \rangle$	$\langle R^2_{2,2} \rangle$	
2.6	0.01 ± 0.01	0.01 ± 0.01	0.46 ± 0.01	
2.7	0.02 ± 0.01	0.02 ± 0.01	0.36 ± 0.01	
2.8	0.02 ± 0.01	0.03 ± 0.01	0.27 ± 0.02	
2.9	0.03 ± 0.01	0.04 ± 0.01	0.16 ± 0.03	
3.0	0.02 ± 0.01	0.05 ± 0.01	0.07 ± 0.03	
3.1	0.02 ± 0.01	0.06 ± 0.01	0.05 ± 0.02	
3.2	0.02 ± 0.02	0.06 ± 0.01	0.04 ± 0.02	
3.3	0.02 ± 0.04	0.05 ± 0.01	0.03 ± 0.01	
3.4	0.00 ± 0.04	0.03 ± 0.01	0.02 ± 0.01	
3.5	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	
3.6	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	

Table 16: Average number density, total and potential energies, and orientational order parameters for the *ct1* system with $\mu^* = 1.5$.

$\langle T^* \rangle$	$\langle \rho^* \rangle$	$\langle E^* \rangle$	$\langle U^*_{\mathrm{GB}} \rangle$	$\langle U^*_{\mathrm{el}} \rangle$
2.6	0.334 ± 0.005	-9.0 ± 0.9	-13.5 ± 0.7	-3.2 ± 0.8
2.7	0.314 ± 0.005	-5.0 ± 1.1	-10.5 ± 0.6	-2.8 ± 0.7
2.8	0.303 ± 0.006	-2.5 ± 1.5	-9 ± 1	-2.4 ± 0.7
2.9	0.290 ± 0.003	0.6 ± 0.7	-6.3 ± 0.3	-1.9 ± 0.6
3.0	0.283 ± 0.003	2.1 ± 0.6	-5.2 ± 0.2	-1.7 ± 0.6
3.1	0.277 ± 0.003	3.4 ± 0.6	-4.4 ± 0.1	-1.5 ± 0.6
3.2	0.270 ± 0.003	4.6 ± 0.6	-3.5 ± 0.2	-1.4 ± 0.6
3.3	0.264 ± 0.003	5.7 ± 0.6	-2.9 ± 0.1	-1.3 ± 0.6
3.4	0.261 ± 0.003	6.2 ± 0.6	-2.7 ± 0.1	-1.3 ± 0.6
3.5	0.259 ± 0.003	6.8 ± 0.6	-2.5 ± 0.1	-1.2 ± 0.5
3.6	0.256 ± 0.003	7.3 ± 0.6	-2.3 ± 0.1	-1.2 ± 0.5
$\langle T^* \rangle$	$\langle R^1_{0,0} \rangle$	$\langle R^2_{0,0} \rangle$	$\langle R^4_{0,0} \rangle$	
2.6	0.00 ± 0.01	0.94 ± 0.01	0.83 ± 0.02	
2.7	-0.01 ± 0.02	0.90 ± 0.02	0.72 ± 0.03	
2.8	0.02 ± 0.01	0.86 ± 0.04	0.63 ± 0.07	
2.9	-0.01 ± 0.02	0.76 ± 0.03	0.47 ± 0.04	
3.0	-0.02 ± 0.03	0.68 ± 0.03	0.36 ± 0.03	
3.1	0.00 ± 0.02	0.56 ± 0.03	0.24 ± 0.03	
3.2	0.00 ± 0.02	0.37 ± 0.06	0.10 ± 0.04	
3.3	0.00 ± 0.02	0.15 ± 0.05	0.02 ± 0.02	
3.4	0.00 ± 0.02	0.11 ± 0.04	0.01 ± 0.02	
3.5	0.00 ± 0.02	0.08 ± 0.03	0.01 ± 0.02	
3.6	0.00 ± 0.02	0.08 ± 0.03	0.01 ± 0.01	
$\langle T^* \rangle$	$\langle R^2_{0,2} \rangle$	$\langle R^2_{2,0} \rangle$	$\langle R^2_{2,2} \rangle$	
2.6	0.01 ± 0.01	0.01 ± 0.01	0.43 ± 0.02	
2.7	0.02 ± 0.01	0.02 ± 0.01	0.36 ± 0.02	
2.8	0.02 ± 0.01	0.02 ± 0.01	0.29 ± 0.04	
2.9	0.01 ± 0.01	0.04 ± 0.01	0.09 ± 0.04	
3.0	0.01 ± 0.01	0.05 ± 0.01	0.05 ± 0.03	
3.1	0.02 ± 0.01	0.06 ± 0.01	0.04 ± 0.02	
3.2	0.02 ± 0.03	0.06 ± 0.01	0.04 ± 0.02	
3.3	0.01 ± 0.05	0.04 ± 0.01	0.03 ± 0.01	
3.4	0.00 ± 0.04	0.02 ± 0.01	0.02 ± 0.01	
3.5	0.00 ± 0.04	0.02 ± 0.01	0.02 ± 0.01	
3.6	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	

