

1 **Supplementary Figures for**

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3 **Nitrite oxidizing bacteria (NOB) dominating in nitrifying community in full-scale biological nutrient removal**
4 **wastewater treatment plants**

5
6 *AMB Express*

7
8 Qian Yao^{1,2}, Dang-Cong Peng^{1,2}

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10 ¹School of Environmental and Municipal Engineering, Xi'an University of Architecture and Technology, Xi'an, 710055,
11 China;

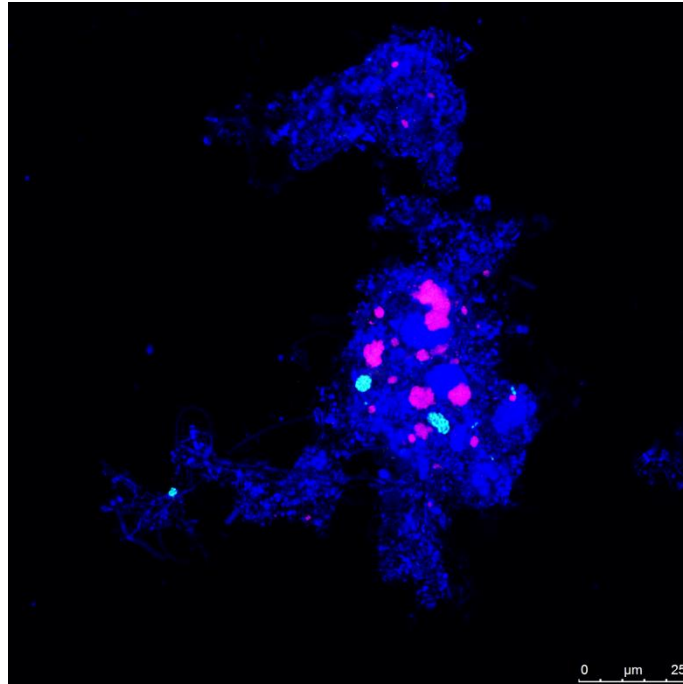
12 ²Key Laboratory of Northwest Water Resource Environment and Ecology, Ministry of Education, Xi'an, 710055, China.

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14 **Correspondence:** Qian Yao, School of Environmental and Municipal Engineering, Xi'an University of Architecture and
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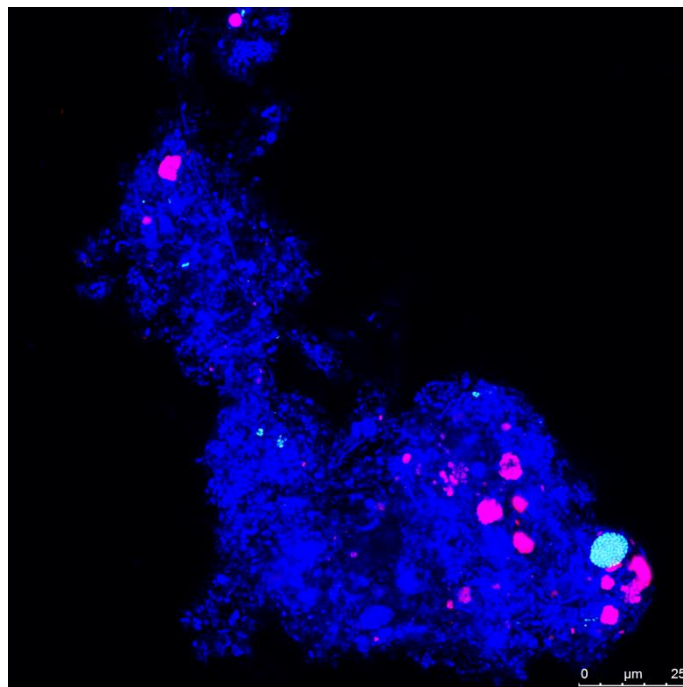
16 E-mail: qianyao@hotmail.com

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Dengjiacun: W1



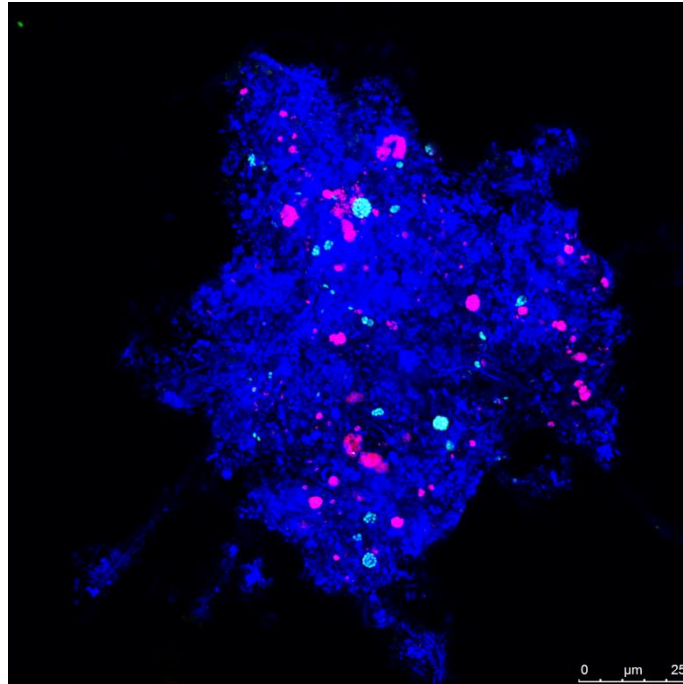
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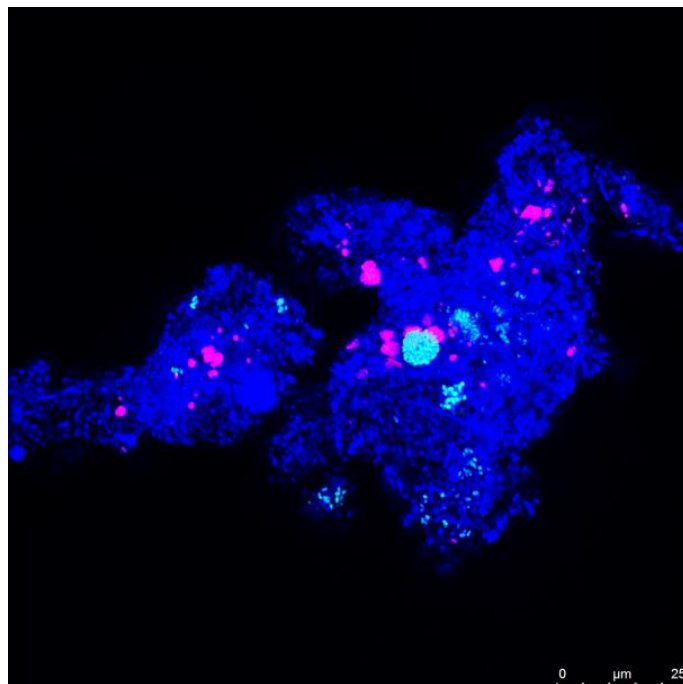
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Dengcun: W2



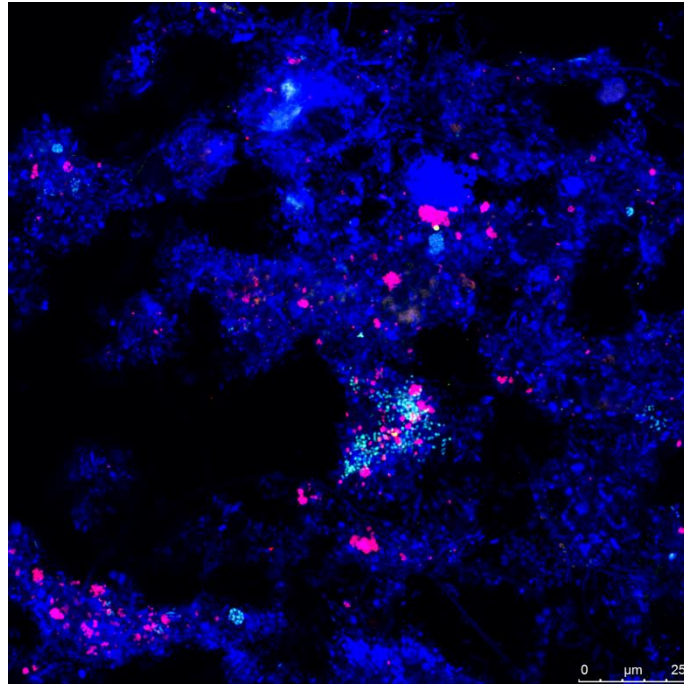
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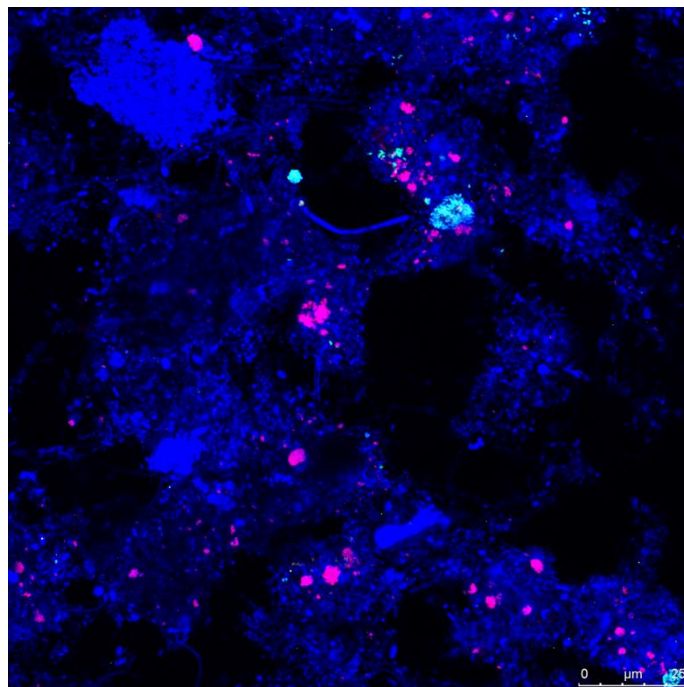
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Beishiqiao: W3



