Electronic Supplementary Material (ESI) for Catalysis Science & Technology.

High-throughput reactor system for optimization of Mo-V-Nb mixed oxide catalysts composition in ethane ODH

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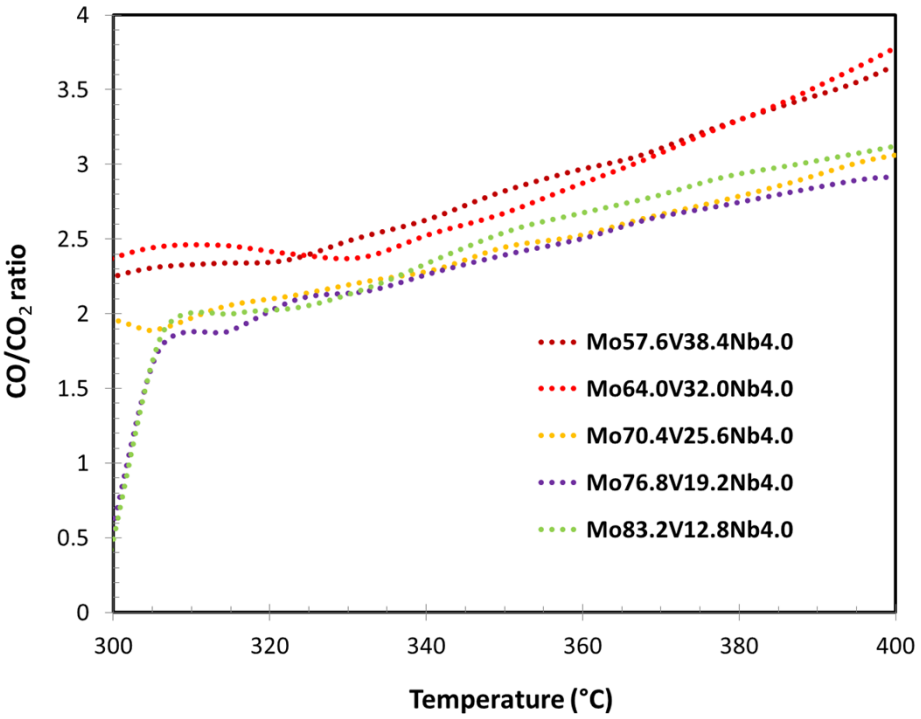

Fig. S1 CO/CO_2 ratio in ethane ODH over typical Mo-V-Nb oxide catalysts with 4% Nb loading.