Table 17: Average number density, total and potential energies, and orientational order parameters for the *ct1* system with $\mu^* = 2$.

$\langle T^* \rangle$	$\langle \rho^* \rangle$	$\langle E^* \rangle$	$\langle U^*_{\mathrm{GB}} \rangle$	$\langle U^*_{\mathrm{el}} \rangle$
2.6	0.309 ± 0.007	-14 ± 2	-11.0 ± 0.8	-11 ± 2
2.7	0.297 ± 0.008	-12 ± 3	-10 ± 1	-10 ± 2
2.8	0.288 ± 0.009	-9 ± 3	-8 ± 2	-9 ± 2
2.9	0.280 ± 0.007	-6 ± 3	-7 ± 1	-8 ± 2
3.0	0.273 ± 0.007	-3 ± 3	-6 ± 1	-7 ± 2
3.1	0.265 ± 0.005	-1 ± 2	-4.1 ± 0.7	-6 ± 1
3.2	0.259 ± 0.004	1 ± 1	-3.1 ± 0.3	-6 ± 1
3.3	0.256 ± 0.003	2 ± 2	-2.7 ± 0.2	-6 ± 1
3.4	0.254 ± 0.003	2 ± 1	-2.6 ± 0.2	-5 ± 1
3.5	0.251 ± 0.003	3 ± 1	-2.4 ± 0.2	-5 ± 1
3.6	0.249 ± 0.003	4 ± 1	-2.2 ± 0.2	-5 ± 1
$\langle T^* \rangle$	$\langle R^1_{0,0} \rangle$	$\langle R^2_{0,0} \rangle$	$\langle R^4_{0,0} \rangle$	
2.6	-0.01 ± 0.01	0.91 ± 0.02	0.74 ± 0.04	
2.7	0.00 ± 0.01	0.88 ± 0.04	0.68 ± 0.07	
2.8	0.02 ± 0.01	0.84 ± 0.06	0.6 ± 0.1	
2.9	0.02 ± 0.02	0.78 ± 0.08	0.5 ± 0.1	
3.0	0.00 ± 0.02	0.7 ± 0.1	0.4 ± 0.1	
3.1	0.01 ± 0.02	0.5 ± 0.1	0.2 ± 0.1	
3.2	-0.01 ± 0.02	0.22 ± 0.08	0.04 ± 0.03	
3.3	0.00 ± 0.02	0.14 ± 0.05	0.02 ± 0.02	
3.4	0.00 ± 0.02	0.10 ± 0.04	0.01 ± 0.02	
3.5	0.00 ± 0.02	0.07 ± 0.03	0.01 ± 0.01	
3.6	0.00 ± 0.02	0.08 ± 0.03	0.01 ± 0.02	
$\langle T^* \rangle$	$\langle R^2_{0,2} \rangle$	$\langle R^2_{2,0} \rangle$	$\langle R^2_{2,2} \rangle$	
2.6	0.02 ± 0.01	0.020 ± 0.01	0.40 ± 0.02	
2.7	0.02 ± 0.01	0.022 ± 0.01	0.33 ± 0.07	
2.8	0.02 ± 0.01	0.026 ± 0.01	0.2 ± 0.1	
2.9	0.01 ± 0.01	0.033 ± 0.01	0.14 ± 0.09	
3.0	0.01 ± 0.01	0.04 ± 0.01	0.07 ± 0.05	
3.1	0.02 ± 0.02	0.05 ± 0.01	0.04 ± 0.02	
3.2	0.01 ± 0.03	0.04 ± 0.02	0.03 ± 0.01	
3.3	0.00 ± 0.04	0.03 ± 0.01	0.02 ± 0.01	
3.4	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	
3.5	-0.01 ± 0.03	0.01 ± 0.01	0.02 ± 0.01	
3.6	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	

