Efficient Day-and-Night NO_2 Abatement by Polyaniline/TiO_2 Nanocomposites

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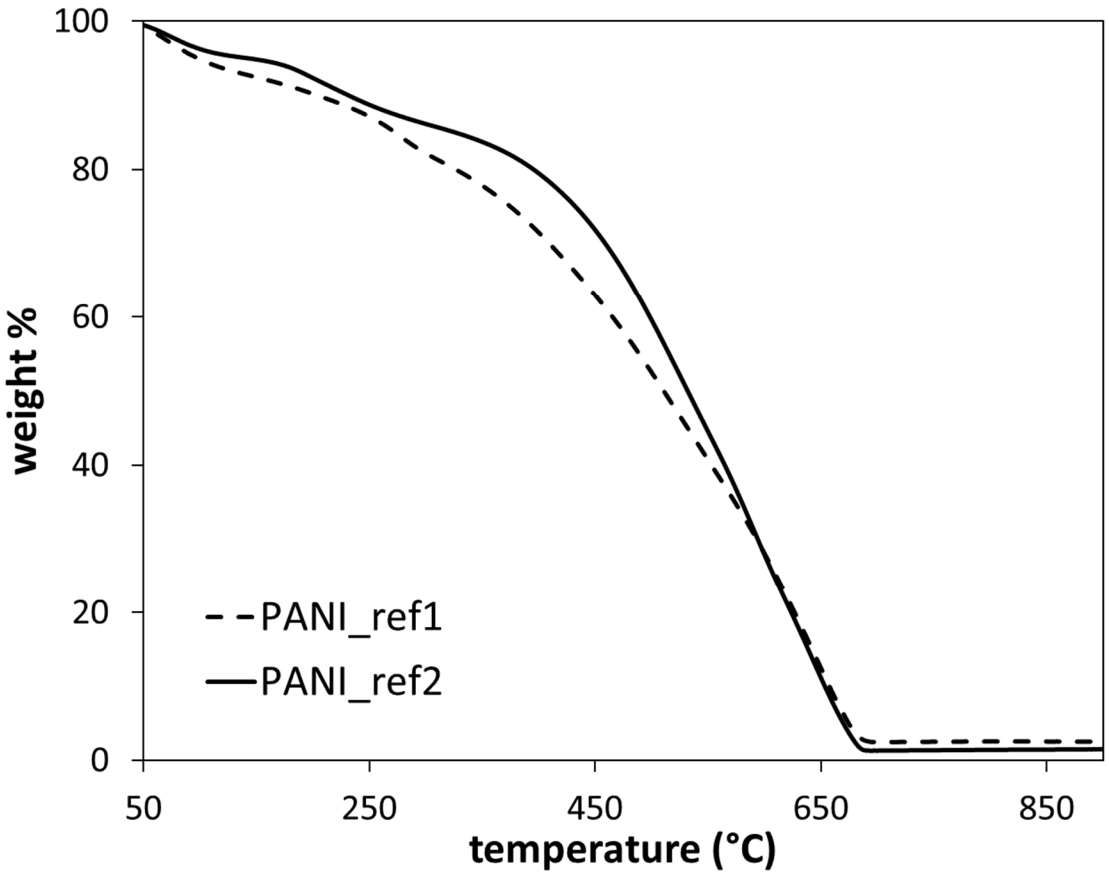


Figure S1: TGA curves of the pristine PANI_ref1 and the PANI_ref2.

