

# Unveiling the Impact of Oxygen Vacancies in Engineered Bimetallic Oxides for Enhanced Oxygen Evolution Reaction: Insights from Experimental and Theoretical Approaches

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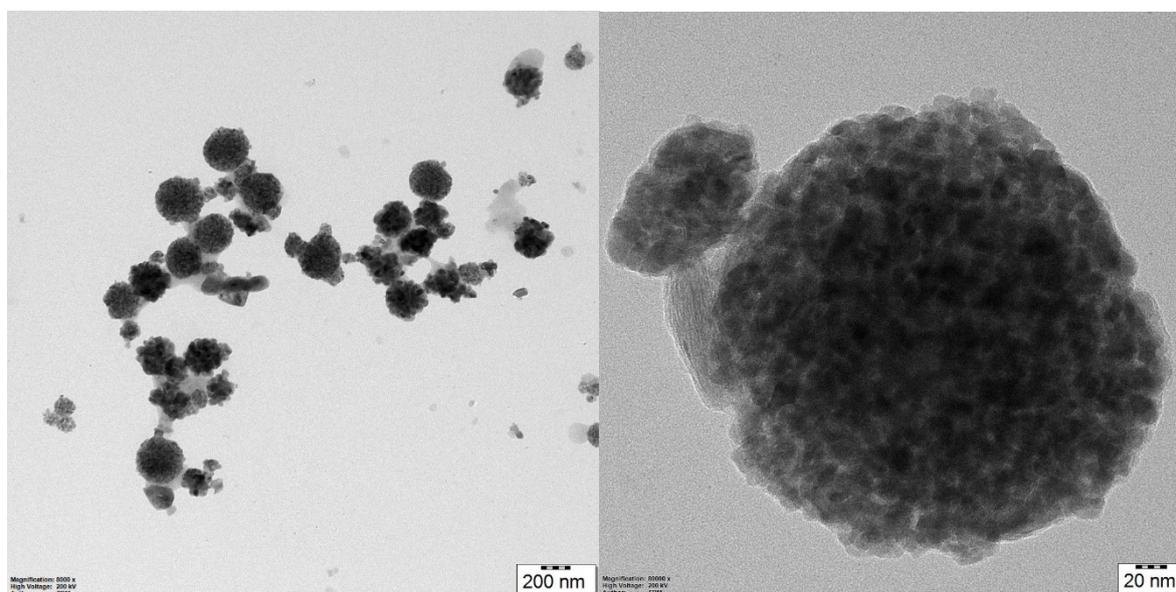
