**Table S2.** Trace elemental analysis of aqueous samples of the oxidized micrographite, oxidized graphene nanoplatelets, reduced graphene nanoplatelets and graphene nanoribbons. The values presented are for one batch of samples.

|  |  |
| --- | --- |
| **Sample** | **Manganese (ppm)** |
| Aqueous oxidized graphite | 0.82 |
| Aqueous oxidized graphene nanoplatelets | 1.48 |
| Aqueous reduced graphene nanoplatelets | 0.60 |
| Aqueous graphene nanoribbons | 0.27 |