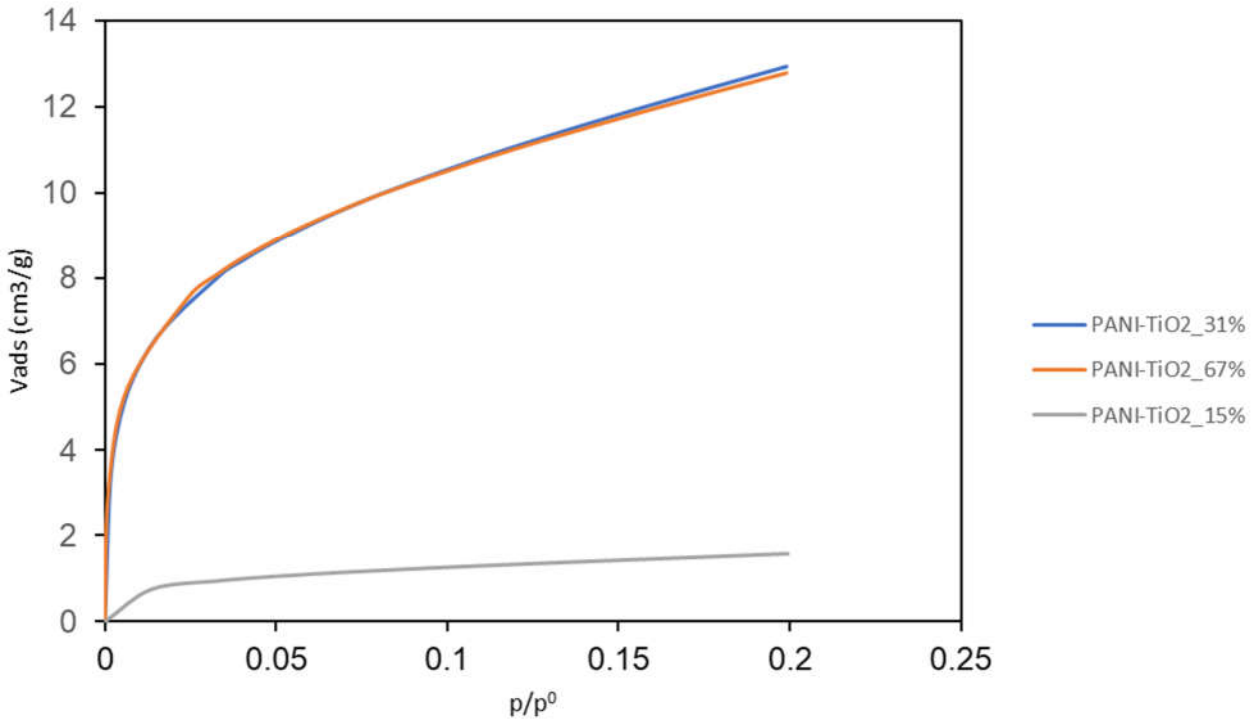


Figure S2: N_2 adsorption isotherms in $0 < p/p^0 < 0.2$ for the samples.

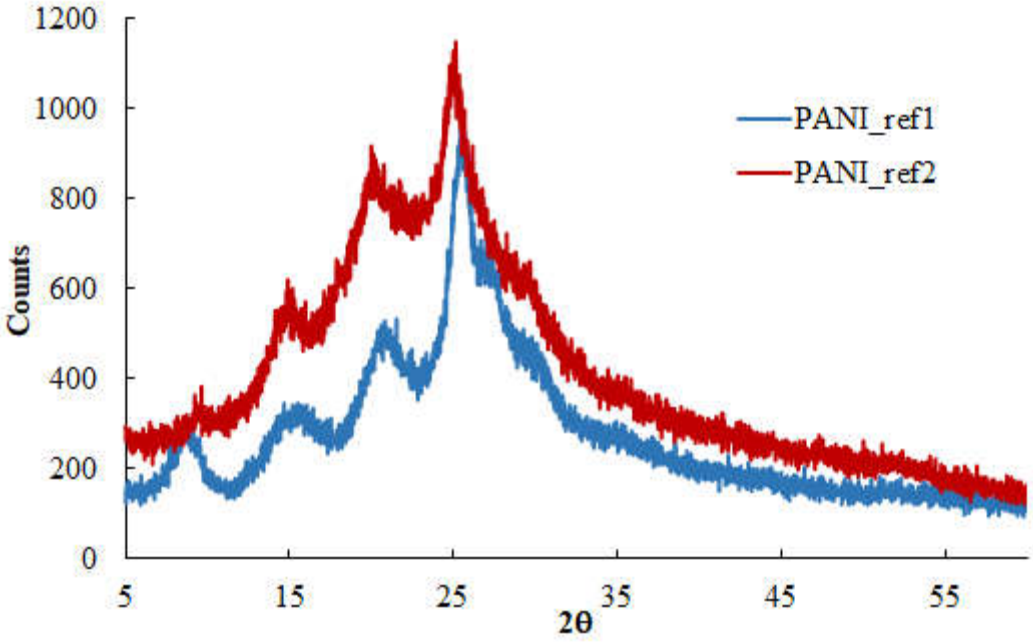


Figure S3: PXRD of PANI_ref1 and PANI_ref2.

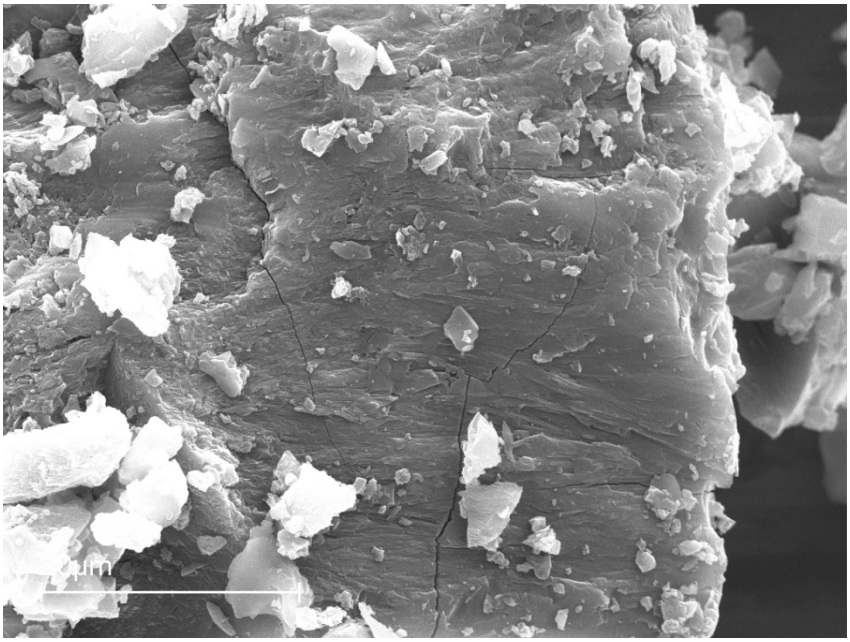


Figure S4: SEM of PANI_ref2.