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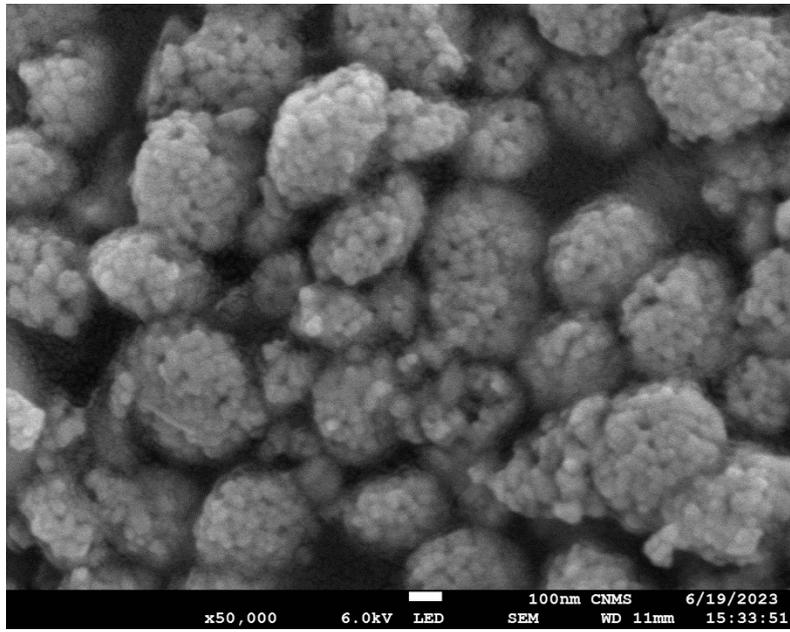
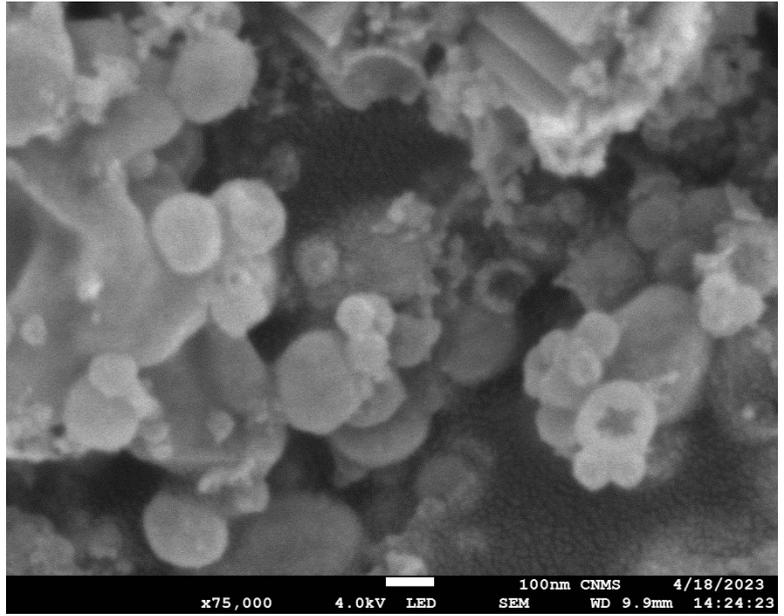
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## Supporting Information

