

Ultra-fast extraction of metals from a printed circuit board using high power ultrasound in a calcium chloride-based deep eutectic solvent

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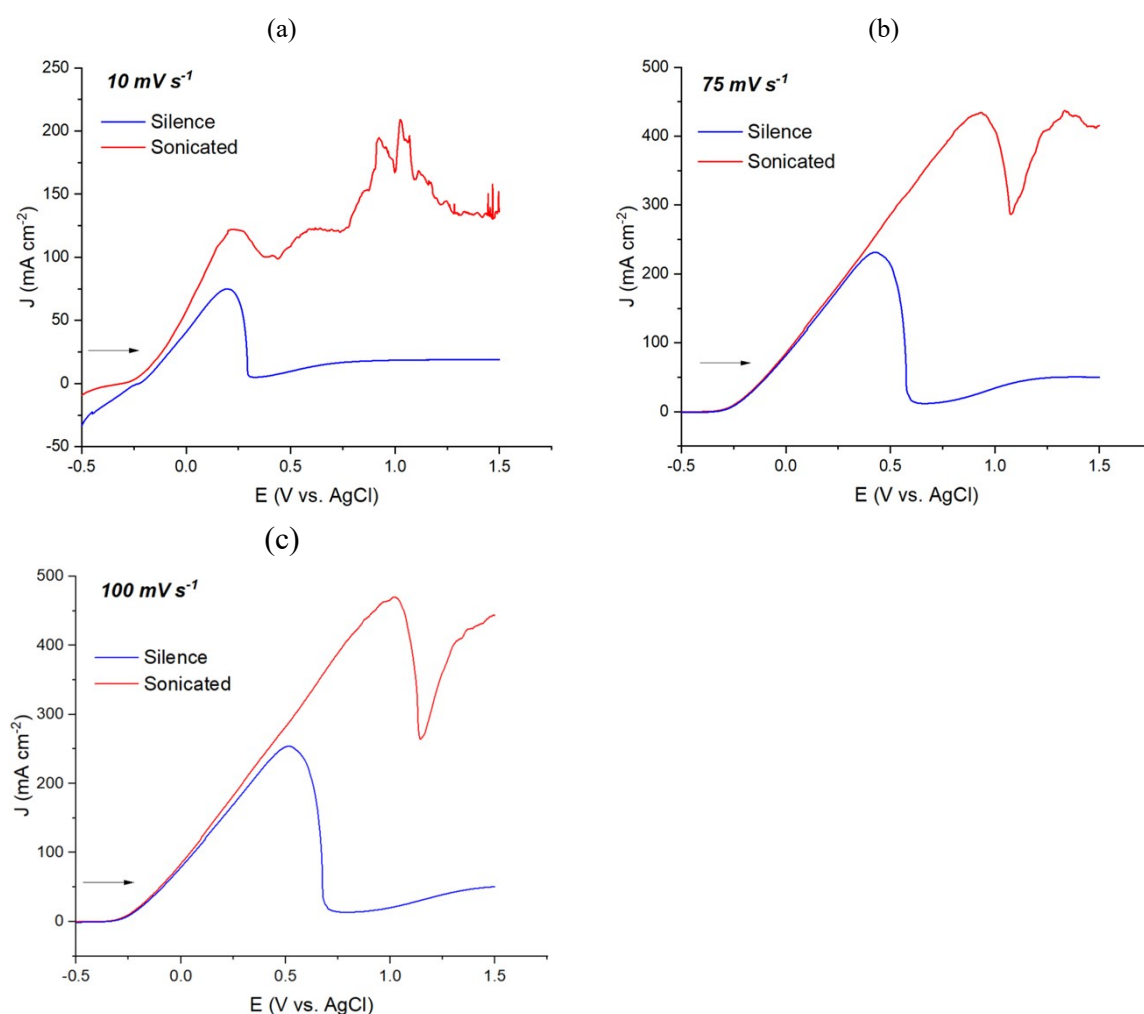


Figure S1 : Effect of ultrasound on the linear sweep voltammetry of copper in $\text{CaCl}_2 \cdot 6\text{H}_2\text{O} : \text{EG}$ in silence and sonicated conditions and different scanning rates (80 W cm^{-2} of ultrasound power intensity).