Table 18: Average number density, total and potential energies, and orientational order parameters for the *ct1* system with $\mu^* = 3$.

$\langle T^* \rangle$	$\langle \rho^* \rangle$	$\langle E^* \rangle$	$\langle U^*_{\mathrm{GB}} \rangle$	$\langle U^*_{\mathrm{el}} \rangle$
2.6	0.348 ± 0.004	-8.7 ± 0.1	-16.4 ± 0.2	-0.02 ± 0.04
2.7	0.318 ± 0.003	-2.36 ± 0.06	-10.4 ± 0.2	-0.02 ± 0.04
2.8	0.303 ± 0.003	0.75 ± 0.05	-7.5 ± 0.1	-0.02 ± 0.04
2.9	0.294 ± 0.003	2.46 ± 0.06	-6.1 ± 0.1	-0.01 ± 0.04
3.0	0.287 ± 0.003	3.66 ± 0.06	-5.2 ± 0.1	-0.01 ± 0.04
3.1	0.280 ± 0.003	4.74 ± 0.07	-4.5 ± 0.1	-0.01 ± 0.04
3.2	0.274 ± 0.003	5.78 ± 0.08	-3.7 ± 0.1	-0.01 ± 0.04
3.3	0.267 ± 0.003	6.86 ± 0.08	-3.0 ± 0.1	-0.01 ± 0.04
3.4	0.263 ± 0.003	7.41 ± 0.09	-2.7 ± 0.1	-0.01 ± 0.04
3.5	0.260 ± 0.003	7.91 ± 0.09	-2.5 ± 0.1	-0.01 ± 0.03
3.6	0.258 ± 0.003	8.3 ± 0.1	-2.4 ± 0.1	-0.01 ± 0.03
$\langle T^* \rangle$	$\langle R^1_{0,0} \rangle$	$\langle R^2_{0,0} \rangle$	$\langle R^4_{0,0} \rangle$	
2.6	0.00 ± 0.01	0.97 ± 0.01	0.89 ± 0.01	
2.7	0.00 ± 0.02	0.90 ± 0.01	0.71 ± 0.01	
2.8	0.01 ± 0.01	0.82 ± 0.01	0.55 ± 0.02	
2.9	-0.01 ± 0.02	0.75 ± 0.02	0.44 ± 0.02	
3.0	0.01 ± 0.02	0.69 ± 0.02	0.36 ± 0.03	
3.1	0.01 ± 0.02	0.60 ± 0.02	0.26 ± 0.03	
3.2	0.01 ± 0.03	0.45 ± 0.04	0.15 ± 0.03	
3.3	0.00 ± 0.02	0.17 ± 0.04	0.02 ± 0.02	
3.4	0.00 ± 0.02	0.12 ± 0.04	0.01 ± 0.02	
3.5	0.00 ± 0.02	0.09 ± 0.03	0.01 ± 0.02	
3.6	0.00 ± 0.02	0.09 ± 0.03	0.01 ± 0.01	
$\langle T^* \rangle$	$\langle R^2_{0,2} \rangle$	$\langle R^2_{2,0} \rangle$	$\langle R^2_{2,2} \rangle$	
2.6	0.01 ± 0.01	0.01 ± 0.01	0.47 ± 0.01	
2.7	0.02 ± 0.01	0.02 ± 0.01	0.36 ± 0.01	
2.8	0.03 ± 0.01	0.04 ± 0.01	0.27 ± 0.02	
2.9	0.03 ± 0.01	0.04 ± 0.01	0.16 ± 0.03	
3.0	0.02 ± 0.01	0.05 ± 0.01	0.06 ± 0.02	
3.1	0.01 ± 0.01	0.06 ± 0.01	0.04 ± 0.02	
3.2	0.02 ± 0.02	0.06 ± 0.01	0.04 ± 0.02	
3.3	0.02 ± 0.05	0.04 ± 0.01	0.03 ± 0.01	
3.4	0.00 ± 0.04	0.03 ± 0.01	0.02 ± 0.01	
3.5	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	
3.6	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	

Table 19: Average number density, total and potential energies, and orientational order parameters for the *ct2* system with $\mu^* = 0.5$.

