



เอกสารอ้างอิง

1. Stringfellow, G.B. "Epitaxy". Rep.Prog.Phys. 45(1982) : 469-525.
2. Dawson, L.R. "Liquid Phase Epitaxy". Prog.Solid State Chem. 7(1972) : 117-139.
3. Stringfellow, G.B. Vapour-Phase Epitaxy in Crystal Growth. (Pamplin, B.R. ed.) 2 nd ed., pp.181-220, Pergamon Press, Oxford, 1980.
4. Ploog, K.Molecular-beam Epitaxy in Crystal Growth, Properties, Applications (Freyhardt, H.C.ed.) pp.75-157, Springer-Verlag, Berlin, 1980.
5. Lau, S.S., Mayes, J.W. and Tseng, W. in Handbook on Semiconductors (Keller, S.P.ed.) Vol. 3 pp.531-562, North-Holland, Amsterdam, 1980.
6. Lang, D.V., Cho, A.Y., Gossard, A.C., Illegems, and Wiegmann, W. "Study of Electron Traps in n-GaAs Grown by Molecular Beam Epitaxy". J.Appl Phys. 47 (1976) : 2556-2564.
7. Bauser, E., Fischer, B. and Sullivan, P.A. Tracing of Terrace Growth GaAs LPE Layers. in Semiconductor Characterization Techniques, (Barnes, P.A. and Rozgoryi, G.A.ed.) Vol.78-3. pp.307-313, The Electrochemical Society, Princeton, N.J., 1978.
8. Hilsum, C. and Rose, A.C. in Semiconducting III-V Compounds. pp.6, Pergamon Press, Oxford, 1961.
9. Van Vechten, J.A. Phys.Rev. 187, (1969) : 1007
10. Cohen, M.L. and Bergstresser, T.K. "Band Structures and Pseudopotential Form Factors for Fourteen Semiconductors of the Diamond and Zinc-blende Structures" Phys.Rev. 141 (1966) : 789-796.
11. Bergstresser, T.K., Cohen, M.L. and Williams, E.W. Phys.Rev. Letters. 15(1965) : 662.

12. Tsaur, S.C., Milnes, A.G., Sahai, R. and Feucht, D.L. "Theoretical and Experimental Results for GaAs Solar Cells" in Symposium on GaAs and Related Compounds pp.156-167. Institute of Physics, London, 1973.
13. Sommer, A.H. "Practical Use of III-V Compound electron emitters" in Symposium on GaAs and Related Compounds. pp.143-155. Institute of Physics, London, 1973.
14. Bass, J.C. "Gallium Arsenide Microwave Devices." in Symposium on GaAs and Related Compounds, pp.129-139. Institute of Physics, London, 1971.
15. Giess, E.A. and Ghez, R. Liquid-Phase Epitaxy in Epitaxial Growth Part A, (Matthews, J.W. ed.) pp.183-213. Academic Press, New York, 1975.
16. Hsieh, J.J. Liquid-Phase Epitaxy in Handbook on Semiconductors, (Keller, S.P.ed.) Vol.3 pp.415-497. North-Holland, Amsterdam, 1980.
17. Kressel, H. and Nelson, H. Properties and Application of III-V Compound Deposited by Liquid-Phase Epitaxy in Advances in Research and Development, (Maurice, G.H., Francombe, H. and Hoffman, W. eds.) Vol.7. pp.115-255. Academic Press, New York and London, 1973.
18. Nelson, H. "Epitaxial Growth from the Liquid State and its Application to the Fabrication of Tunnel and Laser Diode". RCA Review. 24(1963): 603-615.
19. Hansen, M. in Constitution of Binary Alloys. pp.165, McGrawHill, New York, 1958.
20. Long, S.I., Ballantyne, J.M. and Eastman, L.F., "Steady State LPE Growth of GaAs". J. of Crystal Growth. 26(1974) : 13-20
21. Crossley, I. and Small, M.B. "Computer Simulations of Liquid Phase Epitaxy of GaAs in Ga Solution." J. of Crystal Growth. 11(1971) : 157-165.

