

## Supplementary Information

### Zr modified SrNbO<sub>2</sub>N as active photocatalyst for water oxidation under visible light illumination

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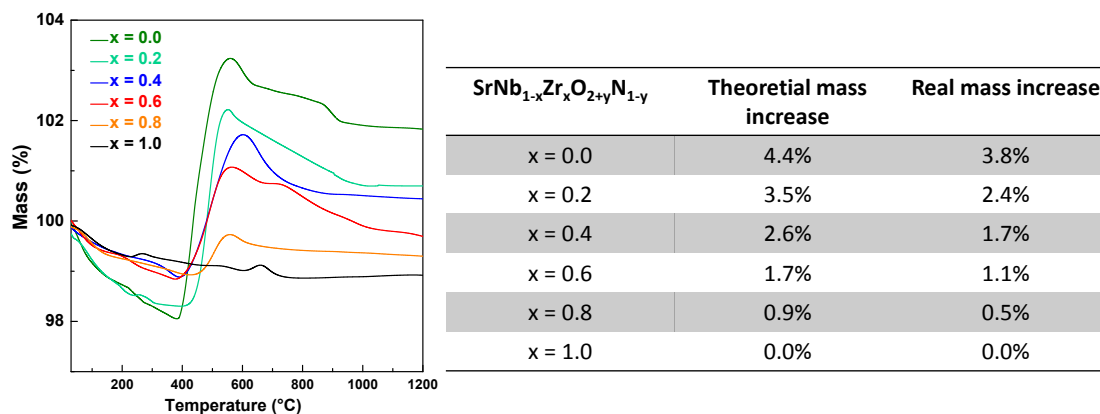


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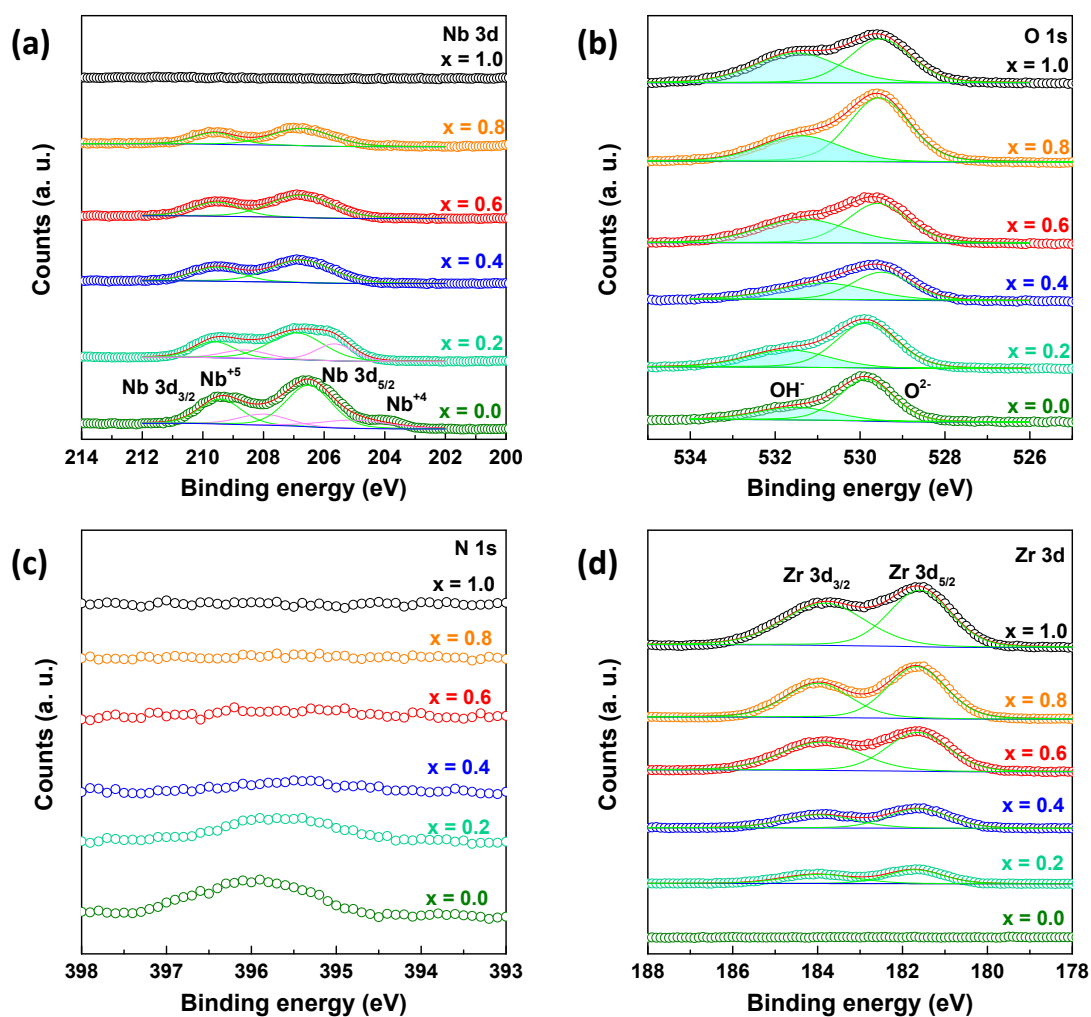


