

## EMPLOYMENT OPPORTUNITY

### North Carolina State University

Raleigh, NC

### Multiple Postdoctoral Positions in the Synthesis, Characterizations, and Device Development of 2D Materials

Applications are invited for multiple postdoctoral positions in the Cao group at North Carolina State University. The research of the prospective candidate will focus on exploring CVD and MOCVD approaches to synthesize large-scale 2D materials and heterostructures, including but not limited to transition metal dichalcogenides (TMD), h-BN, and graphene. The research also involves characterization of the composition and properties of the synthesized materials using a variety of sophisticated tools. One important task is to fabricate and characterize electronic circuits with the 2D materials.

Candidates should possess a PhD in physics, materials science, chemistry, electrical engineering, or a related discipline, and a demonstrated scientific and technical expertise in either of the following fields: CVD synthesis, device fabrication, device physics, electrical/optical characterizations. Experience in the CVD or MOCVD synthesis and device development of 2D materials is preferred but not required. Applicants should have demonstrated capability to initiate, conduct, and publish cutting-edge research. Independent work, strong self-motivation, and eagerness to publish in high ranking are very important assets of the successful candidate.

The research in the Cao group is at the crossroad of materials science, physics, chemistry and electrical engineering. The Cao group is particularly interested in deeply understanding the fundamentals through synergistic efforts in both theoretical and experiments grounds, and subsequently design new materials or devices following the guidance of the fundamental understanding. As a result, group members can expect to receive well-round training in optical and electronic characterizations, optical spectroscopy, device fabrications, and materials synthesis. More information about the research work and recent publications in the Cao group can be found at <https://www.mse.ncsu.edu/research/linyou/Publications>.

The starting date of the position can vary from immediate to any time before June 2017, whichever way is convenient for the candidate. Interested candidates are encouraged to send a CV including the names and contacts of three references to Prof. Linyou Cao at [lcao2@ncsu.edu](mailto:lcao2@ncsu.edu).

#### **Where to apply**

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