

Supplementary Material

Facile Synthesis and Characterization of Molybdenum Carbides/Carbon Nanocomposites by Laser Pyrolysis

Théo Caroff ^{1,2,3}, Pitalinani Badaki ^{3,4}, Nathalie Herbert ⁴, Franck Tessier ⁴, David Berthebaud ^{1,2}, Naoki Ohashi ^{1,2}, Tetsuo Uchikoshi ^{1,2}, Pierre Lonchambon ³, Nathalie Herlin-Boime ^{3,*} and Fabien Grasset ^{1,4,*}

¹ CNRS-Saint-Gobain-NIMS, IRL 3629, Laboratory for Innovative Key Materials and Structures (LINK), NIMS, Tsukuba 305-0044, Japan

² Research Center for Functional Materials, National Institute for Materials Science (NIMS), Tsukuba 305-0044, Japan

³ CEA, IRAMIS UMR NIMBE, Université Paris Saclay, F-91191 Gif-Sur-Yvette, France

⁴ Univ Rennes, CNRS, ISCR (Institut des Sciences Chimiques de Rennes)–UMR6226, F-35000 Rennes, France

* Correspondence: nathalie.herlin@cea.fr (N.H.-B.); fabien.grasset@univ-rennes1.fr (F.G.)

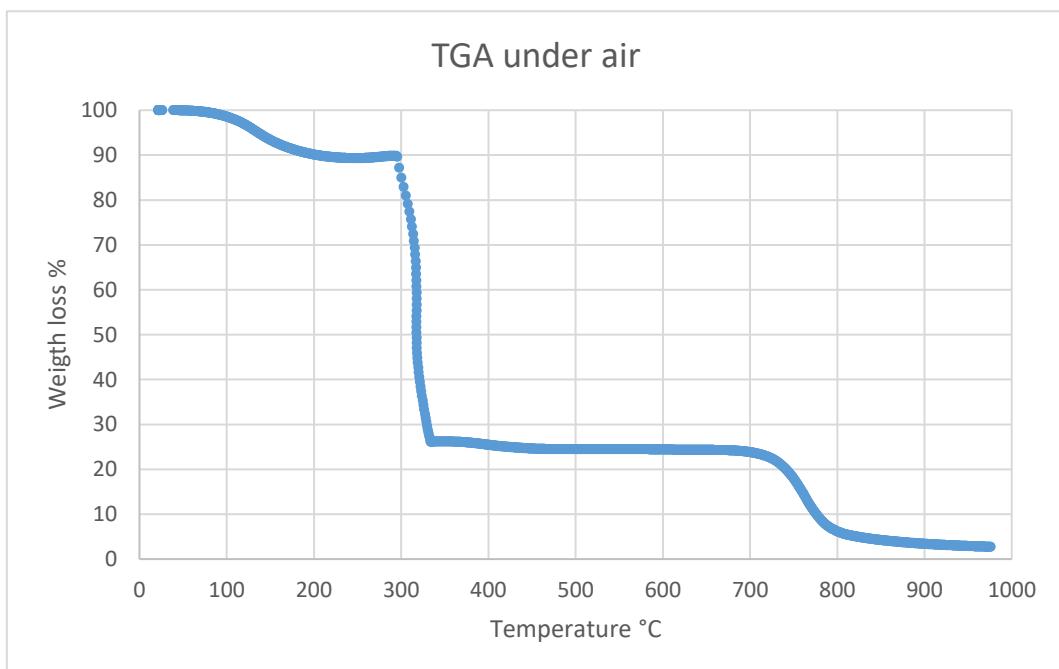


Figure S1. TGA of MOC9 under air.

