Development of a droplet cathode glow discharge excitation source for high throughput detection of Li, Ca and K in serum samples

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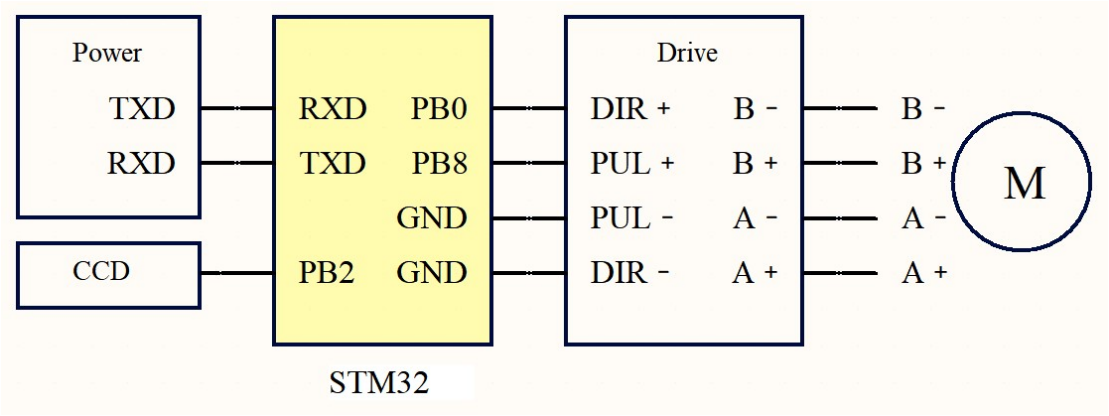

Fig. S1 The circuit control diagram of the DCGD-OES system.

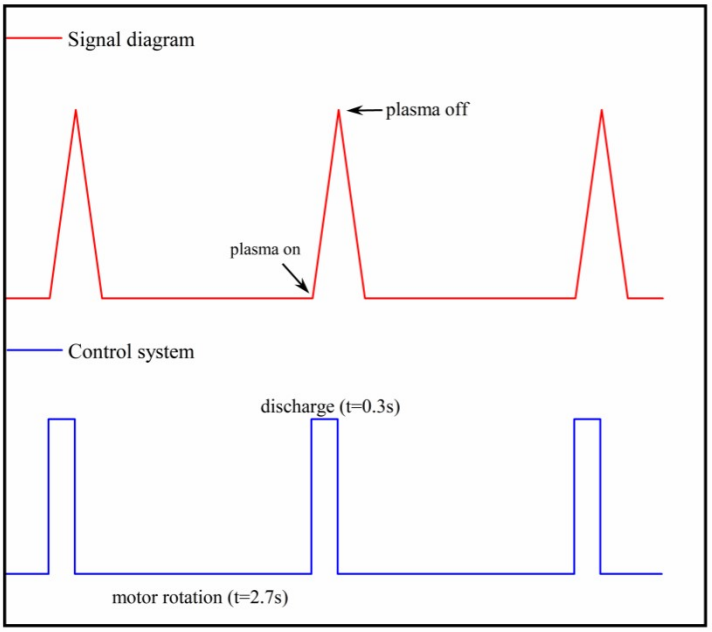

Fig. S2 The logic diagram illustration of the control of DCGD system.

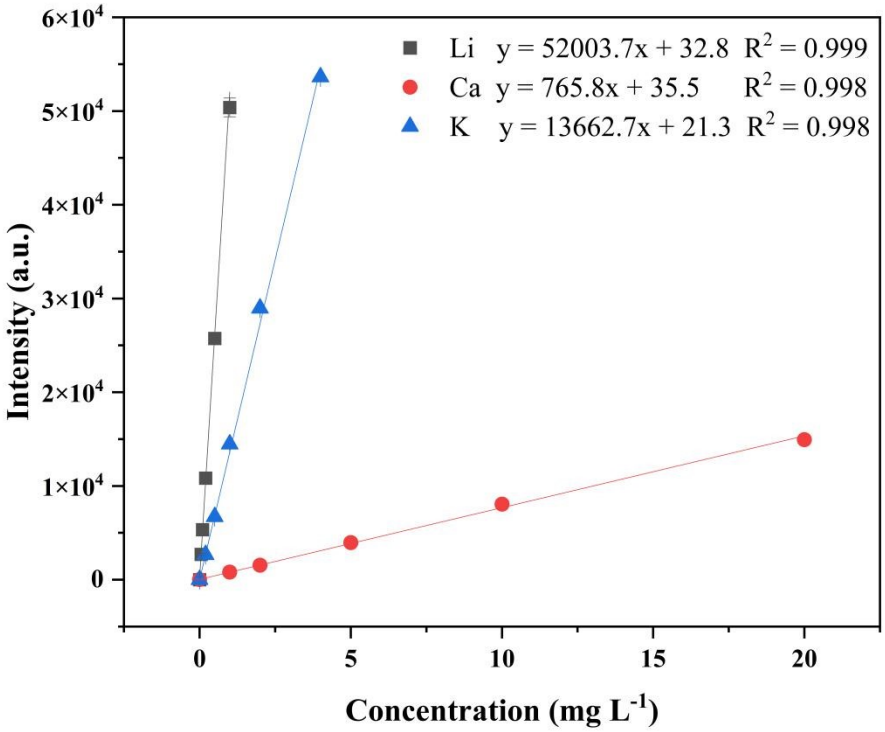

Fig. S3 (a) Calibration plots for Li, Ca, and K by DCGD-OES. Intensities have been corrected for blank emission.

Table S1. Comparison of detection limits between DCGD-OES and previous studies.

Method	LOD (mg L^{-1})			Absolute LOD (pg)			References
	Li	Ca	k	Li	Ca	k	
SCGD-OES	—	0.011	0.00049	—	6600	294	1
SCGD-OES	—	0.023	0.013	—	13410	7600	2
SCGD-OES	0.0008	—	0.003	2	—	70	3
ICP-OES	0.001	0.0006	0.004	2000	1200	8000	4
DCGD-OES	0.002	0.078	0.005	20	780	50	This work

References

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