VLSI- Technology Credits: 4

Bipolar Junction Transistor Fabrication, MOSFET Fabrication for IC, Crystal Structure of Si, Defects in Crystal, Crystal growth, Epitaxy, Vapour phase Epitaxy, Doping during Epitaxy Molecular beam Epitaxy, Oxidation I - Kinetics of Oxidation, Oxidation rate constants, Dopant Redistribution, Oxide Charges, Diffusion - Theory of Diffusion, Infinite Source, Actual Doping Profiles, Diffusion Systems, Ion - Implantation Process, Annealing of Damages, Masking during Implantation, Lithography, Wet Chemical Etching, Dry Etching, Plasma Etching Systems.

References

1. Semiconductor Devices: Physics and Technology by S.M. Sze, Wiley International Edition
2. VLSI Technology by S.M. Sze, Wiley International Edition