

Electric Supplementary Information on “**Development of direct gas injection system
to atmospheric-pressure in-solution discharge plasma for plasma degradation and
material syntheses**”

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In the present supplementary information, the validity of the fitting result for Figure 3 in the article is examined. In Figure S1, the experimental emission spectrum from the ASG plasma without gas injection, and three fitting curves are shown. As shown in Figure S1, the fitting curves clearly deviate from the experimental spectrum when the fixed temperature parameters are 6900 and 7500 K, while the best fitted curve is determined when the temperature is 7200 K. From this result, the uncertainties of the blackbody temperature estimated by the fitting is less than 300 K, or about 4%.

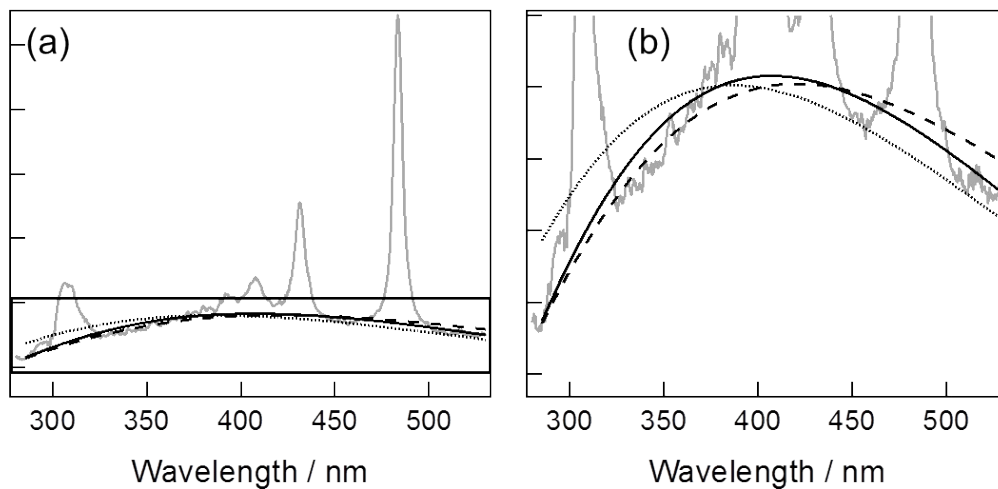


Figure S1. The experimental emission spectrum (grey solid line) from the ASG plasma without the gas injection, and the best-fitted curves (black lines) for the continuous blackbody emission. The temperature parameter for the fitting is 6900 (dashed line), 7200 (solid line), and 7500 K (dotted line). In the Figure (b), the part in the Figure (a) enclosed by the rectangle is enlarged.