

run_simulation_sodium_nmr_0201
simulation of sodium nmr sequences

prepare_parameters_0201

prepare parameters for the simulation

change parameters
in this file

1
prepare simulation

prepare_get_date_time_0201

get date and time of the simulation

prepare_simulation_0201

prepare matlab structures for the simulation

prepare_tissue_relaxation_times_0201

prepare relaxation times of the tissues

change parameters
in this file

prepare_redfield_relaxation_0201

prepare redfield matrix from relaxation times

prepare_w_0201

prepare frequency offset distribution

prepare_wq_0201

prepare residual quadrupolar interaction (rqj) distribution

prepare_superoperators_0201

prepare superoperators for spin 3/2

prepare_sequence_parameters_0201

prepare pulse sequence parameters: pulse number, duration, delays, etc.

change parameters
in this file

prepare_sequence_0201

prepare rf pulses and delays in the sequence

prepare_rf_pulse_0201

prepare rf pulses

prepare_delay_0201

prepare delays

simulate_evolution_superoperator_0201

simulate superoperators evolution with liouvillians

2
simulate sequence

simulate_spherical_tensor_decomposition_0201

decompose density operator in spherical tensors

calculate_spherical_tensor_coefficient_0201

calculate spherical tensors

calculate_spherical_tensor_0201

calculate spherical tensors

calculate_clebsch_gordan_coefficient_0201

calculate clebsch-gordan coefficients

acquire_signal_spectrum_0201

acquire signal and calculate fft spectrum for each tissue

3
acquire data

plot_distributions_w_wq_0201

plot distributions of frequency offset and rqj for each tissue

4
plot results

plot_evolution_spherical_tensor_0201

plot evolution of spherical tensors during sequence

plot_evolution_magnetization_0201

plot evolution of magnetization of all tissues during sequence

plot_acquired_signal_spectrum_0201

plot acquired signal and spectra for each tissue

plot_rf_pulse_sequence_0201

plot rf pulse sequence with signal acquisition window

display_simulation_info_0201

display information on the simulation parameters and results

5
display info