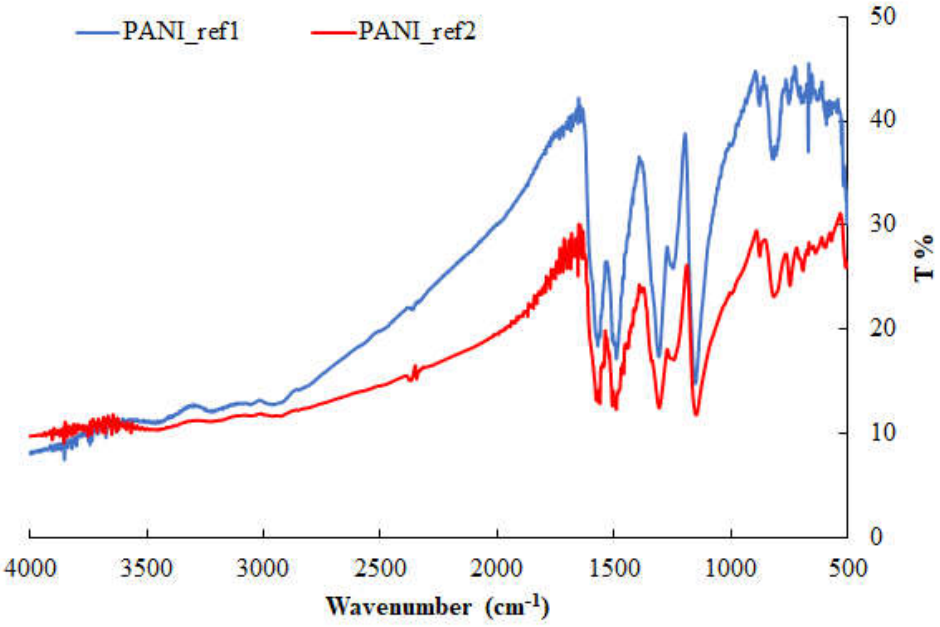


Figure S5: FTIR spectra of PANI_ref1 and PANI_ref2.

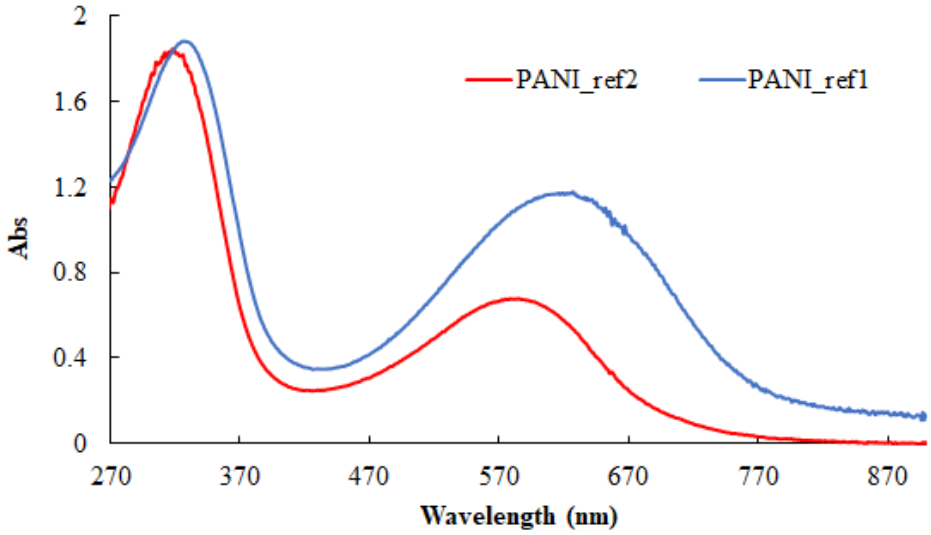


Figure S6: UV-vis spectra of PANI_ref1 and PANI_ref2.

