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FIGURE S1

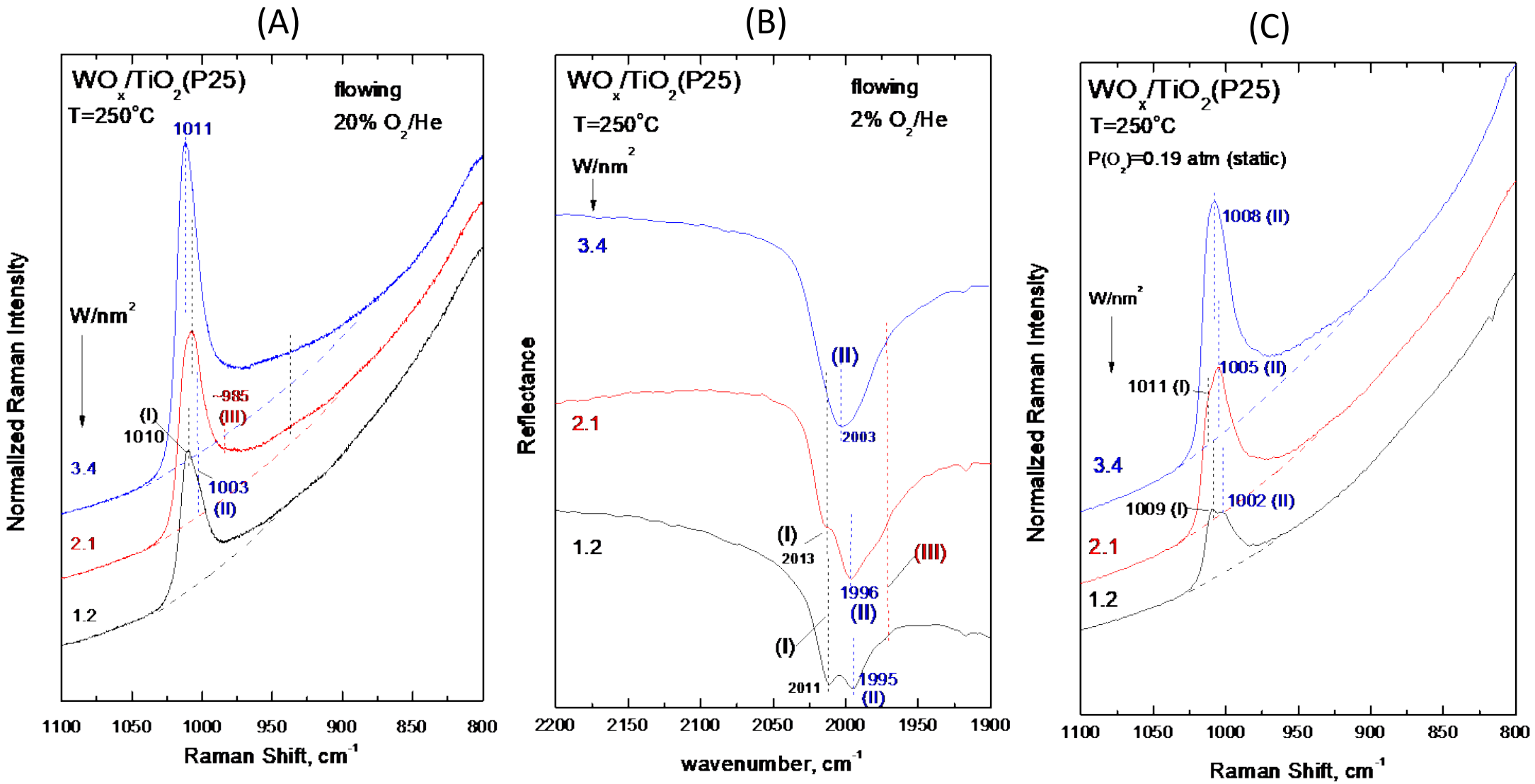


FIGURE S2

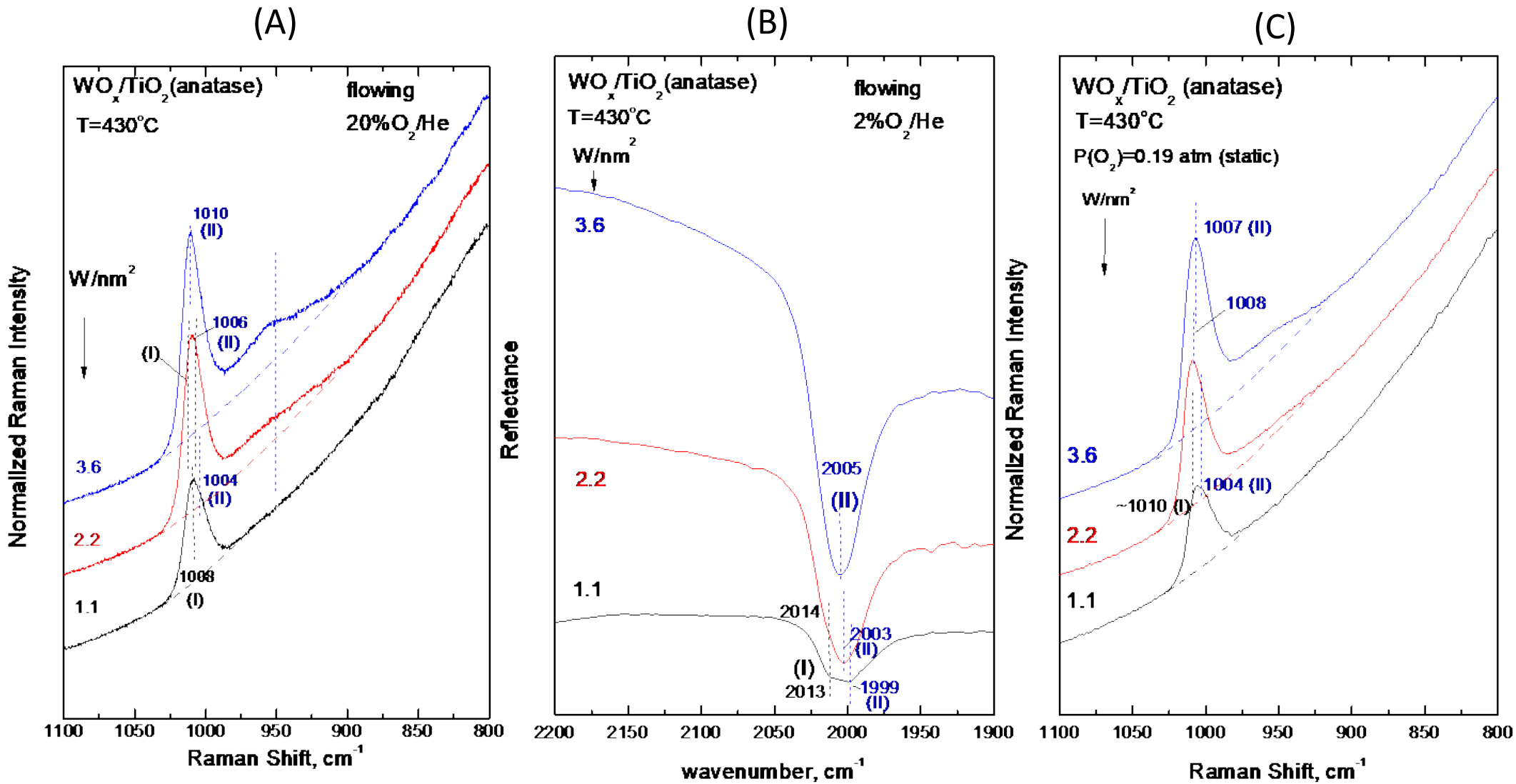

(A)
(B)
(C)
WOx/TiO2(anatase)
T=430°C
flowing
20%O2/He
W/nm2
3.6
2.2
1.1
1010 (II)
1006 (II)
1004 (II)
1008 (I)
(I)
Normalized Raman Intensity
Raman Shift, cm-1
1100
1050
1000
950
900
850
800
WOx/TiO2(anatase)
T=430°C
flowing
2%O2/He
W/nm2
3.6
2.2
1.1
2005 (II)
2014
2003 (II)
(I)
2013
1999 (II)
Reflectance
wavenumber, cm-1
2200
2150
2100
2050
2000
1950
1900
WOx/TiO2 (anatase)
T=430°C
P(O2)=0.19 atm (static)
W/nm2
1007 (II)
1008
3.6
2.2
1.1
~1010 (I)
1004 (II)
Normalized Raman Intensity
Raman Shift, cm-1

