

SUBJECT INDEX

Accumulators

- nickel-cadmium, plastic-bonded electrodes for,
 - VIII. Study of oxygen recombination rate on plastic-bonded cadmium electrodes provided with active carbon catalyst, 3
 - IX. Oxygen recombination rate on plastic-bonded electrodes with different active materials, 273
 - X. The nature of the second discharge step of nickel oxide electrodes, 351
- nickel-cadmium, optimisation of active material for positive electrodes of, 9

Active material

- for positive electrodes of Ni-Cd accumulators, optimisation of, 9

Battery

- electrolytes, subzero, kinetic barriers to the preferred electrode process in, 83
- manganese dioxide — a survey of its history and etymology, 133
- positive electrodes, a new method for examining mixtures of two crystalline varieties of a metal oxide for, 121

Batteries

- an automatic system for assessing the electrical performance of electrodes and, 99
- lead-acid
 - a study of the discharge characteristics of, 41
 - sulphation in discharged, 143
- lead/acid traction, crystalline phase composition of positive plates in, under simulated electric vehicle service, 175
- lithium, new cathodic materials usable in, electrochemical behaviour of, 277
- lithium organic electrolyte, on the use of rocking chair configurations for, 289
- nickel-cadmium, sealed, a failure model for, 369

- silver-zinc, construction of miniature, and the technology for their mass production, 67

- zinc-chlorine, a design for, 359

Bismuth

- electrochemical behaviour of new cathodic materials usable in lithium batteries, $\text{AgBi}(\text{CrO}_4)_2$ and $\text{Bi}_2\text{O}(\text{CrO}_4)_2$, 277

Cadmium

- nickel-cadmium batteries, sealed, a failure model for, 369
- Ni-Cd cells, sealed, on the anomalous behaviour of deeply discharged, 403
- plastic-bonded electrodes for nickel-cadmium accumulators.
 - VIII. Study of oxygen recombination rate on plastic-bonded cadmium electrodes provided with active carbon catalyst, 3
 - IX. Oxygen recombination rate on plastic-bonded cadmium electrodes with different active materials, 273
 - X. The nature of the second discharge step of nickel oxide electrodes, 351
- positive electrodes of Ni-Cd accumulators, optimisation of active material for, 9

Capacity limiting process

- sulfate passivation in the lead-acid system as a, 159

Carbon

- air electrodes, influence of structure and hydrophobic properties on the characteristics of, 17
- catalyst, study of oxygen recombination rate on plastic-bonded cadmium electrodes provided with active, 3

Catalyst

- active carbon, study of oxygen recombination rate on plastic-bonded cadmium electrodes provided with, 3
- platinum, corrosion of, in alkaline solutions, 301