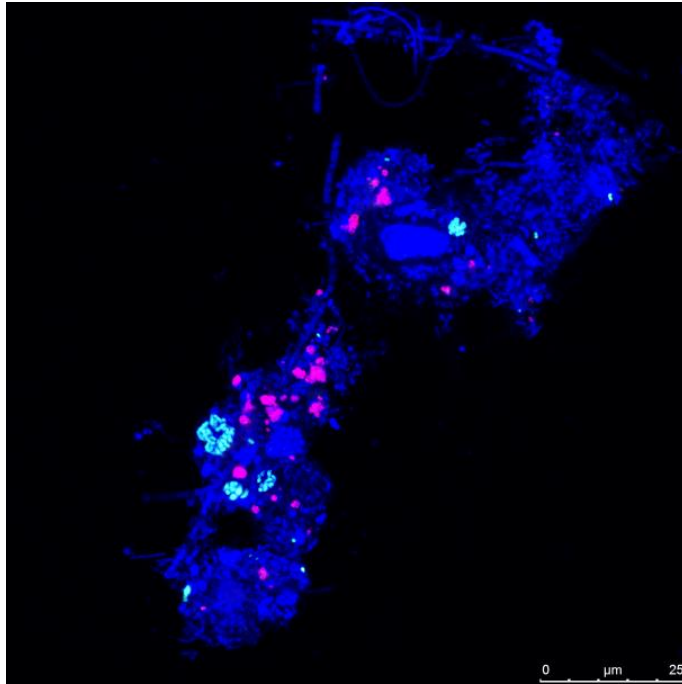
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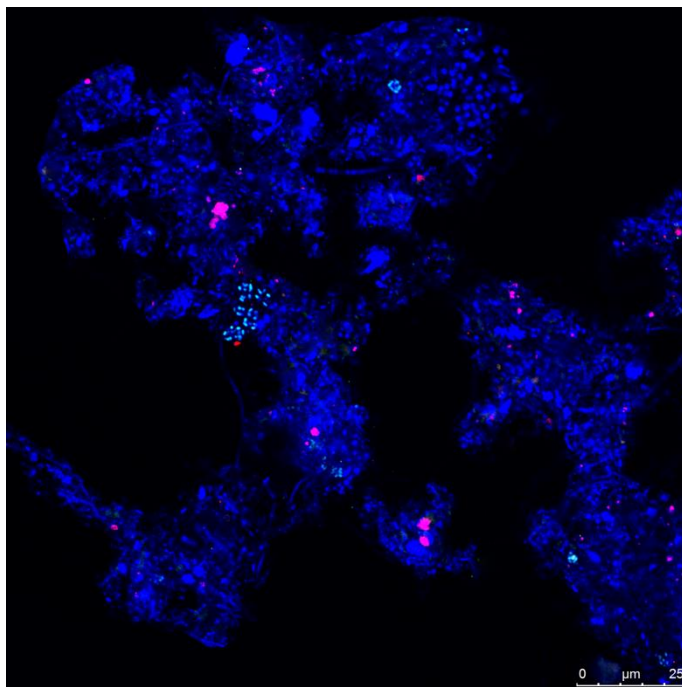
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Bshiq: W4



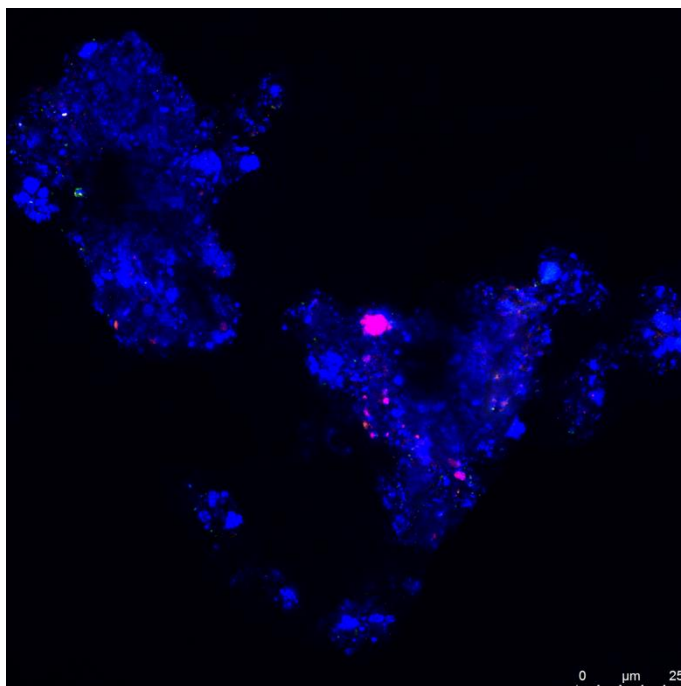
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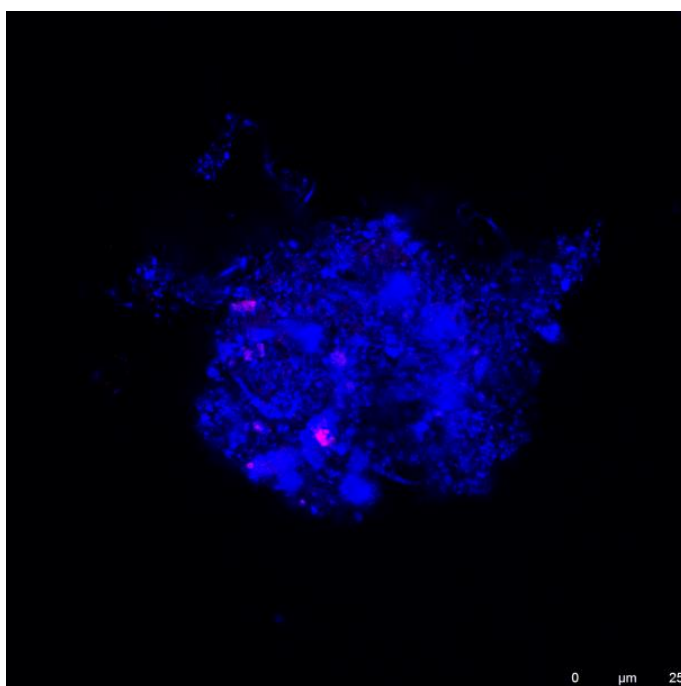
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Fangzhicheng: W5



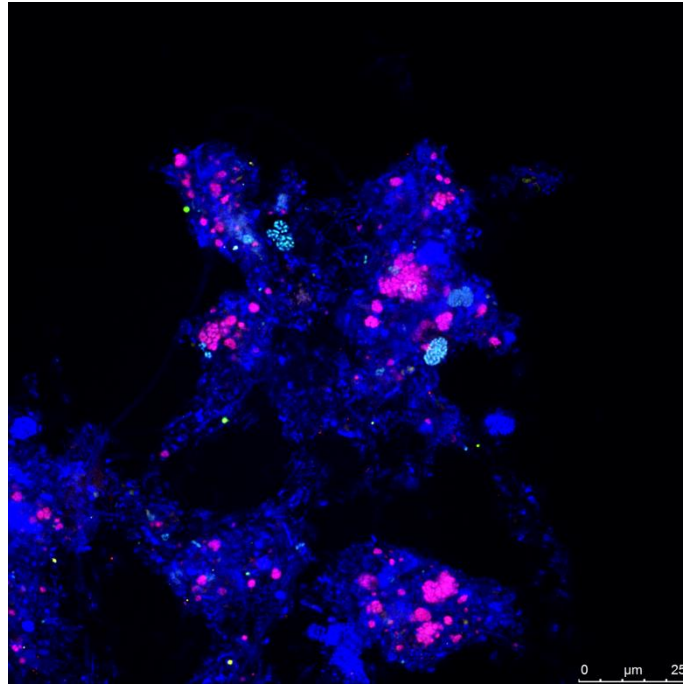
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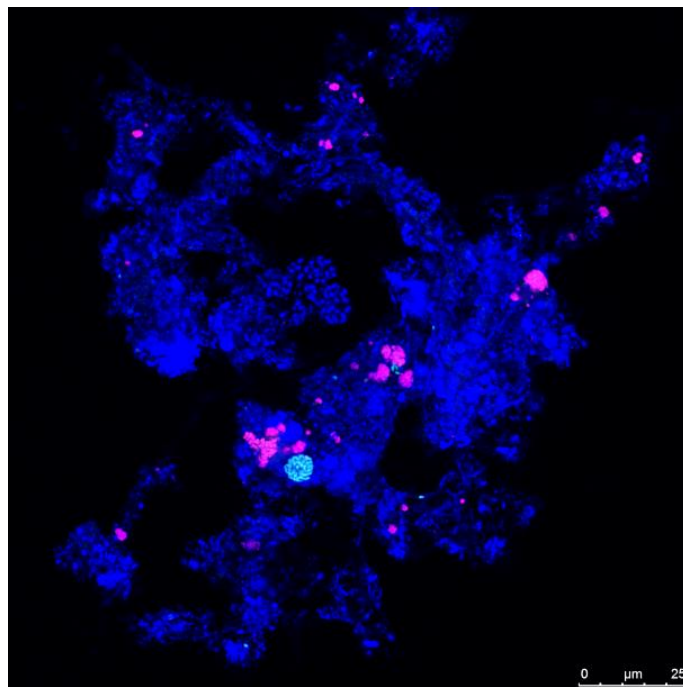
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Dianzicun: W6



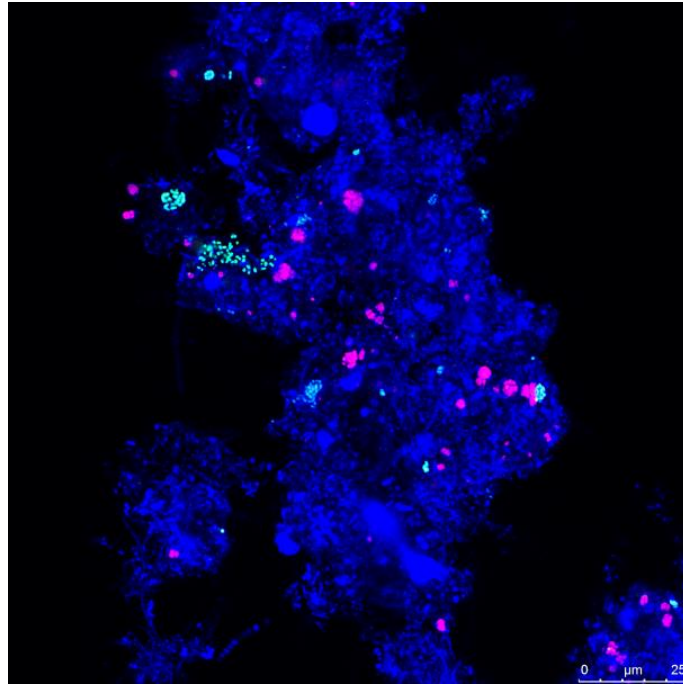
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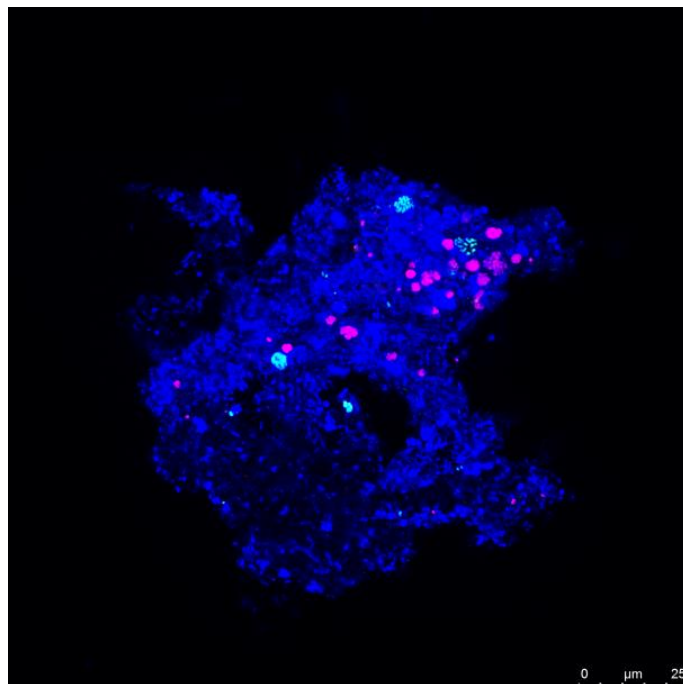
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Yuanlecun: W7



