**Layer Deposition**

**Wet Chemical Deposition**

1. **Spin Coating**  
   Input: Sample/Substrate, Reaction Solution, Atmosphere, Spin coating recipe, Anti solvent,   
   Settings: Speed (rpm), acceleration (rpm/s) and duration (s) on spin coater, anti solvent dropping time (s), solution volume (ml), anti solution volume (ml)  
   Process information:   
   Output: Layer with functional role
2. **Slot die coating**

Input: Sample/Substrate, Reaction Solution, Atmosphere,

Settings: pre pump, speed (mm/s), gap (mm), coating pump rate (ml/minute), length of die head (mm), temerature (°C), air knife pressure (mbar)

Process information:

Output: Layer with functional role

1. **Drop casting**

Input: Sample/Substrate, Reaction Solution, Atmosphere,

Settings: Temperature (°C), Time on hotplate (s)

Process information:

Output: Layer with functional role

1. **Dip coating**  
   Input: Sample/Substrate, Reaction Solution, Atmosphere,

Settings:

Process information:

Output: Layer with functional role

1. **Doctor blading**  
   Input: Sample/Substrate, Reaction Solution, Atmosphere,

Settings:

Process information:

Output: Layer with functional role

1. **Aerosol printing**  
   Input: Sample/Substrate, Reaction Solution, Atmosphere,

Settings:

Process information:

Output: Layer with functional role

1. **Spray pyrolysis**  
   Input: Sample/Substrate, Reaction Solution, Atmosphere,

Settings: volume (ml), temperature (°C)

Process information:

Output: Layer with functional role

1. **Spray coating**  
   Input: Sample/Substrate, Reaction Solution, Atmosphere,

Settings:

Process information:

Output: Layer with functional role

1. **Sol-gel deposition**  
   Input: Sample/Substrate, Reaction Solution, Atmosphere,

Settings:

Process information:

Output: Layer with functional role

1. **Dip coating**  
   Input: Sample/Substrate, Reaction Solution, Atmosphere,

Settings:

Process information:

Output: Layer with functional role

1. **Chemical bath deposition**  
   Input: Sample/Substrate, Reaction Solution, Atmosphere,

Settings:

Process information:

Output: Layer with functional role

1. **Chemical solution deposition**  
   Input: Sample/Substrate, Reaction Solution, Atmosphere,

Settings:

Process information:

Output: Layer with functional role

1. **Electrophoretic deposition**  
   Input: Sample/Substrate, Reaction Solution, Atmosphere,

Settings:

Process information:

Output: Layer with functional role

1. **Gravure printing**  
   Input: Sample/Substrate, Reaction Solution, Atmosphere,

Settings:

Process information:

Output: Layer with functional role

1. **Ink jet printing**  
   Input: Sample/Substrate, Reaction Solution, Atmosphere, active nozzle, print head

Settings: print\_speed (mm/s), quality\_factor, pring\_angle (deg), resolution\_x, resolution\_y, directional, print\_head\_temperature (°C), substrate\_temperature (°C), pressure\_setpoint (mbar), voltage\_a/b (V), rise\_edge\_a/b (us), peak\_time\_a/b (us), fall\_edge\_a/b (us), print\_head\_distance\_z (mm), substrate\_height (mm), swaths, wait\_run\_time (s), total\_run\_time (s)

Process information:

Output: Layer with functional role

1. **Offset printing**  
   Input: Sample/Substrate, Reaction Solution, Atmosphere,

Settings:

Process information:

Output: Layer with functional role

1. **Screen printing**  
   Input: Sample/Substrate, Reaction Solution, Atmosphere,

Settings:

Process information:

Output: Layer with functional role