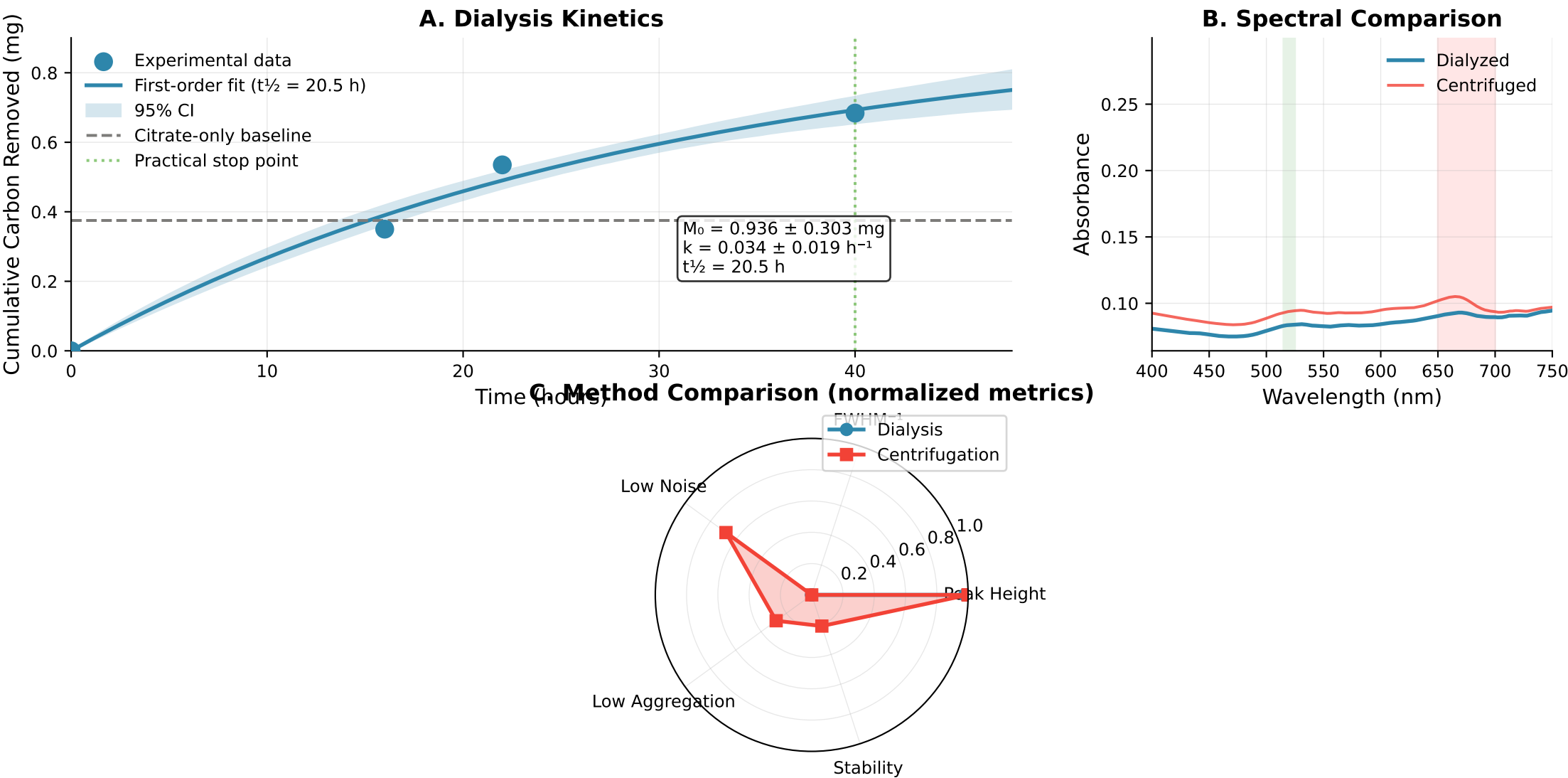


Figure 2: The Purification Journey - Dialysis Creates Superior AuNP Platform



D. Statistical Comparison

Metric	Dialysis	Centrifuge	Improvement	p-value
Peak Height ( $A_{520}$ )	$0.126 \pm 0.031$	$0.129 \pm 0.037$	↓ 2.0%	0.929
FWHM (nm)	$80.000 \pm 0.000$	$80.000 \pm 0.000$	↓ 0.0%	nan
Baseline Noise	$0.001 \pm 0.001$	$0.000 \pm 0.000$	↓ 210.2%	0.057
Red Tail (650-700nm)	$0.101 \pm 0.020$	$0.072 \pm 0.025$	↓ 39.1%	0.179
Aggregation Index	$0.897 \pm 0.291$	$0.709 \pm 0.405$	↓ 26.5%	0.539