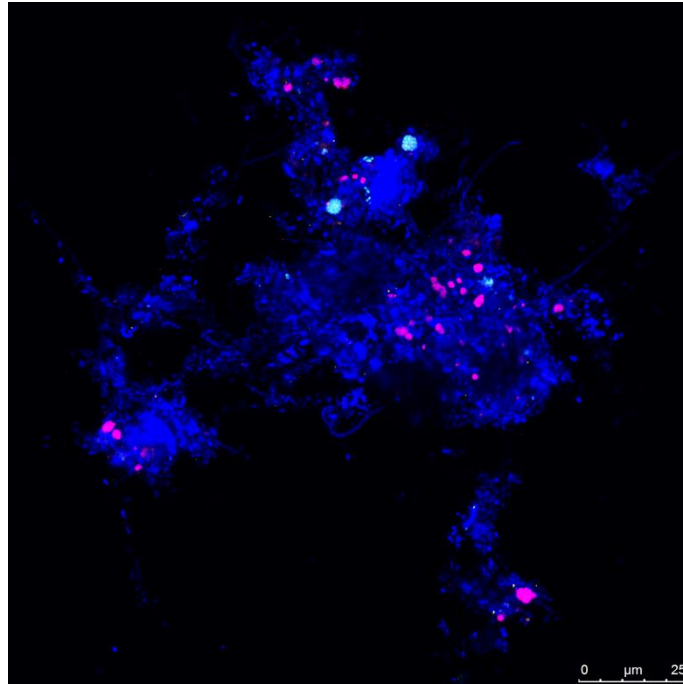
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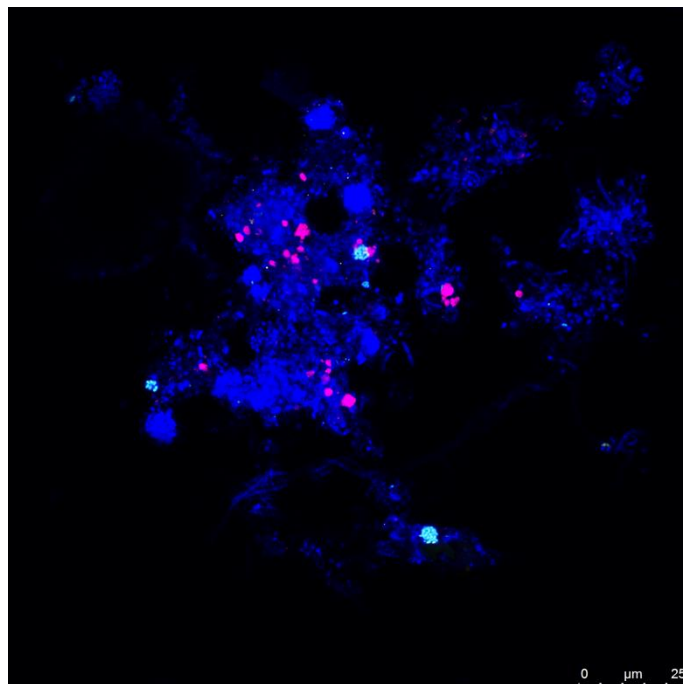
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Liucunbao: W8



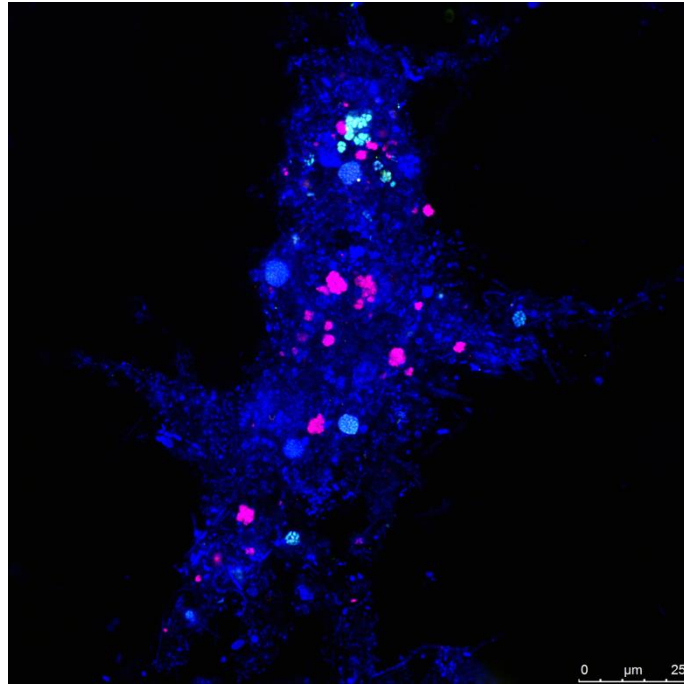
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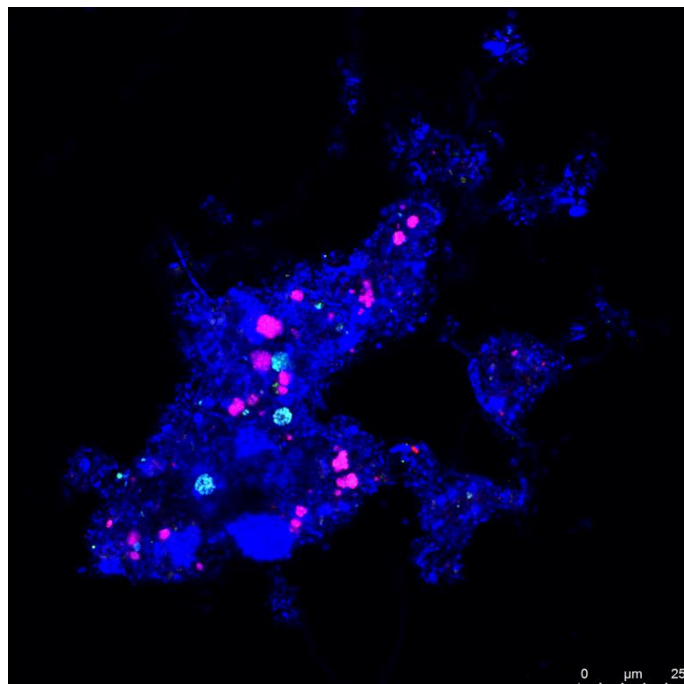
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Gaoxin: W9



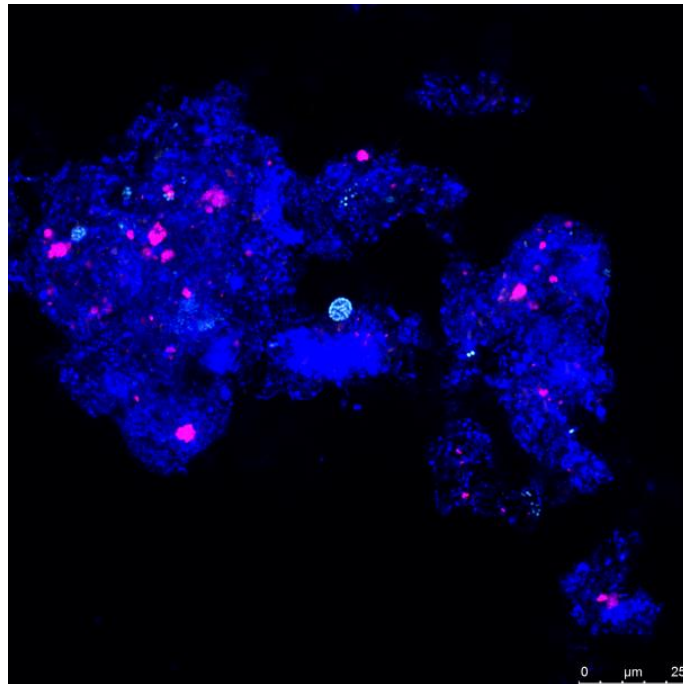
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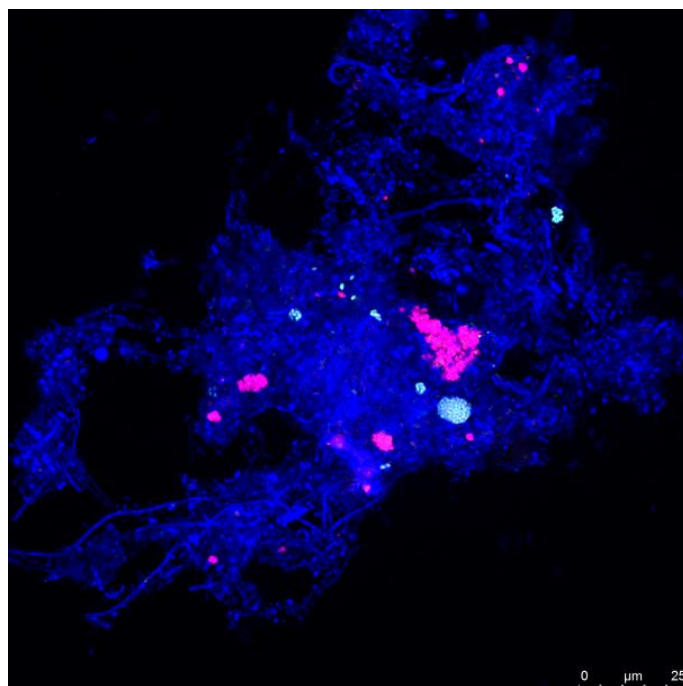
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Changan: W10