$\langle T^* \rangle$	$\langle \rho^* \rangle$	$\langle E^* \rangle$	$\langle U^*_{\mathrm{GB}} \rangle$	$\langle U^*_{\mathrm{el}} \rangle$
2.6	0.348 ± 0.004	-8.8 ± 0.2	-16.4 ± 0.2	-0.1 ± 0.2
2.7	0.318 ± 0.003	-2.7 ± 0.2	-10.4 ± 0.2	-0.3 ± 0.2
2.8	0.303 ± 0.003	0.5 ± 0.2	-7.6 ± 0.2	-0.2 ± 0.2
2.9	0.294 ± 0.003	2.2 ± 0.2	-6.2 ± 0.2	-0.2 ± 0.1
3.0	0.286 ± 0.003	3.5 ± 0.2	-5.2 ± 0.1	-0.2 ± 0.1
3.1	0.280 ± 0.003	4.6 ± 0.2	-4.5 ± 0.1	-0.2 ± 0.1
3.2	0.273 ± 0.003	5.7 ± 0.2	-3.7 ± 0.1	-0.1 ± 0.1
3.3	0.267 ± 0.003	6.7 ± 0.2	-3.0 ± 0.1	-0.1 ± 0.1
3.4	0.263 ± 0.003	7.3 ± 0.2	-2.7 ± 0.1	-0.1 ± 0.1
3.5	0.260 ± 0.003	7.8 ± 0.2	-2.5 ± 0.1	-0.1 ± 0.1
3.6	0.258 ± 0.003	8.3 ± 0.2	-2.4 ± 0.1	-0.1 ± 0.1
$\langle T^* \rangle$	$\langle R^1_{0,0} \rangle$	$\langle R^2_{0,0} \rangle$	$\langle R^4_{0,0} \rangle$	
2.6	0.00 ± 0.01	0.97 ± 0.01	0.89 ± 0.01	
2.7	0.00 ± 0.01	0.90 ± 0.01	0.72 ± 0.01	
2.8	0.00 ± 0.02	0.82 ± 0.01	0.55 ± 0.02	
2.9	-0.01 ± 0.03	0.75 ± 0.02	0.44 ± 0.02	
3.0	0.02 ± 0.01	0.68 ± 0.02	0.35 ± 0.02	
3.1	0.00 ± 0.03	0.59 ± 0.03	0.26 ± 0.03	
3.2	0.00 ± 0.02	0.45 ± 0.04	0.14 ± 0.03	
3.3	0.01 ± 0.02	0.22 ± 0.07	0.04 ± 0.03	
3.4	0.00 ± 0.02	0.10 ± 0.03	0.01 ± 0.01	
3.5	0.00 ± 0.02	0.08 ± 0.03	0.01 ± 0.01	
3.6	0.00 ± 0.02	0.07 ± 0.02	0.00 ± 0.01	
$\langle T^* \rangle$	$\langle R^2_{0,2} \rangle$	$\langle R^2_{2,0} \rangle$	$\langle R^2_{2,2} \rangle$	
2.6	0.01 ± 0.01	0.01 ± 0.01	0.50 ± 0.01	
2.7	0.02 ± 0.01	0.02 ± 0.01	0.36 ± 0.01	
2.8	0.03 ± 0.01	0.04 ± 0.01	0.27 ± 0.02	
2.9	0.03 ± 0.01	0.04 ± 0.01	0.19 ± 0.03	
3.0	0.02 ± 0.01	0.05 ± 0.01	0.07 ± 0.03	
3.1	0.02 ± 0.01	0.06 ± 0.01	0.04 ± 0.02	
3.2	0.02 ± 0.02	0.06 ± 0.01	0.03 ± 0.02	
3.3	0.01 ± 0.04	0.05 ± 0.02	0.03 ± 0.01	
3.4	0.01 ± 0.04	0.02 ± 0.01	0.02 ± 0.01	
3.5	0.01 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	
3.6	0.00 ± 0.03	0.01 ± 0.01	0.02 ± 0.01	

Table 20: Average number density, total and potential energies, and orientational order parameters for the *ct2* system with $\mu^* = 1$.

