A NON-ITERATIVE METHOD FOR PARAMETER ESTIMATION OF THE FRICKE-MORSE MODEL

1. Parameter estimation with a set of closed-form expressions.

2. There is no possibility of converging into a local minimum or non-convergence.

3. Set of estimated parameters is unique solution.

4. Verified with noiseless and data with noise of 6 Electrical Bioimpedance Applications.

White Gaussian noise reduction: symmetrical two-pass moving average filter with 13 averaged of points.

Relative errors in parameter estimations in case of data with 40 dB of noise are lower than ±1%.

20-80 times faster than CNLS.

	TBC	RR	TT	LL	LC	AA
Proposed method	0.198 ms	0.190 ms	0.191 ms	0.497 ms	0.183 ms	0.191 ms
CNLS	9.419 ms	8.081 ms	8.728 ms	11.390 ms	7.687 ms	7.945 ms