|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Supplementary File 2: number of replicates** | |  |  |  |  |  |  |  |  |
| # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| number of replicates by figure by sample in plot order (left-right or top-down, according to labels) | | | | | | | |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Fig. 1b1 | 58 |  |  |  |  |  |  |  |  |
| Fig. 1b2 | 18 | 18 | 8 | 4 | 10 | 4 | 4 |  |  |
| Fig. 1c | 3 | 4 | 3 | 3 | 3 |  |  |  |  |
| Fig. 1e | 6 | 5 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Fig. 2b | 3 | 3 | 4 | 4 | 3 |  |  |  |  |
| Fig. 2c | 4 | 4 | 4 | 4 |  |  |  |  |  |
| Fig. 2d | 3 | 3 | 3 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Fig. 3a | 8 | 8 | 5 | 5 |  |  |  |  |  |
| Fig. 3b | 3 | 3 |  |  |  |  |  |  |  |
| Fig. 3c | 4 | 4 | 4 | 4 | 4 | 4 | 4 |  |  |
| Fig. 3e | 3 | 3 | 3 | 3 | 3 | 3 | 3 |  |  |
| Fig. 3f | 4 | 4 | 4 | 4 | 4 | 4 | 4 |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Fig. 4e | 29 | 28 | 4 | 6 | 13 | 3 | 3 | 5 | 20 |
| Fig. 4f | 9 | 9 | 4 | 4 | 7 | 3 | 3 | 3 | 7 |
| Fig. 4g | 3 | 3 | 3 | 3 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Fig. 5b | 13 | 13 | 13 | 13 | 13 | 13 | 13 |  |  |
| Fig. 5c | 3 | 3 | 3 | 3 |  |  |  |  |  |
| Fig. 5d | 3 | 3 | 3 | 3 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Fig. 6c (particles, not replicates) | 5233 | 18314 | 1900 | 14215 | 7074 | 11765 |  |  |  |
| Fig. 6d | 10 | 6 | 4 | 4 |  |  |  |  |  |
| Fig. 6e | 8 | 5 | 3 | 3 |  |  |  |  |  |
| Fig. 6g | 6 | 6 | 6 | 6 | 6 | 6 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Fig. 1 – figure s2a | 3 | 3 | 3 | 3 |  |  |  |  |  |
| Fig. 1 – figure s2c | 4 | 3 | 4 | 3 |  |  |  |  |  |
| Fig. 1 – figure s2d | 5 | 5 | 5 | 5 | 5 |  |  |  |  |
| Fig. 1 – figure s2e (left) | 19 |  |  |  |  |  |  |  |  |
| Fig. 1 – figure s2e (right) | 3 | 3 | 3 | 3 | 3 | 3 | 3 |  |  |
| Fig. 1 – figure s2f | 13 | 6 | 4 | 4 | 3 | 3 | 6 | n.d. |  |
| Fig. 1 – figure s2g | 5 | 5 | 5 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Fig. 2 – figure s1 | 5 | 4 | 4 | 3 | 4 | 4 | 3 |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Fig. 3 – figure s1b | 24 | 19 |  |  |  |  |  |  |  |
| Fig. 3 – figure s1c | 3 | 3 | 3 | 3 | 3 | 3 |  |  |  |
| Fig. 3 – figure s1d | 3 | 3 | 3 | 3 | 3 | 3 | 3 |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Fig. 3 – figure s2d | 3 | 3 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Fig. 4 – figure s2a (left) | 12 | 9 | 3 | 12 | 3 | 3 | 3 | 7 |  |
| Fig. 4 – figure s2a (right) | 3 | 3 | 3 | 3 |  |  |  |  |  |
| Fig. 4 – figure s2b | 24 | 22 | 7 | 7 | 9 | 9 | 9 |  |  |
| Fig. 4 – figure s2c | 10 | 8 | 5 | 5 | 5 | 5 | 5 |  |  |
| Fig. 4 – figure s2d (left) | 9 | 9 | 6 | 6 | 3 | 3 | 6 |  |  |
| Fig. 4 – figure s2d (right) | 7 | 3 | 4 | 4 | 4 |  |  |  |  |
| Fig. 4 – figure s2e | 14 | 14 | 10 | 10 | 10 | 6 | 6 | 6 |  |
| Fig. 4 – figure s2f | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |  |
| Fig. 4 – figure s2g (left) | 3 | 3 | 3 | 3 | 3 |  |  |  |  |
| Fig. 4 – figure s2g (right) | 7 | 7 | 3 | 3 | 3 | 4 | 4 | 4 |  |
| Fig. 4 – figure s2h | 3 | 3 | 3 | 3 | 5 | 3 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Fig.5 - figure s1a | 3 | 3 | 3 | 3 | 3 | 3 |  |  |  |
| Fig.5 - figure s1b | 3 | 3 | 3 | 3 |  |  |  |  |  |
| Fig.5 - figure s1c (black) | 13 | 13 | 13 | 13 | 13 | 13 | 13 |  |  |
| Fig.5 - figure s1c (red) | 13 | 13 | 13 | 13 | 13 | 13 | 13 |  |  |
| Fig. 5 – figure s1d (red) | 13 | 13 | 13 | 13 | 13 | 13 | 13 |  |  |
| Fig. 5 – figure s1e (black) | 13 | 13 | 13 | 13 | 13 | 13 | 13 |  |  |
| Fig. 5 – figure s1e (red) | 13 | 13 | 13 | 13 | 13 | 13 | 13 |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Fig. 6 – figure s1d | 3 | 3 | 3 | 4 | 4 | 4 |  |  |  |
| Fig. 6 – figure s1e (particles, not replicates) | 3588 | 7404 | 9655 |  |  |  |  |  |  |
| Fig. 6 – figure s1f (left) | 6 | 3 | 3 | 3 |  |  |  |  |  |
| Fig. 6 – figure s1f (right) | 6 | 3 | 3 | 3 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Fig. 6 – figure s2a (left) | 3 | 3 |  |  |  |  |  |  |  |
| Fig. 6 – figure s2a (right) | 3 | 3 |  |  |  |  |  |  |  |
| Fig. 6 – figure s2b | 7 | 7 |  |  |  |  |  |  |  |
| Fig. 6 – figure s2d | 6 | 6 | 6 | 6 | 6 | 6 |  |  |  |