### Data availability statements



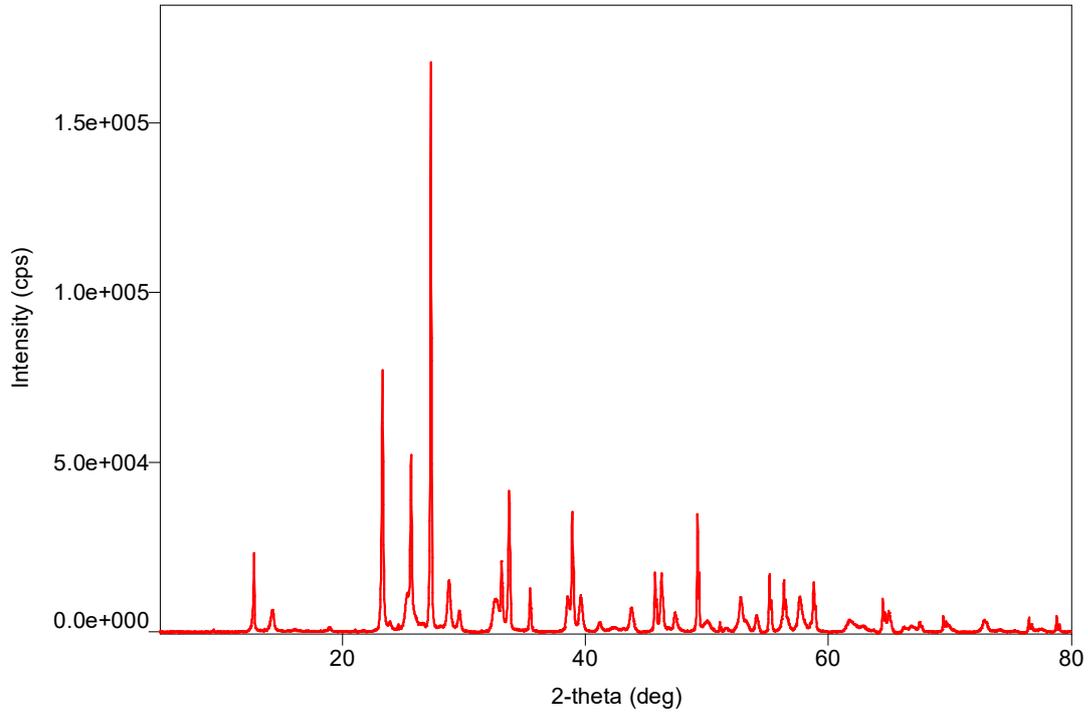


# Analysis Results

## General Information

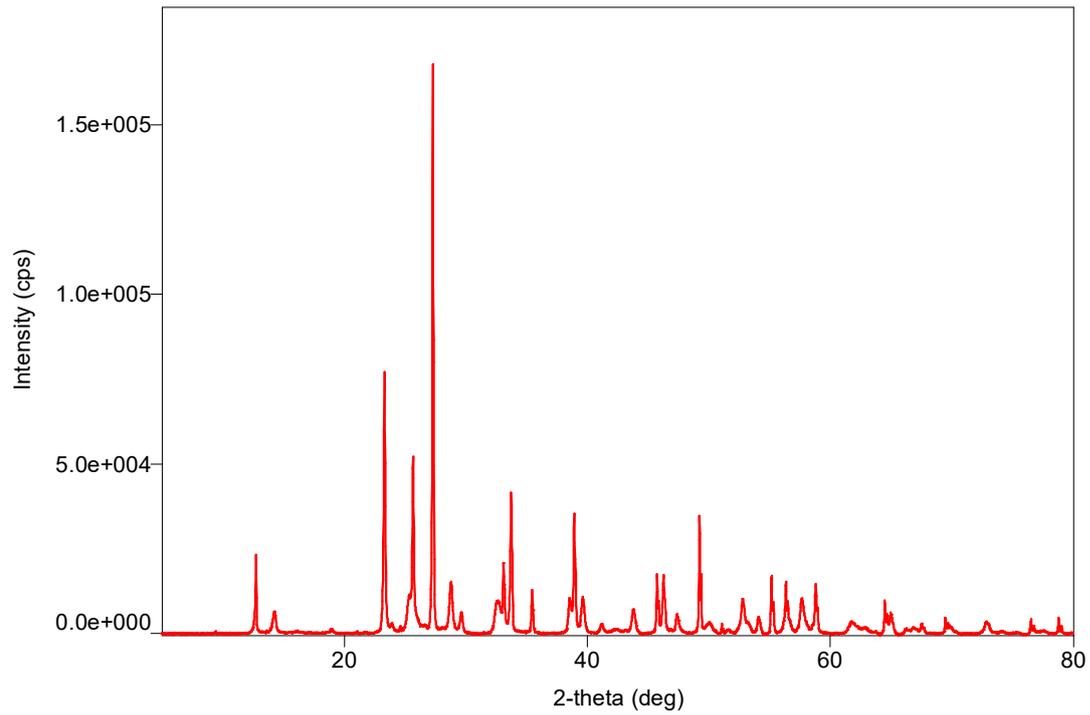
Analysis date	2023/08/23 11:25:28	Measurement date
Sample name	NMO-7c	Operator
File name	NMO-7c.raw	
Comment		

## Measurement profile



## Measurement conditions

X-Ray	40 kV , 30 mA	Scan speed / Duration time
Goniometer		Step width
Attachment	-	Scan axis
Filter	K-beta filter	Scan range
CBO selection slit	-	Incident slit
Diffrected beam mono.		Length limiting slit
Detector	D/teX Ultra	Receiving slit #1
Scan mode	CONTINUOUS	Receiving slit #2