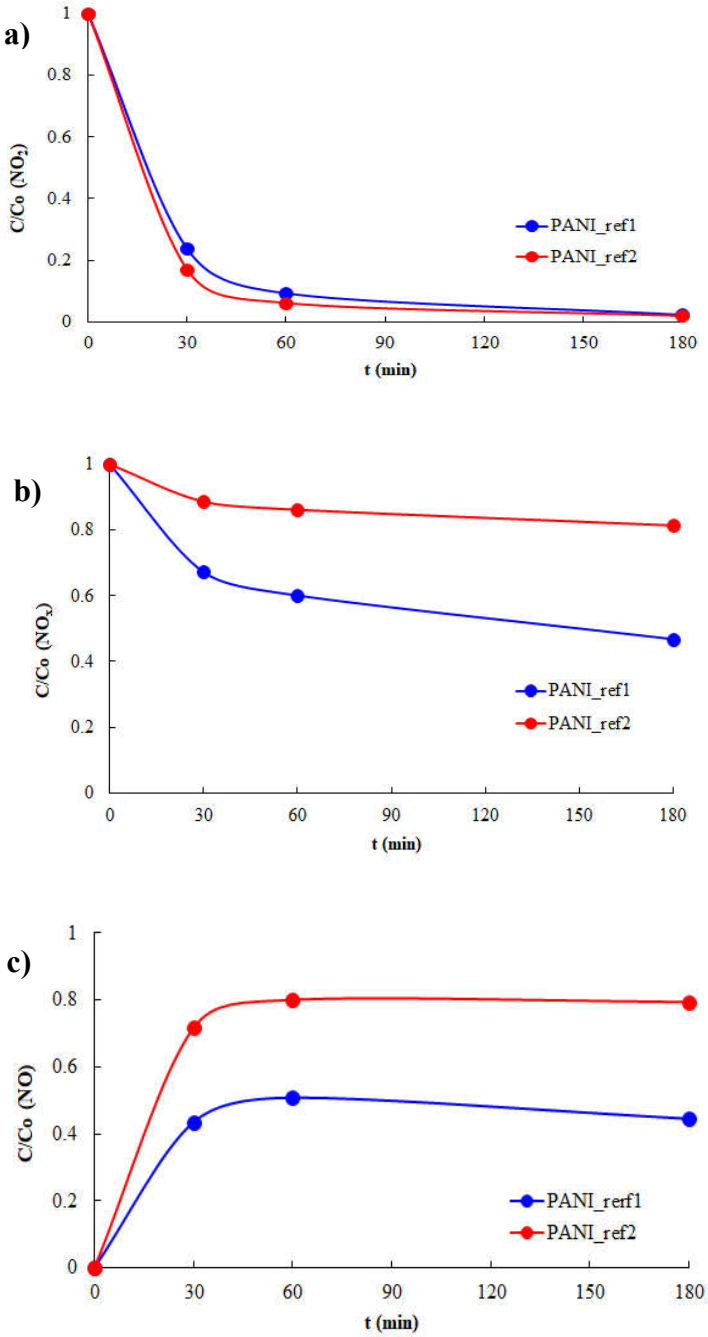
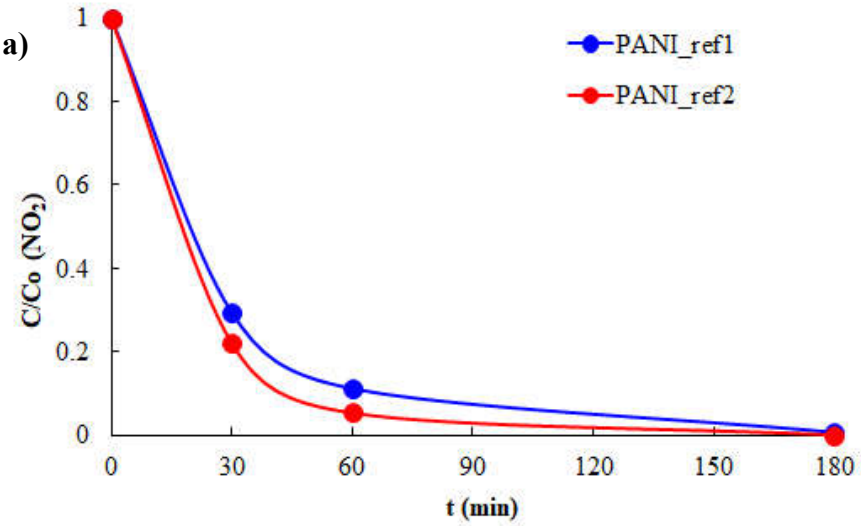
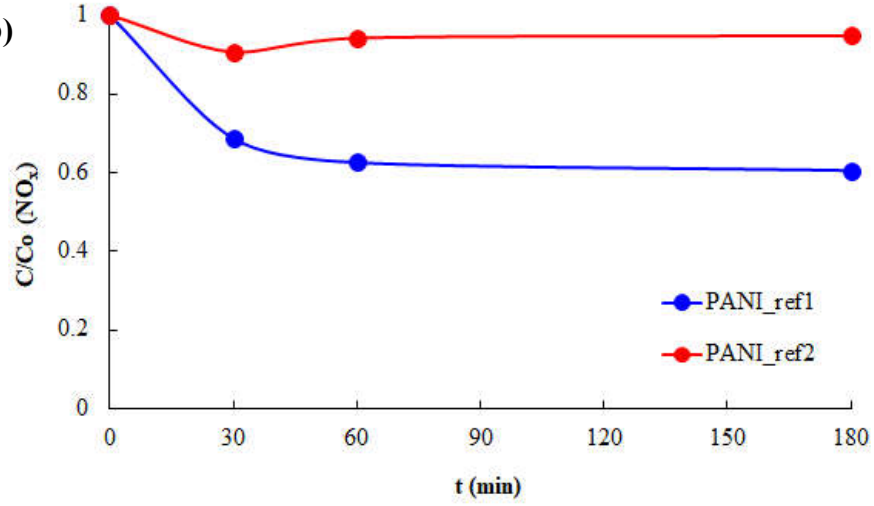


Figure S7: (**a**) NO_2 and (**b**) NOx removal efficiency and (**c**) NO production as a function of time for PANI1 and PANI2 under UVA light.

a)


PANI_ref1
PANI_ref2
C/Co (NO2)
t (min)
0
0.2
0.4
0.6
0.8
1
0
30
60
90
120
150
180

b)


PANI_ref1
PANI_ref2
C/Co (NOx)
t (min)
0
0.2
0.4
0.6
0.8
1
0
30
60
90
120
150
180

c)

