Supporting Information

for

Nitrogen-doped graphene films from chemical vapor deposition of pyridine: influence of process parameters on the electrical and optical properties

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Results of the Raman spectral fittings

Table S1: Raman properties of pyridine-CVD graphene films.

Samples		Raman parameters									
H_2	***T* (°C)**	**Γ_D (cm^{-1})**	**ω_D (cm^{-1})**	**Γ_G (cm^{-1})**	**ω_G (cm^{-1})**	**Γ_{2D} (cm^{-1})**	**ω_{2D} (cm^{-1})**	**$I_{D/G}$**	**$I_{2D/G}$**	**$I_{D/D'}$**	**L_a[nm]**
1 sccm	**930**	28.1	1343.7	20.0	1585.5	34.5	2682.0	0.92	1.55	3.68	15.26
	1000	31.2	1349.6	17.2	1584.3	36.6	2690.7	0.20	0.69	2.51	54.28
	1070	32.2	1351.5	16.1	1583.2	37.8	2693.4	0.14	0.6	2.14	73.20
100 sccm	**930**	28.7	1344.3	22.5	1586.0	39.4	2682.6	1.16	1.29	4.42	13.31
	1000	29.7	1348.2	17.3	1583.2	33.1	2690.8	0.17	0.86	3.19	66.27
	1070	33.5	1350.8	17.2	1582.3	40.4	2693.8	0.08	0.75	2.57	124.74

Table S2: Raman ratios of ethanol-CVD graphene films.

Samples		Raman ratios		
H_2	***T* (°C)**	**$I_{D/G}$**	**$I_{2D/G}$**	**$I_{D/D'}$**
1 sccm	**930**	0.68	0.89	3.41
	1000	0.13	0.84	2.17
	1070	0.05	0.89	1.67
100 sccm	**930**	0.25	1.15	2.88
	1000	0.19	0.86	3.80
	1070	0.06	0.70	2.0