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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

Tahrizi Andana[a,b], Marco Piumetti[a], Samir Bensaid*[,a], Laurent Veyre[b], Chloé Thieuleux[b], Nunzio Russo[a], Debora Fino[a], Elsje Alessandra Quadrelli[b], Raffaele Pirone[a]

[a]Department of Applied Science and Technology, Politecnico di Torino, Corso Duca degli Abruzzi 24, 10129, Turin, Italy

[b]Université de Lyon 1, ICL, C2P2 UMR 5265, CPE Lyon, 43 Bd du 11 Novembre 1918, F-69616 Villeurbanne, France

* To whom correspondence should be addressed.

Tel.: +39-011-0904710;

Fax: +39-011-0904699;

E-mail address: samir.bensaid@polito.it

Highlights

- Silane-stabilized Pt nanoparticles were deposited on ceria and ceria-praseodymia
- NO_2 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