(a)

(b)

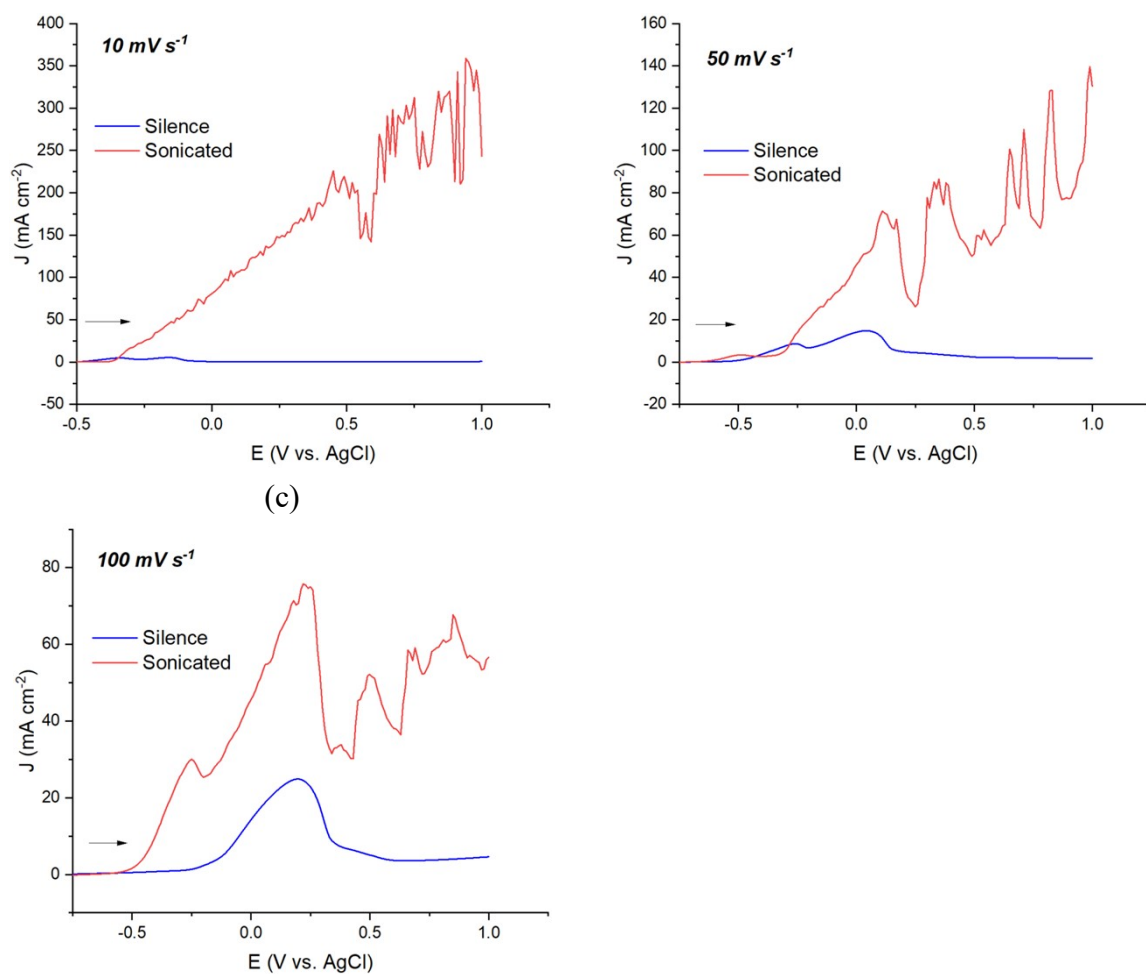


Figure S2: Effect of ultrasound on the linear sweep voltammetry of nickel in $\text{CaCl}_2 \cdot 6\text{H}_2\text{O}$: EG in silence and sonicated conditions and different scanning rates (80 W cm^{-2} of ultrasound power intensity).