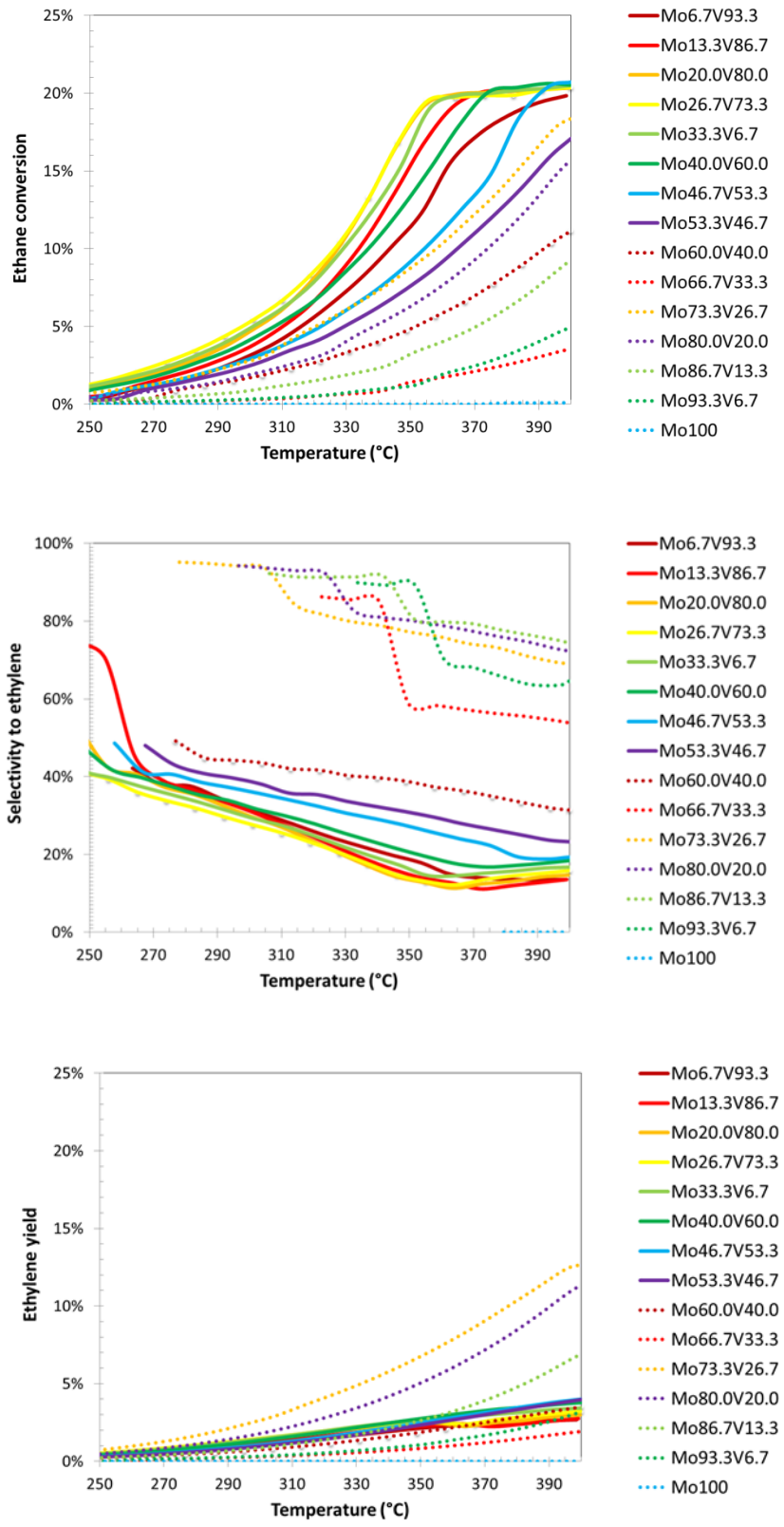

Fig. S2 Ethane conversion, ethylene selectivity and ethylene yield in ethane ODH over Mo-V oxide catalysts without Nb.

