SILICON MOLECULAR BEAM EPITAXY : A COMPREHENSIVE BIBLIOGRAPHY 1962-82

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Résumé.- Nous avons compilé une bibliographie de plus de 200 références s'étendant sur les 20 premières années de l'épitaxie par jets moléculaires du silicium. EJM-Si est définie largement afin d'inclure une série de publications sur les méthodes de dépôt de silicium sous-ultravide. Cette définition permet d'inclure les premiers travaux dans le domaine et des approches alternatives de croissances épitaxiales telles que le dépôt en phase vapeur partiellement ionisée, l'épitaxie par faisceau d'ions et l'épitaxie en phase solide. Les références sont données avec les titres dans 10 catégories de sujets. Dans ces catégories, les articles sont inscrits alphabétiquement par premier auteur en respectant la chronologie. Les catégories se recoupent et les traductions en anglais citées, si disponibles. Les citations sont limitées aux travaux en cours d'impression ou acceptés pour publication. Après la bibliographie, des numéros de références par auteurs sont donnés par ordre alphabétique. Les catégories sont les suivantes :

- I. REVUES (REF. 1-8)
- II. PREMIERS TRAVAUX (REF. 9-43)
(articles ou projets achevés en 1972)
- III. APPAREILLAGE (REF. 44-48)
- IV. PREPARATION DES SUBSTRATS (REF. 49-61)
- V. HOMOEPITAXIE
 - A. NON DOPE OU DOPE PENDANT L'EPITAXIE (REF. 62-106)
 - B. DOPE PAR IMPLANTATION (REF. 107-119)
- VI. DEPOT DE SILICIUM IONISE (REF. 120-138)
(incluant le dépôt en phase vapeur partiellement ionisée et l'épitaxie par faisceau d'ions)
- VII. HETEROEPITAXIE
 - A. SUBSTRAT ISOLANT (REF. 139-153)
 - B. CROISSANCE ISOLANT/SILICIUM (REF. 154-157)
 - C. CROISSANCE METAL/SILICIUM (REF. 158-178)
 - D. CROISSANCE SEMICONDUCTEUR/SILICIUM (REF. 179-193)
- VIII. EPITAXIE LOCALISEE (REF. 194)
- IX. STRUCTURES DE DISPOSITIFS (REF. 195-204)
- X. DEPOTS NON EPITAXIES (REF. 205-223)
(incluant l'épitaxie en phase solide et recuit laser sous pression de silicium, et le dépôt de silicium polycristallin)

Abstract. -

We have compiled a Bibliography of over two hundred references spanning the first twenty years of Silicon Molecular Beam Epitaxy. Si-MBE is defined broadly to include a range of publications involving high vacuum deposition of silicon. This definition permits the inclusion of early work in the field and alternative approaches to epitaxial growth such as partially ionized vapor deposition, ion beam epitaxy and solid phase epitaxy. References are listed with titles in ten subject categories. Within these categories papers are listed alphabetically by first author in chronological succession. Categories are cross referenced and English translations are cited, if available. Citations are limited to works in print or accepted for publication. Following the bibliography reference numbers are listed by authors alphabetically. Categories in the bibliography are listed below:

- I. REVIEWS (REF. 1-8)
- II. EARLY RESEARCH (REF. 9-43)
 (papers or projects completed by 1972)
- III. APPARATUS (REF. 44-48)
- IV. SUBSTRATE PREPARATION (REF. 49-61)
- V. HOMOEPI TAXY
 - A. UNDOPED OR WITH EVAPORATED DOPANTS (REF. 62-106)
 - B. IMPLANTED DOPANTS (REF. 107-119)
- VI. IONIZED SILICON DEPOSITION (REF. 120-138)
 (including partially ionized vapor deposition and ion beam epitaxy)
- VII. HETEROEPI TAXY
 - A. INSULATING SUBSTRATES (REF. 139-153)
 - B. INSULATOR/SILICON GROWTH (REF. 154-157)
 - C. METAL/SILICON GROWTH (REF. 158-178)
 - D. SEMICONDUCTOR/SILICON GROWTH (REF. 179-193)
- VIII. PATTERNED EPITAXY (REF. 194)
- IX. DEVICE STRUCTURES (REF. 195-204)
- X. NON-EPITAXIAL DEPOSITION (REF. 205-223)
 (including solid phase epitaxy and laser annealing using evaporated silicon, and polycrystalline silicon deposition)

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II. EARLY RESEARCH

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V. HOMOEPITAXY

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