Title: Senior Thin Film Process Development Engineer

Report to: Chief Technology Officer (CTO)

Locations: Changzhou and Suzhou, Jiangsu Province

Salary: Negotiable, depending on qualifications and experience

Job type: Full time, Permanent

Job description:

Under the direction of the CTO of the company, the senior thin film process development engineer is responsible for developing, monitoring, sustaining, and supporting advanced thin film deposition and processing for new and prototype products; designing and conducting advanced wafer experiments, analysing the data, and reporting the results; developing and implementing new practices or methodologies which reduce cost and improve operational efficiency; conducting root cause analysis and implementing corrective action; developing and implementing procedures for transitioning new products into the production line; and reviewing, updating, and maintaining experimental documentation and process instructions.

Key responsibilities:

- Develops, sustains, and supports advanced thin film processes for new and prototype products
- Develops and implements novel approaches to improve and optimize Crossbar structure devices
- Develops and implements practices or methodologies which reduce cost and improve operational efficiency
- Conducts root cause analysis and implements corrective action if required
- Develops and implements processes or procedures for transitioning new products into the production line
- Resolves process issues related to material selection; recommends corrective action
- Reviews, updates, and maintains documentation and process instructions
- Instructs operators and technicians on processes and procedures, including modifications to existing procedures
- Partners with equipment and maintenance personnel in order to minimize tool down time and integrate new tools into the production line

- Designs and conducts advanced experiments, analyzes data, and develops recommendations for improving the performance or reducing cost based on test results
- Collaborates with other team members, managers, or departments
- Adheres to all safety policies and procedures as required
- Performs other duties of a similar nature or level

Job requirements:

Minimum qualifications:

- Master's degree in Electrical Engineering, Materials Science, or Physics, and/or equivalent relevant experience; PhD preferred
- Minimum 5 years of hands-on experience in working in CVD, ALD, PECVD, and PVD processes
- Strong experience working in the magnetic recording head, PCRAM/MRAM or semiconductor industry in a thin film process development engineering role
- Strong knowledge and experience using data analysis software or similar software
- Proficient in the use of Microsoft Office Applications

Knowledge, skills and abilities:

- Strong knowledge and experience in CVD, ALD, PVD,
- Strong knowledge and hands-on experience of thin film manufacturing processes, practices, and techniques
- Strong knowledge in using Electrical characterization techniques (magnetoresistance and high frequency capacitance measurements)
- Strong knowledge of using material characterization techniques and tools such as XRD, SEM, XPS.
- Strong knowledge in using magnetic characterization techniques such as VSM and SQUID.

- Able to design experiments, analyze results, and recommend corrective action in order to reduce scrap and improve yield
- Able to use critical thinking to resolve issues, conduct root cause analysis, and make recommendations for process improvements
- Knowledge and ability to use Microsoft Office applications to create spreadsheets, Word documents, and presentations in Chinese and English
- Able to communicate effectively in Chinese and English, both verbally and in writing, with all levels of contractors, consultants, employees, and management
- Able to work productively and collaboratively with all levels of employees and management
- Able to comply with all safety policies and procedures
- Demonstrated organizational and time management skills
- Demonstrated problem-solving and trouble shooting skills
- Flexible and be able to prioritize tasks

Working conditions:

Senior thin film process development engineer primarily works in an office environment and research laboratory from Monday to Friday. The schedule may be altered from time-to-time to meet business or operational needs; may travel to different cities as needed*;* may also work in a research facility – class 1000 Clean room; adheres to required safety and dress standards (wears a bunny suit); may be exposed to hazardous chemicals, fumes, or vapours and excessive noise from time-to-time while in the wafer manufacturing facility; stands and walks; performs various fine grasping movements, bends, and twists; operates a computer and enters information using a keyboard, operates a telephone, and other office equipment.

Company:

LoMaRe Technologies is a new semiconductor start-up developing emerging non-volatile memory (NVM) technologies with proprietary intellectual property. Headquartered in London, UK, LoMaRe is a spin-off company from world leading institution Imperial College London. Our company's ambition is to commercialise scientific innovation and we are looking to add experienced experts to join our team in China to develop memory technology. Apply to become a part of a future leader in semiconductor chip technology and join a dynamic fast-paced working environment with an ambitious and success-focused team.