- Catalytic recombination device
a self-limiting, hydrogen/oxygen, 211
- Cathodic materials
usable in lithium batteries: AgBi-
(CrO₄)₂ and Bi₂O(CrO₄)₂, electro-
chemical behaviour of new, 277
- Cells
galvanic, electrolyte creepage in,
I. Contribution to the phenomena,
257
II. Transport mechanism at high
pressures, 267
lead-acid, fundamentals of,
XVII. Negative organic expander
action at low temperatures, 197
lithium-manganese dioxide, low tem-
perature discharge characteristics
of, 35
lithium-metal sulphide, pelletized,
Part I. A selected review, 327
Part II. Some operating character-
istics of pelletized LiAl-FeS cells,
341
Li/SO₂, investigation and production
control of, by the galvanostatic
pulse method, 395
Ni-Cd, sealed, on the anomalous
behaviour of deeply discharged, 403
- Chlorine
zinc-chlorine batteries, a design for,
359
- Chromium
electrochemical behaviour of new
cathodic materials usable in lithi-
um batteries, AgBi(CrO₄)₂ and
Bi₂O(CrO₄)₂, 277
- Corrosion
of platinum catalyst in alkaline solu-
tions, 301
- Crystalline phase composition
of positive plates in lead/acid traction
batteries under simulated electric
vehicle service, 175
- Discharge characteristics
of lead-acid batteries, a study of the, 41
of lithium-manganese dioxide cells,
low temperature, 35
- Discharge step
of nickel oxide electrodes, nature of
second, 351
- Electrical performance
of electrodes and batteries, an auto-
matic system for assessing the, 99
- Electric vehicle service
crystalline phase composition of posi-
tive plates in lead/acid traction
batteries under simulated, 175
- Electrochemical behaviour
of new cathodic materials usable in
lithium batteries: AgBi(CrO₄)₂ and
Bi₂O(CrO₄)₂, 277
- Electrochemistry
of nickel hydroxides and oxyhydrox-
ides, review of the structure and
the, 229
- Electrode(s)
an automatic system for assessing the
electrical performance of, and bat-
teries, 99
cadmium, plastic-bonded
oxygen recombination rate on,
provided with active carbon catal-
yst, 3
oxygen, recombination rate on,
with different active materials, 273
carbon-air, influence of structure and
hydrophobic properties on the
characteristics of, 17
manganese dioxide
VII. Experimental determination
and a simple theoretical description
of the electrical potential of solid
solutions in the range γ -MnO₂ to
 δ -MnOOH, 113
nickel
plastic bonded, microstructure of, 55
plastic bonded (pressed type) high
rate, the internal resistance of, 61
nickel oxide, the nature of the second
discharge step, 351
plastic-bonded, for nickel-cadmium
accumulators.
VIII. Study of oxygen recombina-
tion rate on plastic-bonded cadmi-
um electrodes provided with active
carbon catalyst, 3
IX. Oxygen recombination rate on
plastic-bonded cadmium electrodes
with different active materials, 273
X. The nature of the second dis-
charge step of nickel oxide elec-
trodes, 351
positive battery, a new method for
examining mixtures of two crystal-
line varieties of a metal oxide for,
121
positive, of Ni-Cd accumulators, opti-
misation of active material for, 9

- Electrode process**
 in subzero battery electrolytes, kinetic barriers to the preferred, 83
- Electrolyte(s)**
 lithium organic, batteries, on the use of rocking chair configurations for, 289
 subzero battery, kinetic barriers to the preferred electrode process in, 83
- Electrolyte creepage**
 in galvanic cells
 I. Contribution to the phenomena, 257
 II. Transport mechanism at high pressures, 267
- Energy storage**
 flywheels for, review of, with reference to their potential for use in space, 311
- Flywheels**
 for energy storage, review of, with reference to their potential for use in space, 311
- Galvanic cells**
 electrolyte creepage in,
 I. Contribution to the phenomena, 257
 II. Transport mechanism at high pressures, 267
- Galvanostatic pulse method**
 investigation and production control of Li/SO₂ cells by the, 395
- Hydrogen/oxygen**
 recombination device, a self-limiting catalytic, 211
- Hydrophobic properties**
 influence of structure and, on the characteristics of carbon-air electrodes, 17
- Hydroxides**
 nickel, and oxyhydroxides, review of the structure and electrochemistry, 229
- Kinetic barriers**
 to the preferred electrode process in subzero battery electrolytes, 83
- Lead-acid**
 batteries
 a study of the discharge characteristics, 41
 sulphation in discharged, 143
- cells, fundamentals of,
 XVII. Negative organic expander action at low temperatures, 197
 system, sulfate passivation in the, as a capacity limiting process, 159
 traction batteries, crystalline phase composition of positive plates in, under simulated electric vehicle service, 175
 tubular positives, factors affecting the formation of, 385
- Lithium**
 batteries, new cathodic materials usable in, electrochemical behaviour of, 277
 Li/SO₂ cells, investigation and production control of, by the galvanostatic pulse method, 395
 -manganese dioxide cells, low temperature discharge characteristics of, 35
 -metal sulphide cells, pelletized
 Part I. A selected review, 327
 Part II. Some operating characteristics of pelletized LiAl-FeS cells, 341
 organic electrolyte batteries, on the use of rocking chair configurations for, 289
- Manganese, γ -MnO₂ to δ -MnOOH**
 manganese dioxide electrode, the electrical potential of solid solutions in the range, 113
- Manganese dioxide**
 battery, a survey of its history and etymology, 133
 electrode
 VII. Experimental determination and a simple theoretical description of the electrical potential of solid solutions in the range γ -MnO₂ to δ -MnOOH, 113
 lithium-manganese dioxide cells, low temperature discharge characteristics of, 35
- Metal oxide**
 for positive battery electrodes, a new method for examining mixtures of two crystalline varieties of a, 121
- Microstructure**
 of plastic bonded nickel electrodes, 55
- Miniature batteries**
 silver-zinc, construction of, and the technology for their mass production, 67

