Stanford

Marwa Atwa

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Bio

BIO

Marwa Atwa is a postdoctoral scholar at Nanoscale Prototyping Laboratory (NPL), focusing on developing durable electrodes for hydrogen fuel cells. She got her Ph.D. in Chemistry from the University of Calgary in 2021 under the supervision of Professor Viola Birss, where she mastered different skills in both material science and electrochemistry fields. During her Ph.D. studies, she developed and tested highly active cathodes for hydrogen fuel cells based on novel nanoporous carbon films made from uniform and bimodal porous structures. Before joining the University of Calgary, Marwa received her M. Sc. And B. Sc. degrees in Chemistry from Suez Canal University, where her research focused on protecting low-carbon steel from corrosion in an acidic medium by applying various nanoengineered metal and alloys coatings using electroplating technique.

STANFORD ADVISORS

- Britt Hedman, Postdoctoral Faculty Sponsor
- Dimosthenis Sokaras, Postdoctoral Research Mentor

Publications

PUBLICATIONS

- **Scalable nanoporous carbon films allow line-of-sight 3D atomic layer deposition of Pt: towards a new generation catalyst layer for PEM fuel cells.** *Materials horizons*
  Atwa, M., Li, X., Wang, Z., Dull, S., Xu, S., Tong, X., Tang, R., Nishihara, H., Prinz, F., Birss, V.
  2021; 8 (9): 2451-2462
- **Scalable nanoporous carbon films allow line-of-sight 3D atomic layer deposition of Pt: towards a new generation catalyst layer for PEM fuel cells** *MATERIALS HORIZONS*
  Atwa, M., Li, X., Wang, Z., Dull, S., Xu, S., Tong, X., Tang, R., Nishihara, H., Prinz, F., Birss, V.
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