Electronic Supplementary Material (ESI) for CrystEngComm.

Supporting Information

Fabrication of silicon-vacancy color centers in diamond films: tetramethylsilane as a new dopant source

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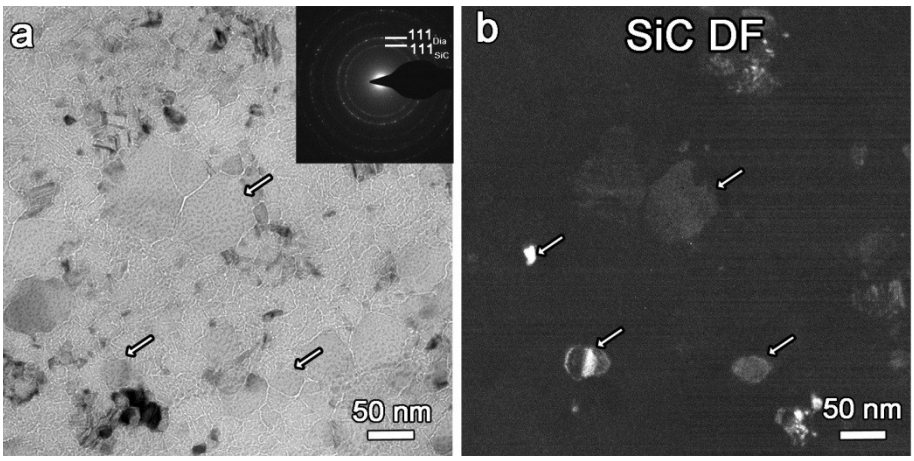

Figure S1 the TEM bright-field (a) and dark-field (b) images of Si-doped diamond films deposited at the growth temperature of 650 °C with the Si/C ratio of 1/310.

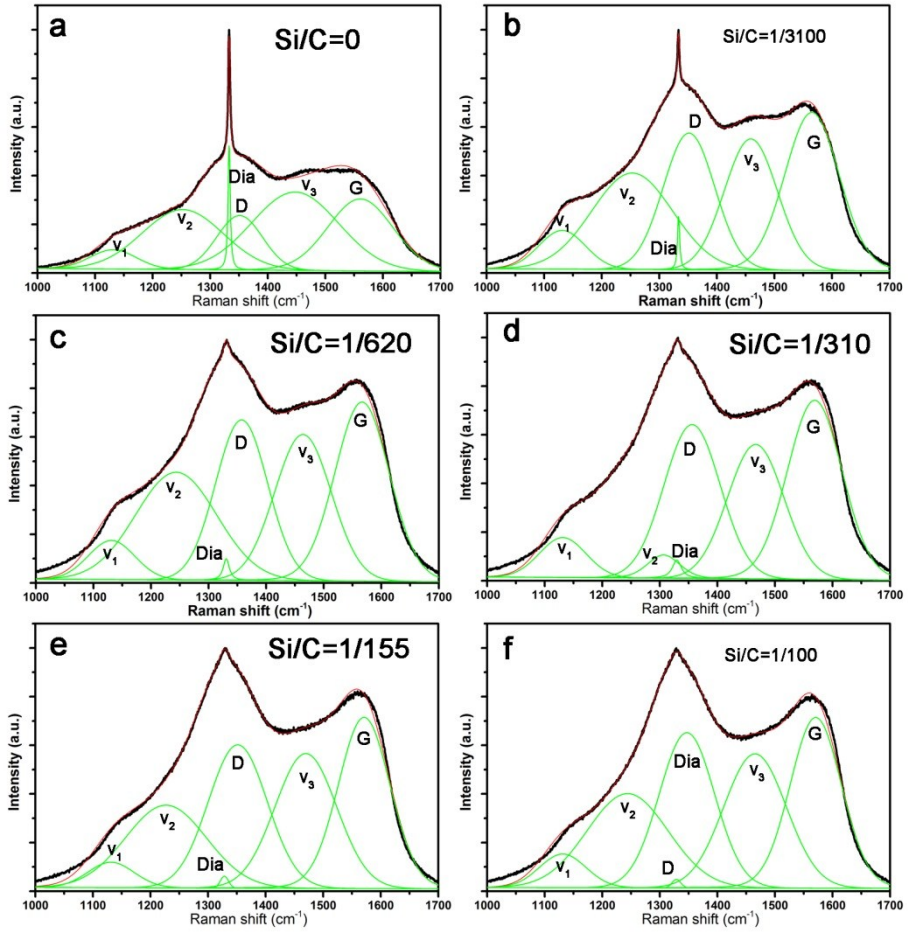

Figure S2 The deconvolution of Raman spectra of Si-doped diamond films at the growth temperature of 870 °C with different Si/C ratios: (a) 0; (b) 1/3100; (c) 1/620; (d) 1/310; (e) 1/155; (f) 1/100.

