

Exp3_ontology_test

Date: 2024-08-02
Status: Success
Created by: Manuel Vollbrecht

Title:

Date of experiment:	01.08.2024
Experimenter:	Keno Krieger
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Goal of Experiment:	

Flame 1 (front) - precursors										
Sample ID	Element	Precursor (Metal)	Precursor provider (metal)	Precursor LOT number (metal)	Precursor (solvent)	Precursor provider (solvent)	Precursor LOT number (solvent)	used volume of precursor solution [ml]	precursor molarity [M]	notes:

exp3	Y	Y butoxide	Sigma Aldrich	ASDFGH	toluene			50	0.5	
	Ta	Ta ethoxide	Strem	QWERTZ	xylene	VWR	LLLLLLL	50	0.5	

Flame 1 (front) - gas and dispersion parameters													
Sample ID	precursor feed rate [ml/min]	dispersion gas (type)	dispersion gas purity	dispersion gas flow rate [l/min]	fuel gas (type)	fuel gas purity	fuel gas flow rate [l/min]	O ₂ gas purity (pilot flame)	O ₂ flow rate [l/min] (pilot flame)	sheath gas (type)	sheath gas purity	sheath gas flow rate [l/min]	notes:
exp3	5	oxygen	5.0	5	methane	3.5	1.5	5.0	3.2				

Flame 1 (front) - reactor set-up						
Sample ID	Nozzle type (e.g. Tethis)	nozzle-filter distance [cm]	nozzle angle [°]	pressure drop at nozzle [bar]	final pressure drop [mbar]	notes:
exp3	Tethis	60	0	1.5	225	

Flame 2 (back) - precursors

Sample ID	Element	Precursor (Metal)	Precursor or provider (metal)	Precursor LOT number (metal)	Precursor (solvent)	Precursor provider (solvent)	Precursor LOT number (solvent)	mass of metal precursor [g]	total volume of precursor solution [ml]	precursor molarity [M]	notes:

Flame 2 (back) - gas and dispersion parameters

Sample ID	precursor feed rate [ml/min]	dispersion gas (type)	dispersion gas purity	dispersion gas flow rate [l/min]	fuel gas (type)	fuel gas purity	fuel gas flow rate [l/min]	O ₂ gas purity (pilot flame)	O ₂ flow rate [l/min] (pilot flame)	sheath gas (type)	sheath gas purity	sheath gas flow rate [l/min]	notes:

Flame 2 (Back) - reactor set-up

Sample ID	nozzle type (e.g. Tethis)	nozzle-filter distance [cm]	horizontal nozzle distance [cm]	nozzle angle [°]	pressure drop at nozzle [bar]	final pressure drop [mbar]	notes:

Results				
Sample ID	empty filter [g]	covered filter [g]	sieving grid [μm]	Product after sieving [mg]
exp3	4.91	5.87	125	743

Notes/observations:



Unique eLabID: 20240802-ce5f26899e08213e11cde5a18e1f70e0b3451166
Link: <https://elabftw.iwt.zz/experiments.php?mode=view&id=2441>