

Scott and Pearce, Vol. 55, No. 2, February 1989

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Table 4 should read:

TABLE 4 Chiral spin-Potts model for the ripple phase

State variables: Head group orientation: $\sigma = +1 \rightarrow \lceil$ $\sigma = -1 \rightarrow \rceil$
 Displacement $\perp$ to Bilayer: $n = 0, \pm 1, \pm 2, \dots, \pm q$
 Hamiltonian (two-dimensional square lattice; index i labels axis of head group orientation)

$$H = \sum_{i,j} J_1 \cos \left[\frac{2\pi}{q} \left(n_{i+1,j} - n_{i,j} + \frac{\Delta}{2} (\sigma_{i+1,j} + \sigma_{i,j}) \right) \right] + \sum_{i,j} J_2 \cos \left[\frac{2\pi}{q} (n_{i,j+1} - n_{i,j}) \right] + \sum_{i,j} h \sigma_{i+1,j} \sigma_{i,j}$$

$$J_1 = J_2 = -12.38 \text{ kcal/m} \quad h = -90 \text{ cal/m} \quad \Delta = 0.95 \quad q = 8$$

State	Model energy	Computed energy
	<i>kcal/m</i>	
$n_{i+1,j} - n_{i,j} = \pm 1$ $\sigma_{i+1,j} = \sigma_{i,j} = \mp 1$	$\lceil \rceil$ or $\lceil \lceil$	-12.46
$n_{i+1,j} = n_{i,j}$ $\sigma_{i+1,j} = -\sigma_{i,j}$	$\rceil \lceil$ or $\lceil \rceil$	-12.28
$n_{i+1,j} - n_{i,j} = \pm 2$ $\sigma_{i+1,j} = \sigma_{i,j}$	$\lceil \rceil$ or $\lceil \lceil$	-8.49
$n_{i+1,j} = n_{i,j}$ $\sigma_{i+1,j} = \sigma_{i,j}$	$\lceil \lceil$ or $\rceil \rceil$	-9.18
$n_{i+1,j} - n_{i,j} = \pm 1$ $\sigma_{i+1,j} = -\sigma_{i,j}$	$\lceil \rceil$ or $\lceil \lceil$	-8.66

*Numerical calculations are ambiguous due to possible chain folding or reorientation.