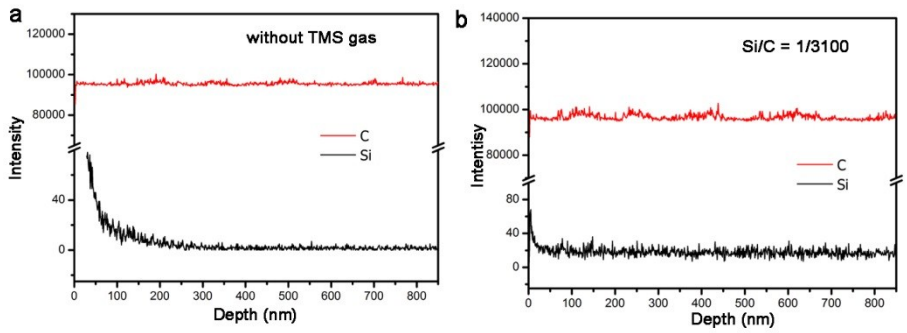

Figure S3 SIMS depth profiles for diamond films grown at the temperature of 870 °C with different Si/C ratios: (a) 0; (b) 0/3100.

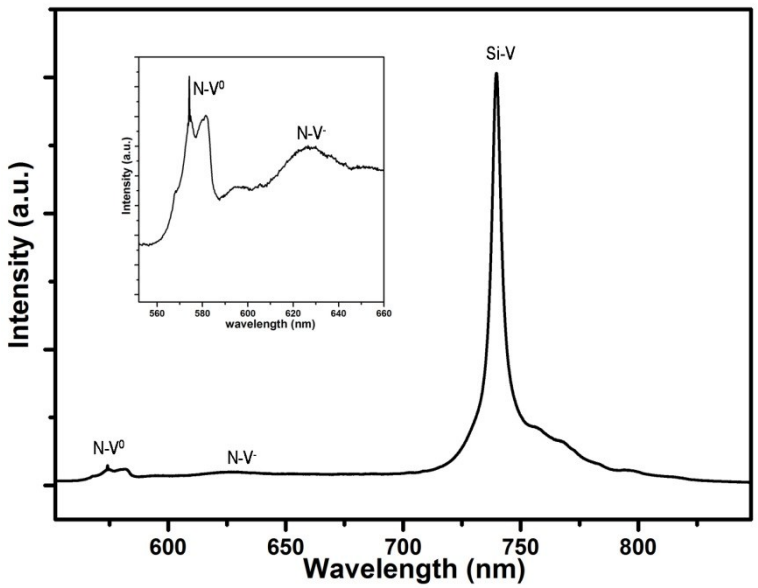

Figure S4 PL emission spectra of Si-doped diamond films with the Si/C ratio of 1/3100 deposited at the temperature of 870 °C.

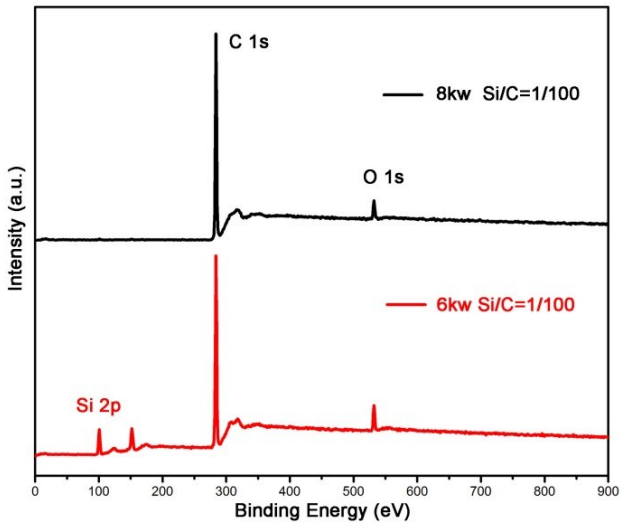

Figure S5 XPS spectra of the deposited diamond films at the Si/C ratio of 1/100