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Nanostructured equimolar ceria-praseodymia for NO_x-assisted soot oxidation: insight into Pr dominance over Pt nanoparticles and metal–support interaction

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Highlights

- Silane-stabilized Pt nanoparticles were deposited on ceria and ceria-praseodymia
- NO₂ adsorption on equimolar ceria-praseodymia was observed during the reaction
- Equimolar ceria-praseodymia had comparable activity with Pt-ceria in NO oxidation
- Equimolar ceria-praseodymia outperformed Pt-ceria in NO_x-assisted soot oxidation
- Peculiar metal–support interaction was observed for Pt–ceria-praseodymia

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