

## Image Analysis

### The Image Processing Handbook Third Edition by John C. Russ

Thoroughly updated and delivering an impressive array of concepts and techniques to take full advantage of high-end imaging software. The ultimate image analysis reference work 752pp

**New to the third edition:**

- surface imaging including stereoscopy, structured light & Moiré patterns, SEM+X-ray analysis, ion probe confocal LM, stylus instruments and scanned probe microscopes
- Visualisation methods - range images with and without colour coding; rendering, wire frame & ray tracing; multiplane images etc
- Coverage of the latest developments in digital camera and video
- 3D image processing update and much, much more

**B252** The Image Processing Handbook

### Practical Handbook on Image Processing for Scientific Applications by B Jaehne

This volume provides basic knowledge of image processing with many references to general concepts widely used in natural sciences. It includes carefully selected methods that are theoretically sound and proved by applications. Contains over 400 illustrations, tables and photos with numerous practical tips.

**Contents:**

From objects to images; Quantitative visualisation; Image formation; Imaging sensors; Digitalisation and quantitation; Enhancing, restoring and reconstructing images; Pixels; Geometry; Transmission; Storage; Data bases; Edges; Orientation; Scale; Texture; Segmentation; Size and shape; Matching and tracking; Classification. 464pp

**B270** Practical handbook on image processing for scientific applications, hardback

### Fractal Imaging by Ning Lu

Fractal image compression technology, one of the major digital image compression techniques has been a well kept secret for many years. **Fractal Imaging** presents the logic, technology and various uses of fractal imaging by analysing a complete, usable fractal representation system. The book begins with a brief mathematical background of fractal image representation, guides the reader through a detailed study of the spatial transform and the intensity transform, translation and rescaling, the block match searching method, quadtree splitting, leading up to the introduction to fractal imaging, colour image compression and decompression algorithms. The final chapter illustrates the magic of fractal zooming with dazzling real-life images and introducing a new image enhancement technique.

**B333** Fractal Imaging 400pp