

Fig.1 N atomic composition ratio under each irradiation condition. RILC: Radical + Ion + Light + Catalyst.

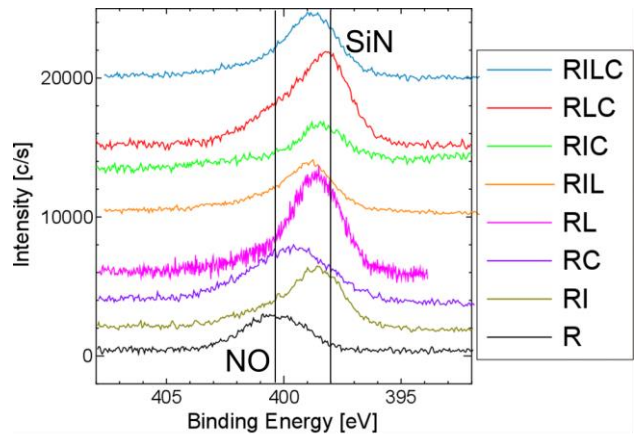


Fig.2 XPS N1s spectrum under each irradiation condition. RILC: Radical + Ion + Light + Catalyst.

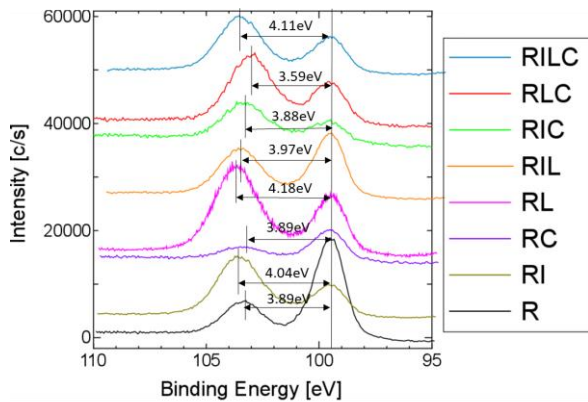


Fig.3 XPS Si2p spectrum under each irradiation condition. RILC: Radical + Ion + Light + Catalyst.

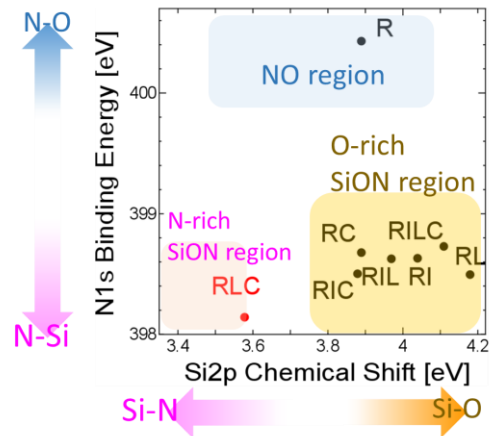


Fig.4 Correlation of spectral peaks of XPS N1s and Si2p under each irradiation condition. RILC: Radical + Ion + Light + Catalyst.