$\langle T^* \rangle$	$\langle \rho^* \rangle$	$\langle E^* \rangle$	$\langle U^*_{\mathrm{GB}} \rangle$	$\langle U^*_{\mathrm{el}} \rangle$
2.6	0.344 ± 0.004	-8.8 ± 0.4	-15.8 ± 0.2	-0.8 ± 0.4
2.7	0.317 ± 0.003	-4.0 ± 0.4	-10.6 ± 0.2	-1.5 ± 0.4
2.8	0.304 ± 0.003	-0.9 ± 0.5	-8.2 ± 0.3	-1.1 ± 0.4
2.9	0.292 ± 0.003	1.6 ± 0.3	-6.2 ± 0.2	-0.9 ± 0.3
3.0	0.285 ± 0.003	3.0 ± 0.3	-5.2 ± 0.1	-0.8 ± 0.3
3.1	0.278 ± 0.003	4.2 ± 0.3	-4.4 ± 0.1	-0.7 ± 0.3
3.2	0.271 ± 0.003	5.4 ± 0.3	-3.5 ± 0.1	-0.7 ± 0.3
3.3	0.265 ± 0.003	6.4 ± 0.3	-2.9 ± 0.1	-0.6 ± 0.3
3.4	0.262 ± 0.003	7.0 ± 0.3	-2.6 ± 0.1	-0.6 ± 0.3
3.5	0.259 ± 0.003	7.5 ± 0.3	-2.5 ± 0.1	-0.6 ± 0.3
3.6	0.257 ± 0.003	7.9 ± 0.3	-2.3 ± 0.1	-0.5 ± 0.3
$\langle T^* \rangle$	$\langle R^1_{0,0} \rangle$	$\langle R^2_{0,0} \rangle$	$\langle R^4_{0,0} \rangle$	
2.6	0.00 ± 0.01	0.96 ± 0.01	0.88 ± 0.01	
2.7	0.00 ± 0.02	0.90 ± 0.01	0.72 ± 0.01	
2.8	-0.05 ± 0.02	0.84 ± 0.02	0.60 ± 0.03	
2.9	-0.01 ± 0.02	0.75 ± 0.02	0.45 ± 0.02	
3.0	0.02 ± 0.02	0.67 ± 0.02	0.35 ± 0.02	
3.1	0.00 ± 0.03	0.57 ± 0.03	0.24 ± 0.03	
3.2	0.00 ± 0.03	0.38 ± 0.05	0.11 ± 0.03	
3.3	0.00 ± 0.02	0.18 ± 0.06	0.03 ± 0.02	
3.4	0.00 ± 0.02	0.10 ± 0.04	0.01 ± 0.02	
3.5	0.00 ± 0.02	0.08 ± 0.03	0.01 ± 0.02	
3.6	0.00 ± 0.02	0.07 ± 0.03	0.01 ± 0.01	
$\langle T^* \rangle$	$\langle R^2_{0,2} \rangle$	$\langle R^2_{2,0} \rangle$	$\langle R^2_{2,2} \rangle$	
2.6	0.01 ± 0.01	0.01 ± 0.01	0.46 ± 0.01	
2.7	0.02 ± 0.01	0.02 ± 0.01	0.36 ± 0.01	
2.8	0.02 ± 0.01	0.03 ± 0.01	0.28 ± 0.02	
2.9	0.02 ± 0.01	0.04 ± 0.01	0.13 ± 0.04	
3.0	0.02 ± 0.01	0.05 ± 0.01	0.06 ± 0.03	
3.1	0.02 ± 0.01	0.06 ± 0.01	0.05 ± 0.02	
3.2	0.02 ± 0.02	0.06 ± 0.01	0.04 ± 0.02	
3.3	0.01 ± 0.04	0.04 ± 0.02	0.03 ± 0.01	
3.4	0.00 ± 0.04	0.02 ± 0.01	0.02 ± 0.01	
3.5	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	
3.6	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	

Table 21: Average number density, total and potential energies, and orientational order parameters for the *ct2* system with $\mu^* = 1.5$.