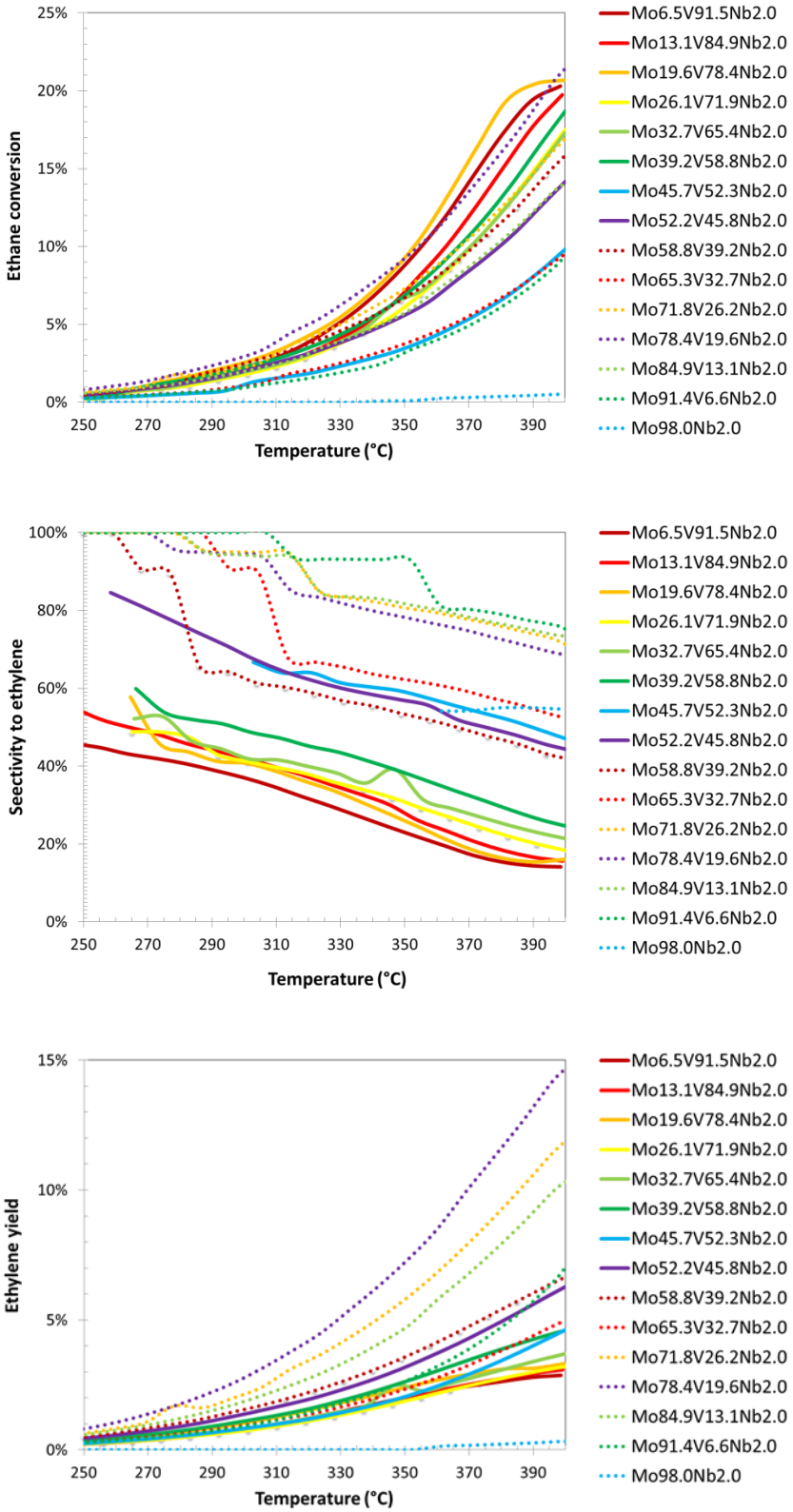

Fig. S3 Ethane conversion, ethylene selectivity and ethylene yield in ethane ODH over Mo-V-Nb oxide catalysts with 2% Nb.