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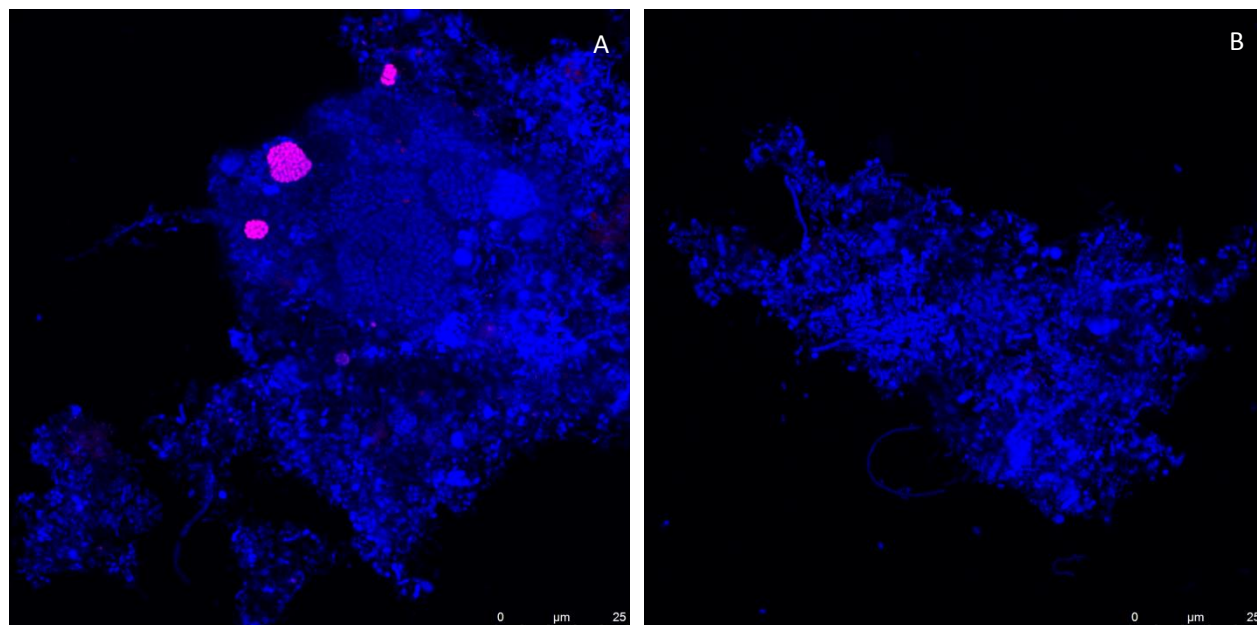
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50 Figure S1. Community structure of nitrifying bacteria in 10 WWTPs In situ hybridization of activated sludge with
51 Cy5-labeled probe EUBmix, Flous-labeled probe AOBmix and Cy3-labeled probe NOBmix. Blue:
52 EUBmix-stained Eubacteria; cyan: AOBmix-stained AOB; carmine: NOBmix-stained NOB; Bar=25 μ m

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Dengjiacun: W1

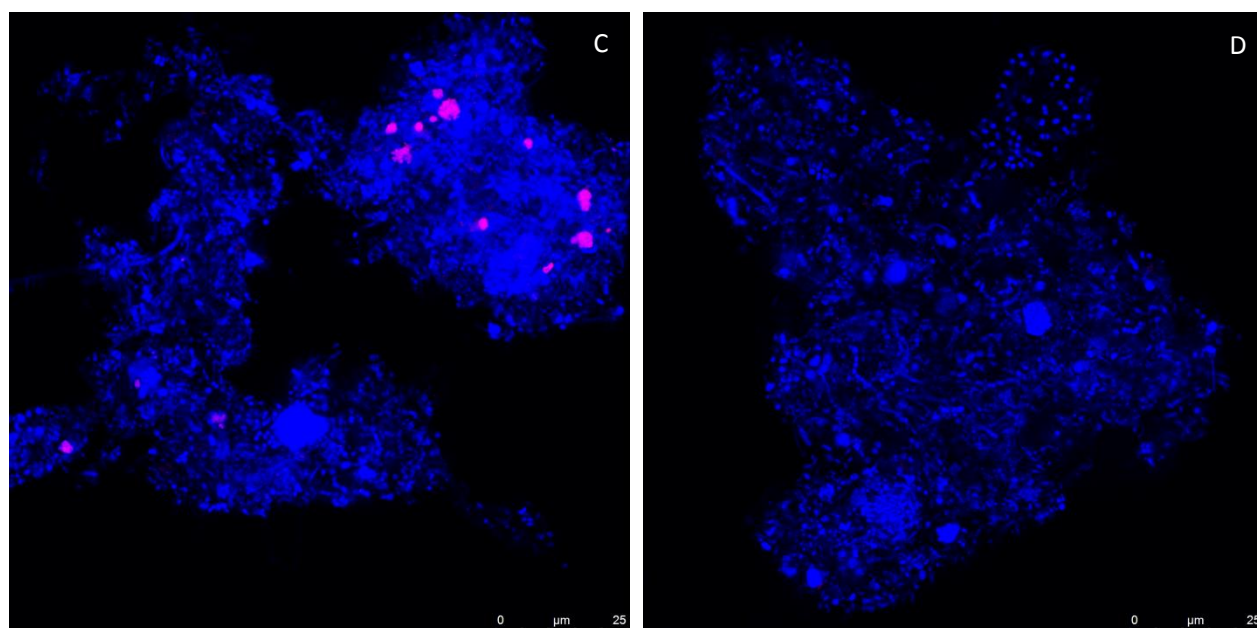
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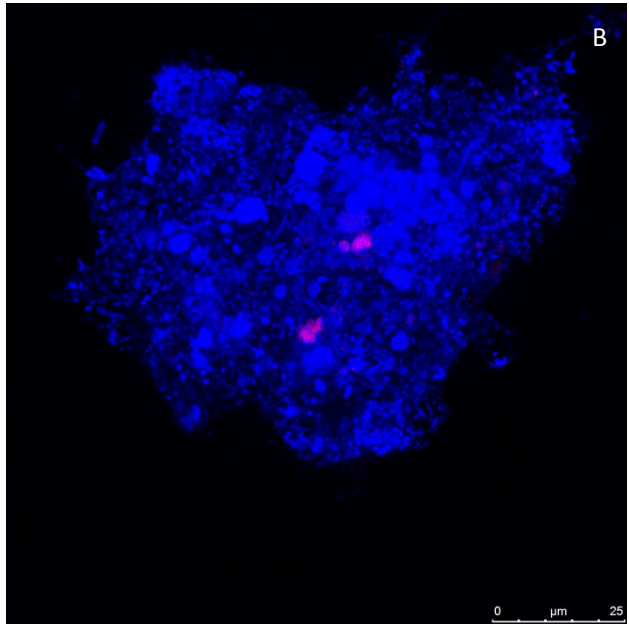
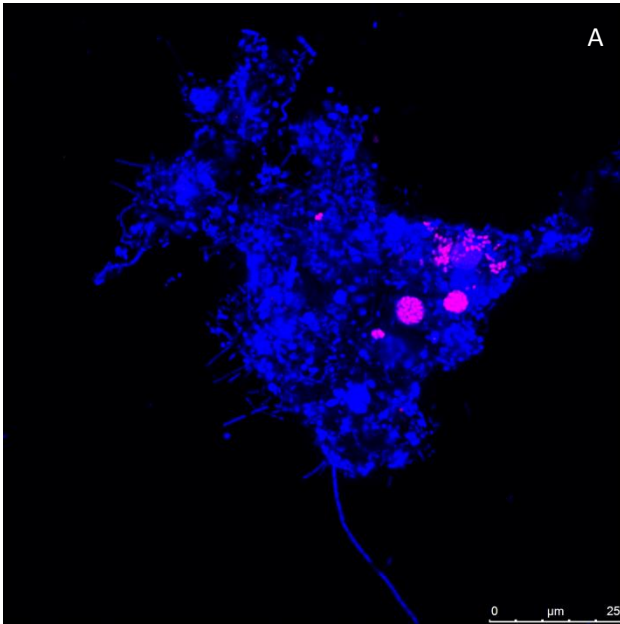


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Dengcun: W2

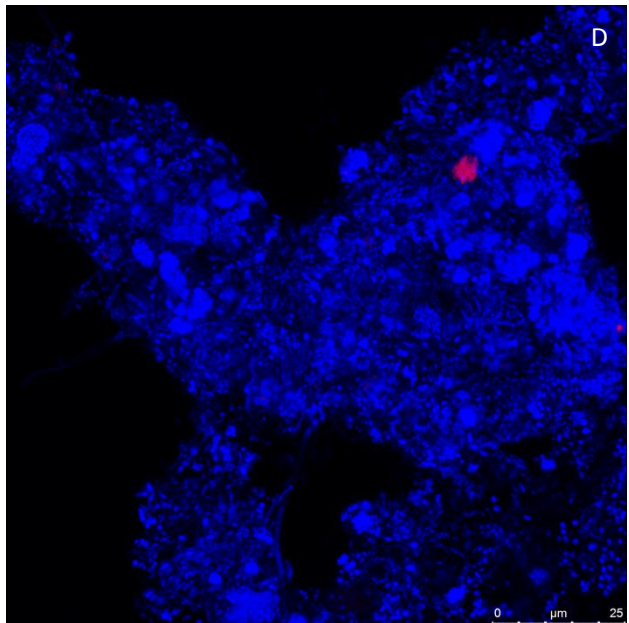
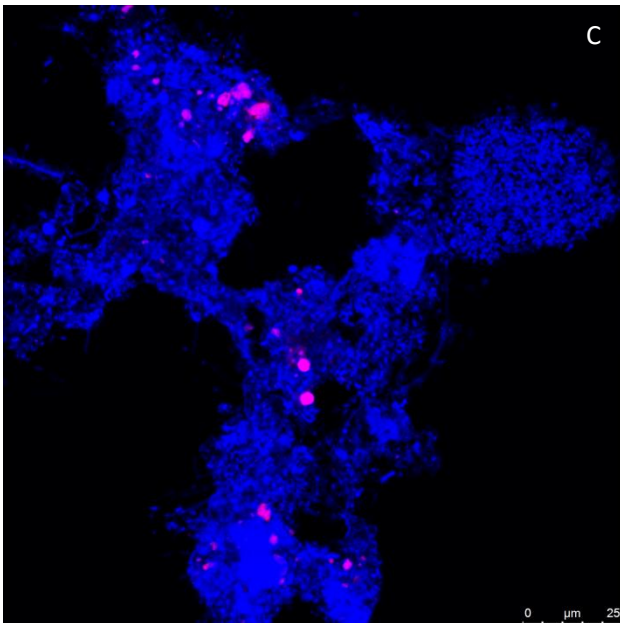
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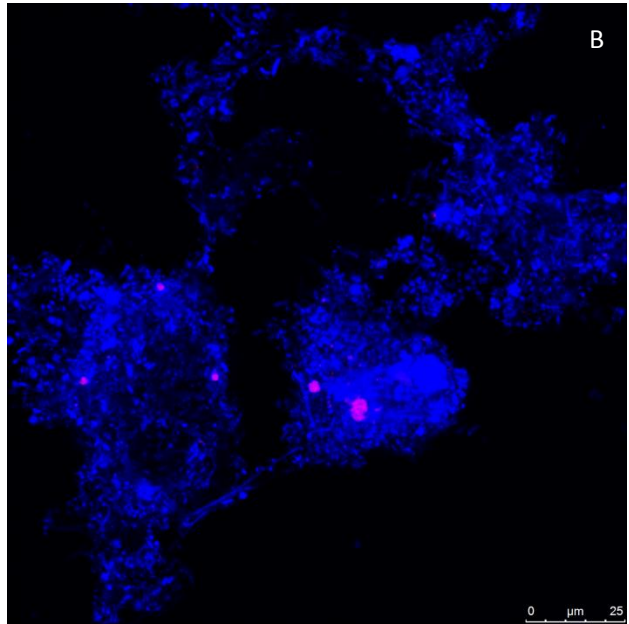
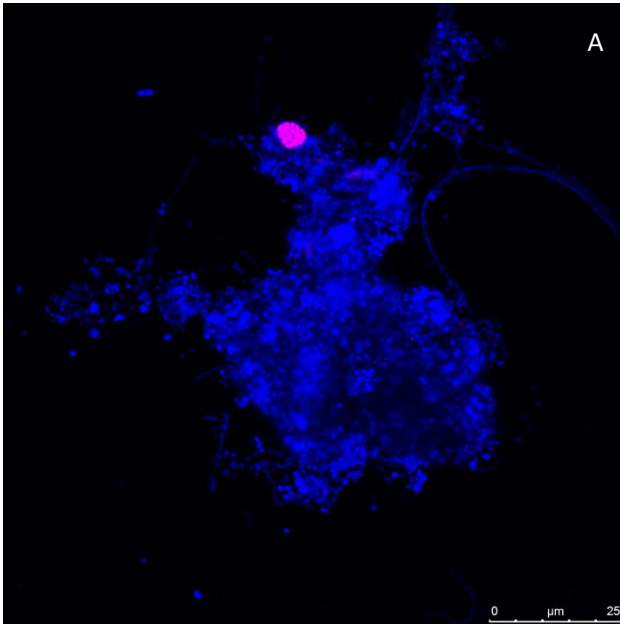