22. Deitch, R.H. "Liquid-Phase Epitaxial Growth of Gallium Arsenide under Transient Thermal conditions." J. of Crystal Growth. 7(1970) : 69-73.
23. Rupprecht, H. "New Aspects of Solution Regrowth in the device Technology of GaAs." in Proceedings International Symposium on GaAs. pp.57-61, London Institute of Physics and The Physical Society, Reading, 1966.
24. Panish,, M.B., Hayashi, I. and Sumski, S. IEEE J. Quantum Electronics. 5(1969) : 210-211.
25. Small, M.B. and Cryossley, I. "The Physical Processes Occuring During Liquid Phase Epitaxial Growth" J. of Crystal Growth. 27 (1974): 35-48.
26. Harris, J.S., Nannichi, Y. and Pearson, G.L., "Ohmic Contacts to Solution-Grown Gallium Arsenide". J. Appl. Phys. 40, (1969) : 4575-4581.
27. Paorici, C. Crystal Growth and Doping in Physics of Modern Materials Vol.1.pp.71, IAEA, Vienna, 1980.
28. Brys'Kiewicz, T. "Investigation of the Mechanism and Kinetics of Growth of LPE GaAs" J. of Crystal Growth. 43(1978):101-114.
29. Rode, D.L. "Isothermal Diffusion Theory of LPE : GaAs, GaP, Bubble Garnet." J. of Crystal Growth. 20(1973): 13-23.
30. Muralidharan, R. and Jain, S.C. "Improvements in the Theory of Growth of LPE Layers of GaAs and Interpretation of Recent Experiments" J. of Crystal Growth. 50(1980) : 707-719.
31. Hsieh, J.J. "Thickness and Surface Morphology of GaAs LPE layers Grown by Supercooling, Step. Cooling, Equilibrium-Cooling, and Two-Phase Solution Technigues." J. of Crystal Growth. 27(1974): 49-61.

32. Potard, C. "Calcul des Conditions de Croissance de Cristaux en Solution." J. of Crystal Growth. 13/14(1972): 804-809.
33. Rutter, J.W. and Chalmers, B., "A Prismatic Substructure Formed During Solidification of Metals." Can.J. of Physics. 31(1952): 15-39.
34. Minden, H.T. "Constitutional Supercooling in GaAs Liquid Phase Epitaxy." J. of Crystal Growth. 6(1970) : 228-236.
35. Sekeka, R.F. Morphological Stability in Crystal Growth : An Introduction (Hartman, P. ed) pp.403-443, North-Hollan, Amsterdam, 1973.
36. Mullins, W.W. and Sekerka, R.F., "Stability of a Planar Interface During Solidification of a Dilute Binary Alloys." J. Appl. Phys. 35(1964):444-451.
37. Small, M.B. and Potemski, R.M. "Wave Morphologies on the Surfaces of GaAs and $\text{Ga}_{0.65}\text{Al}_{0.35}\text{As}$ Grown by LPE." J. of Crystal Growth. 37(1977) : 163-168.
38. Longo, J.T., Harris, Jr., J.S., Gertner, E.R. and Chu, J.C. "Improve Surface Quality of Solution Grown GaAs and $\text{Pb}_{1-x}\text{Sm}_x\text{Te}$ Epitaxial Layers : A New Technique." J. of Crystal Growth. 15(1972) :107-116.
39. Bauber, E. and Benz, K.W. "LPE of GaAs and Related Compounds : Substrate Orientation and Surface Morphology." Microelectronics Journal. 13(1982):10-14
40. Baliga, B.J. "Kinetics of Epitaxial Growth of Silicon from a Tin Melt." J. of the Electrochem. Soc. 124(1977):1627-1631.
41. Hall, R.N. "Solubility of III-V Compound Semiconductors in Column III Liquids." J. of the Electrochem. Soc. 110(1963):385-388.
42. Castaño, J.L., Piguerras, J. and Muñoz, E. "Surface Layers in Heat-Treated GaAs" Revue de Physique Appliquee. 13(1978):293-297.

43. Cullity, B.D. in Elements of X-ray Diffraction., pp.89-93, Adison-Wesley Publishing company, Reading, Massachusetts, 1959.
44. Honig, R.E. "Surface and Thin Film Analysis of Semiconductor materials." Thin Solid Films. 31(1976) : 89-122.
45. Bauser, E. "Development of Depressions and Voids during LPE Growth of GaAs." Appl. Phys. 15(1978)243-252.
46. Toyoda, N., Mihara, M. and Hara, T. "Liquid-Phase Epitaxial Growth of Thin GaAs Layers from Supercooled Solutions." J. Appl. Phys. 47(1976):443-448
47. Olsen, G.H. and Ettenberg, M., "Universal Stain/Etchant for Interfaces in III-V Compounds." J. Appl. Phys. 45(1974): 5112-5114.
48. Baliga, B.J., Ehle, R., Shealy J.R. and Garwacki, W., "Breakdown Characteristics of Gallium Arsenide." IEEE Electron Device Letters. EDL-2(1981) : 302-304.
49. Van der Pauw, L.J. "A Method of Measuring Specific Resistivity and Hall Effect of Disc of Arbitrary Shape" Philips Research Reports 13,1-9, Research Laboratory of N.V. Philips'Gloei. lampenfabrieken, Eindhoven, Netherlands, 1958.
50. Ruryan, W.R. in Semiconductor Measurement and Instrumentation. pp.133-137, McGraw-Hill Kogakusha, LTD. Tokyo, 1975.

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