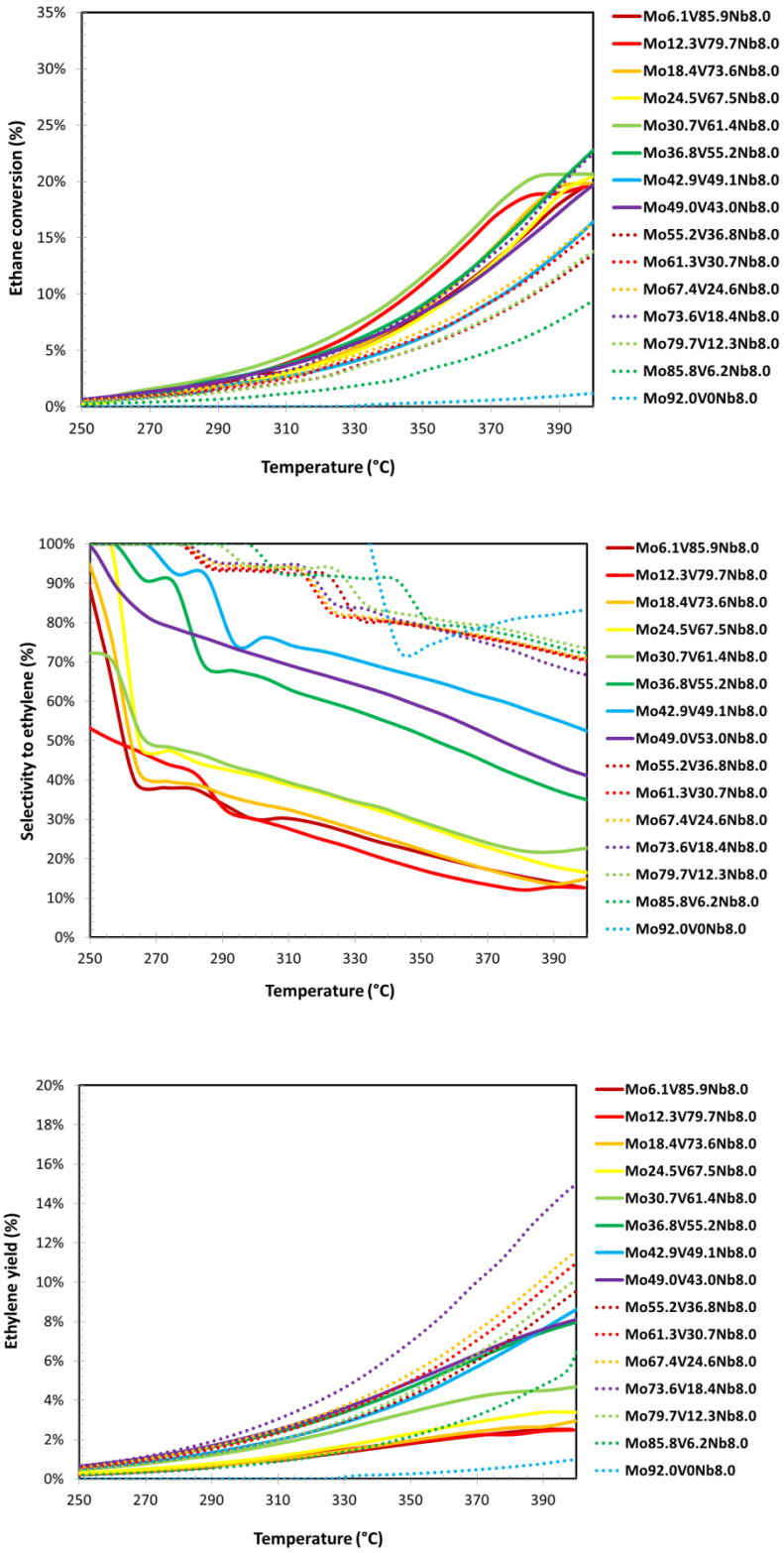

Fig. S4 Ethane conversion, ethylene selectivity and ethylene yield in ethane ODH over Mo-V-Nb oxide catalysts with 8% Nb.