Table S 1: List of image sequences at full field-of-view available in movie format on YouTube via the corresponding links.

Figure in main manuscript	Medium	Time frame of cavitation activity	Link
Figure 6a	$\text{CaCl}_2 \cdot 6\text{H}_2\text{O}$: EG	First 50 ms	https://youtu.be/7iFuVHTI3FY
Figure 6b	$\text{CaCl}_2 \cdot 6\text{H}_2\text{O}$: EG	Up to 1 s.	https://youtu.be/AQmLtWkEyyE
Figure 6c	$\text{CaCl}_2 \cdot 6\text{H}_2\text{O}$: EG	Between 1 and 1.3 s	https://youtu.be/u9mec31SAB4
Figure 6d	$\text{CaCl}_2 \cdot 6\text{H}_2\text{O}$: EG	Between 12 and 13 s.	https://youtu.be/OV696AK76S0
Figure 7a	Demineralised water	Over first 50 ms.	https://youtu.be/6Nqj29MqZNE
Figure 7b	Demineralised water	Over up to ~1 s	https://youtu.be/AUhXkmGv9C4

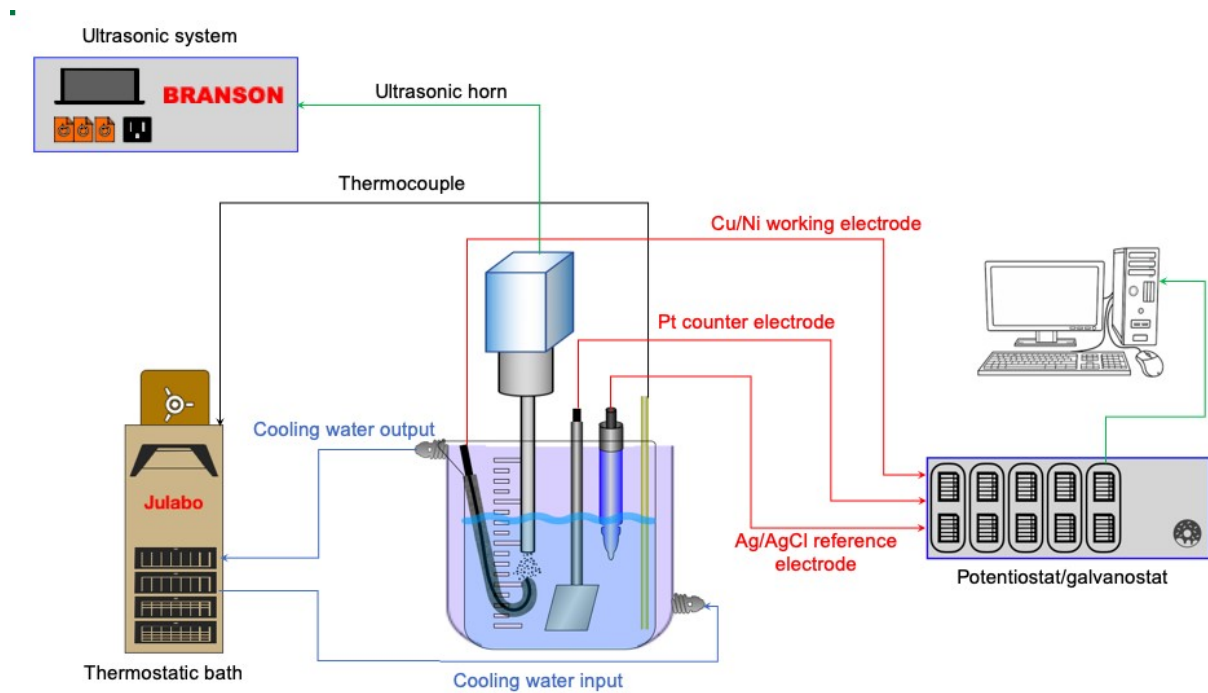


Figure S3: Experimental setup used for electrochemical measurement.