FIGURE S3

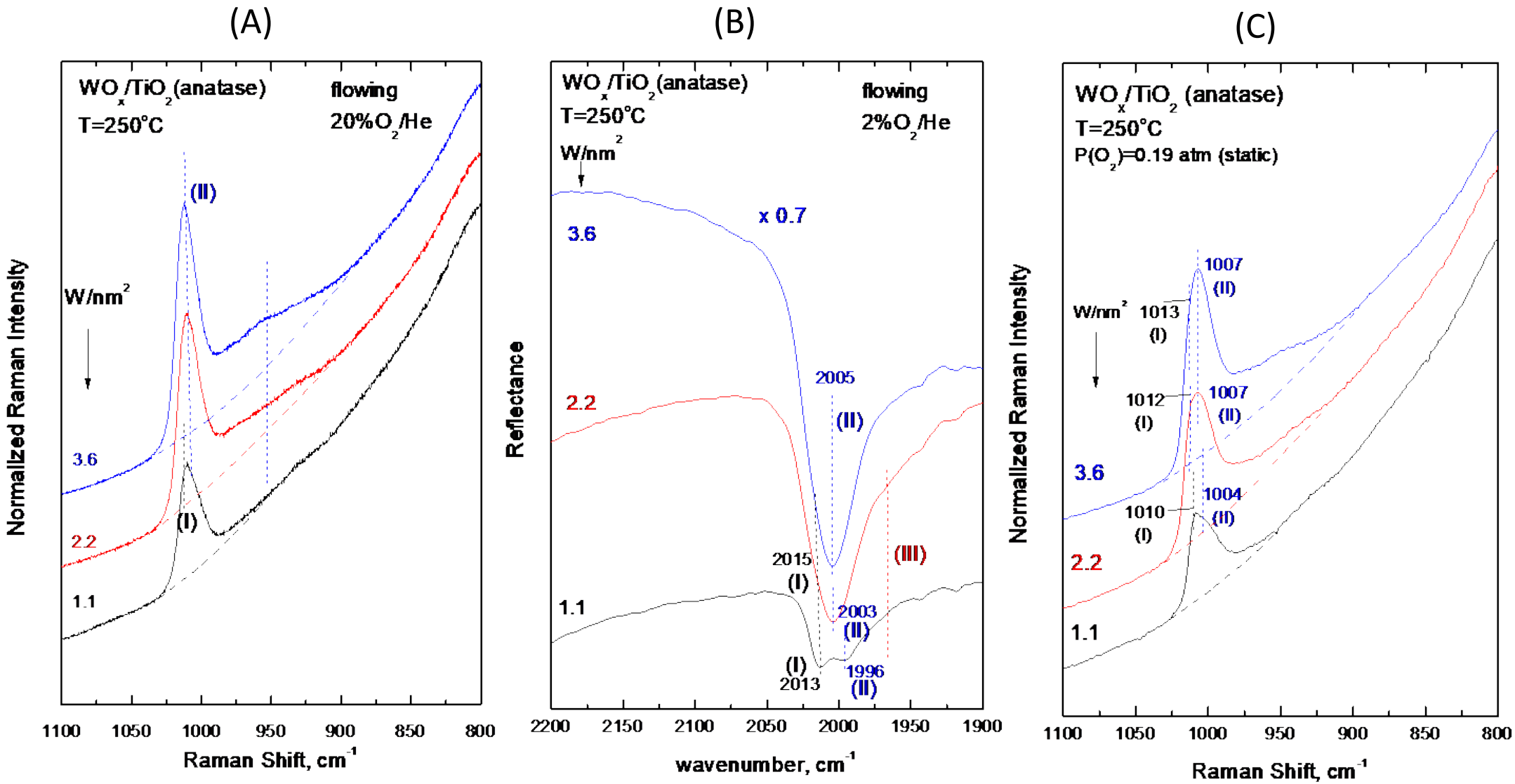
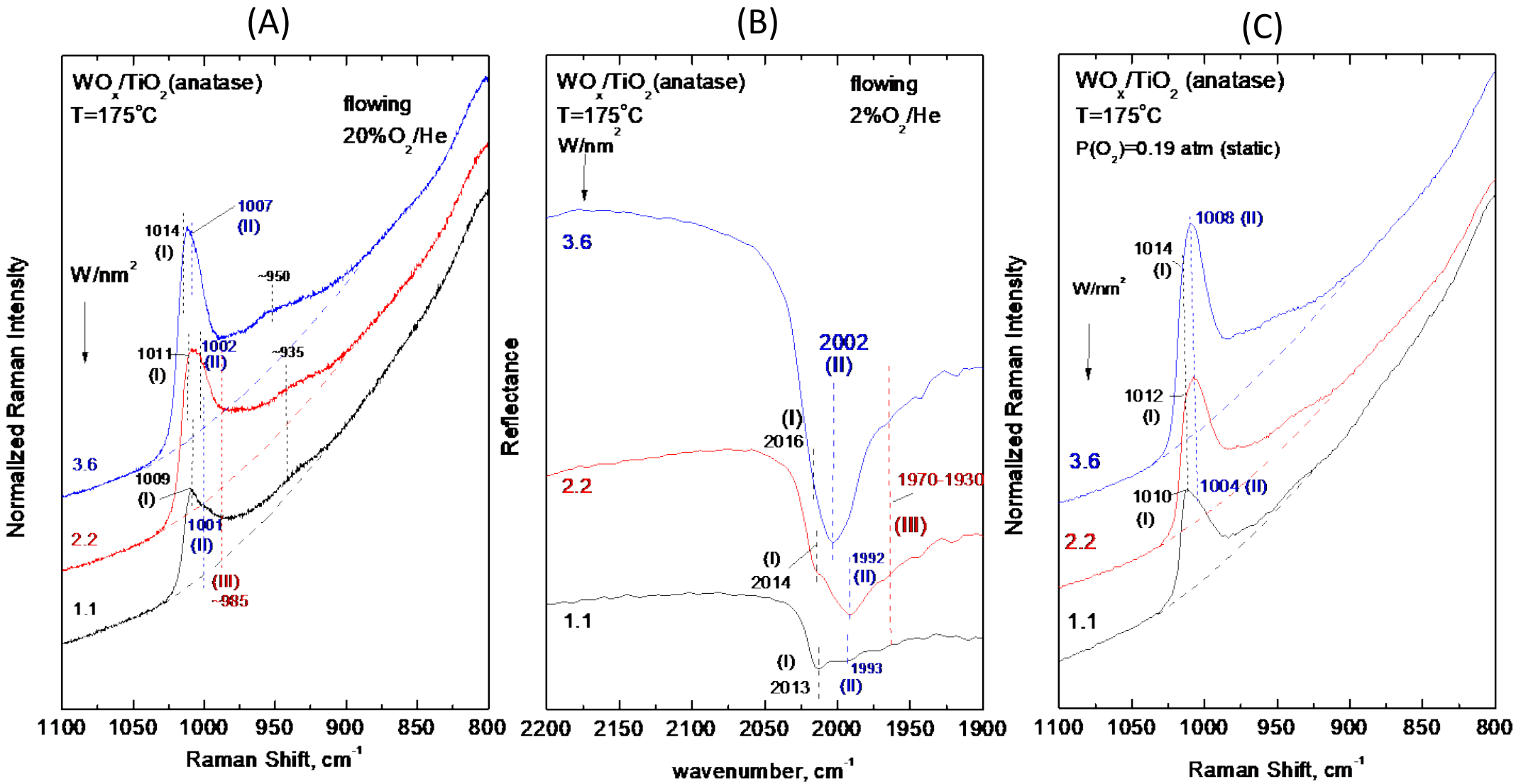