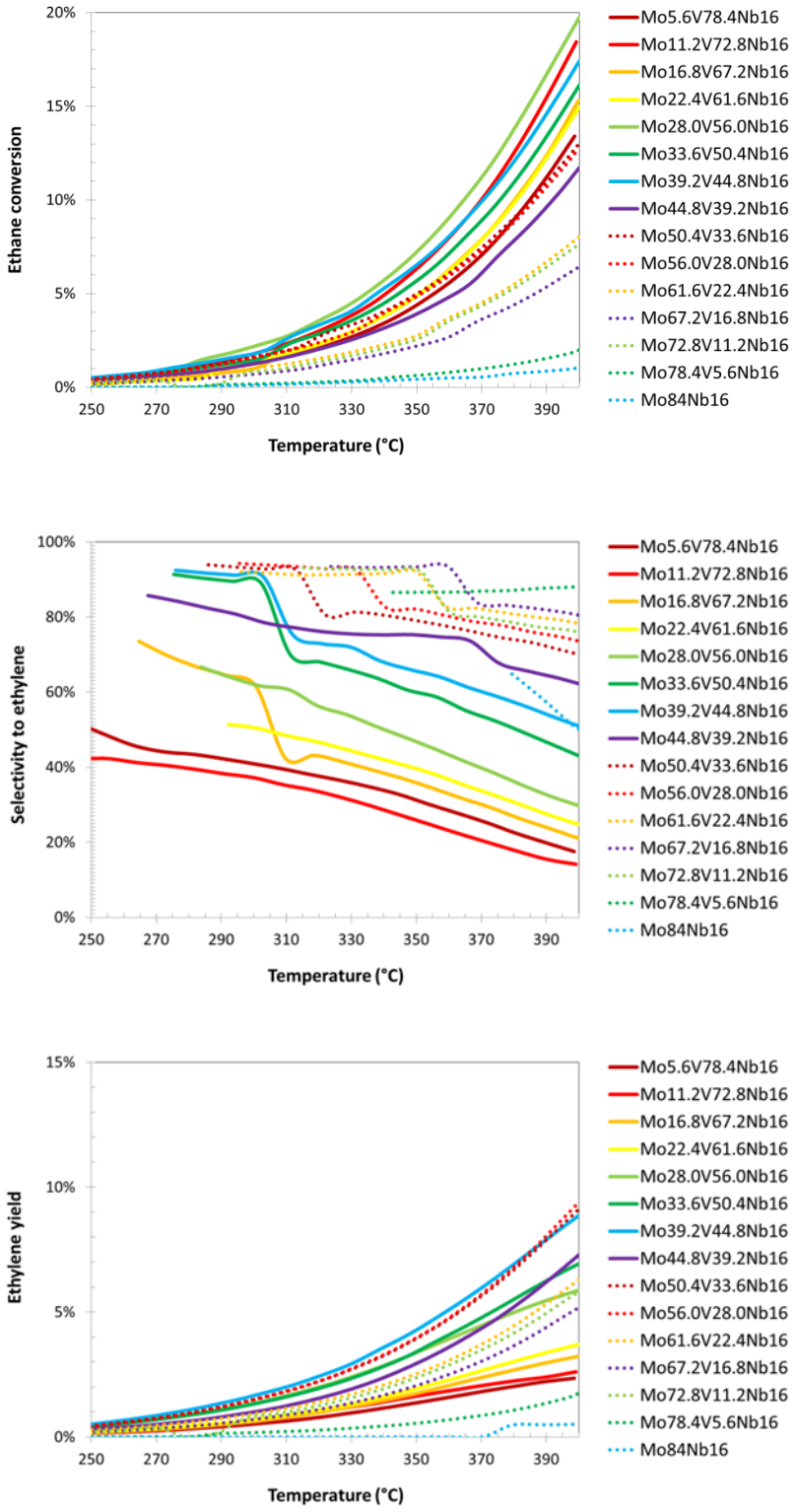

Fig. S5 Ethane conversion, ethylene selectivity and ethylene yield in ethane ODH over Mo-V-Nb oxide catalysts with 16% Nb.

