BRINGING INNOVATION BY SCALING UP NANOMATERIALS AND INKS FOR PRINTING

The BASMATI project addresses the development of active nanomaterial and electrochemical inks for printing technologies such as screen and inkjet printing. The ink formulations are tested on a case study through printing of a thin film battery. The general objective of the project is to scale-up the ink formulations to pilot line ensuring large volume fabrication of new products with improved properties for printing application.

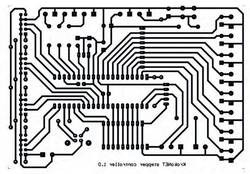
NANOMATERIAL SYNTHESIS

CONDUCTIVE MATERIALS

Cu

FUNCTIONAL INK FORMULATION

CONDUCTIVE INKS



HIGH THROUGHPUT PRINTING TECHNOLOGY

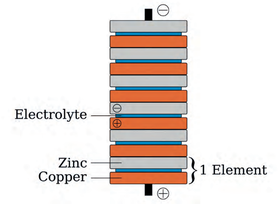
SCREEN PRINTING

UPSCALING & PILOT

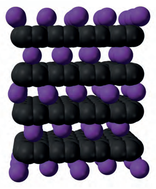
POWDER

THIN FILM BATTERY DEMONSTRATOR

MULTISTACK



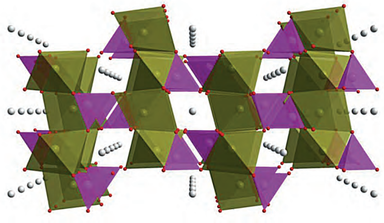
ELECTROCHEMICAL MATERIALS



NMC
Cathode material
$LiNiMnCoO_2$

LFP
Cathode material
$LiFePO_4$

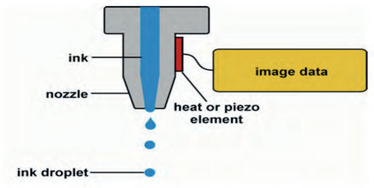
ELECTROCHEMICAL INKS



NMC

LFP

INKJET AND DISPENSING PRINTING



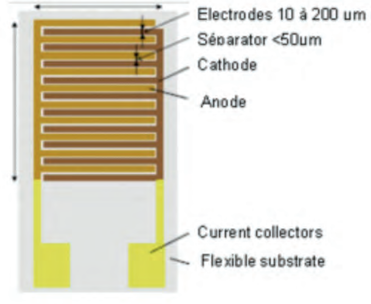
PRINTED LAYER CHARATERIZATION

ARISTOTLE UNIVERSITY OF THESSALONIKI

INK

INTERDIGITATED

with Inkjet and Dispensing Printing



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