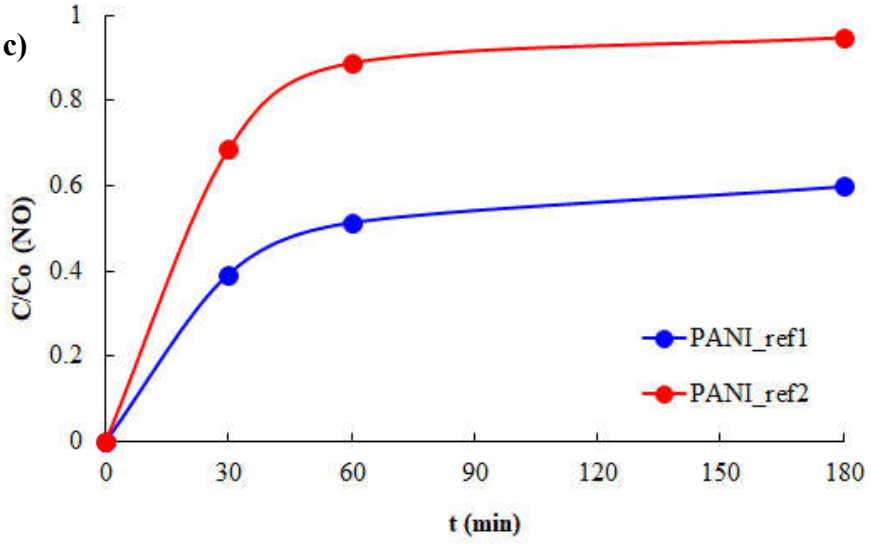
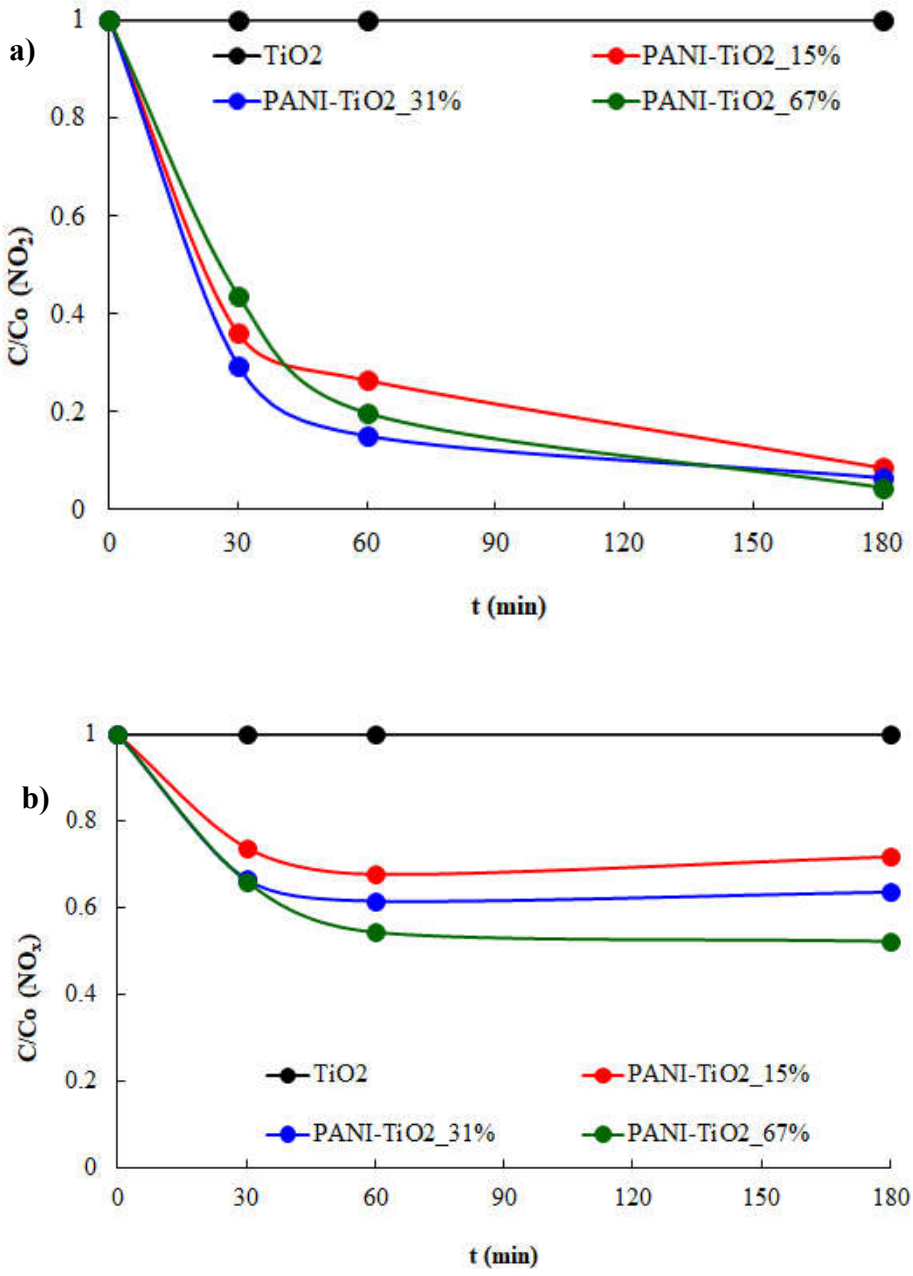

PANI_ref1
PANI_ref2
C/Co (NO)
t (min)
0
0.2
0.4
0.6
0.8
1
0
30
60
90
120
150
180

Figure S8: (**a**) NO_2 and (**b**) NOx removal efficiency and (**c**) NO production as a function of time for PANI1 and PANI2 under LED light.