(A)
(B)
(C)
WOx/TiO2 (anatase)
T=250°C
flowing
20%O2/He
W/nm2
3.6
2.2
1.1
(II)
(I)
Normalized Raman Intensity
Raman Shift, cm-1
WOx/TiO2 (anatase)
T=250°C
W/nm2
flowing
2%O2/He
x 0.7
3.6
2.2
1.1
2005
(II)
2015
(I)
2003
(II)
(III)
(I)
2013
1996
(II)
Reflectance
wavenumber, cm-1
WOx/TiO2 (anatase)
T=250°C
P(O2)=0.19 atm (static)
W/nm2
1013
(I)
1007
(II)
1012
(I)
1007
(II)
3.6
1004
(II)
1010
(I)
2.2
1.1
Normalized Raman Intensity
Raman Shift, cm-1

FIGURE S4


(A)
(B)
(C)
WOx/TiO2 (anatase)
T=175°C
flowing
20%O2/He
W/nm2
1014 (I)
1007 (II)
~950
1011 (I)
1002 (II)
~935
1009 (I)
1001 (II)
(III) ~985
3.6
2.2
1.1
Normalized Raman Intensity
Raman Shift, cm-1
2%O2/He
Reflectance
2002 (II)
(I) 2016
1970-1930
(III)
(I) 2014
1992 (II)
(I) 2013
1993 (II)
wavenumber, cm-1
P(O2)=0.19 atm (static)
1008 (II)
1012 (I)
1010 (I)
1004 (II)