1	Appendix A. Supplementary Material
2 3	Acute bio-augmentation effect of perfluorooctane sulfonic acid (PFOS) on activated sludge in biological denitrification process and related stress
4	mechanism
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21 Fig. A1 Venn diagram of microbial community at different PFOS concentrations.



36 Fig. A2 The (a) rarefaction curves of observed species and the (b) Shannon and (c)37 rank-abundance curves after sample exposure to different concentrations of PFOS.





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41 Fig. A3 Scanning electron microscopy (SEM) images of activated sludge after 8h of
42 exposure to (a, b) 0, (d) 10, (f) 100, and (h) 1000 µg/L PFOS, energy dispersive X-ray
43 analysis (EDAX) of F element after short-term exposure to (c) 0, (e) 10, (g) 100 and (i)
44 1000 µg/L PFOS, and energy dispersive spectroscopy (EDS) images (j).