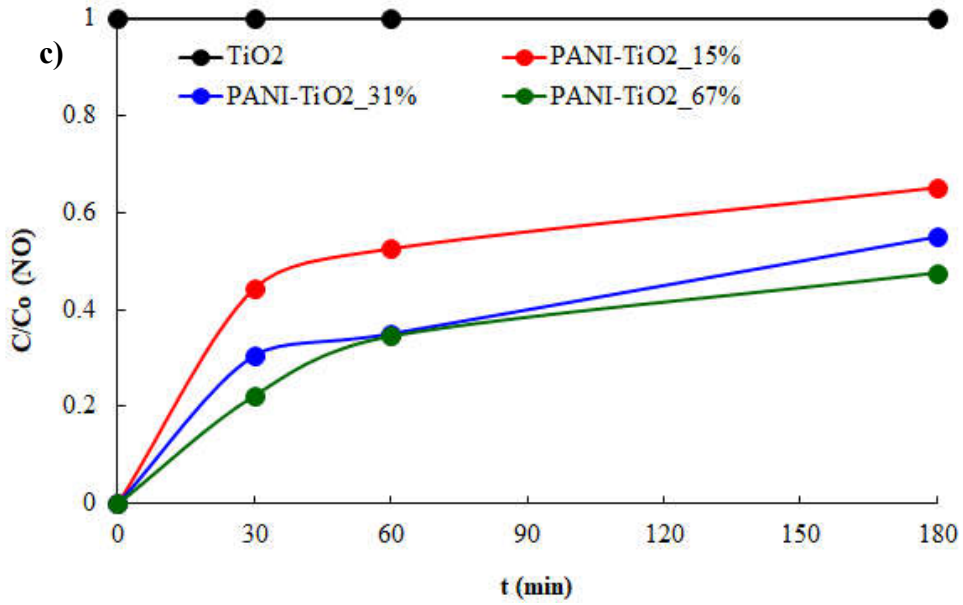
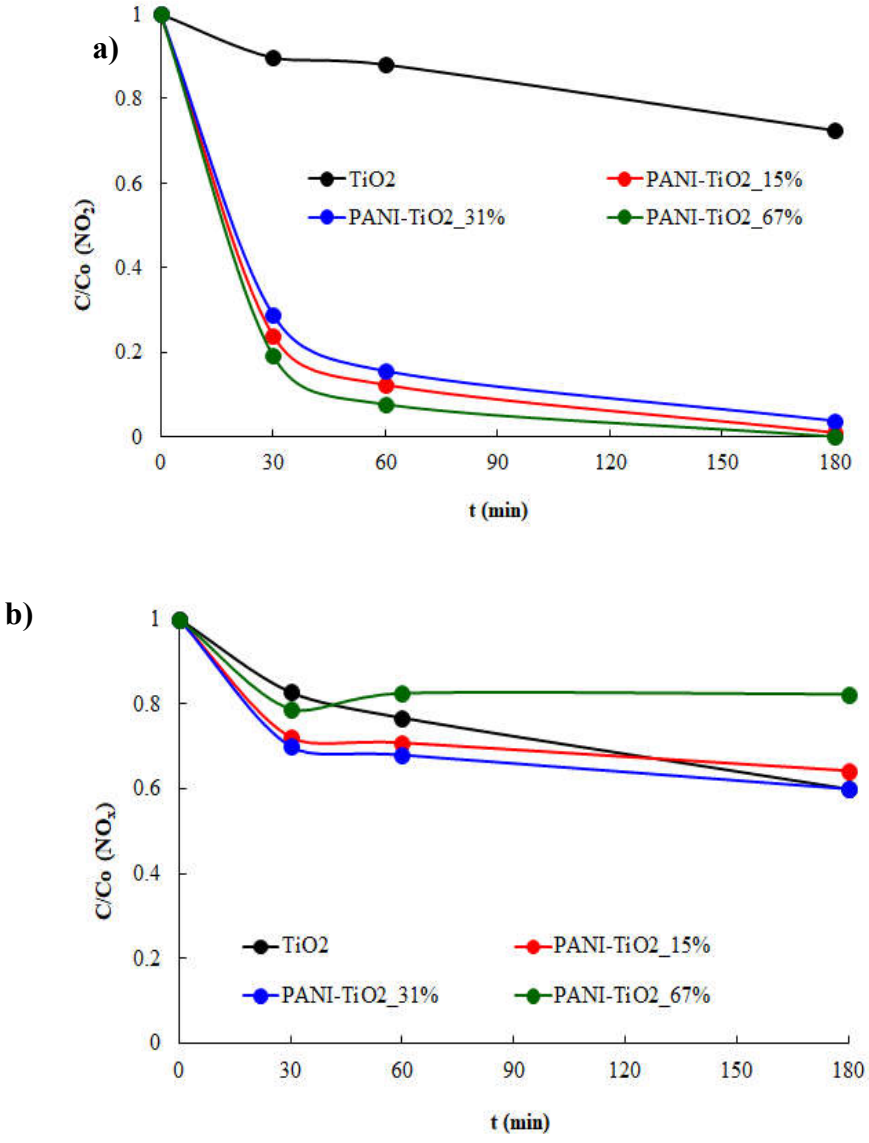


Figure S9: (**a**) NO_2 and (**b**) NOx removal efficiency and (**c**) NO production as a function of time for TiO_2 and PANI/TiO_2 nanocomposites in dark.