Nickel

- cadmium batteries, sealed, a failure model for, 369
- cadmium cells, sealed on the anomalous behaviour of deeply discharged, 403

electrodes

- plastic bonded, microstructure of, 55
- plastic bonded (pressed type) high type rate, the internal resistance of, 61

hydroxides and oxyhydroxides, review of the structure and the electrochemistry of, 229

plastic-bonded electrodes for nickel-cadmium accumulators.

VIII. Study of oxygen recombination rate on plastic-bonded cadmium electrodes provided with active carbon catalyst, 3

IX. Oxygen recombination rate on plastic-bonded cadmium electrodes with different active materials, 273

X. The nature of the second discharge step of nickel oxide electrodes, 351

positive electrodes of Ni-Cd accumulators, optimisation of active material for, 9

Nickel oxide

electrodes, nature of second discharge step, 351

Organic expander action

negative, at low temperatures, fundamentals of lead-acid cells, 197

Oxygen

a self-limiting hydrogen/oxygen recombination device, 211

Oxygen recombination rate

on plastic-bonded cadmium electrodes with active carbon catalyst, 3

with different active materials, 273

Oxyhydroxides

nickel, and hydroxides, review of the structure and electrochemistry, 229

Passivation

sulfate, in the lead-acid system as a capacity limiting process, 159

Platinum

catalyst, corrosion of, in alkaline solutions, 301

Positive electrodes

of Ni-Cd accumulators, optimisation of active material for, 9

Positive plates

in lead/acid traction batteries under simulated electric vehicle service, crystalline phase composition of, 175

Recombination device

a self-limiting catalytic hydrogen/oxygen, 211

Resistance

internal, of plastic bonded (pressed type) high rate Ni electrodes, 61

Rocking chair configurations

for cyclable lithium organic electrolyte batteries, 289

Silver

electrochemical behaviour of new cathodic materials usable in lithium batteries, $\text{AgBi}(\text{CrO}_4)_2$ and $\text{Bi}_2\text{O}(\text{CrO}_4)_2$, 277

-zinc batteries, construction of miniature, and the technology for their mass production, 67

Space

flywheels for energy storage with reference to their potential for use in, 311

Structure

of nickel hydroxides and oxyhydroxides, review of, and the electrochemistry of, 229

Sulfate passivation

in the lead-acid system as a capacity limiting process, 159

Sulphation

in discharged lead-acid batteries, 143

Sulphide

lithium-metal sulphide cells, pelletized, Part I. A selected review, 327

Part II. Some operating characteristics of pelletized LiAl-FeS cells, 341

Sulphur dioxide

Li/SO_2 cells, investigation and production control of, by the galvanostatic pulse method, 395

Temperature

low, discharge characteristics of lithium-manganese dioxide cells, 35

Traction batteries

lead/acid, under simulated electric vehicle service, crystalline phase

composition of positive plates in,
175

Tubular positives

lead/acid, factors affecting the forma-
tion of, 385

Zinc

-chlorine batteries, a design for, 359
silver-zinc batteries, construction of
miniature, and the technology for
their mass production, 67