



At 3M, our 93,000 employees do work that matters, applying our science in ways that make a positive impact on people's lives around the globe. And that work is accomplished through close collaboration with smart, curious and motivated 3Mers in 87 countries, all rallying behind 3M's vision:

3M technology advancing every company.

3M products enhancing every home.

3M innovation improving every life.

Opportunities Available

We are expanding our nanofabrication capabilities and are interested in meeting potential candidates.

ASML

ASML Holding N.V., incorporated on October 3, 1994, is a holding company. The Company is a manufacturer of chip-making equipment. The Company is engaged in the development, production, marketing, selling and servicing of semiconductor equipment systems, consisting of lithography systems. The Company's products include systems, and installed base products and services. The Company's principal operations are in the Netherlands, the United States and Asia. Its subsidiaries include ASML Netherlands B.V., ASML Systems B.V., ASML Hong Kong Ltd. and ASML US Inc.

The Company offers TWINSCAN systems, equipped with lithography system with a mercury lamp as light source (i-line), Krypton Fluoride (KrF) and Argon Fluoride (ArF) light sources for 300 millimeter processing wafers for manufacturing environments for which imaging at a small resolution is required. TWINSCAN systems also include immersion lithography systems (TWINSCAN immersion systems). The TWINSCAN NXT platform enables semiconductors through the multiple patterning (MPT), which requires two or more exposures per layer on a chip, enabling imaging patterns and lines by using its TWINSCAN NXT planar wafer stage and grid metrology. The Company also offers NXE systems, which are equipped with extreme ultraviolet (EUV) light source technology.

Opportunities Available

Full-time Positions Available

Astrileux Corporation

We are a rapidly growing semiconductor R&D company that an immediate opening for a industry postdoc at LBNL. The successful applicant will build and characterize new materials for EUV lithography integrating them into future generations of semiconductor industry technology at 7 nm and smaller. We hope to provide the candidate with an exciting opportunity to be part of an early stage development project with great global market impact, and a chance to see their work implemented at forefront of science, through leading edge technology in a next-generation industry.

Our company has won many awards in material science, semiconductors and start-ups likely to succeed in the hard sciences, and we see high calibre individuals to be part of a rock star team. Initial responsibilities for this position will require some work at the National Center for Electron Microscopy, Molecular Foundry and the Material Sciences Division at LBNL.

Opportunities Available

Graduate Student Part time and Full time Positions Available

Candidate Requirements:

- PhD in Material Science, Chemistry, Electrical Engineering, Mechanical Engineering or Physics.
- Strong experience with NanoCharacterization tools: HRTEM, HRSTEM, FIB-SEM, Cross-sectional STEM, AFM, SEM. Additionally XRD, XPS, SAXS, GISAXS is desirable.
- Strong Experience with material deposition, vacuum deposition tools, nano fabrication tools, and designing and using vacuum systems.

The preferred candidate is also:

- Willing to develop technology programs with customers.
- Willing to relocate to Berkeley to work for an exciting, dynamic, and leading start-up company as well as collaborate with world-class scientists at LBNL
- Authorized to work in US the by being a US Citizen, US permanent resident holder or holding OPT card.

- Seeks rapidly accelerated career growth, with challenging opportunities that would not be found in a large company.

Travel to customer facilities to give presentations will be occasionally required.

- Please email resume, publications and references to info@astrileux.com
- Our company will consider all candidates, and diversity candidates are strongly encouraged to apply. A travel stipend to conferences may also be provided for suitable candidates.

Carl Zeiss

Carl Zeiss provides a broad range of instruments and equipment for a range of markets including consumer goods, semiconductor manufacturing, and laboratory R&D instrumentation. More specifically, Zeiss provides equipment to enable EUV lithography, electron beam instruments (SEMs), focused ion beam instruments (FIBs), and X Ray Microscopy.

Opportunities Available

Across the globe over 700 positions are open. Many of them are overlapping the topics of the EIPBN conference.

Fractilia

The goal of Fractilia is to bring rigor, accuracy, and ease-of-use to the measurement of pattern roughness and other metrics for semiconductor manufacturing. We are a computational metrology company -- we combine our expertise in stochastics, lithography, and software to develop proprietary, physics-based algorithms which we implement in the most accurate and useful products available. Fractilia is based in Austin, Texas.

