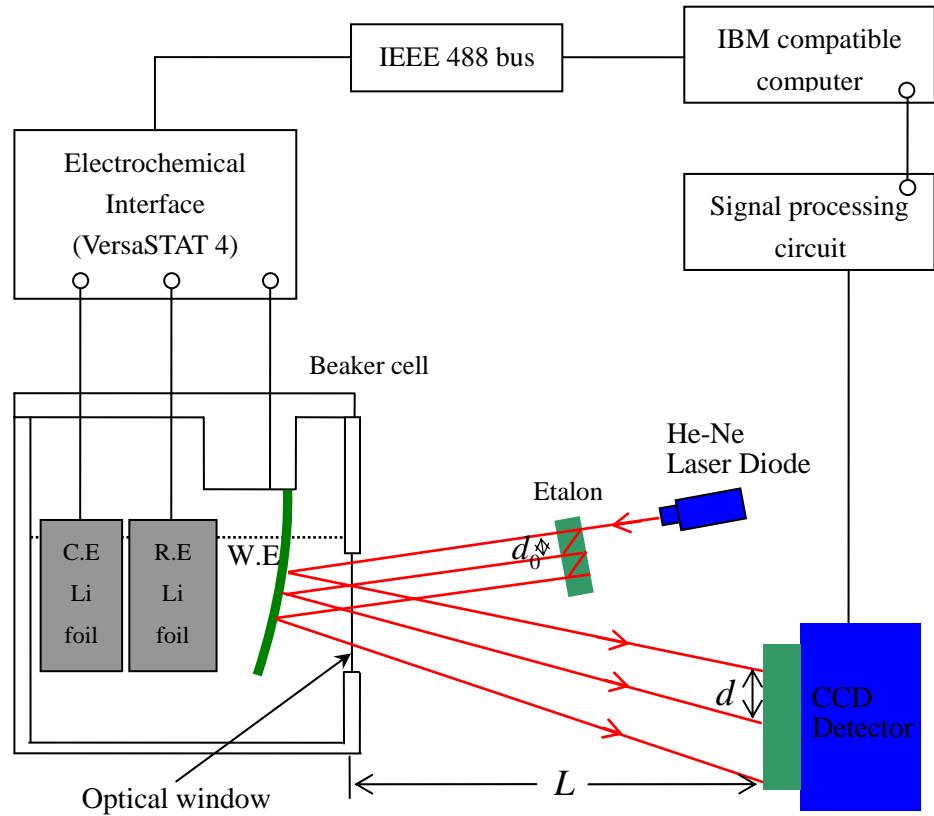
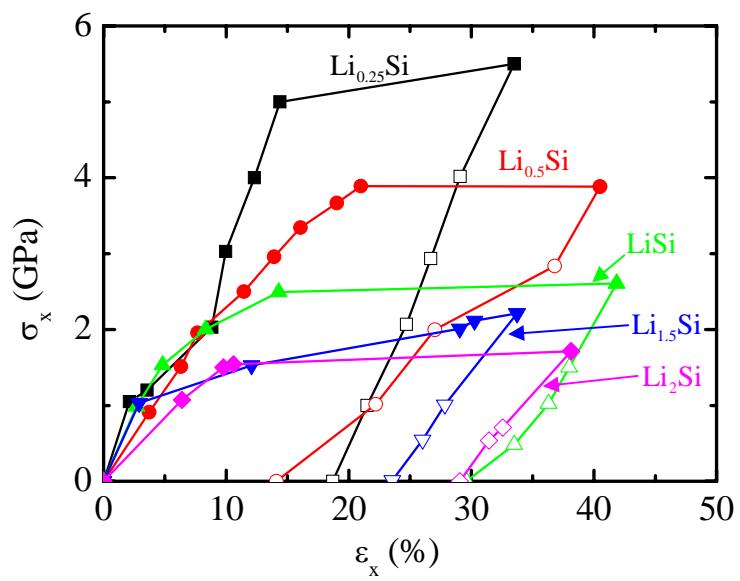


**Supplemental figures:**



C. E.: counter electrode. R. E.: reference electrode. W. E.: working electrode  
Electrolyte: 1LiPF<sub>6</sub> solution

**Fig. 1s.** A custom electrochemical cell with in-situ multi-beam stress sensor



**FIG. 2s.** Stress-strain responses of lithiated a-Si under uniaxial tension with different Li concentrations.