

Electronic Supplementary Information (ESI)

Pr³⁺-Doped (K_{0.5}Na_{0.5})NbO₃ as High Response Optical Oxygen Sensing

Agent

Wei Tang,^{a,b} Ye Sun,^{*a} Shaochen Wang,^a Baosheng Du,^a Yongqi Yin,^a Xiao Liu,^a Bin Yang,^a Wenwu Cao,^{*a,c} and Miao Yu^{*b}

- ^a Condensed Matter Science and Technology Institute, School of Science, Harbin Institute of Technology, Harbin 150080, China
E-mail: sunye@hit.edu.cn
- ^b State Key Laboratory of Urban Water Resource and Environment, School of Chemical Engineering and Technology, Harbin Institute of Technology, Harbin 150001, China
E-mail: miaoyu_che@hit.edu.cn
- ^c Materials Research Institute, The Pennsylvania State University, University Park, Pennsylvania 16802, U.S.A.
E-mail: dzk@psu.edu

Table S1 Structural parameters of the as-grown and annealed KNN:Pr³⁺ samples at room temperature refined with *Pm* space group.

	As-grown	Annealed in O ₂	Annealed in Ar
<i>a</i> (Å)	7.9972(9)	7.9967(7)	7.985(6)
<i>b</i> (Å)	7.8794(6)	7.9967(7)	7.8674(3)
<i>c</i> (Å)	7.9449(7)	7.9446(2)	7.8963(8)
<i>V</i> (Å ³)	500.6	501.2	496.1

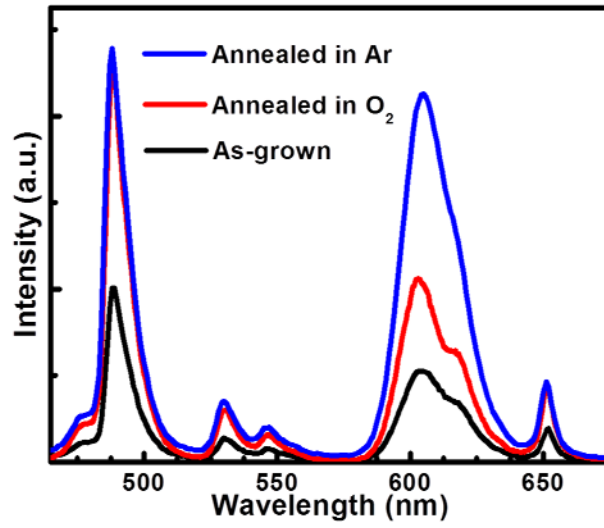


Fig. S1 PL spectra of the as-grown, O₂-annealed, and Ar-annealed KNN:Pr³⁺ samples under 325 nm excitation in air at room temperature.