

Supporting Information

for

**Controllable electrically guided nano-Al/MoO<sub>3</sub>  
energetic-film formation on a semiconductor bridge  
with high reactivity and combustion performance**

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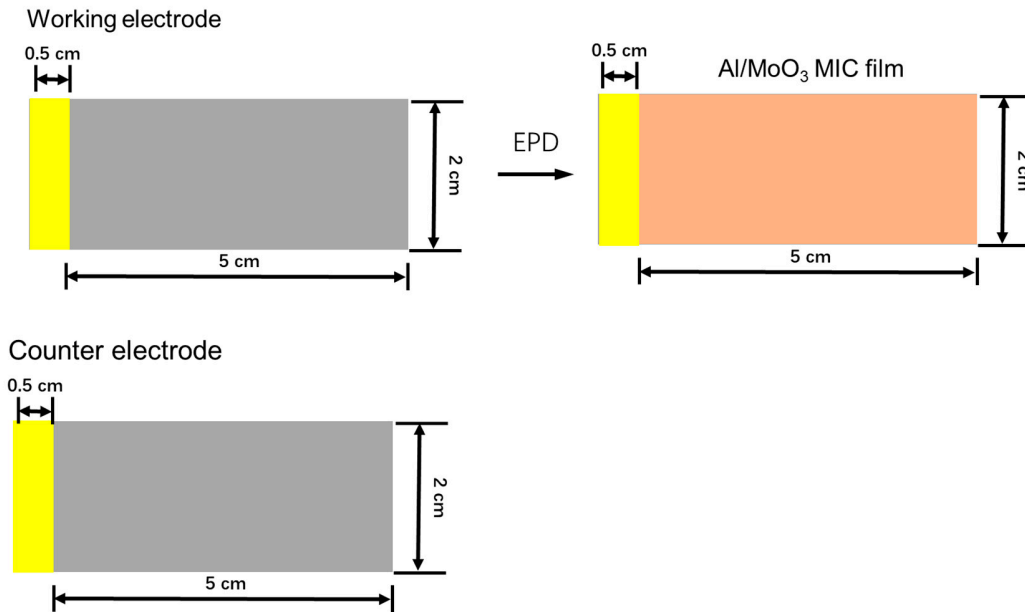
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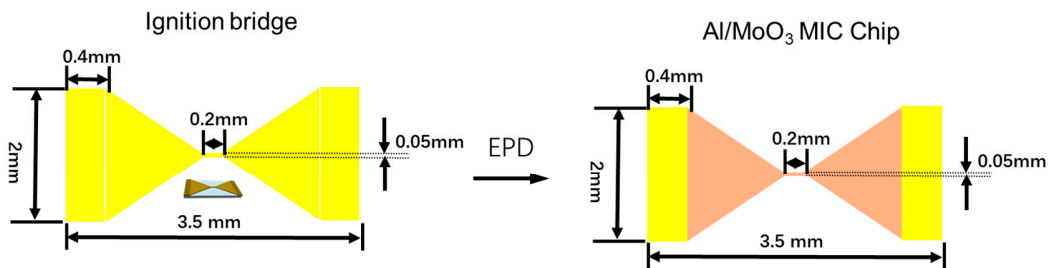
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## EPD dynamic research

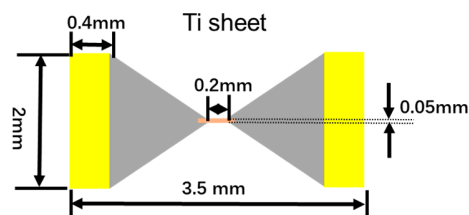


## Ignition test

Working electrode:



Counter electrode:



**Figure S1.** The size specification of the working and counter electrodes used for EPD dynamic research and ignition test. All yellow rectangle zones are parts of electrodes without touching the optimized suspension.

**Table S1.** Molar content results of different elements in products by EDX and AAS analysis in three random regions.

Elements	Molar content (%)							
	EDX analysis				AAS analysis			
	Region 1	Region 2	Region 3	Average value	Region 1	Region 2	Region 3	Average value
<b>Al</b>	~33.6%	~33.9%	~33.2%	~33.7%	~34.2%	~34.0%	~33.6%	~33.9%
<b>Mo</b>	~16%	~16.2%	~15.7%	~16%	~15.6%	~15.3%	~16.1%	~15.7%
<b>O</b>	~50%	~49%	~51%	~50%	~50.2%	~50.7%	~49.4%	~50.4%
	Al:Mo:O≈2:1:3				Al:Mo:O≈2:1:3			