$\langle T^* \rangle$	$\langle \rho^* \rangle$	$\langle E^* \rangle$	$\langle U^*_{\mathrm{GB}} \rangle$	$\langle U^*_{\mathrm{el}} \rangle$
2.6	0.327 ± 0.004	-9.7 ± 0.8	-12.6 ± 0.5	-4.8 ± 0.8
2.7	0.312 ± 0.006	-6 ± 2	-10.4 ± 0.9	-4.3 ± 0.8
2.8	0.302 ± 0.007	-4 ± 2	-9 ± 1	-3.7 ± 0.8
2.9	0.290 ± 0.005	-1 ± 1	-6.8 ± 0.9	-3.0 ± 0.7
3.0	0.282 ± 0.004	1.3 ± 0.8	-5.3 ± 0.4	-2.5 ± 0.6
3.1	0.275 ± 0.003	2.8 ± 0.7	-4.3 ± 0.3	-2.2 ± 0.6
3.2	0.269 ± 0.003	4.1 ± 0.6	-3.5 ± 0.2	-2.0 ± 0.6
3.3	0.263 ± 0.003	5.2 ± 0.6	-2.8 ± 0.1	-1.9 ± 0.6
3.4	0.260 ± 0.003	5.8 ± 0.6	-2.7 ± 0.1	-1.8 ± 0.6
3.5	0.258 ± 0.003	6.3 ± 0.6	-2.5 ± 0.1	-1.7 ± 0.6
3.6	0.255 ± 0.003	6.8 ± 0.6	-2.3 ± 0.1	-1.6 ± 0.5
$\langle T^* \rangle$	$\langle R^1_{0,0} \rangle$	$\langle R^2_{0,0} \rangle$	$\langle R^4_{0,0} \rangle$	
2.6	-0.00 ± 0.01	0.93 ± 0.01	0.80 ± 0.02	
2.7	0.02 ± 0.03	0.90 ± 0.02	0.71 ± 0.05	
2.8	-0.01 ± 0.01	0.86 ± 0.04	0.64 ± 0.06	
2.9	0.00 ± 0.02	0.78 ± 0.05	0.51 ± 0.07	
3.0	-0.01 ± 0.02	0.68 ± 0.04	0.36 ± 0.05	
3.1	-0.01 ± 0.01	0.55 ± 0.05	0.23 ± 0.04	
3.2	-0.01 ± 0.02	0.39 ± 0.05	0.11 ± 0.03	
3.3	0.01 ± 0.02	0.11 ± 0.04	0.01 ± 0.02	
3.4	0.00 ± 0.02	0.10 ± 0.03	0.01 ± 0.02	
3.5	0.00 ± 0.02	0.09 ± 0.04	0.01 ± 0.01	
3.6	0.00 ± 0.02	0.08 ± 0.03	0.01 ± 0.01	
$\langle T^* \rangle$	$\langle R^2_{0,2} \rangle$	$\langle R^2_{2,0} \rangle$	$\langle R^2_{2,2} \rangle$	
2.6	0.01 ± 0.01	0.01 ± 0.01	0.41 ± 0.01	
2.7	0.02 ± 0.01	0.02 ± 0.01	0.37 ± 0.03	
2.8	0.02 ± 0.01	0.02 ± 0.01	0.30 ± 0.05	
2.9	0.02 ± 0.01	0.04 ± 0.01	0.15 ± 0.07	
3.0	0.02 ± 0.01	0.05 ± 0.01	0.08 ± 0.03	
3.1	0.02 ± 0.01	0.06 ± 0.01	0.04 ± 0.02	
3.2	0.02 ± 0.03	0.06 ± 0.01	0.03 ± 0.02	
3.3	0.01 ± 0.04	0.02 ± 0.01	0.02 ± 0.01	
3.4	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	
3.5	0.00 ± 0.04	0.02 ± 0.01	0.02 ± 0.01	
3.6	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	

Table 22: Average number density, total and potential energies, and orientational order parameters for the *ct2* system with $\mu^* = 2$.