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Beishiqiao: W3

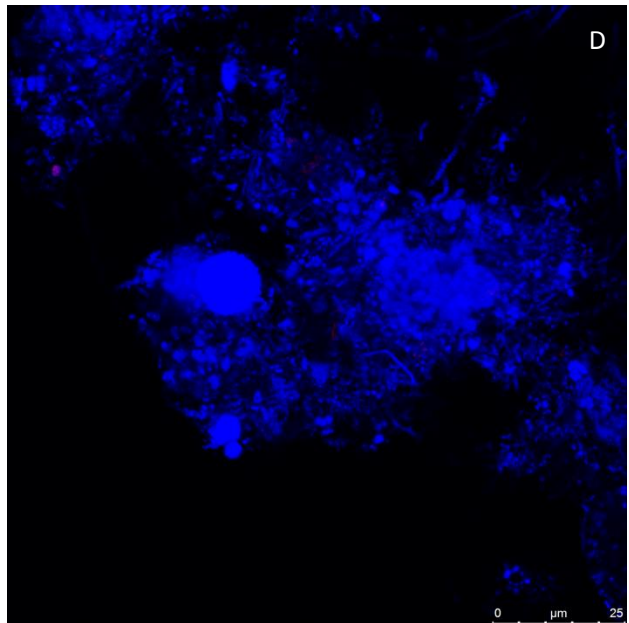
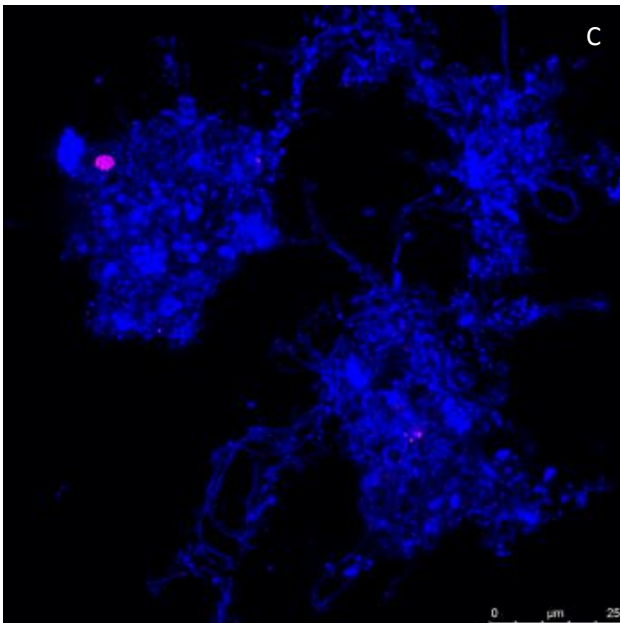
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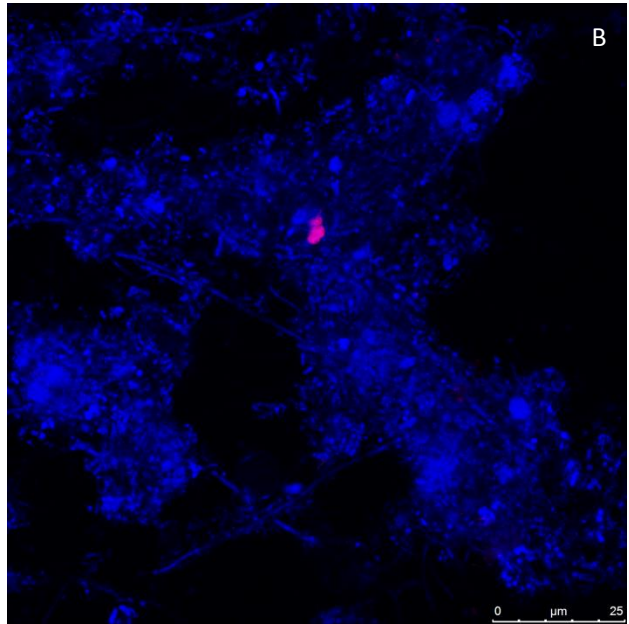
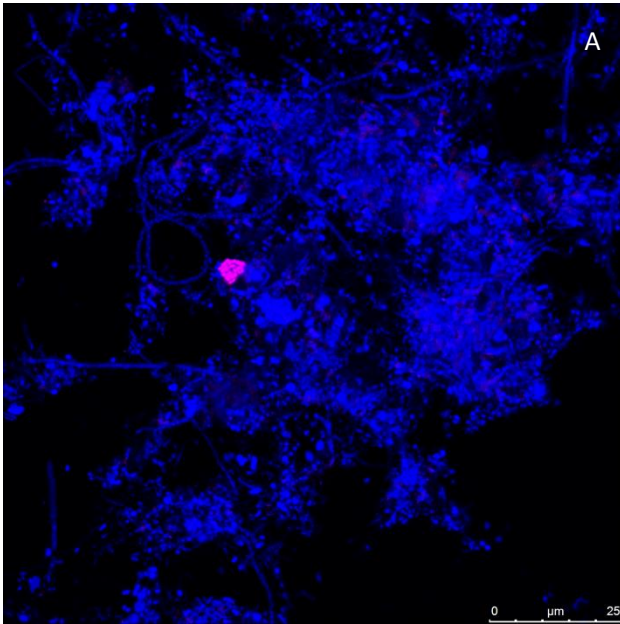


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Bshiq: W4

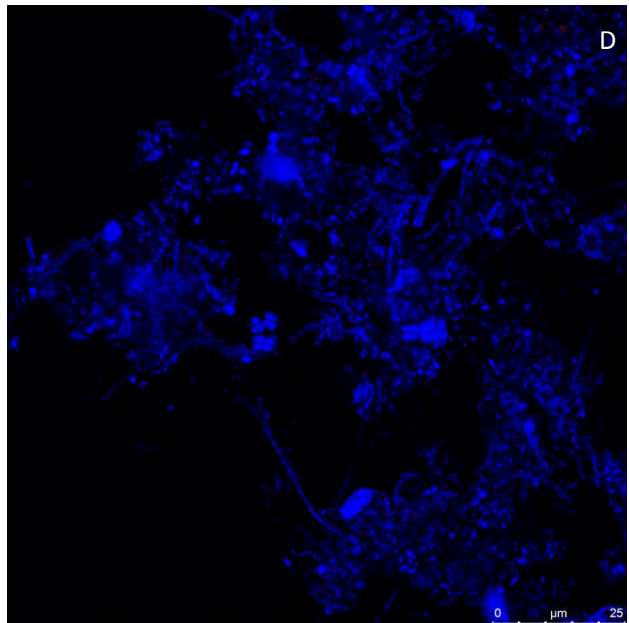
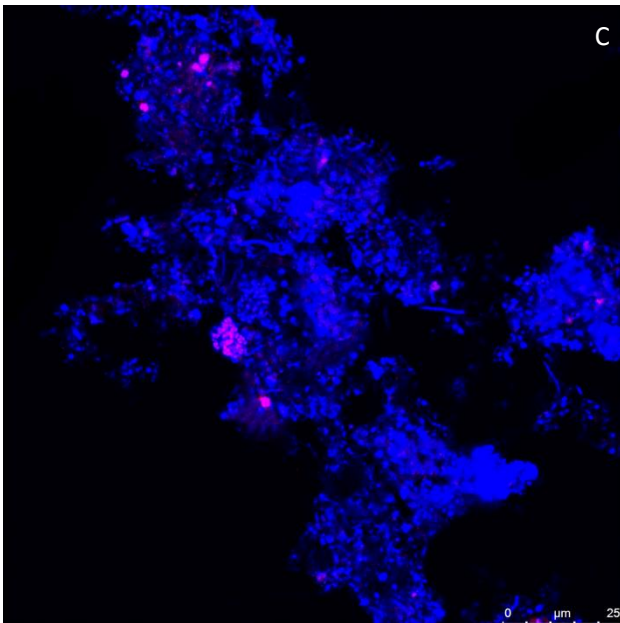
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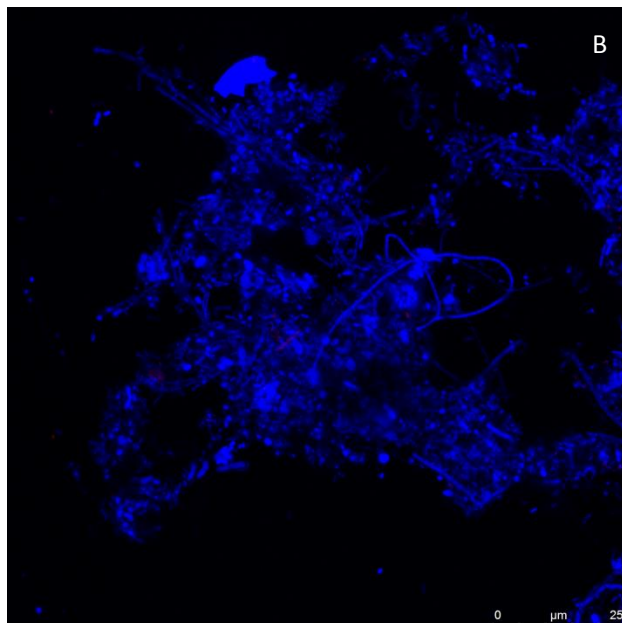
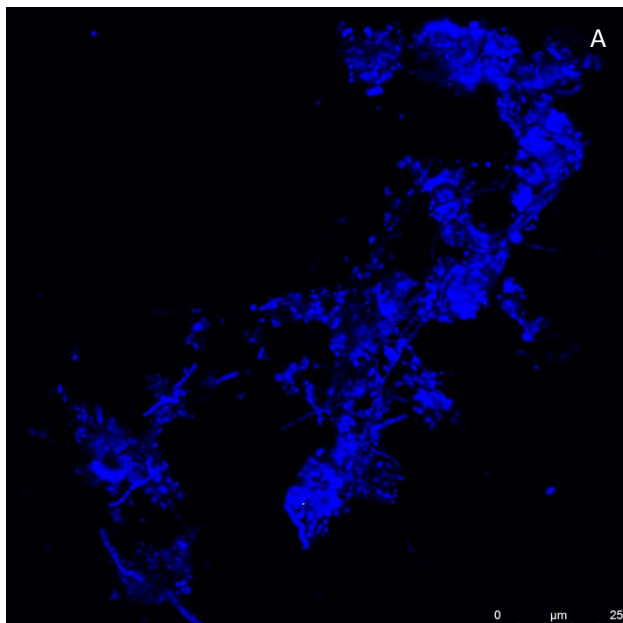


