Soft-Matter Characterization

- The only book covering the whole field
- A comprehensive treatment of the major techniques for studying soft matter at the nanoscale level
- Accessible to an interdisciplinary audience

This 2 volume 4-part set includes extensive discussions of scattering techniques (light, neutron and X-ray) and related fluctuation and grating techniques that are at the forefront of this field. Most of the scattering techniques are Fourier space techniques. Recent advances have seen the development of powerful direct imaging methods such as atomic force microscopy and scanning probe microscopy. In addition, techniques that can be used to manipulate soft matter on the nanometer scale are also in rapid development. These include the scanning probe microscopy technique mentioned above as well as optical and magnetic tweezers. This will appeal to soft matter scientists at the graduate level and above, condensed matter physicists, chemists, biologists, medical doctors and engineers.