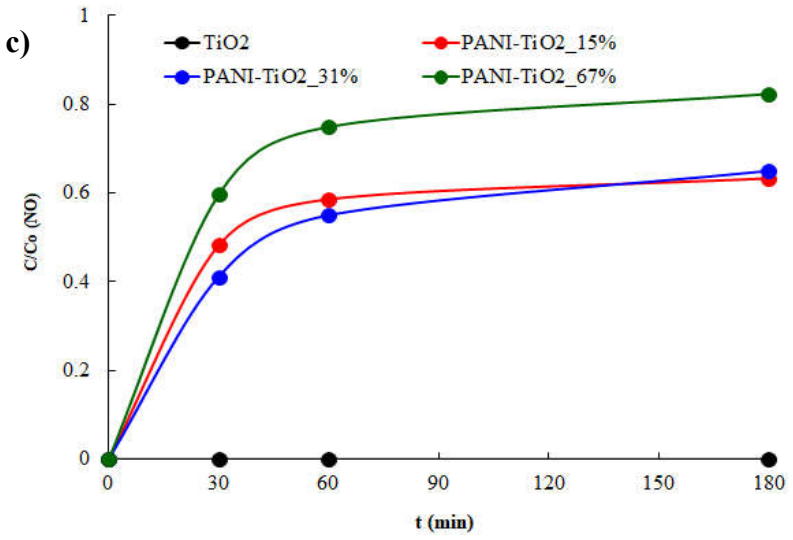
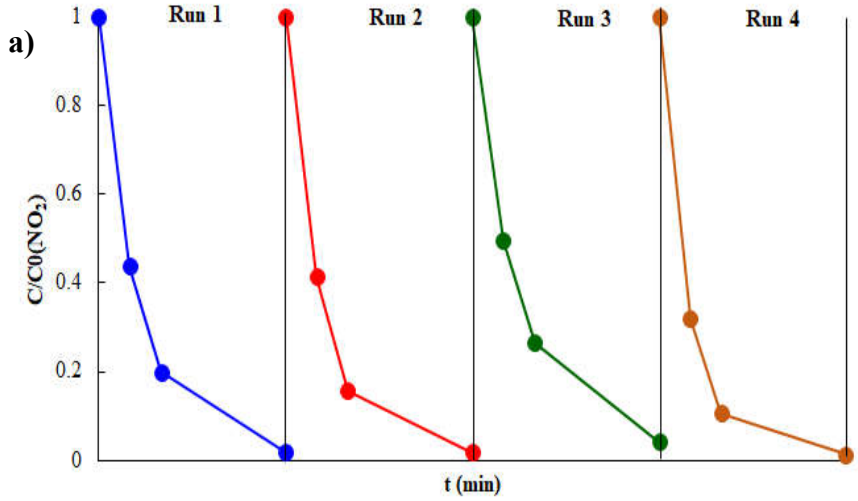


Figure S10: (**a**) NO_2 and (**b**) NOx removal efficiency and (**c**) NO production as a function of time for TiO_2 and PANI/TiO_2 nanocomposites under LED light.



