

	.....	1
1	.....	1
2	.....	1
3	.....	2
4	.....	3
5	.....	4
6	.....	5
7	.....	5
8	.....	6
9	.....	7
10	.....	7
11	.....	8
13	.....	9
14	.....	10
15	—	11
16	.....	11

1

1

2

3

201210037257.5
201510359766.3

4

5

13861753187
13656197045

2

2011

1

350t

600t/d

CNG

2 CNG

3 35-40 /t

300 t/d 3 NG 2.3

CNG 800 m³ 3000

4

1 ·

200510094483.7

2 · 200920046593.X

3 ·

200610040925.4

4 · 200510094484.1

5 · 201310563525.1

13861753187

0510-85197091 :wqruan@jiangnan.edu.cn

3

1

VFAs

VFAs

2

280-340 mg COD /gVSS

TN 88% TP 94%
2

3

13812085019

5

/

/

/

/

/

13771045367 xuzhan@jiangnan.edu.cn

6

“ ”

SCI 200 40
13771045367 zhanxu_010@163.com

7

1

COD 40% B/C 0.35

2

COD

90%

0.1-0.2 m³/kg

67%

50

SCI

15

19

14

7

13812085019

hoolzou@163.com

8

863

2011

2001

1

7000 m³/d

1380

5000 m²

COD 2500 mg/L BOD 1200 mg/L

SS 500 mg/L pH

5-12 30-50 mg/L 15 mg/L

GB19821-2005

DB44/26-2001

COD ≤ 45 mg/L BOD ≤ 15 mg/L

SS ≤ 20

mg/L pH 6 9 ≤ 5 mg/L ≤ 0.5 mg/L

2

“ CLR

+

”

3

1380

CLR

GB19821-2005

4

1. 200920046593.X
 - 2 .
 - 200610040925.4
 3. 200510094484.1
 4. 200910032478.1
 5. 200610038236.X
- 13861753187
- 0510-85197-091 :wqruan@jiangnan.edu.cn

9

21.2% 2 2 7

SCI 2

15106172090 huowang@jiangnan.edu.cn

10

CPB

CSB

1 XRD SEM BET FTIR Zeta

2 Design Expert

3 Optimal Design

(RSM)

- - -

PAC

COD

30mg/L

TP

0.2mg/L

Cr

1.0mg/L

95.2%

0.5

13771045367

11

1

α -Fe₂O₃

· OH · O₂-

98.8%

50% COD

2

3

18021569066

12

MBR

1

MBR

2

1.5m²

2200

0.5

GB18918-

2002

A

3

5

1

4

5

15161580029

13

1

+

90%

2

1

:

C:S

0.5-2.1

2

5-10 μm

3

3

4

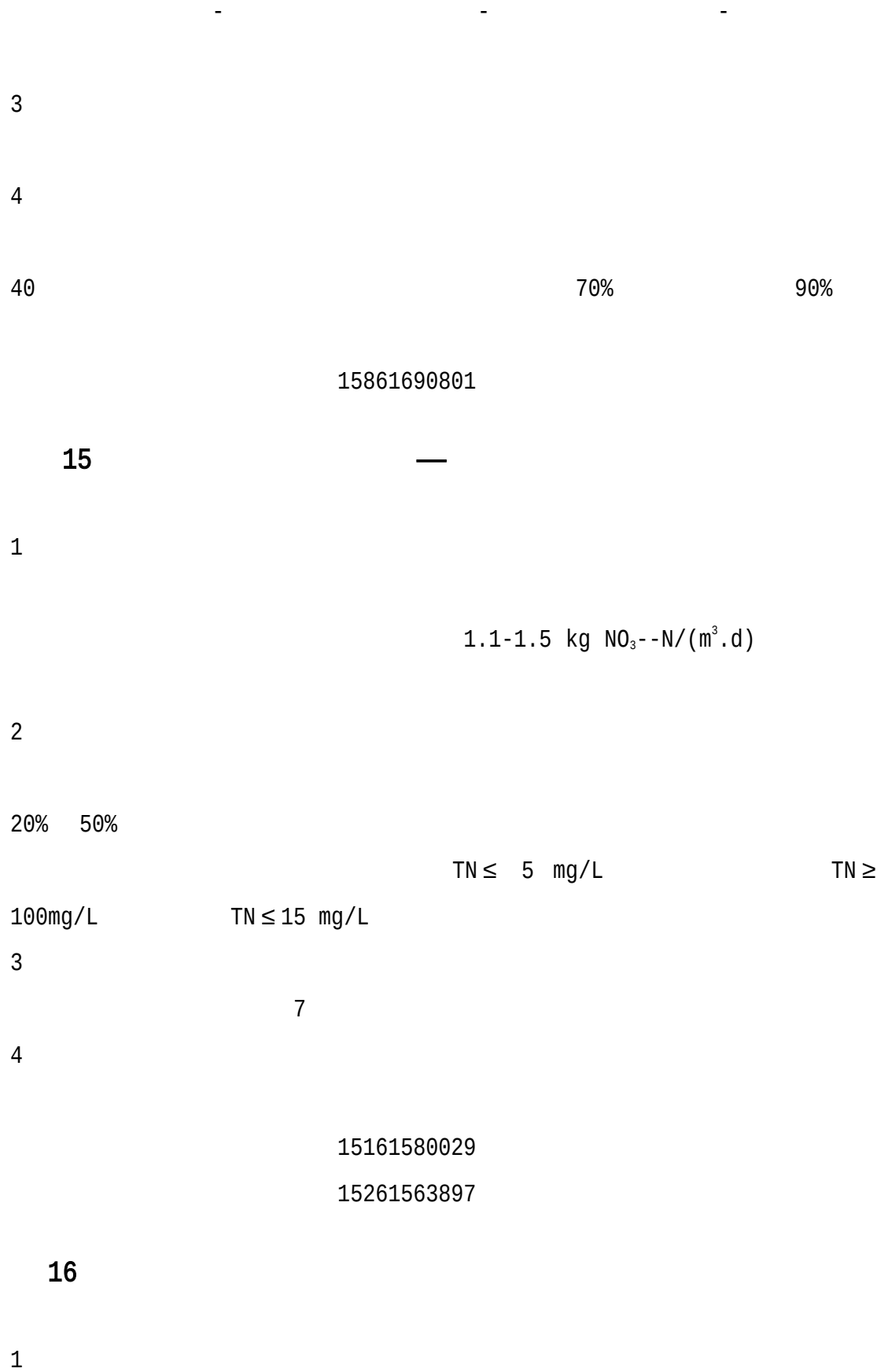
;13812030477

:yanqun@jiangnan.edu.cn

14

1

2



6

2

55

12~24

h

5 d

3

6

4

15161580029