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Fangzhicheng: W5

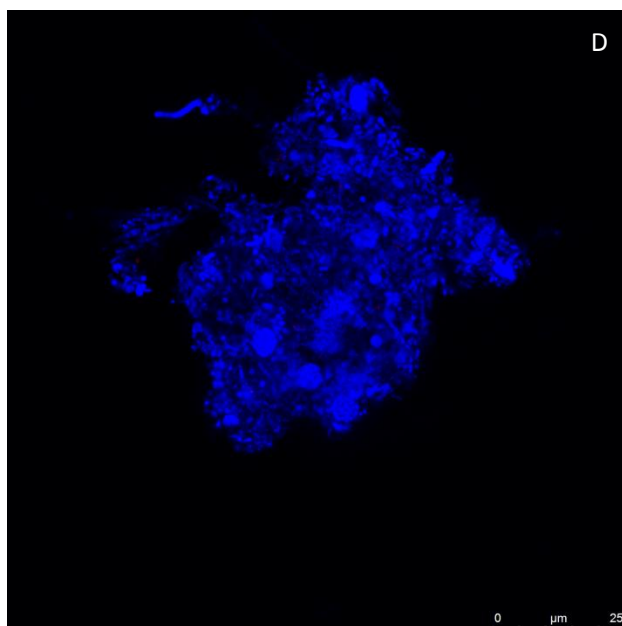
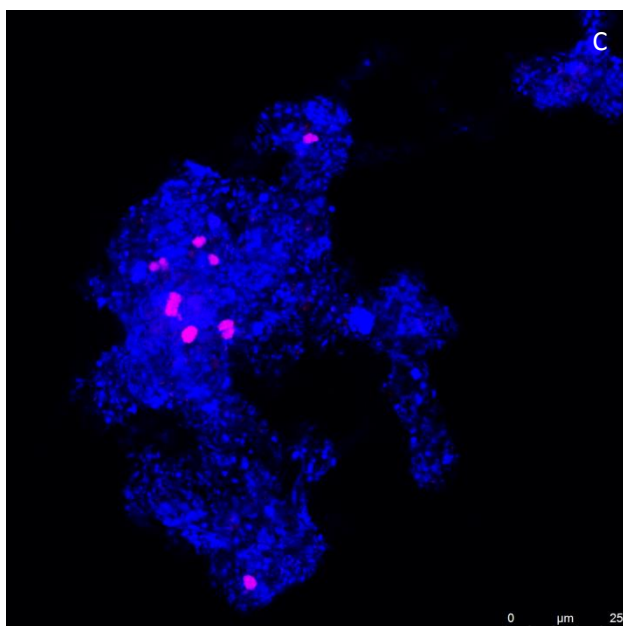
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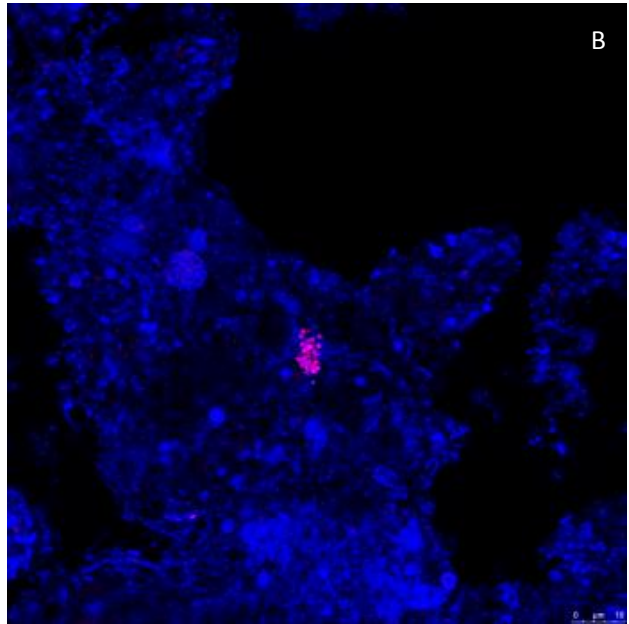
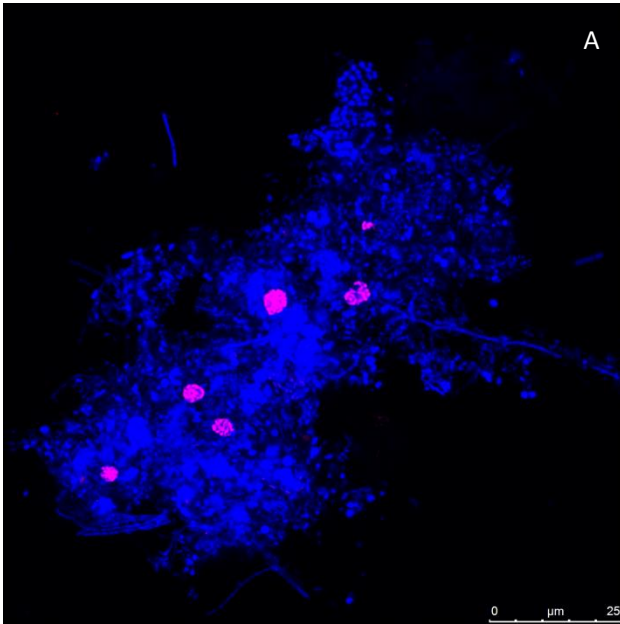


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Dianzicun: W6

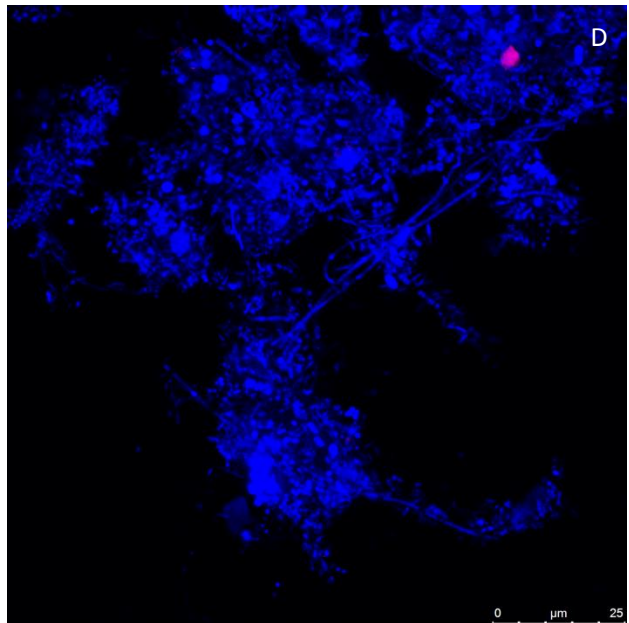
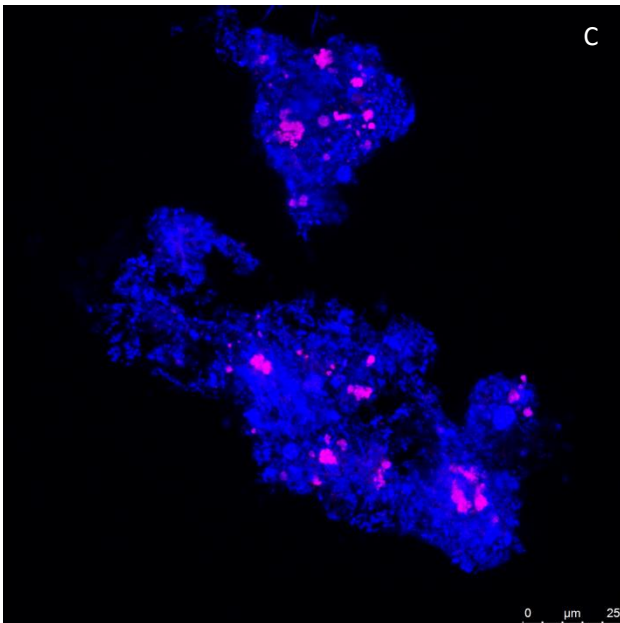
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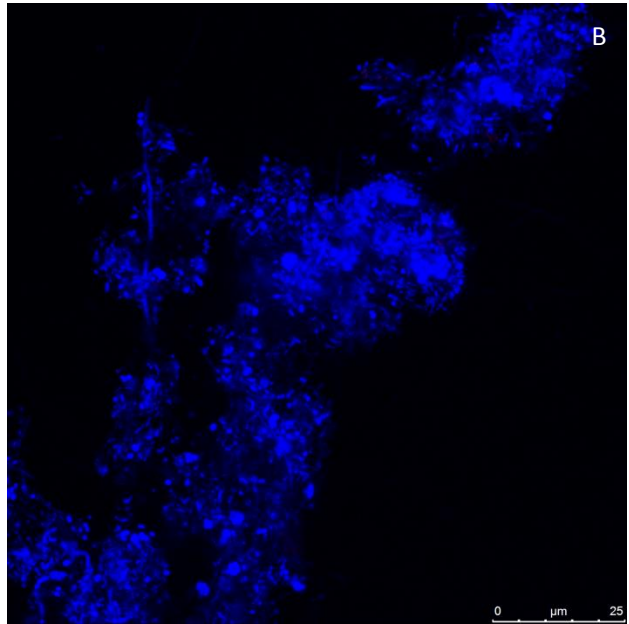
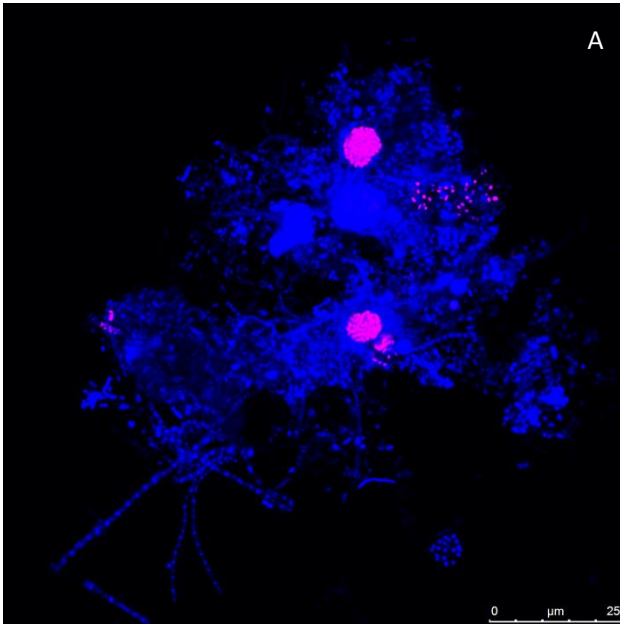