To apply, please contact Dr. Andrei Mihai, jobs@lomaretech.com.

职位：高级薄膜工艺开发工程师

上司职务：首席技术官（CTO）

地点：常州和苏州， 江苏省

薪金：面议，取决于学历资格和经验

工作类型：全职，永久

职位描述：

在公司 CTO 的指导下，高级薄膜工艺开发工程师负责开发，监视，维护和技术支持用于新产品和原型产品的先进薄膜沉积技术和工艺流程；设计和进行先进的晶圆实验，分析数据并报告结果；制定和实施新的实践或方法，以降低成本并提高运营效率；进行根本原因分析并采取纠正措施；制定和实施将新产品过渡到生产线的程序；以及审查，更新和维护实验文档和流程说明。

主要职责：

- 为新产品和原型产品，开发，维护和技术支持先进的薄膜工艺
- 开发和实施新的方法来改善和优化交叉结构器件
- 制定并实施可降低成本并提高运营效率的实践或方法
- 进行根本原因分析并根据需要采取纠正措施
- 制定并实施将新产品过渡到生产线的流程或程序
- 解决与材料选择有关的制作问题；建议采取纠正措施
- 审查，更新和维护实验文档和流程说明
- 指导操作员和技术员工艺流程和程序，包括对现有程序的修改
- 与设备和维护人员合作，以最大程度地减少设备停机时间并将新设备集成到生产线中
- 设计并进行高级实验，分析数据，并根据测试结果提出改进性能或降低成本的建议
- 与其他团队成员，经理或部门合作
- 遵守所有安全守则和程序
- 履行类似性质或级别的其他职责

工作要求**:**

最低要求：

- 电气工程，材料科学或物理学的硕士学位，和/或同等相关的经验；博士学位优先
- 至少 5 年的 CVD，ALD，PECVD 和 PVD 工艺经验
- 具有在磁记录头，PCRAM / MRAM 或半导体行业中从事薄膜工艺开发工程工作的丰富经验
- 具有使用数据分析软件或类似软件的丰富知识和经验
- 熟练使用 Microsoft Office 应用程序

知识，技能和能力：

- 具有 CVD，ALD，PVD 方面的丰富知识和经验
- 对薄膜制造工艺，实践和技术具有丰富的知识和实验经验
- 在使用电气表征技术方面有丰富的知识（抗磁阻和高频电容测量）
- 具有使用材料表征技术和工具（例如 XRD，SEM，XPS）的丰富知识
- 在使用磁性表征技术（例如 VSM 和 SQUID）方面具有丰富的知识
- 能够设计实验，分析结果并提出纠正措施，以减少废品并提高产量
- 能够运用批判性思维来解决问题，进行根本原因分析并提出改进流程的建议
- 具有使用 Microsoft Office 应用程序创建电子表格，Word 文档和中英文演示文稿的知识和能力
- 能够与各级承包商，顾问，员工和管理层有效地进行中文和英文的口头和书面沟通
- 能够与各级员工和管理层进行有效的合作
- 能够遵守所有安全守则和程序
- 具备组织和时间管理技能
- 具备解决问题和故障排除的技巧
- 灵活且能够优先处理任务

工作环境:

从星期一到星期五主要在办公室环境中和研究实验室工作。时间表可能会不时更改，以满足业务或运营需求；可能会根据需要到不同的城市出差。也可能在研究实验室中工作-1000 级无尘室；遵守安全守则的要求和着装标准（穿无尘服）。在晶圆制造工厂中，可能会不时暴露于

有害化学物质，烟雾或蒸气以及过多的噪音；站立和行走；进行各种精细的抓握动作，弯曲和扭曲；操作计算机并使用键盘输入信息，操作电话和其他办公设备。

公司：
LoMaRe Technologies 是一家新的半导体初创公司，开发具有专有知识产权的新兴非易失性存储器（NVM）技术。 LoMaRe 总部位于英国伦敦，是一家由世界知名大学伦敦帝国理工学院独立出来的公司。公司的目标是将科学创新商业化，我们诚挚地邀请有丰富经验的专家加入在中国的团队，开发内存技术。申请成为半导体芯片技术未来领导者的一员并加入雄心勃勃且以成功为目标的团队和充满活力的快节奏工作环境。

如有意申请，请联系 Andrei Mihai 博士，jobs@lomaretech.com。