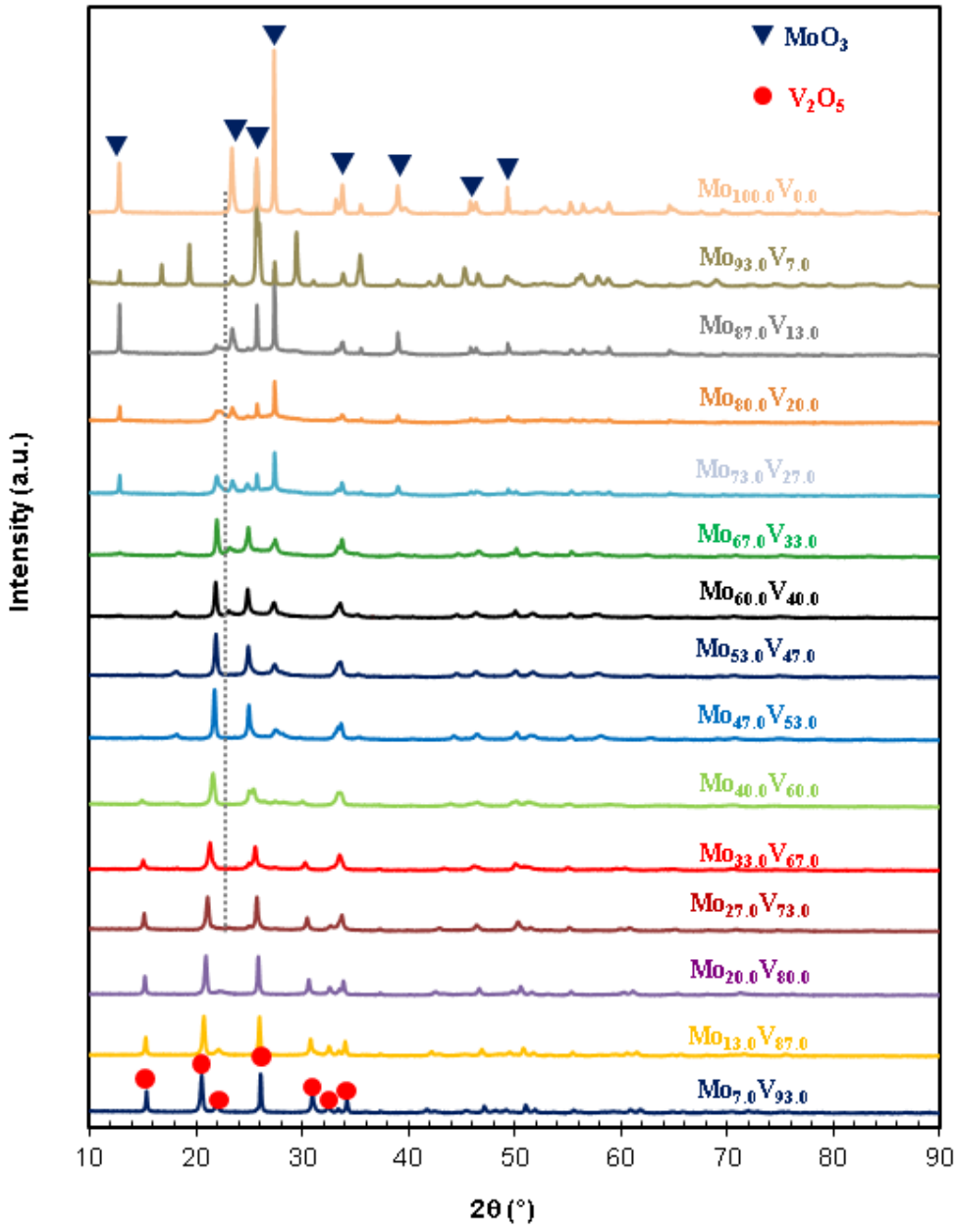

Fig. S6 XRD pattern of Mo-V mixed oxide samples without Nb.