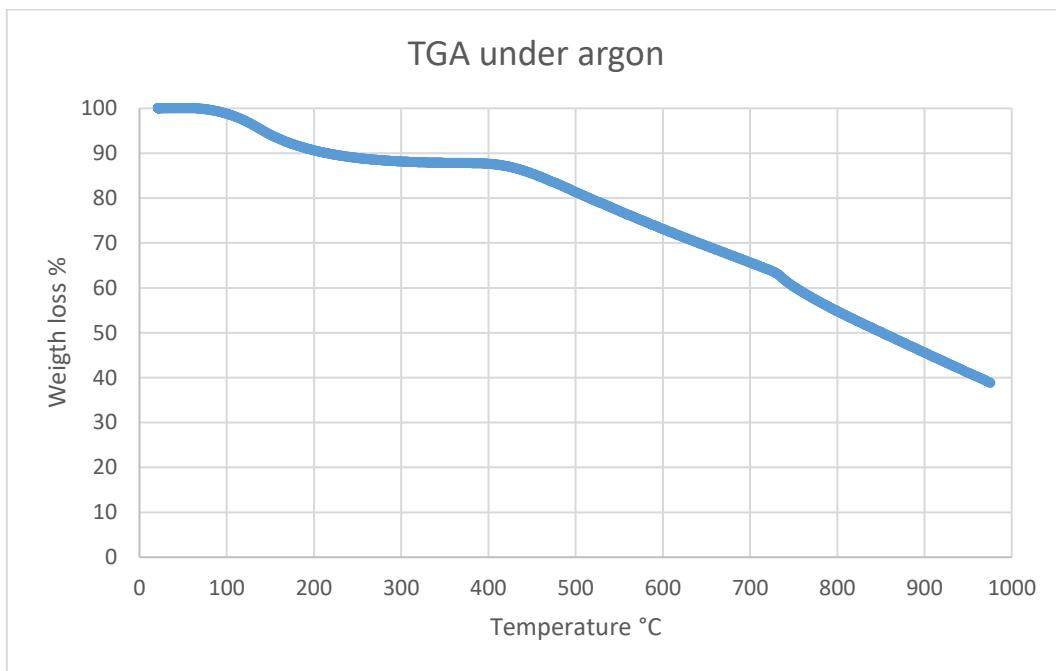


Figure S2. TGA of MOC9 under air.

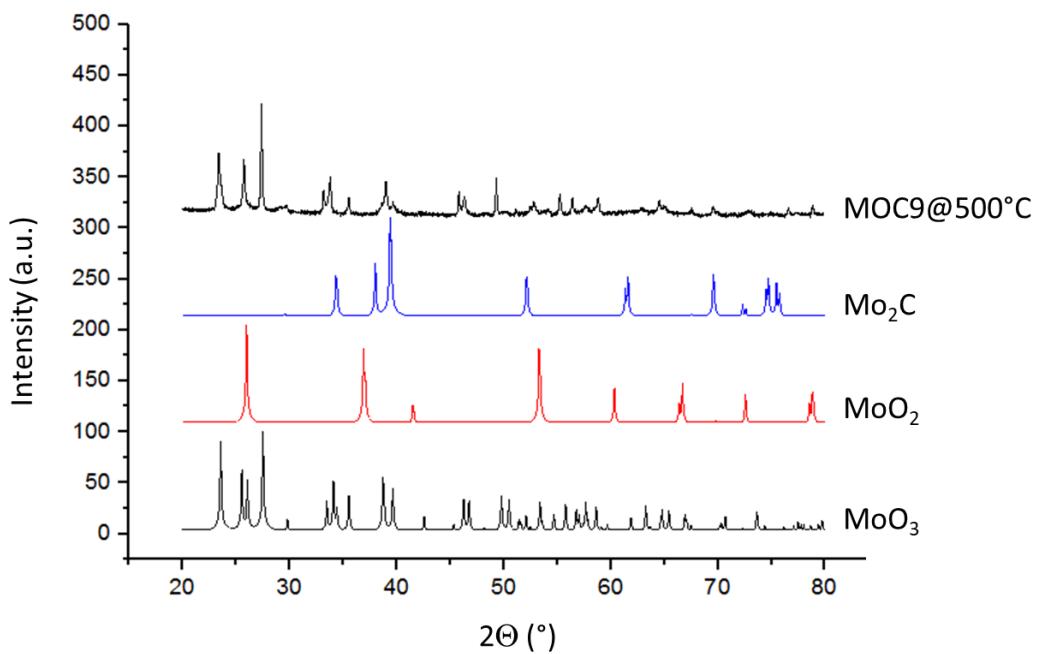


Figure S3. XRD patterns of MOC9@500 °C under air.

