Table 6. Parameters for different feature selection methods.

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| --- | --- | --- |
| Algorithm | Parameter | Value |
| Elastic Net | Number of alpha values (n\_alphas) | 100 |
| List of l1 ratios (l1\_ratios) | [0.1, 0.5, 0.7, 0.9, 0.95, 0.99, 1] |
| Maximum number of iterations (max\_iter) | 1e8 (100,000,000) |
| Lasso | GridSearchCV  Scope | 10-6 to 106, 50 values |
| (optimal alpha) | 0.008286 |
| Ridge | GridSearchCV  Scope | 10-6 to 106, 50 values |
| (optimal alpha) | 10985.41 |
| Feature selection threshold | 0.01 |
| RFE | Step | 1 |
| Estimator | SVC(kernel="linear", C=0.1) |
| mRMR | Method | MIQ |
| ReliefF | Number of neighbors | 1 |
| GA | Population size | 50 |
| Crossover probability | 0.8 |
| Mutation probability | 0.2 |
| Maximum number of iterations | 30 |
| Selection of algorithm parameters-tournsize | 3 |
| PSO | Population size | 10 |
| Maximum number of iterations | 30 |
| Initial inertia weight | 1.0 Initial, decaying at 0.9 damping ratio |
| Individual learning facto | 1.5 |
| Global learning factor | 2.0 |
| CSA | Population size | 10 |
| Maximum number of iterations | 30 |
|  | 2 |