

Band	spin state I	$E_{\text{TSD}}[\text{I}]$	$E_{\text{shape-trans}}$	Valid trajectory
TSD1	12.5	2.597	5.60357	True
TSD2	15.5	3.513	8.3503	True
TSD3	18.5	4.313	11.697	True
TSD4	25.5	6.769	21.8394	True