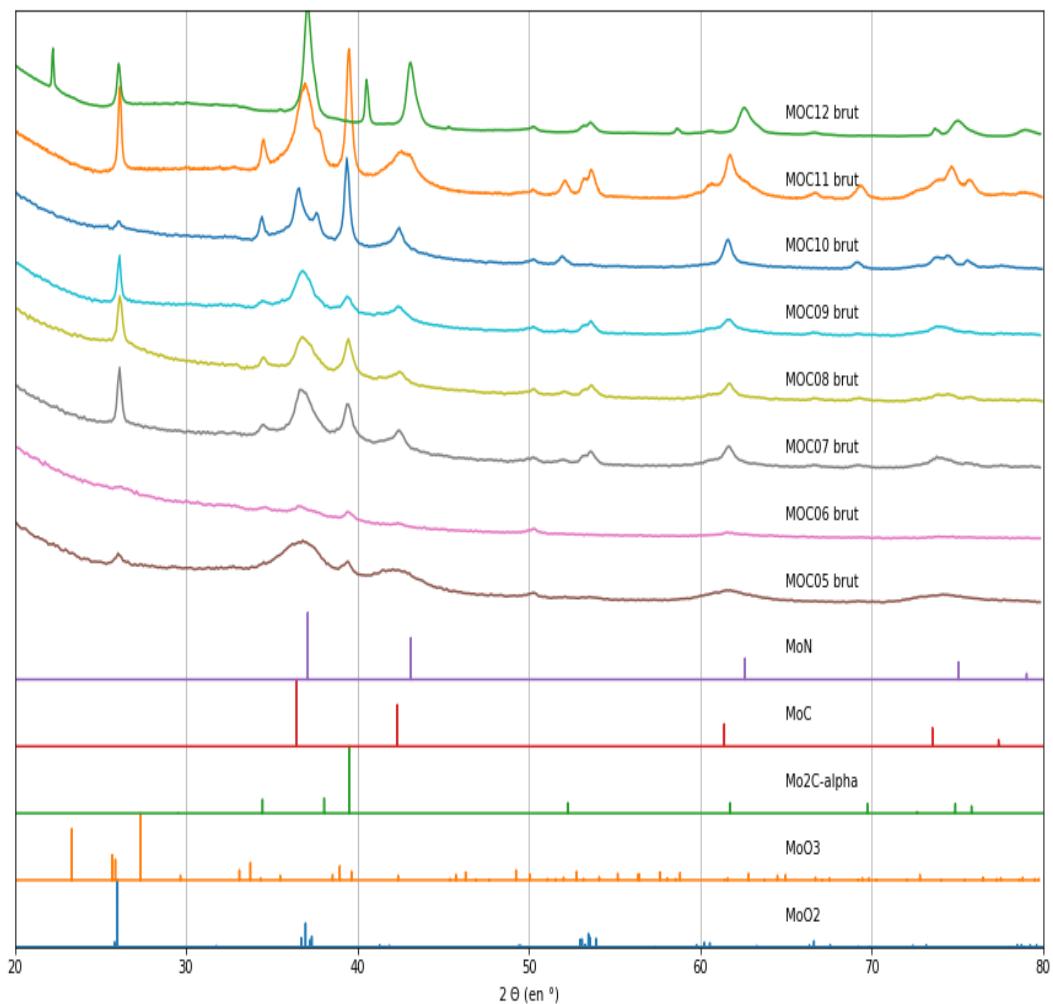


Figure S4. Powder-XRD patterns of MOCX ($5 < X < 12$) obtained on sample without any treatment. The references plotted in the figure are obtained from the Eva data source software available on the DRX apparatus.