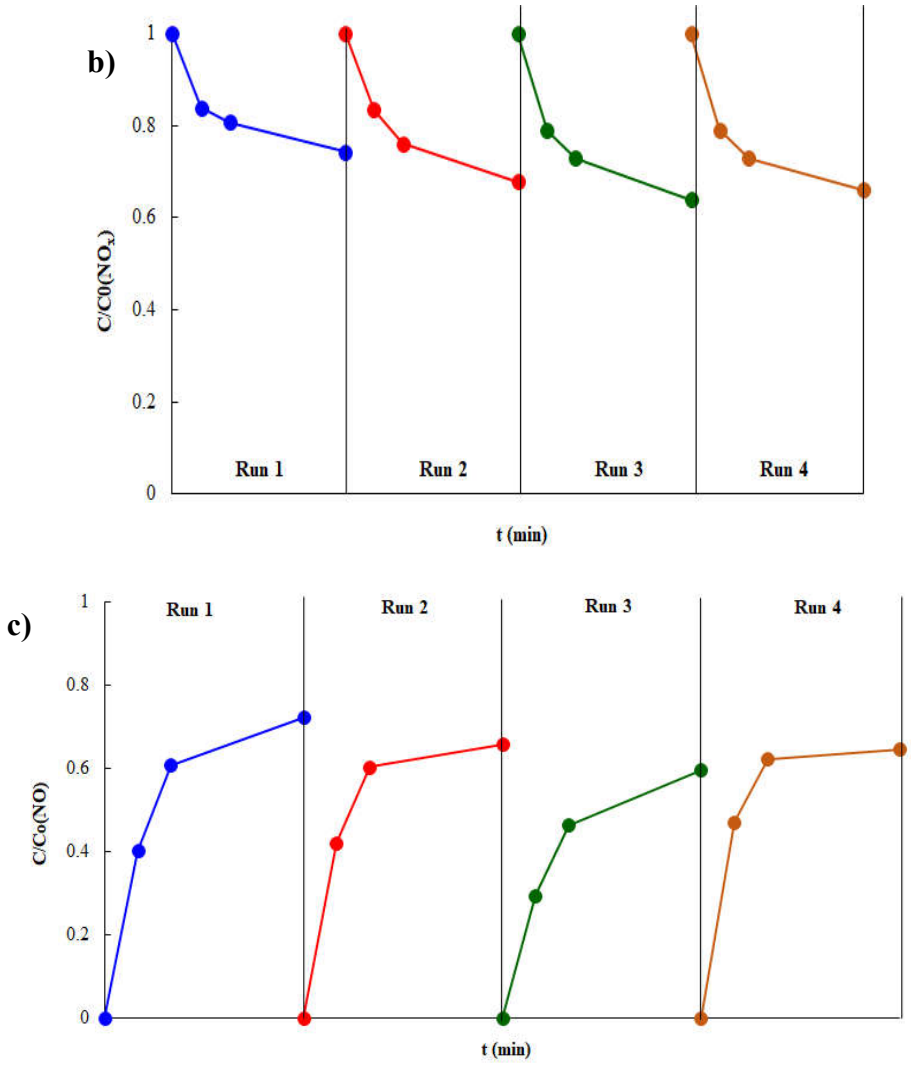
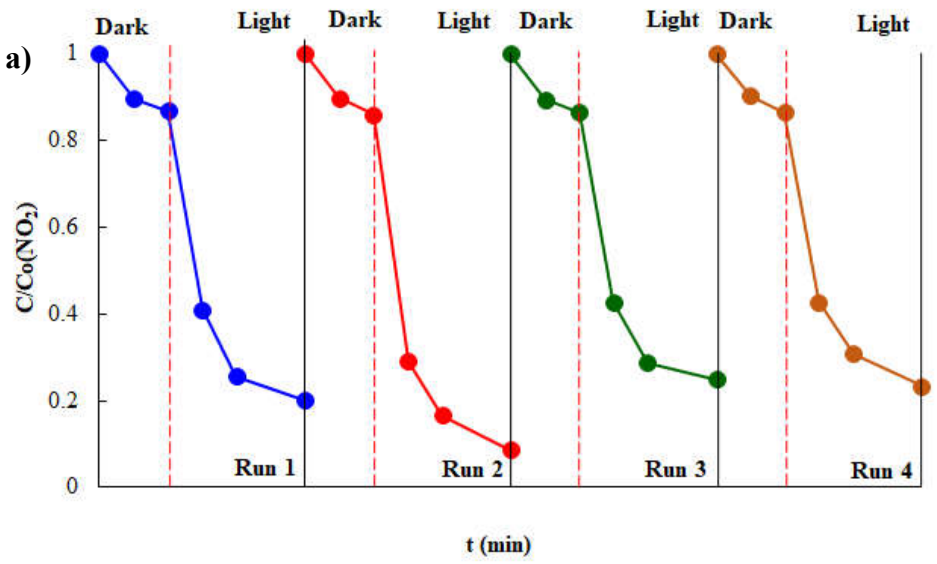


Figure S11: Recycle tests carried out with PANI_ref1 under dark: (**a**) NO_2 and (**b**) NOx removal efficiency and (**c**) NO production.



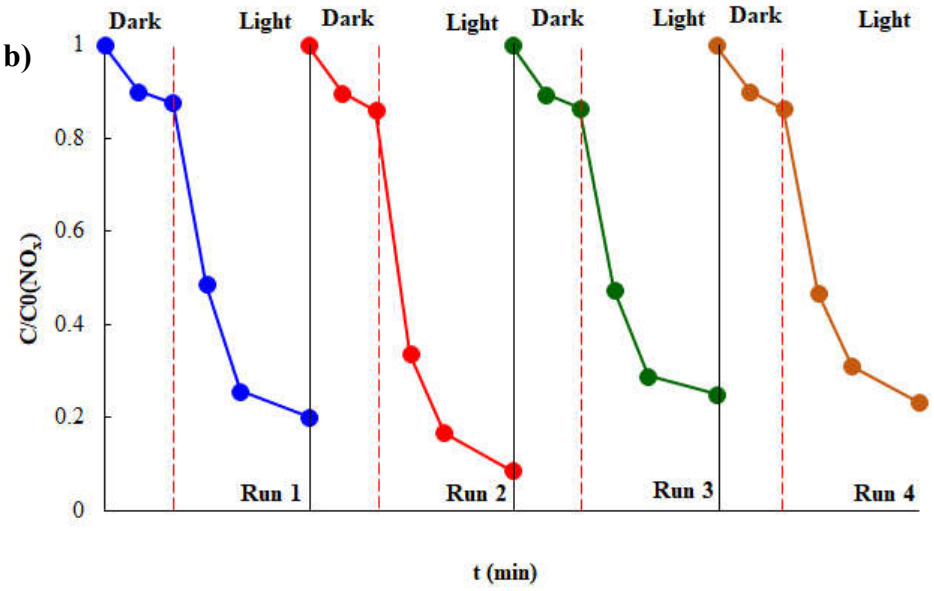


Figure S12: Recycle tests carried out with TiO_2 under UVA irradiation: (**a**) NO_2 and (**b**) NOx removal efficiency.