Opportunities Available

Apps Engineer position

Intel - Intel Mask Operations

As the world's largest chip manufacturer, Intel strives to make every facet of semiconductor manufacturing state-of-the-art -- from semiconductor process development and manufacturing, through yield improvement to packaging, final test and optimization, and world class Supply Chain and facilities support. Employees in the Technology and Manufacturing Group are part of a worldwide network of design, development, manufacturing, and assembly/test facilities, all focused on utilizing the power of Moore's Law to bring smart, connected devices to every person on Earth. Intel Mask Operations plays a critical role in this network, responsible for the production of photolithography masks for Intel's leading-edge silicon manufacturing solutions. Intel Mask Operation has two locations; the original location in Santa Clara, CA provides mask technology development as well as production for all technology nodes. The second location in Hillsboro, OR provides additional manufacturing capacity and enhanced business continuity.

Opportunities Available

Full-Time Positions Available in Santa Clara, CA and Hillsboro, OR



Who are we? We research, develop, and manufacture the world's most advanced inspection and measurement equipment for the semiconductor and nanoelectronics industries. We enable the digital age by pushing the boundaries of technology, creating tools capable of finding defects smaller than a wavelength of visible light. We create smarter processes so that technology leaders can manufacture high-performance chips—the kind in that phone in your pocket, the tablet on your desk and nearly every electronic device you own—faster and better. We're passionate about creating solutions that drive progress and help people do what wouldn't be possible without us.

Opportunities Available

Fulltime and Internships Positions Available. See attached document.

NuFlare Technology America, Inc.

NuFlare Technology, Inc. was founded in 2002 as a spinoff of the Semiconductor Equipment Division of Toshiba Machine Co. Ltd. Since that time, we have developed and provided state-of-the-art electron beam mask writers, mask inspection systems and epitaxial growth systems for the manufacture of semiconductor devices, thereby contributing to the development of the semiconductor industry.

We have over thirty years of experience in developing electron beam mask writers that print IC circuit patterns on photomasks. Photomasks are quartz plates used to transfer IC circuit patterns onto silicon wafers for semiconductor devices, and play a pivotal role in micro- and nano-fabrication processes by improving productivity and device performance. NuFlare's electron beam mask writers lead the industry and are valued by customers worldwide.

Our mask inspection systems, which identify defects in the printed patterns on photomasks, are also highly valued by our customers. Furthermore, epitaxial growth systems for power devices are expected to find more widespread use in electric vehicles (EVs) and other applications. Epitaxial growth systems are currently moving from the development phase to use in practical applications.

NuFlare Technology will maintain advanced technological capabilities to provide semiconductor manufacturing equipment that meets customer needs in a timely manner, and sustain our vision that states "Contributing through leading-edge semiconductor manufacturing equipment to the advance of the semiconductor industry, society, and mankind."

Opportunities Available

Full-time positions: Electron Optics Engineer, Field Service Engineer, Deep Learning Engineer. Student Internships available year round.

Philips SCIL Nanoimprint Solutions

SCIL Nanoimprint Solutions offers solutions for patterning nano-structures on large wafers by using its unique and proprietary lithography technology (SCIL).

SCIL or Substrate Conformal Imprint Lithography is a cost effective, robust, high yield process enabling nanometer resolution patterns on a large variety of materials. SCIL delivers proven, high quality imprints on wafer areas up to 200 mm. It can be used to make patterns with feature sizes down to less than 10 nm and overlay alignment down to 1 μm .

SCIL Nanoimprint Solutions helps customers with optimized equipment, consumable materials and processes for high volume production. Our solutions enable manufacturers of optics and photonic products to increase performance, lower end-product costs and increase functionality.

Opportunities Available

Expanding the team from 7 to 15-20 in the next 1-2 years:

- internships (4M – 1Y)
- chemical engineers
- process developers
- material scientists

SwissLitho AG

SwissLitho is a young high-tech company with the vision to change the way nanostructures are commonly made. Their multiple-patented nanolithography technology, called NanoFrazor, was originally invented at IBM Research Zurich as a successor of a new concept for data storage - the so called Millipede memory. Heatable silicon tips are used for direct patterning of arbitrary 2D and 3D nanostructures and for simultaneous imaging of the tiny nanostructures.

SwissLitho AG and Heidelberg Instruments joined forces in 2018. Together, they offer the widest range of direct write micro- and nanolithography systems world-wide, from low-cost desktop solutions to high-end writers for substrates larger than 1m. Their products are used in R&D, industrial manufacturing, and academic research for generating micro- and nanostructures with high-aspect ratio as well as in grayscale mode.

Opportunities Available

Internships with flexible start and end dates; Full-time positions can be discussed for next year

zeroK NanoTech

zeroK NanoTech manufacturers focused ion beam (FIB) and SIMS systems with unmatched performance and new capabilities. With our FIB platform you can mill smaller structures than is possible with gallium-based systems. Our Cs⁺ focused beam SIMS system enables SIMS elemental analysis at sub 10-nm resolutions, and can perform in domains traditionally served by other techniques like EDX.

Opportunities Available

Full-time positions available.