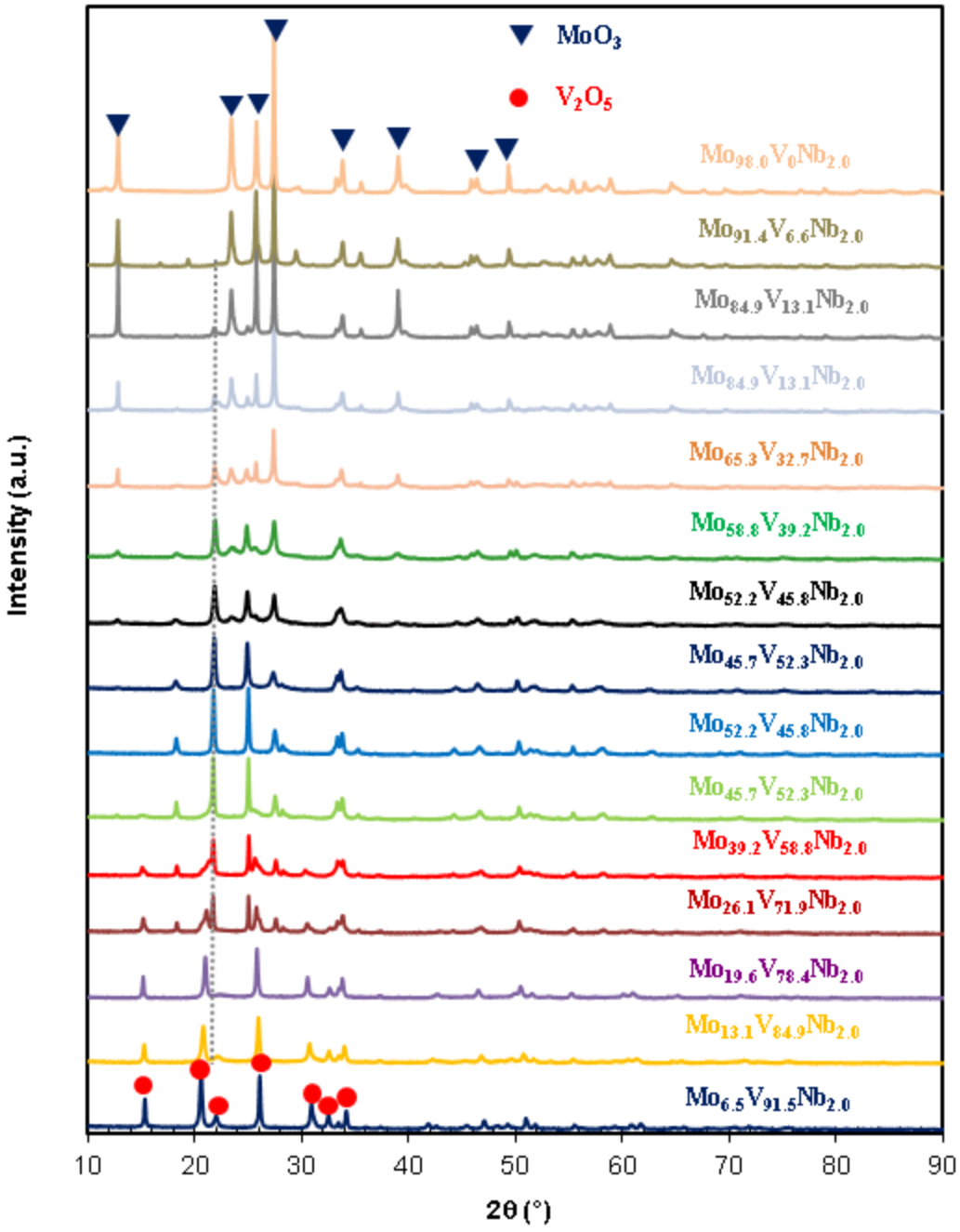

Fig. S7 XRD pattern of Mo-V-Nb mixed oxide samples with 2% of Nb loading.

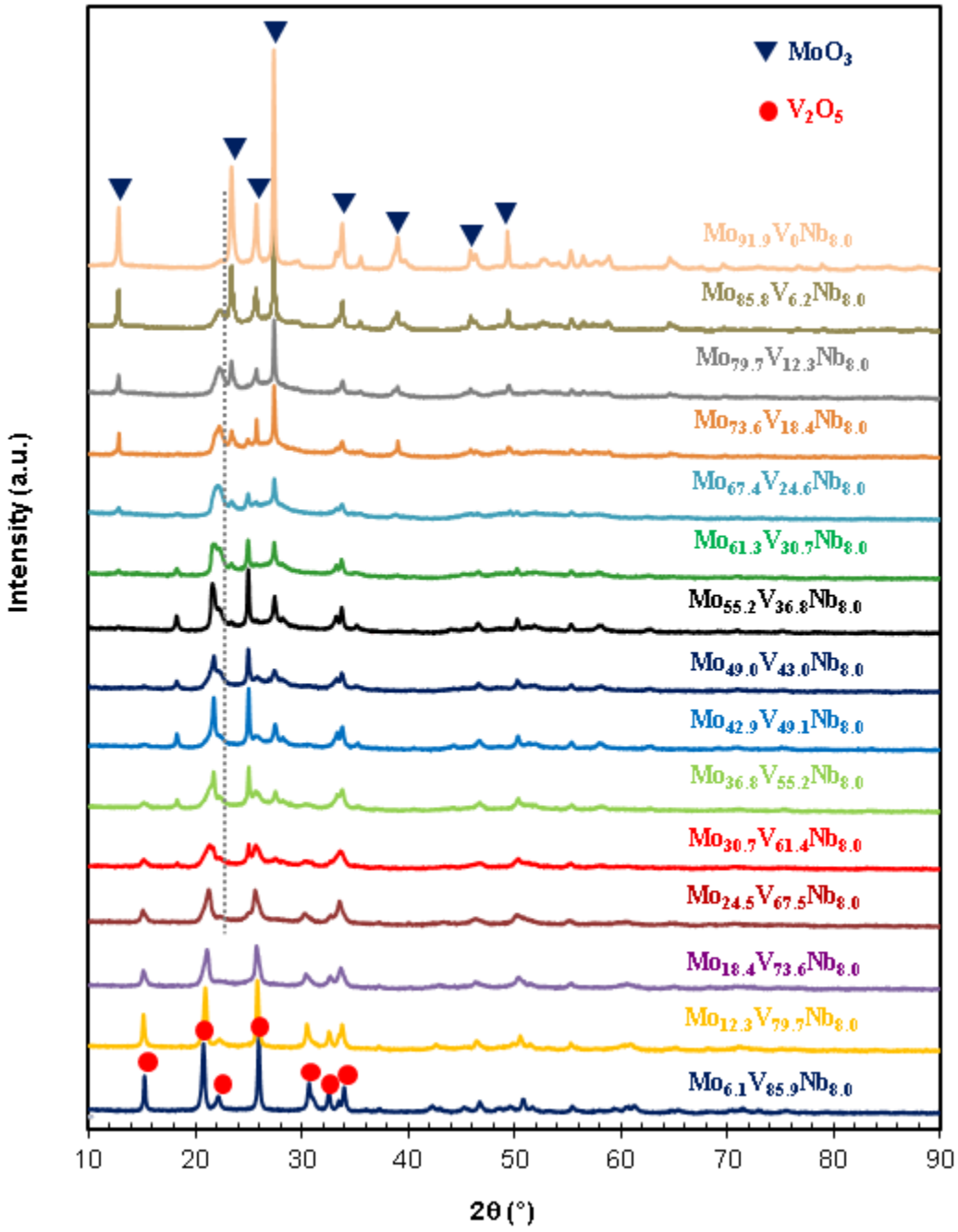

Fig. S8 XRD pattern of Mo-V-Nb mixed oxide samples with 8% of Nb loading.

