

SUBJECT INDEX

- Accumulator**
 lead/graphite, using aqueous hydrofluoric acid, 9
- Aluminium**
 lithium-, electrode, the secondary, at room temperature
 I Cycling in LiClO_4 -propylene carbonate solutions, 145
 II Kinetics of the electrochemical formation of the lithium-aluminium alloy, 155
- Bath aging**
 electrochemical impregnation, 277
- Battery(ies)**
 cycle life, analytical modeling of, 317
 lead/acid, influence of pulsed discharge on the capacity of, 71
 Ni-Cd, using polypropylene separators, design, development, performance and reconditioning of, 305
 Ni/H_2 , common pressure vessel, a demonstration of feasibility, 335
- Cadmium**
 nickel-
 batteries using polypropylene separators, design, development, performance and reconditioning of, 305
 cells, degradation in, studied by impedance measurements, 289
- Catalytic activity**
 of tungsten carbide in phosphoric acid, 1
- CdS/CuInSe₂**
 solar cells, diffusion length determination in thin film, by the EBIC method, 167
- Cell(s)**
 based on lithium negative electrodes (anodes), a review of, 83
 lithium/thionyl chloride, design of a safe cylindrical, 61
 Ni/H_2 , effect of geosynchronous altitude radiation on performance of, 323
- Common pressure vessel**
 Ni/H_2 battery, a demonstration of feasibility, 335
- Conductivity**
 of LiAlCl_4 solutions in nitromethane containing SO_2 , 31
- Corrosion resistance**
 of tungsten carbide in phosphoric acid, 1
- Cycle life**
 battery, analytical modeling of, 317
- Degradation**
 in nickel-cadmium cells studied by impedance measurements, 289
 nickel electrode performance and, technological implications, in studies of, 233
- Diffusion length determination**
 in thin film CdS/CuInSe₂ solar cells by the EBIC method, 167
- EBIC method**
 diffusion length determination in thin film CdS/CuInSe₂ solar cells by, 167
- Electrochemical characteristics**
 of plastic (PTFE) bonded nickel hydroxide electrodes, 195
- Electrochemical formation**
 of the lithium-aluminium alloy, kinetics of, the secondary lithium-aluminium electrode at room temperature, 155
- Electrochemical impregnation**
 bath aging, 277
- Electrode(s)**
 lithium-aluminium, the secondary, at room temperature
 I Cycling in LiClO_4 -propylene carbonate solutions, 145
 II Kinetics of the electrochemical formation of the lithium-aluminium alloy, 155
 lithium negative, a review of cells based on, 83
 nickel
 development of a, having stable performance at various charge and discharge rates over a wide temperature range, 219

- performance and degradation, technological implications in studies of, 233
- nickel composite, lightweight,
I Concept and feasibility, 249
- nickel hydroxide, structural and electrochemical characteristics of plastic (PTFE) bonded, 195
- nickel oxide, influence of material dispersion on the redox behaviour of, 203
- Electrode sinter
nickel, estimation of the mechanical stress in, its implications for nickel electrode construction, 267
- Electrolytic properties
LiClO₄-propylene carbonate, additive effects of Li⁺ ion solvation compounds on, 53
- Geosynchronous altitude radiation
effect of, on performance of Ni/H₂ cells, 323
- Graphite
a lead/graphite accumulator using aqueous hydrofluoric acid, 9
- Hydrofluoric acid
a lead/graphite accumulator using aqueous, 9
- Hydrogen
Ni/H₂ battery, common pressure vessel, a demonstration of feasibility, 335
Ni/H₂ cells, effect of geosynchronous altitude radiation on performance of, 323
- Impedance measurements
degradation of nickel-cadmium cells studied by, 289
- Lead/acid
batteries, influence of pulsed discharge on the capacity of, 71
- Lead/graphite
accumulator using aqueous hydrofluoric acid, 9
- LiAlCl₄ solutions
conductivity of, in nitromethane containing SO₂, 31
- LiClO₄
-propylene carbonate electrolytic properties, additive effects of Li⁺ ion solvation compounds on, 53
- Lithium
additive effects of Li⁺ ion solvation compounds on LiClO₄-propylene carbonate electrolytic properties, 53
-aluminum alloy, kinetics of the electrochemical formation of, the secondary lithium-aluminum electrode at room temperature, 155
-aluminum electrode, the secondary, at room temperature
I Cycling in LiClO₄-propylene carbonate solutions, 145
II Kinetics of the electrochemical formation of the lithium-aluminum alloy, 155
LiClO₄-propylene carbonate solutions, cycling in, the secondary lithium-aluminum electrode at room temperature, 145
negative electrodes (anodes), a review of cells based on, 83
/thionyl chloride cell, design of a safe cylindrical, 61
- Magnesium anode
open-circuit potential-time transient of the, 39
- Material dispersion
influence of, on the redox behaviour of nickel oxide electrodes, 203
- Mechanical stress
in nickel electrode sinter and its implications for nickel electrode construction, 267
- Nickel
-cadmium batteries using polypropylene separators, design, development, performance and reconditioning of, 305
-cadmium cells, degradation in, studied by impedance measurements, 289
composite electrode, lightweight,
I Concept and feasibility, 249
electrode
development of a, having a stable performance at various charge and discharge rates over a wide temperature range, 219
performance and degradation, technological implications in studies of, 233
electrode cell technology, past, developments and future of, 177

- electrode construction, estimation of the mechanical stress in nickel electrode sinter and its implications for, 267
- electrode sinter, estimation of the mechanical stress in, its implications for nickel electrode construction, 267
- /H₂ battery, common pressure vessel, a demonstration of feasibility, 335
- /H₂ cells, effect of geosynchronous altitude radiation on performance of, 323
- Nickel hydroxide
 - electrodes, plastic (PTFE) bonded, structural and electrochemical characteristics of, 195
- Nickel oxide
 - electrodes, influence of material dispersion on the redox behaviour of, 203
- Nitromethane
 - conductivity of LiAlCl₄ solutions in, containing SO₂, 31
- Phosphoric acid
 - corrosion resistance and catalytic activity of tungsten carbide in, 1
- Plastic (PTFE) bonded
 - nickel hydroxide electrodes, structural and electrochemical characteristics of, 195
- Potential-time transient
 - of the magnesium anode, open-circuit, 39
- Propylene carbonate
 - LiClO₄⁻ electrolytic properties, additive effects of Li⁺ ion solvation compounds on, 53
 - solutions, cycling in, the secondary lithium-aluminium electrode at room temperature, 145
- Pulsed discharge
 - influence of, on the capacity of lead/acid batteries, 71
- Radiation
 - geosynchronous altitude, effect of, on performance of Ni/H₂ cells, 323
- Redox behaviour
 - of nickel oxide electrodes, influence of material dispersion on, 203
- Solar cells
 - thin film CdS/CuInSe₂, diffusion length determination in, by EBIC method, 167
- Solvation compounds
 - Li⁺ ion, additive effects of, on LiClO₄⁻ propylene carbonate electrolytic properties, 53
- Stable performance
 - development of a Ni electrode having, at various charge and discharge rates over a wide temperature range, 219
- Structural characteristics
 - of plastic (PTFE) bonded nickel hydroxide electrodes, 195
- Thionyl chloride
 - lithium/, cell, design of a safe cylindrical, 61
- Tungsten carbide
 - corrosion resistance and catalytic activity of, in phosphoric acid, 1