Orientation of three-axial \((a,b,c)\) chicken red blood cells in electric fields

Electrodes

linear field

circular field
Abstract
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The front cover picture shows the field orientation of the triaxial chicken red blood cells at an external conductivity of 0.28 S/m and a field frequency of 11 MHz. While the highest polarizable axis (a) is aligned (top) in a linear field, a circular field orients two axes (a and b) in the field plane (bottom). The third axis (c), which is least polarizable, is then aligned perpendicularly to this plane. Linearly or circularly polarized fields can be used to detect those axis-permutations with the highest and lowest polarizability, depending on the external conductivity and the field frequency.