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Electrochemical fabrication of Porous Silicon for an Investigation for use as the anode in Lithium-ion batteries¹ OLIVIA POPNOE, TONI SAUNCY, Angelo State University Physics — An electrochemical cell with a Teflon based structure was made for fabrication of Porous Silicon (p-Si). The cell was then used for anodic etching of a single crystal Si substrate to synthesize a thin layer of p-Si, with hydrofluoric acis used as the electrolytic solution. The resulting film is more robust when compared with those produced previously by non-contact photochemical etching. The anodic etchin method results in a relatively uniform distribution of micropores.

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