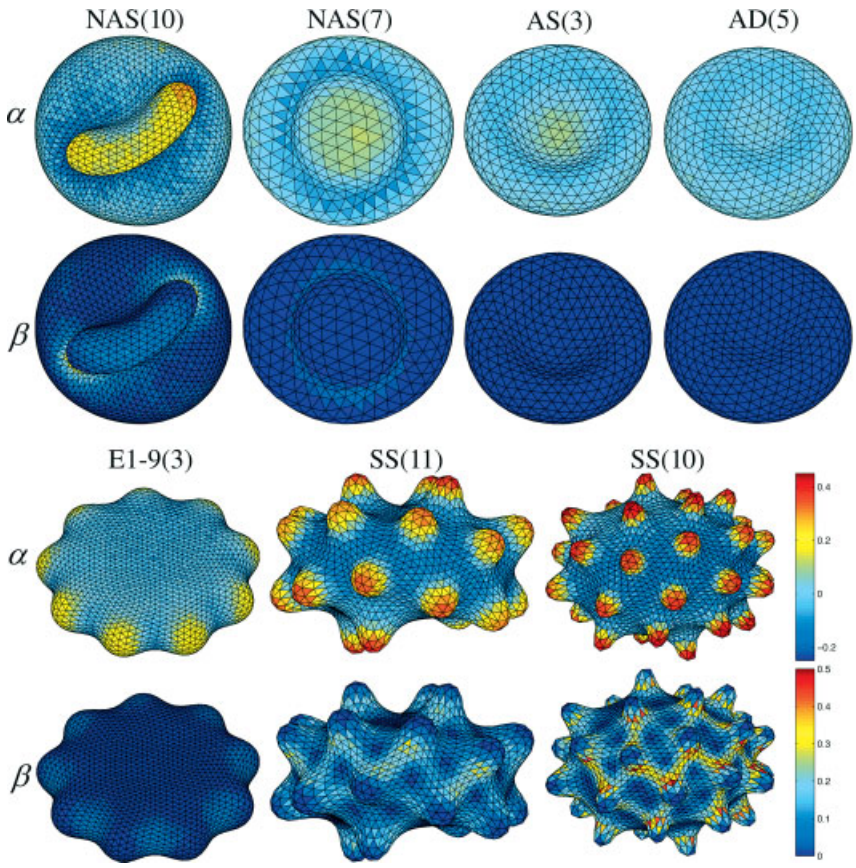

Fig. 2.46 Distributions of the strain fields α (stretch) and β (shear) over representative shapes belonging to some of the major shape classes. These shapes all have $V_{\text{ms}} = 148\ \mu\text{m}^3$ and correspond to the ascending sequence marked in Fig. 2.45 and illustrated in Fig. 2.3 a-g. Note the relatively low strain values for the non-spiculated shapes. As a consequence, these shapes are relatively insensitive to the nonlinear elasticity, Eq. (2.28). Spicules are characterized by large positive α at the tips, large β along the sides, and large negative α at the base and are, therefore, sensitive to nonlinear elastic parameters (see Section 2.8.3).

brane skeletal strain in the vicinity of the spicule apex bears a striking qualitative similarity to the observed membrane skeletal strain in the vicinity of the tip of a RBC tongue aspirated into a micropipette (Lee et al. 1999).