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Yuanlecun: W7

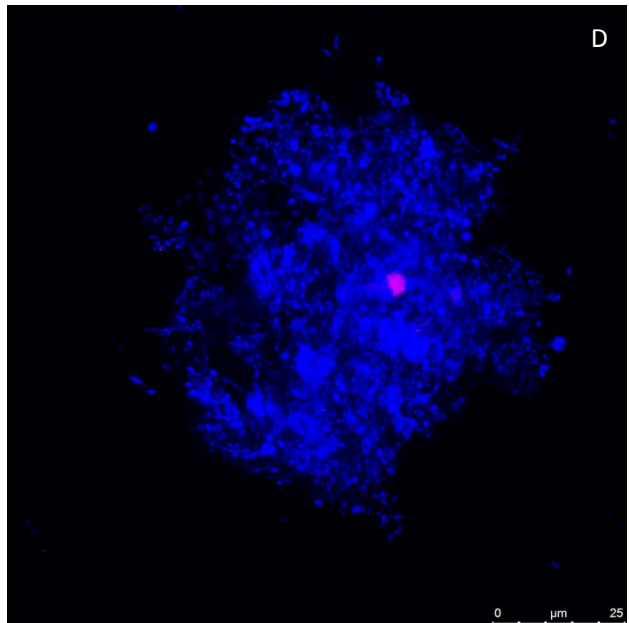
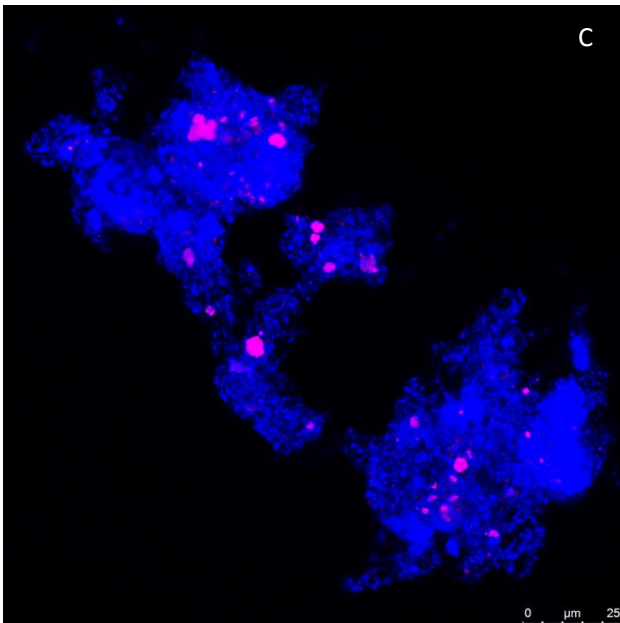
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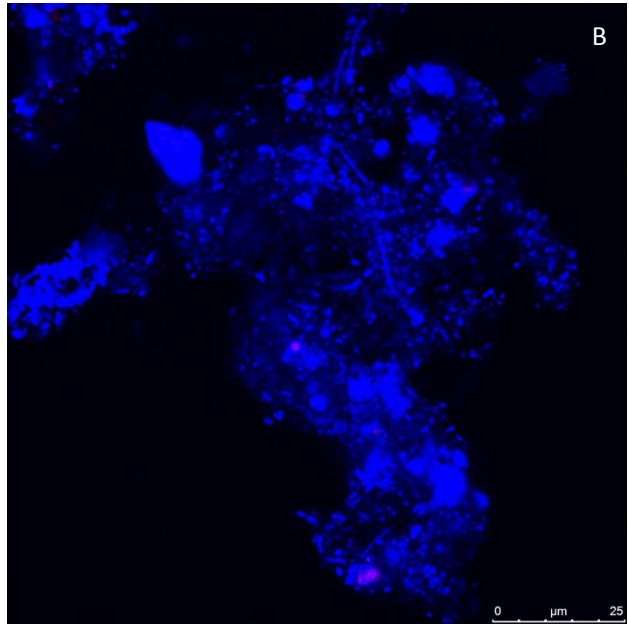
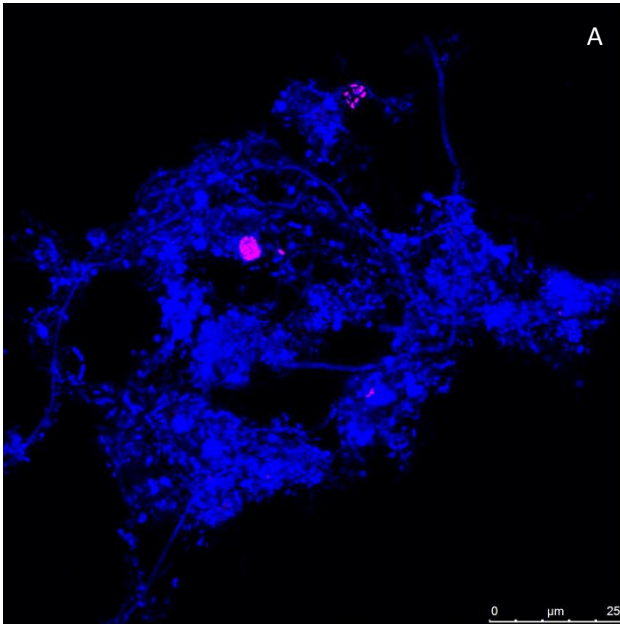


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Liucunbao: W8

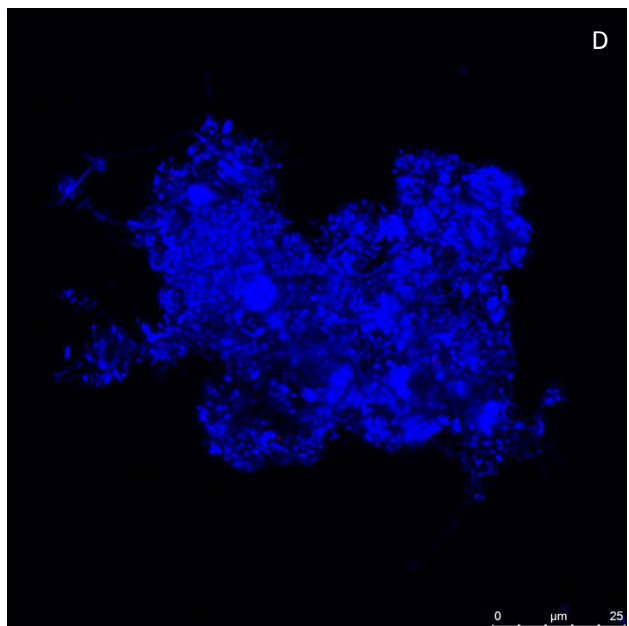
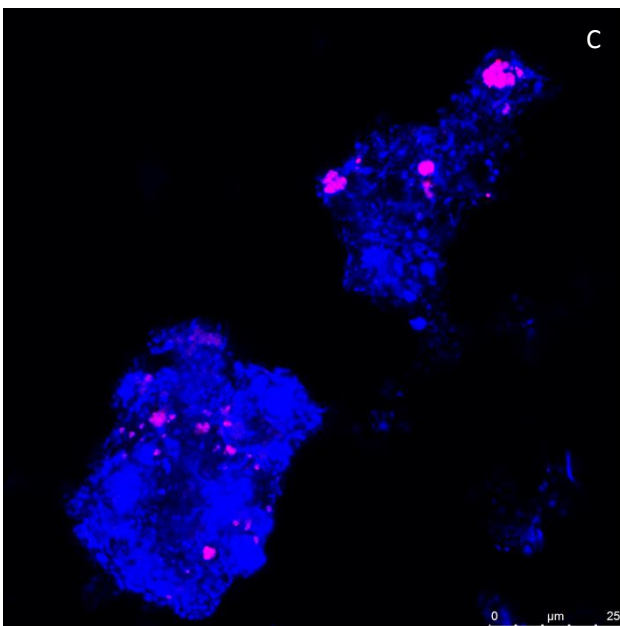
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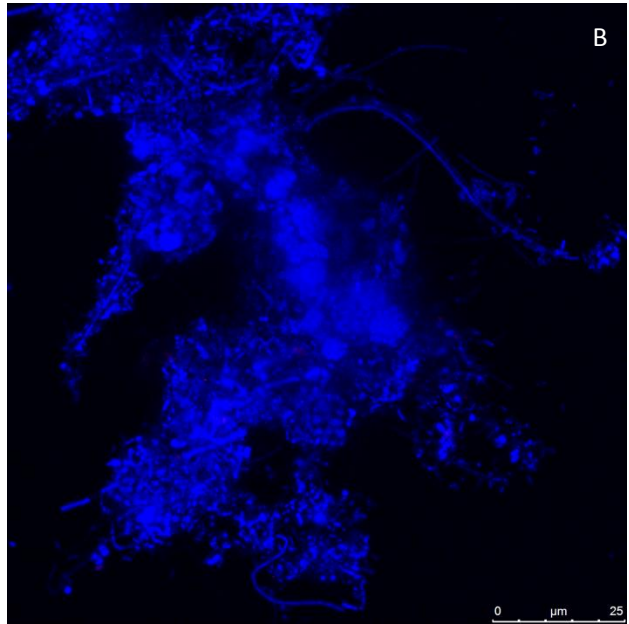
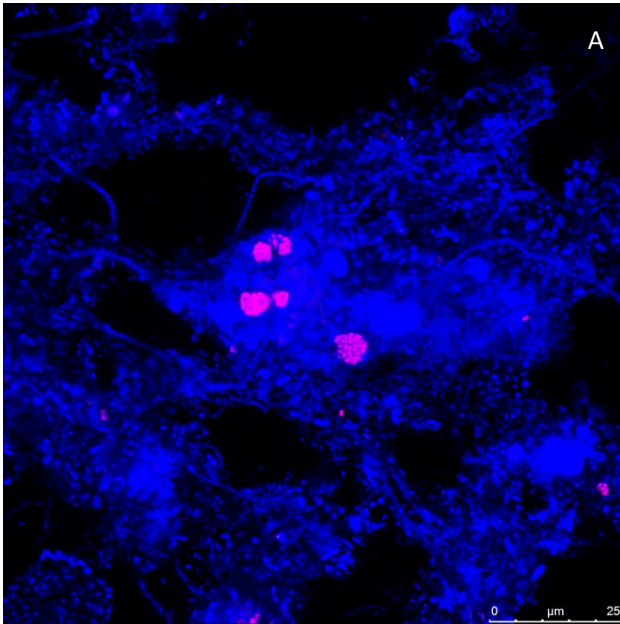


