Plasma Enhanced Atomic Layer Deposition of Boron Nitride

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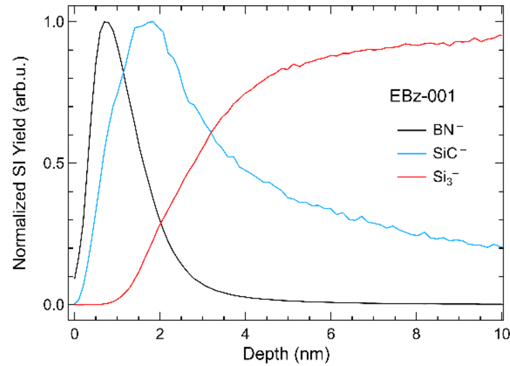
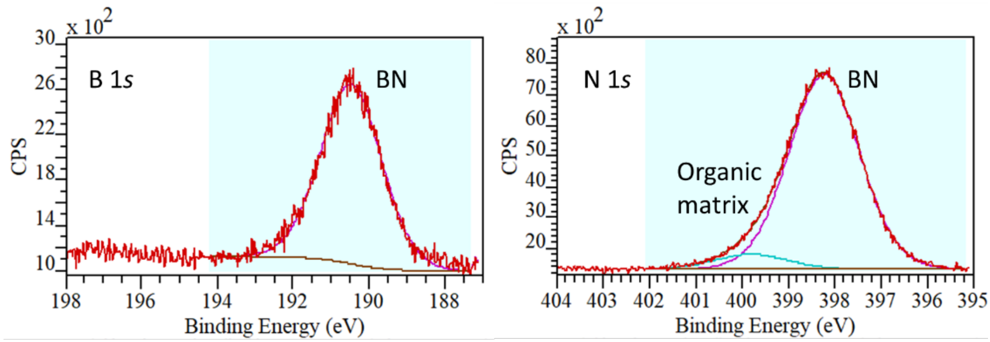
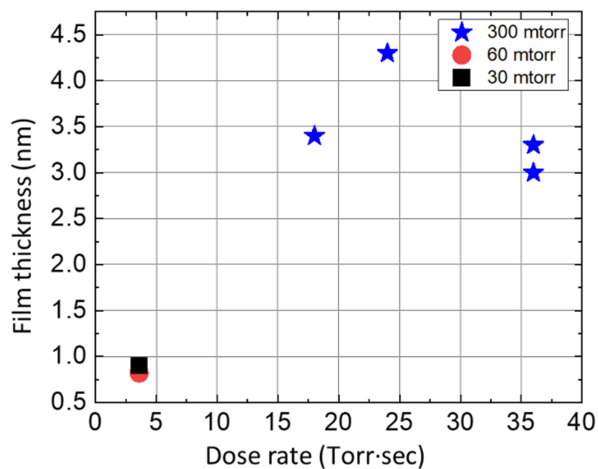


TOF-SIMS of a 1.7 nm $B_{0.44}N_{0.56}$ film grown at 100 °C on SiO_2/Si(001) at 400 W and 100 MHz.



XPS of B 1*s* and N 1*s* peaks for a 3.3 nm thick film. Grown using 36 torr·sec dose rate, a 400 W, 100 MHz Ar:N_2 700:50 SCCM plasma, 20 cycles. The film's stoichiometry is 47:53 B:N.



Film thickness versus different dose rates of borazine. The pressure of borazine used during the dose is labelled in the legend.