## Peak list

No.	2-theta(deg)	d(ang.)	Height(cps)	FWHM(deg)	Int. I(cps deg)
1	12.7482(18)	6.9383(10)	17753(211)	0.082(3)	2482(21)
2	14.258(6)	6.207(3)	4447(105)	0.287(6)	1895(23)
3	16.04(4)	5.520(15)	373(31)	0.75(9)	587(29)
4	18.950(19)	4.679(5)	892(47)	0.27(2)	414(16)
5	23.324(3)	3.8107(5)	55703(373)	0.137(4)	10300(88)
6	23.920(14)	3.717(2)	1154(54)	0.23(4)	288(67)
7	25.686(5)	3.4654(7)	34470(294)	0.122(10)	6697(322)
8	25.90(5)	3.437(7)	3141(89)	0.88(10)	4414(401)
9	27.311(2)	3.2628(2)	136801(585)	0.087(2)	16270(189)
10	28.769(7)	3.1006(7)	10521(162)	0.275(6)	4121(44)
11	29.617(10)	3.0138(10)	4066(101)	0.220(10)	1169(29)
12	32.661(10)	2.7395(8)	6734(130)	0.443(16)	4131(109)
13	33.113(3)	2.7031(2)	14794(192)	0.134(6)	2737(74)
14	33.730(3)	2.6551(2)	33133(288)	0.123(4)	5658(68)
15	35.466(3)	2.52896(19)	11223(168)	0.092(3)	1643(23)
16	38.562(3)	2.33279(19)	7783(139)	0.174(8)	2068(51)
17	38.9436(16)	2.31078(9)	29439(271)	0.117(2)	5287(54)
18	39.622(7)	2.2728(4)	7501(137)	0.273(5)	2761(31)
19	41.158(10)	2.1914(5)	1702(65)	0.328(15)	600(21)
20	42.28(3)	2.1360(16)	644(40)	0.86(7)	592(39)
21	43.18(4)	2.0934(19)	391(31)	0.46(11)	192(49)
22	43.777(9)	2.0662(4)	4744(109)	0.317(7)	1620(58)
23	45.756(2)	1.98134(10)	15900(199)	0.087(2)	1878(28)
24	46.291(3)	1.95967(12)	13765(186)	0.151(4)	3225(34)
25	46.84(4)	1.9379(14)	300(27)	0.19(13)	89(20)
26	47.415(4)	1.91580(17)	4560(107)	0.193(9)	1362(30)
27	49.2459(10)	1.84877(4)	33010(287)	0.0779(10)	3497(29)
28	50.028(10)	1.8217(3)	2058(72)	0.62(2)	1723(39)
29	51.088(5)	1.78635(17)	2509(79)	0.075(5)	202(12)
30	51.589(19)	1.7702(6)	753(43)	0.23(3)	187(16)
31	52.761(7)	1.7336(2)	7226(134)	0.257(12)	2399(129)
32	53.161(19)	1.7215(6)	2178(74)	0.40(5)	1131(124)
33	54.086(7)	1.6942(2)	4028(100)	0.186(11)	966(25)
34	55.178(3)	1.66321(10)	16052(200)	0.107(3)	1977(48)
35	56.356(3)	1.63123(8)	12937(180)	0.103(5)	2279(78)
36	56.632(11)	1.6239(3)	2498(79)	0.22(3)	935(91)
37	57.665(9)	1.5973(2)	7505(137)	0.345(11)	3573(51)
38	58.61(3)	1.5737(7)	1856(68)	0.23(5)	582(153)
39	58.802(3)	1.56906(7)	12745(178)	0.115(5)	2016(131)
40	61.74(2)	1.5012(5)	2186(74)	0.64(8)	1499(249)
41	62.65(5)	1.4815(11)	983(50)	0.8(2)	886(227)
42	63.62(5)	1.4613(10)	209(23)	0.14(9)	31(19)
43	64.501(4)	1.44350(7)	8620(147)	0.124(3)	1135(40)
44	64.957(11)	1.4345(2)	4190(102)	0.297(19)	1326(41)
45	66.218(14)	1.4102(3)	1059(51)	0.20(3)	235(24)
46	66.87(3)	1.3980(6)	1007(50)	0.62(5)	688(39)
47	67.511(7)	1.38628(13)	2564(80)	0.159(8)	448(28)
48	69.485(3)	1.35164(6)	4638(108)	0.103(4)	685(19)
49	69.865(7)	1.34521(11)	1911(69)	0.193(13)	527(23)
50	70.236(15)	1.3390(3)	356(30)	0.13(4)	64(16)
51	72.826(14)	1.2976(2)	2689(82)	0.378(14)	1260(27)
52	73.59(2)	1.2860(3)	206(23)	0.11(5)	28(13)

53	74.047(19)	1.2792(3)	468(34)	0.31(5)	182(16)
54	76.533(5)	1.24376(7)	3593(95)	0.124(6)	548(21)
55	77.45(4)	1.2312(5)	470(34)	0.65(8)	377(28)
56	78.806(3)	1.21347(4)	4343(104)	0.102(4)	597(13)