

Master Nanosciences et nanotechnologies

Hybrid Electronics 2 A

Responsable	Descriptions	Informations
Fabienne MICHELINI fabienne.michelini@univ-amu.fr	Code : S58PH3NDQ2D1 Nature : Domaines : Sciences et Technologies	Composante : Faculté des Sciences Nombre de crédits :

LANGUE(S) D'ENSEIGNEMENT

Anglais

CONTENU

This course is dedicated to the principle of electrochemical energy storage for flexible microelectronics. It will be presented recent progress achieved in the field of Li-ion microbatteries. The principles will be explained in terms of basic electrochemistry and thermodynamics. The relationship between properties at the atomic level with the performance of the power sources will be highlighted. Particularly, an insight into the use of nanostructured materials to improve the storage capacity, rate capability, and cyclability will be given.

Seminars on microfabrication will be given by foreign professors from renowned universities is dedicated to the microfabrication processes. It will be presented recent progress achieved in the field of microtechnologies (high resolution patterning techniques, self-assembly processes, atomic layer deposition techniques, etc.). Particularly, an insight into micropatterned surfaces will be given for modern applications including sensors, biosensors, energy production and storage systems, lab-on-a-chip, smart devices...

VOLUME HORAIRE

- Volume total: 18 heures
- Cours magistraux: 12 heures
- Travaux dirigés: 6 heures

CODES APOGÉE

- SNNC24AJ [ELP]

M3C

Aucune donnée M3C trouvée

POUR PLUS D'INFORMATIONS

[Aller sur le site de l'offre de formation...](#)



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