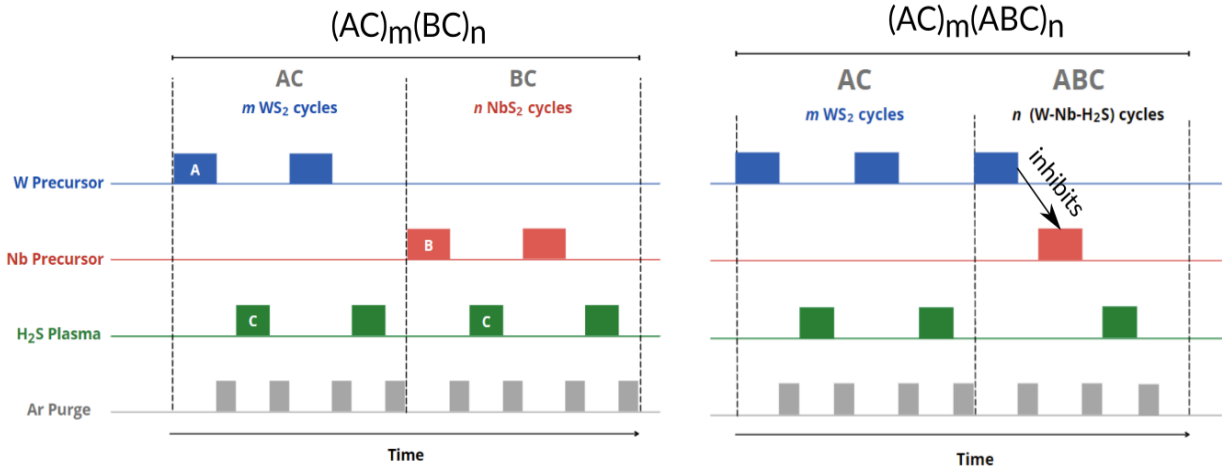
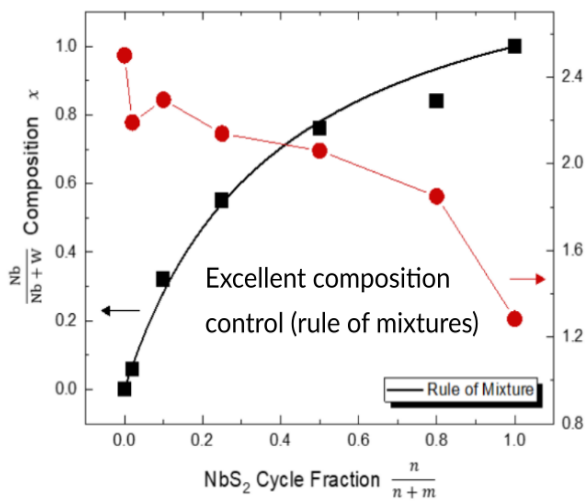


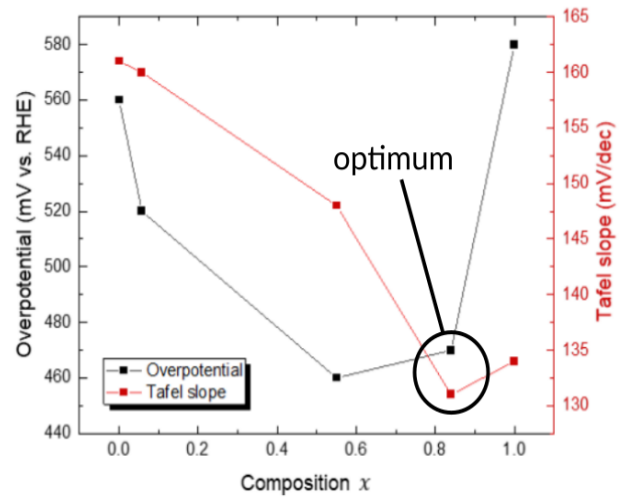
Doping schemes



Composition (XPS)



HER activity



Electronic properties

Process	ρ ($\times 10^4 \mu\Omega\text{-cm}$)	μ_H (cm^2/Vs)	n ($\times 10^{20} \text{cm}^{-3}$)	
Better Nb distribution ↓	(AC)(BC) $Nb_{0.1}W_{0.9}S_x$	5.0	0.31 ± 0.03	4.03 ± 0.41
	(AC)(ABC) $Nb_{0.1}W_{0.9}S_x$	2.6	0.77 ± 0.01	3.16 ± 0.03