$\langle T^* \rangle$	$\langle \rho^* \rangle$	$\langle E^* \rangle$	$\langle U^*_{\mathrm{GB}} \rangle$	$\langle U^*_{\mathrm{el}} \rangle$
2.6	0.272 ± 0.008	-19 ± 3	-8 ± 1	-19 ± 2
2.7	0.267 ± 0.007	-16 ± 4	-7 ± 1	-18 ± 3
2.8	0.263 ± 0.007	-15 ± 4	-7 ± 2	-16 ± 3
2.9	0.256 ± 0.007	-10 ± 4	-5 ± 2	-14 ± 2
3.0	0.252 ± 0.005	-8 ± 3	-4 ± 1	-13 ± 2
3.1	0.249 ± 0.005	-6 ± 3	-4 ± 1	-12 ± 2
3.2	0.246 ± 0.004	-4 ± 2	-2.7 ± 0.4	-11 ± 2
3.3	0.245 ± 0.003	-2 ± 2	-2.3 ± 0.2	-10 ± 2
3.4	0.243 ± 0.003	-1 ± 2	-2.2 ± 0.2	-10 ± 2
3.5	0.242 ± 0.003	0 ± 2	-2.1 ± 0.2	-9 ± 2
3.6	0.241 ± 0.003	0 ± 2	-2.0 ± 0.2	-9 ± 1
$\langle T^* \rangle$	$\langle R^1_{0,0} \rangle$	$\langle R^2_{0,0} \rangle$	$\langle R^4_{0,0} \rangle$	
2.6	0.01 ± 0.01	0.83 ± 0.04	0.62 ± 0.07	
2.7	0.00 ± 0.01	0.79 ± 0.07	0.6 ± 0.1	
2.8	0.00 ± 0.02	0.7 ± 0.1	0.5 ± 0.1	
2.9	0.00 ± 0.02	0.6 ± 0.2	0.3 ± 0.2	
3.0	-0.01 ± 0.02	0.4 ± 0.2	0.2 ± 0.1	
3.1	0.00 ± 0.02	0.4 ± 0.2	0.2 ± 0.1	
3.2	0.00 ± 0.02	0.17 ± 0.08	0.05 ± 0.05	
3.3	0.00 ± 0.02	0.09 ± 0.03	0.01 ± 0.02	
3.4	0.00 ± 0.02	0.08 ± 0.03	0.01 ± 0.02	
3.5	0.00 ± 0.02	0.08 ± 0.03	0.01 ± 0.02	
3.6	0.00 ± 0.02	0.06 ± 0.02	0.00 ± 0.01	
$\langle T^* \rangle$	$\langle R^2_{0,2} \rangle$	$\langle R^2_{2,0} \rangle$	$\langle R^2_{2,2} \rangle$	
2.6	0.04 ± 0.01	0.04 ± 0.01	0.36 ± 0.03	
2.7	0.04 ± 0.01	0.04 ± 0.01	0.34 ± 0.07	
2.8	0.03 ± 0.01	0.04 ± 0.01	0.3 ± 0.1	
2.9	0.03 ± 0.02	0.05 ± 0.01	0.2 ± 0.1	
3.0	0.04 ± 0.03	0.05 ± 0.01	0.13 ± 0.09	
3.1	0.02 ± 0.03	0.05 ± 0.02	0.07 ± 0.06	
3.2	0.00 ± 0.04	0.04 ± 0.02	0.04 ± 0.01	
3.3	0.00 ± 0.04	0.02 ± 0.01	0.03 ± 0.01	
3.4	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	
3.5	0.00 ± 0.03	0.02 ± 0.01	0.02 ± 0.01	
3.6	0.00 ± 0.03	0.01 ± 0.01	0.02 ± 0.01	

Table 23: Average number density, total and potential energies, and orientational order parameters for the *ct2* system with $\mu^* = 3$.