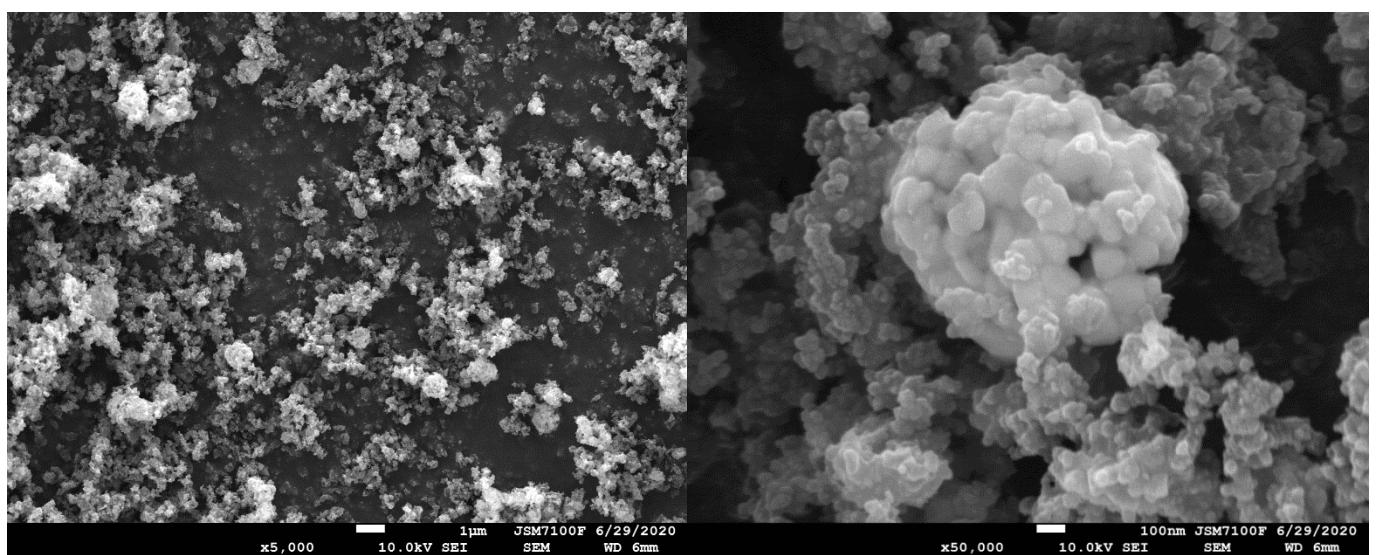


Figure S5. SEM image of MOC10 after annealing at 500 °C under argon.

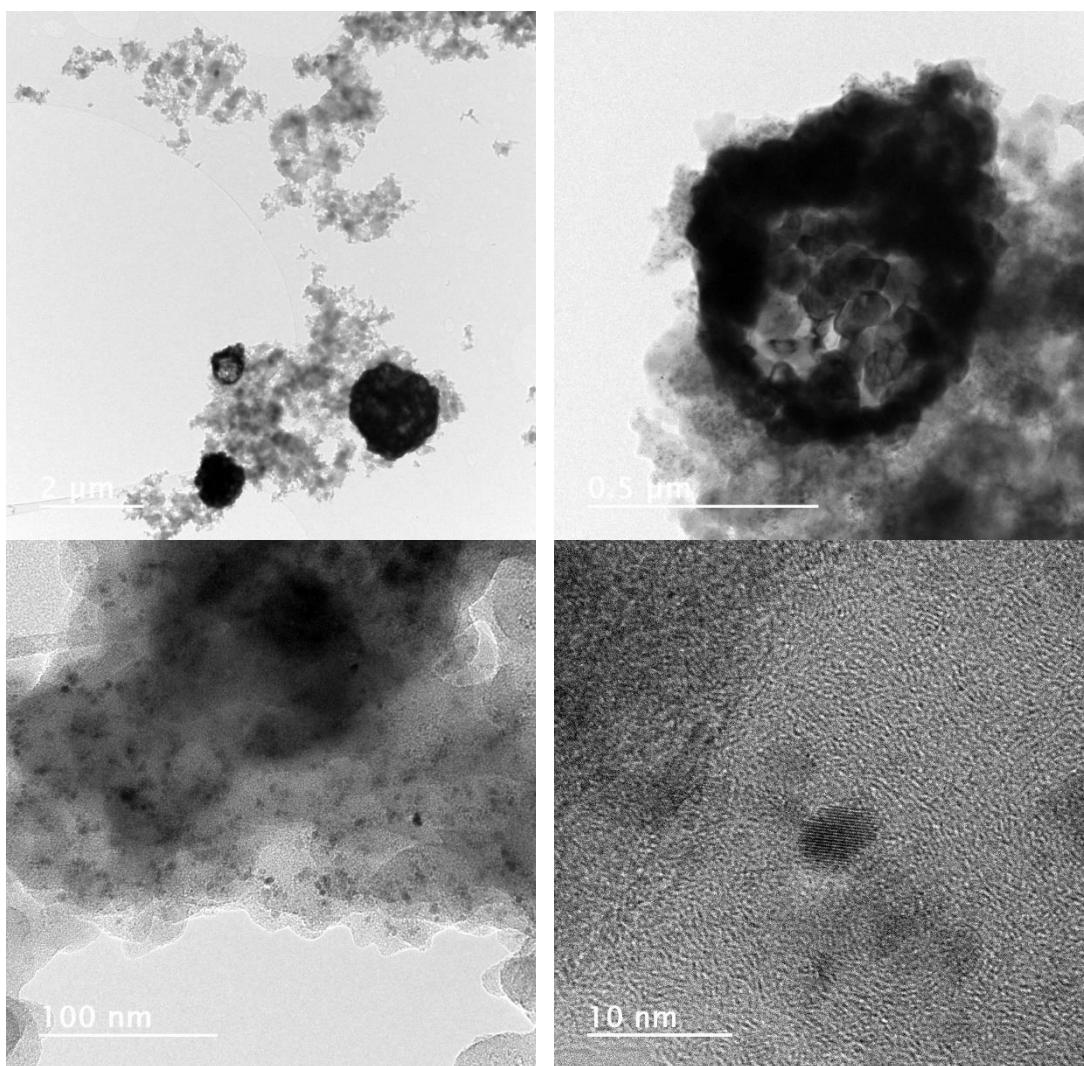


Figure S6. HRTEM image of MOC10 after annealing at 500 °C under argon.