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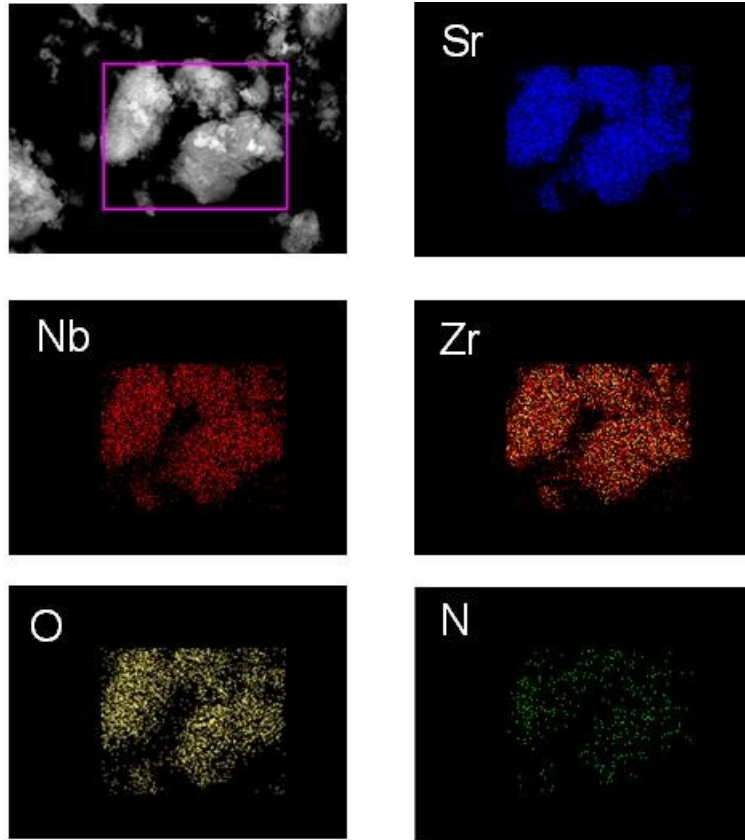