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Gaoxin: W9

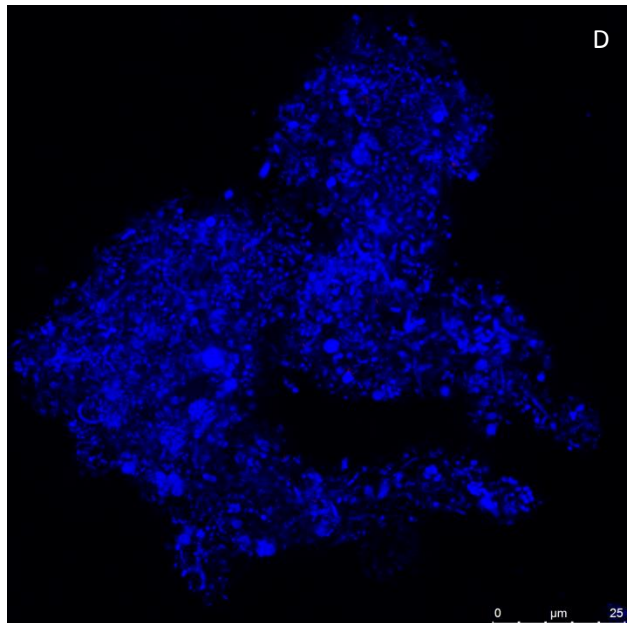
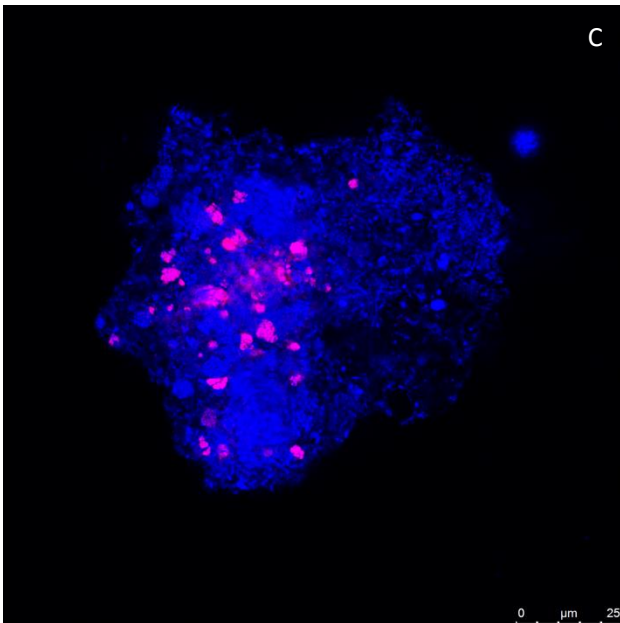
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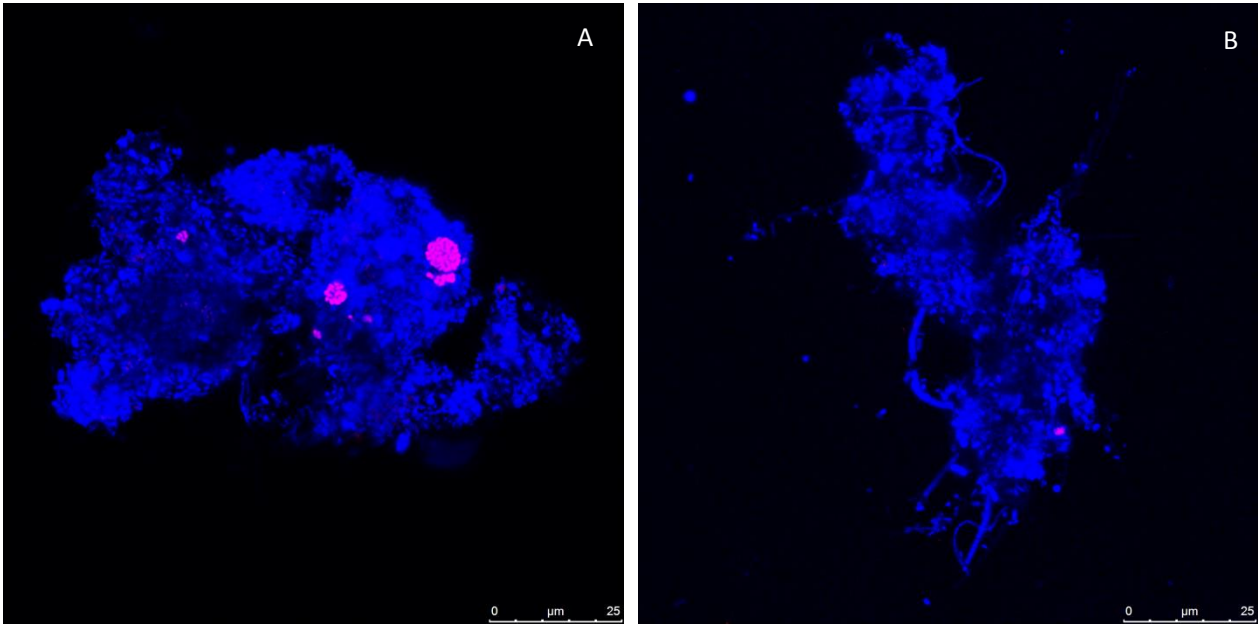


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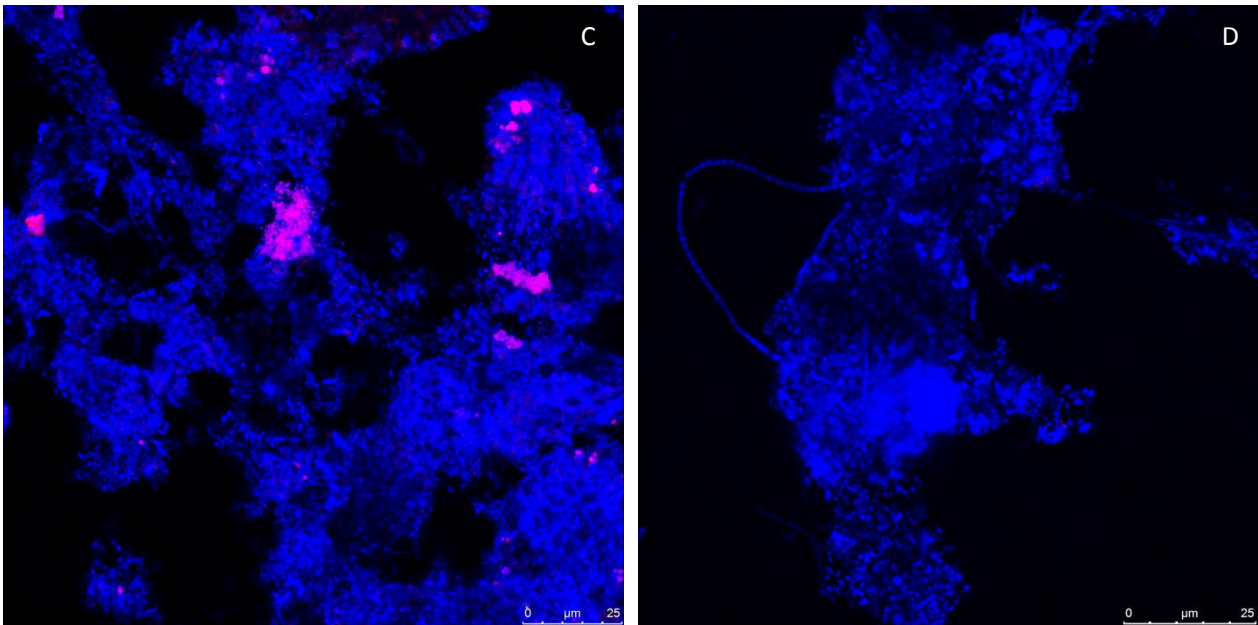
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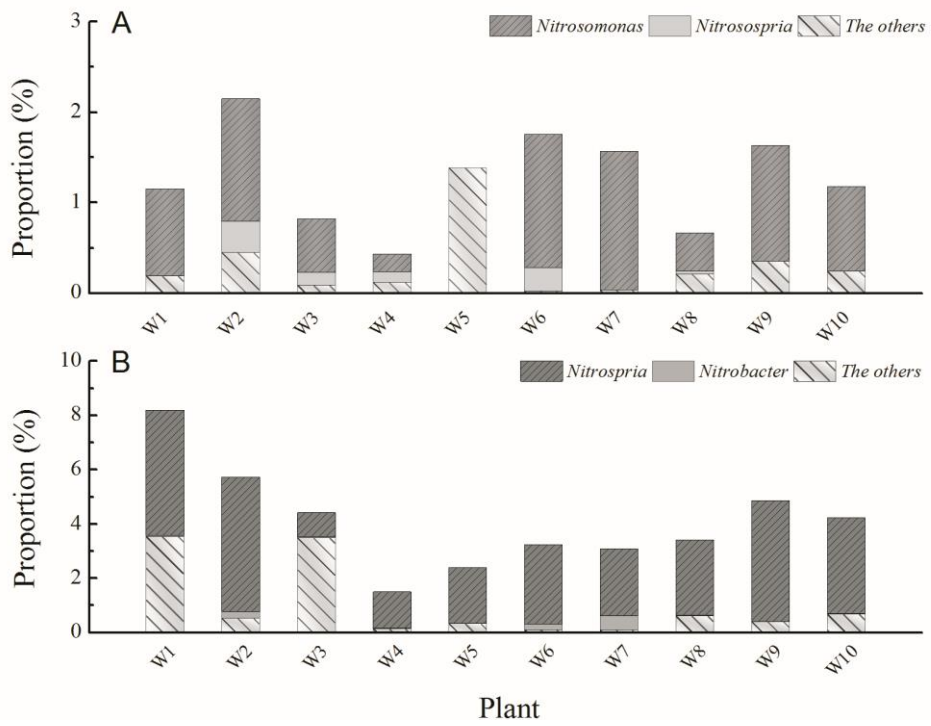
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114 Figure S2. Four groups of nitrifying bacteria in activated sludge in 10 WWTPs. In suit hybridizations of activated
115 sludge with Cy5-labeled probe EUBmix (Eubacteria), Cy3-labeled probe Nsm156 (Nitrosomonas)、Nsv443
116 (Nitrosospira)、Ntspa662 (Nitrospira) and Nit3 (Nitrobacter). Blue: Eubacteria; carmine: Nitrosomonas (A)、
117 Nitrosospira (B)、Nitrospira (C) and Nitrobacter (D). Bar=25 μ m.



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Figure S3. Community structure of nitrifying bacterial in 10 WWTPs (A: AOB; B: NOB).