

# Optimization of Calcium Fluoride Crystallization Process for Treatment of High-Concentration Fluoride-Containing Semiconductor Industry Wastewater

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## Supplementary data

**Table S1.** Composition of silica seed and CaF<sub>2</sub> crystals at different time interval using ICP-OES analysis.

Elements	Silica seed	CaF <sub>2</sub> – 5 h	CaF <sub>2</sub> – 40 d
Sulfate	0.14	0.24	1.19
Aluminum	0.34	0.23	0.42
Calcium	0.34	0.28	9.8
Fluoride	1.53	1.31	14.71
Copper	0.01	0.01	0
Iron oxide	0.7	0.45	0.57
Potassium	0.27	0.33	0.2
Magnesium	0.12	0.08	0.16
Sodium	0.38	0.00	0.52
Phosphate	0.13	0.31	0.04
Zinc	0.04	0.09	0.01
Silica (acid soluble)	0.35	0.30	1.18
Acid insoluble	94.46	95.27	70