Tuning of Conversion and Optical Emission by Electron Temperature in an Inductively-Coupled CO_2 Plasma

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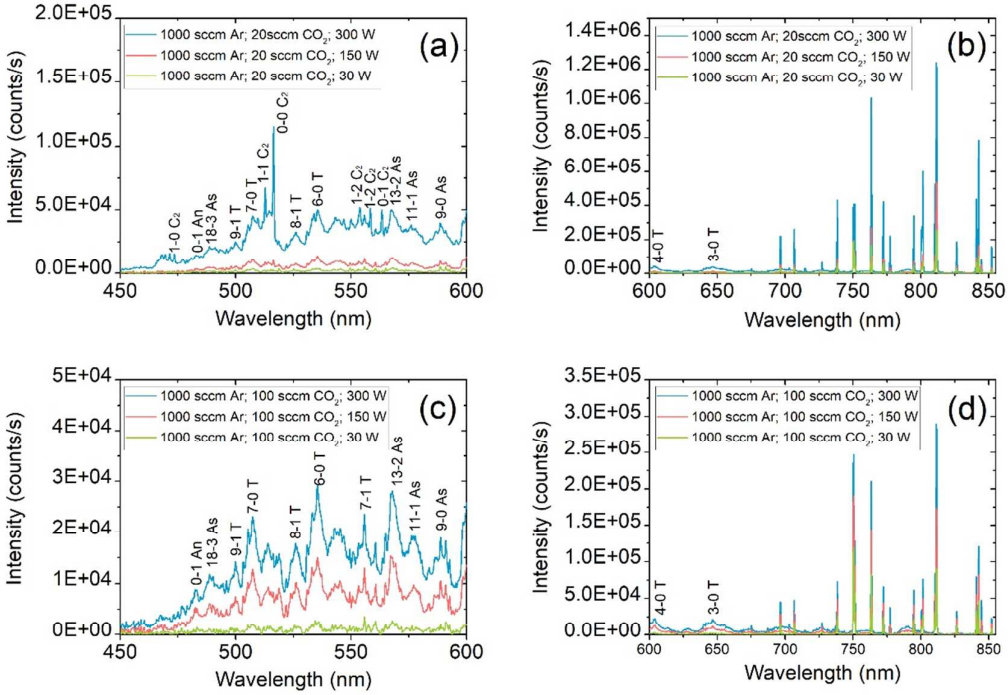

Figure S1 Emission spectrum from CO_2–Ar mixed plasma recorded at different supplied power (30 W, 150 W, 300 W). The Ar flow was fixed at 1000 sccm and CO_2 flow was fixed at 20 sccm and 100 sccm, respectively. The pressure was fixed at 14±1Pa.

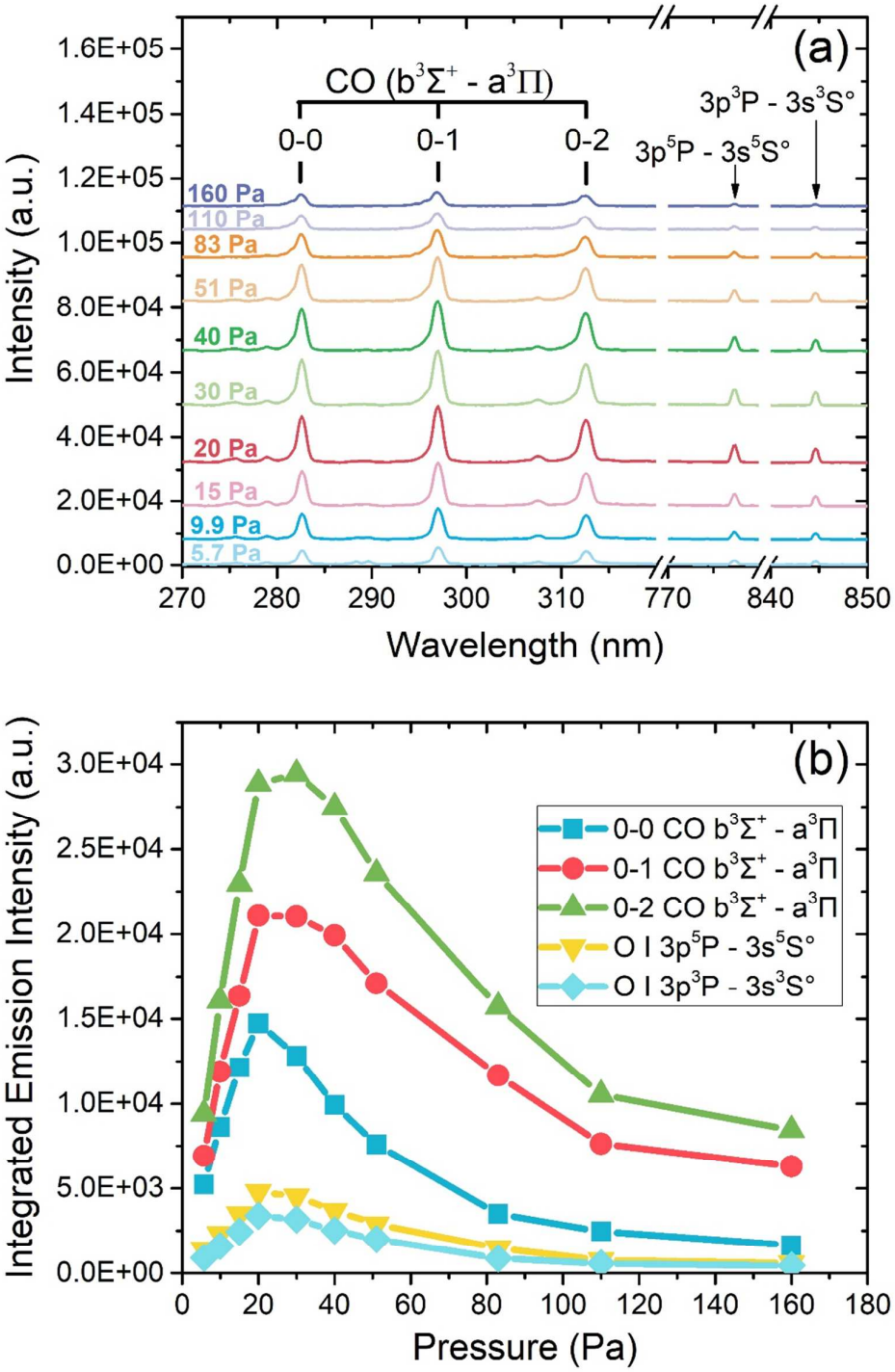

Figure S2 a) Emission spectrum of the CO $b^3\Sigma^+ - a^3\Pi$, O I $3p^5P \rightarrow 3s^5S°$ (777 nm) and O I $3p^3P \rightarrow 3s^3S°$ (844 nm) transitions at different pressure. b) integrated emission intensity of 1-0, 0-0, 0-1 transition of CO ($b^3\Sigma+ - a3\Pi$) system and O I ($3p^5P \rightarrow 3s^5S°$, $3p^3P \rightarrow 3s^3S°$).