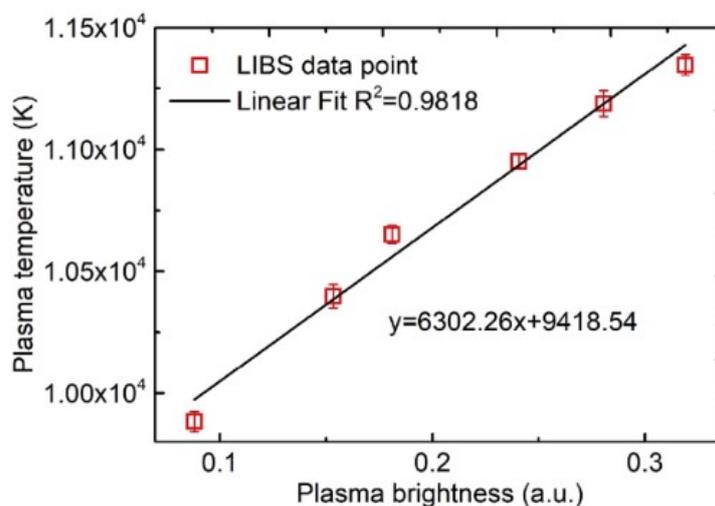


Number	Temperature- Brightness Fitting R ²	Number	Temperature- Brightness Fitting R ²
1-1	0.9556	2-1	0.9312
1-2	0.9310	2-2	0.9387
1-3	0.9412	2-3	0.9560
1-4	0.9389	2-4	0.9518
1-5	0.9595	2-5	0.9388
1-6	0.9571	2-6	0.9536
1-7	0.9657	2-7	0.9624
1-8	0.9335	2-8	0.9502
1-9	0.9469	2-9	0.9311
		2-10	0.9380
		2-11	0.9303

Appendix Table 1. Fitting coefficient of plasma temperature - image brightness in the quantitative experimental group

Number	C	N	H	Ash content	Volatile matter	Texture
GBW11101-1	73.43	1.37	4.65	9.70	34.47	Bituminous coal
GBW11101-2	67.62	1.08	1.49	18.16	26.99	Bituminous coal
GBW11110	57.95	0.98	3.09	26.62	22.47	Bituminous coal
GBW11111	58.00	0.86	3.69	24.67	29.50	Bituminous coal
GBW11112	54.74	0.93	3.67	29.00	29.60	Bituminous coal
GBW11113	72.46	1.03	3.28	16.11	12.25	Anthracite coal

Appendix Table 2. National standard substance for coal composition



Appendix Figure 1. The functional relationship between plasma temperature and brightness information in plasma images.