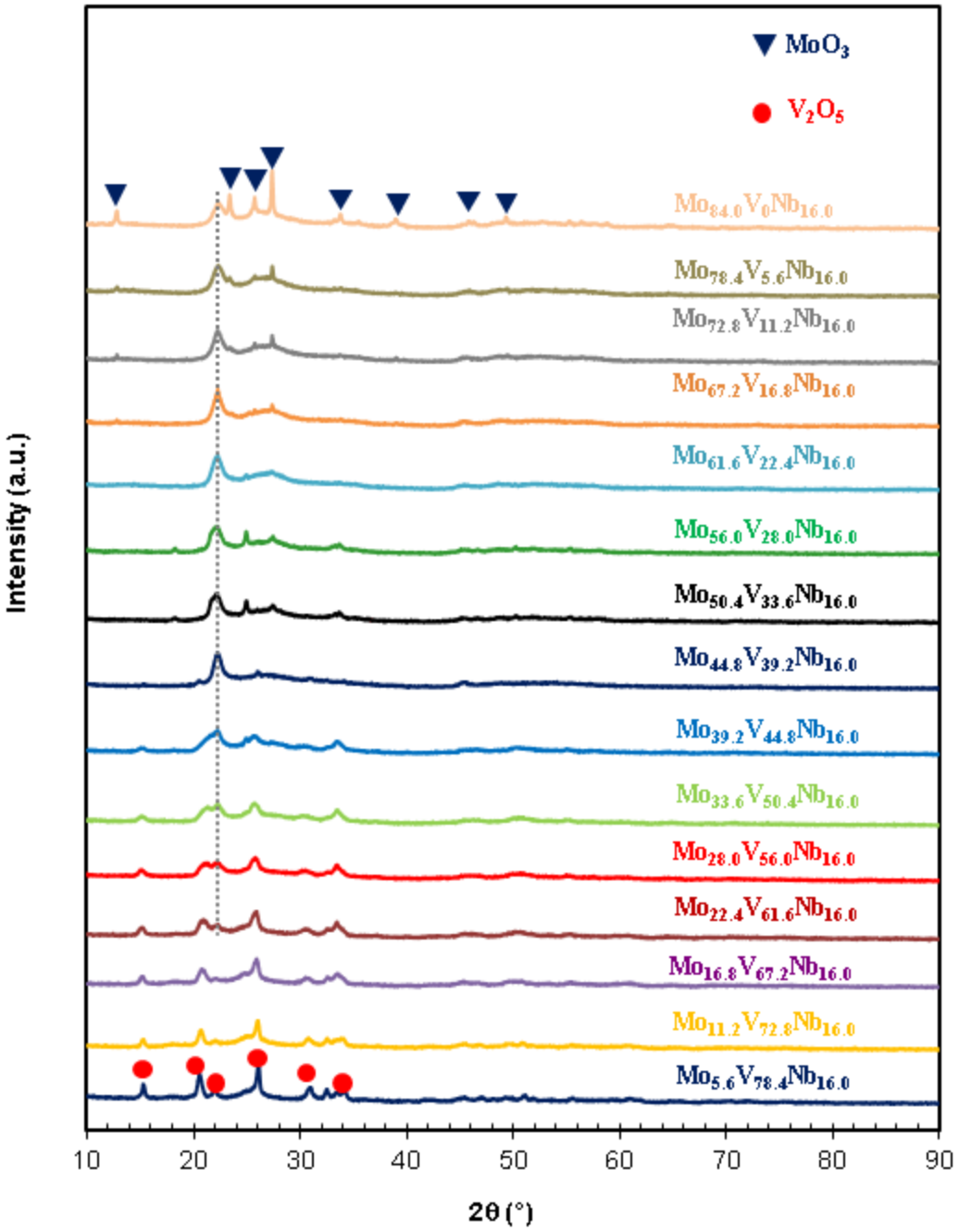

Fig. S9 XRD pattern of Mo-V-Nb mixed oxide samples with 16% of Nb loading.