DSP analysis of log IZR (mm) with dual parameter equations ( ) and ( )

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| S.No | Bacteria | Scale | ρI | ρR | R | SE | F | Log(IZR)o | n | λ=ρR/ρI |
|
| 1 | Escherichia coli | σI ,σR | 0.24±0.08 | 0.35±0.08 | 0.954 | 0.05 | 15.22 | 1.14±0.03 | 6 | 1.46 |
|  | σI ,σR+ | 0.11±0.2 | 0.15±0.2 | 0.761 | 0.1 | 2.75 | 1.16±0.09 | 7 | 1.36 |
|  | σI ,σRo | 0.28±0.18 | 0.15±0.17 | 0.722 | 0.1 | 1.64 | 1.1±0.07 | 6 | 0.54 |
|  | σI ,σR- | 0.23±0.16 | 0.18±0.14 | 0.79 | 0.1 | 2.5 | 1.11±0.07 | 6 | 0.78 |
|  | F,R | 0.24±0.09 | 0.34±0.07 | 0.945 | 0.05 | 16.78 | 1.14±0.04 | 7 | 1.42 |
|  |  |  |  |  |  |  |  |  |  |
| 2 | Klebsiella oxytoca | σI ,σR | 0.36±0.15 | 0.55±0.16 | 0.931 | 0.09 | 9.81 | 1.21±0.07 | 6 | 1.53 |
|  | σI ,σR+ | 0.17±0.29 | 0.21±0.14 | 0.757 | 0.15 | 2.69 | 1.25±0.14 | 7 | 1.24 |
|  | σI ,σRo | 0.42±0.3 | 0.2±0.29 | 0.663 | 0.18 | 1.18 | 1.14±0.13 | 6 | 0.48 |
|  | σI ,σR- | 0.34±0.28 | 0.28±0.23 | 0.747 | 0.17 | 1.89 | 1.16±0.11 | 6 | 0.82 |
|  | F,R | 0.37±0.19 | 0.45±0.15 | 0.885 | 0.1 | 7.23 | 1.2±0.08 | 7 | 1.22 |
|  |  |  |  |  |  |  |  |  |  |
| 3 | Proteus mirabilis | σI ,σR | 0.45±0.13 | 0.44±0.14 | 0.94 | 0.08 | 11.38 | 1.06±0.06 | 6 | 0.98 |
|  | σI ,σR+ | 0.31±0.26 | 0.17±0.12 | 0.801 | 0.13 | 3.6 | 1.08±0.13 | 7 | 0.55 |
|  | σI ,σRo | 0.51±0.25 | 0.14±0.24 | 0.763 | 0.16 | 2.09 | 0.996±0.1 | 6 | 0.28 |
|  | σI ,σR- | 0.44±0.24 | 0.21±0.19 | 0.814 | 0.14 | 2.94 | 1.01±0.09 | 6 | 0.48 |
|  | F,R | 0.47±0.16 | 0.40±0.12 | 0.918 | 0.09 | 10.67 | 1.04±0.07 | 7 | 0.85 |
|  |  |  |  |  |  |  |  |  |  |
| 4 | Pseudomonas aeruginosa | σI ,σR | 0.33±0.08 | 0.37±0.08 | 0.963 | 0.05 | 19.09 | 1.22±0.04 | 6 | 1.12 |
|  | σI ,σR+ | 0.22±0.21 | 0.13±0.10 | 0.777 | 0.11 | 3.06 | 1.23±0.1 | 7 | 0.59 |
|  | σI ,σRo | 0.37±0.19 | 0.15±0.19 | 0.767 | 0.12 | 2.15 | 1.17±0.08 | 6 | 0.41 |
|  | σI ,σR- | 0.31±0.17 | 0.21±0.14 | 0.839 | 0.1 | 3.58 | 1.18±0.07 | 6 | 0.68 |
|  | F,R | 0.35±0.1 | 0.34±0.08 | 0.941 | 0.06 | 15.54 | 1.21±0.05 | 7 | 0.97 |
|  |  |  |  |  |  |  |  |  |  |
| 5 | Shigella sonnei | σI ,σR | 0.33±0.01 | 0.39±0.1 | 0.95 | 0.06 | 13.88 | 1.09±0.04 | 6 | 1.18 |
|  | σI ,σR+ | 0.21±.22 | 0.15±0.1 | 0.782 | 0.11 | 3.15 | 1.11±0.1 | 7 | 0.71 |
|  | σI ,σRo | 0.38±0.22 | 0.14±0.2 | 0.731 | 0.13 | 1.72 | 1.04±0.09 | 6 | 0.37 |
|  | σI ,σR- | 0.31±0.18 | 0.22±0.15 | 0.825 | 0.11 | 3.2 | 1.06±0.08 | 6 | 0.71 |
|  | F,R | 0.35±0.13 | 0.33±0.1 | 0.92 | 0.07 | 10.98 | 1.08±0.06 | 7 | 0.94 |
|  |  |  |  |  |  |  |  |  |  |  |
| 6 | Staphylococcus albus | σI ,σR | 0.38±0.15 | 0.61±0.16 | 0.94 | 0.09 | 11.34 | 1.18±0.07 | 6 | 1.61 |
|  | σI ,σR+ | 0.19±0.32 | 0.22±0.15 | 0.745 | 0.16 | 2.49 | 1.20±0.15 | 7 | 1.16 |
|  | σI ,σRo | 0..45±0.33 | 0.23±0.32 | 0.65 | 0.2 | 1.14 | 1.09±0.14 | 6 | 0.51 |
|  | σI ,σR- | 0.35±0.24 | 0.35±0.28 | 0.78 | 0.17 | 2.32 | 1.13±0.12 | 6 | 1.00 |
|  | F,R | 0.42±0.22 | 0.44±0.17 | 0.86 | 0.12 | 5063 | 1.15±0.09 | 7 | 1.05 |