

Catalyst	Preparation method	Reaction conditions	NO _x conversion	Resistance to H ₂ O and SO ₂							Refs.
				H ₂ O concentration	SO ₂ concentration	T / °C	NO _x Conversion	NO _x conversion	NO _x conversion		
				/ %	/ 10 ⁻⁶		(Start) / %	(End) / %	(Return) / %		
	co-precipitation		> 95% (150-200 °C)	5	50	150-200	95		60-80		
Mn/CeO _x	surfactant template	5 × 10 ⁻⁴ NO, 5 × 10 ⁻⁴ NH ₃ , 5% O ₂ , GHSV=64000 h ⁻¹	> 92% (150-200 °C)	5	50	150-200	98		92	[16]	
				5	100				89	98	
Mn/FeO _x	citric acid	5 × 10 ⁻⁴ NO, 5 × 10 ⁻⁴ NH ₃ , 5% O ₂ , GHSV=35000 h ⁻¹	> 90% (120-180 °C)	0	100	160	98	7	60	70	[17]
				5	0				87	93	
				2	0		100	10	100	100	
Mn/SmO _x	co-precipitation	5 × 10 ⁻⁴ NO, 5 × 10 ⁻⁴ NH ₃ , 5% O ₂ , GHSV=90000 h ⁻¹	> 90% (50-200 °C)	2	100	100	100	15	91	97	[18]
				0	100		100	10	96	99	
				0	100		97.6		97.6		
Fe-Ce/TiO _x	impregnation	1 × 10 ⁻³ NO, 1 × 10 ⁻³ NH ₃ , 3% O ₂ , GHSV=10000 h ⁻¹	> 95% (250 °C)	0	500	250	97.6	100	92		[19]

			0	1000		97.6		90	
Ce/ZrO _x	hydrothermal								
Ti-Ce/ZrO _x	hydrolysis	5 × 10 ⁻⁴ NO, 5 × 10 ⁻⁴ NH ₃ , 5% O ₂ , GHSV=60000 h ⁻¹				40		30	35
									[20]
Mn-Ce/ZrO _x	impregnation		5	100	200	75	8	53	70
Mn-Ti-Ce/ZrO _x						95		70	85

Preparation of low-temperature catalysts doped with different metals, and comparison of their NO_x conversion and H₂O/SO₂ resistances