

Table S1. Comparison of TOFs for CO oxidation over AZM, AZM-G, AZP and literature data.

Reaction system	Particle Size (nm)	Au loading (wt%)	TOF/s ⁻¹	Reference
AZM	3.3	0.37	4.73	This work
AZM-G	3.3	0.37	1.62	This work
AZP	3.9	2.61	2.06	This work
Au/TiO ₂	3.7	1.4	2.8	(1)
Au/ α -Fe ₂ O ₃	3.1	1.1	2.3	(2)
Au/CeO ₂	2.2	2.24	1.4	(2)
Au/TiO ₂	2.4	1.77	2.0	(2)
Au/CeO ₂	1.3	3	0.36	(3)
Au/Mn ₂ O ₃	2.2	2.9	0.55	(4)
Au/Fe ₂ O ₃	3.6	0.66	0.086	(5)
Au/Co ₃ O ₄	~2	1.2	0.48	(5)
Au/TiO ₂	3	3.3	0.32	(5)

References

1. Elodie Quinet, Laurent Piccolo, Franck Morfin, Priscilla Avenier, Fabrice Diehl, Valérie Caps, Jean-Luc Rousset. *J. Catal.*, 2009, 268, 384.
2. Markus M. Schubert, Wojtech Plzak, Jürgen Garche, R. Jürgen Behm. *Catal. Lett.*, 2001, 76, 143.
3. Titilayo Shodiya, Oliver Schmidt, Wen Peng, Nico Hotz. *J. Catal.*, 2013, 300, 63.
4. Lu-Cun Wang, Qian Liu, Xin-Song Huang, Yong-Mei Liu, Yong Cao, Kang-Nian Fan. *Appl. Catal. B: Environ.*, 2009, 88, 204.
5. **M. Haruta, S. Tsubota, T. Kobayoshi, H. Kageyama, M. J. Genet, B. Delmon.** *J. Catal.*, 1993, 144, 175.