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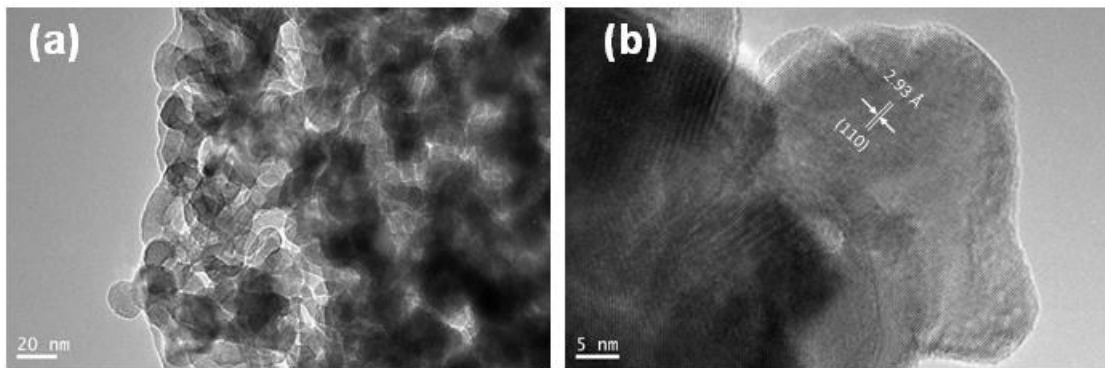


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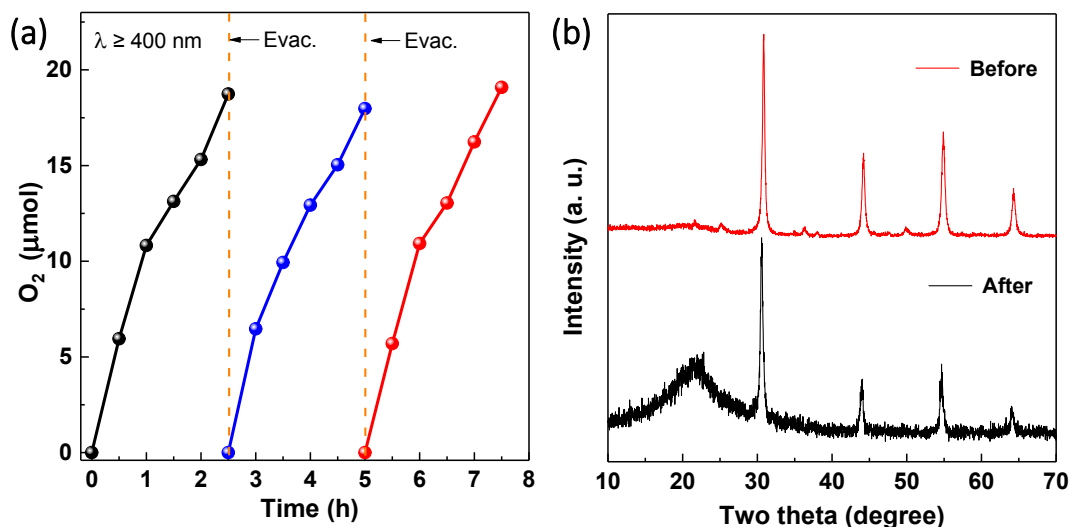


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Table S1. AQE of oxynitride photocatalysts for O<sub>2</sub> evolution from aqueous solutions

Photocatalyst	P.M	Co-catalyst	AQE (%) at 420 nm	Ref.
SrNb <sub>0.2</sub> Zr <sub>0.8</sub> O <sub>2+y</sub> N <sub>1-y</sub>	PC	1 wt% CoO <sub>x</sub>	1.44	This work
CaNbO <sub>2</sub> N	PC	-	1.1	1
LaTiO <sub>2</sub> N	PC	2 wt% IrO <sub>2</sub>	1.5	2
La <sub>0.3</sub> Ca <sub>0.7</sub> TiO <sub>2.7</sub> N <sub>0.3</sub>	Co-precipitation	1 wt% CoO <sub>x</sub>	3.13	3
SrMg <sub>0.2</sub> Nb <sub>0.8</sub> O <sub>2+y</sub> N <sub>1-y</sub>	PC	1 wt% CoO <sub>x</sub>	5.13	4
LaTa <sub>0.9</sub> Zr <sub>0.1</sub> O <sub>1+y</sub> N <sub>2-y</sub>	PC	2 wt% CoO <sub>x</sub>	0.93	5
BaTaO <sub>2</sub> N	Flux	2 wt% CoO <sub>x</sub>	0.24	6

P.M means preparation method. PC denotes polymerized complex method

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