

SUBJECT INDEX

- Activity**
of tungsten carbide hydrogen electrodes,
influence of bonding and filling
agents on, 277
- Anodic oxidation**
of ethylene glycol with noble metal
alloy catalysts, 249
- Antimony alloys**
low, lead-acid batteries with, 3
- Alkali metal alloy—chlorine secondary
battery**
studies on, 159
- Alkyls**
effect of tetra-alkyl ammonium com-
pounds on performance of elec-
trodes of sintered plate nickel-
cadmium cells, 81
electrical conductivity of binary cells
of type silver iodide-piperazinium
and *N, N'*-alkyl-piperazinium diio-
dides, 359
- Ammonium**
effect of tetra-alkyl ammonium com-
pounds on performance of elec-
trodes of sintered plate nickel-
cadmium cells, 81
- Batteries**
alkali metal alloy—chloride secondary,
studies on, 159
C.G.E. circulating zinc/air; practical
vehicle power source, 17
high temperature fuel cell, central role
of electrode interconnection ma-
terial in:
choice of material — review, 91
study of selected highly conducting
mixed oxides, 203
lead-acid, progressive discharge reac-
tion of positive active mass in, 127
lead-acid, with low antimony alloys, 3
- Battery cathodes**
low temperature, use of molybdenum
trioxide doped manganese dioxide
electrode as, 65
- Battery grids**
present trends in lead alloys for manu-
facture of — review, 301
- Battery system**
magnesium-mercurous chloride, per-
formance characteristics of, 371
- Bonding agents**
influence of, on activity of tungsten
carbide hydrogen electrodes, 277
- Cadmium**
effect of tetra-alkyl ammonium
compounds on performance of elec-
trodes of sintered plate nickel-
cadmium cells, 81
- Carbides**
highly dispersed tungsten carbide for
fuel cells with acidic electrolyte,
169
influence of bonding and filling agents
on activity of tungsten carbide
hydrogen electrodes, 277
- Carbon**
active, in acid and alkaline electro-
lytes, electrochemical properties of,
285
electric current from direct conversion
of low molecular weight C, H, O-
compounds, 141
- Carbon catalysts**
effect of various active, on behaviour
of carbon gas-diffusion air elec-
trodes:
alkaline solutions, 35
acid solutions, 47
- Carbon electrodes**
simplex optimization of, for hydro-
gen-oxygen membrane fuel cell,
323
- Carbon gas-diffusion air electrodes**
effect of various active carbon
catalysts on behaviour of, 35, 47
- Catalysts**
effect of various active carbon, on
behaviour of carbon gas-diffusion
air electrodes:
alkaline solutions, 35
acid solutions, 47
noble metal alloy, anodic oxidation of
ethylene glycol with, 249

Cathode

use for lithium cells, use of silver iodate as, 99

Cathodic materials

in copper solid-state power sources, 57

Cells

binary, of type silver iodide-piperazinium and *N, N'*-alkyl-piperazinium diiodides, electrical conductivity of, 359

lithium, based on silver salts as cathodes, 193

lithium-copper compound, in LiCl-KCl eutectic, some aspects of, 237

lithium, use of silver iodate as cathode for, 99

sintered plate nickel-cadmium, effect of tetra-alkyl ammonium compounds on performance of electrodes of, 81

sodium-sulfur, some studies on, 109

C.G.E. circulating zinc/air battery

practical vehicle power source, 17

Chlorides

performance characteristics of magnesium-mercurous chloride battery system, 371

some aspects of lithium-copper compound cells, in LiCl-KCl eutectic, 237

Chlorine

studies on alkali metal alloy-chlorine secondary battery, 159

Copper

solid-state power sources, review of, 333

some aspects of lithium-copper compound cells in LiCl-KCl eutectic, 237

Copper solid-state power sources

investigation on various cathodic materials in, 57

Conduction

mixed, thermal efficiency of solid electrolyte fuel cells with, 311

Current

electric, from direct conversion of low molecular weight C, H, O-compounds, 141

Cyclic voltammetry

on lead electrodes in sulphuric acid solution, 257

Direct conversion

of low molecular weight C, H, O-compounds, electric current from, 141

Discharge reaction

progressive, of positive active mass in lead-acid batteries, 127

Discharge reaction mechanism

of MoO₃ electrode in organic electrolytes, 267

Electric current

from direct conversion of low molecular weight C, H, O-compounds,

Electrical conductivity

of binary cells of type silver iodide-piperazinium and *N, N'*-alkyl-piperazinium diiodides, 359

Electrochemical properties

of active carbon in acid and alkaline electrolytes, 285

Electrode(s)

carbon gas-diffusion air, effect of various active carbon catalysts on behaviour of, 35, 47

carbon, simplex optimization for hydrogen-oxygen membrane fuel cell, 323

lead, in sulphuric acid solution cyclic voltammetry on, 257

magnesium, in aqueous alkaline electrolytes, behaviour of, 221

molybdenum trioxide doped: use as low temperature battery cathodes, 65

electron spin resonance studies of doped manganese dioxides, 73

molybdenum trioxide, in organic electrolytes, discharge reaction mechanism of, 267

of sintered plate nickel-cadmium cells, effect of tetra-alkyl ammonium compounds on performance of, 81

tungsten carbide hydrogen, influence of bonding and filling agents on activity of, 277

Electrode interconnection material

central role in high temperature fuel cell batteries:

choice of material — review, 91
study of selected highly conducting mixed oxides, 203

Electrolyte(s)

acid and alkaline, electrochemical properties of active carbon in, 285

acidic, fuel cell assemblies with, 177

- acidic, highly dispersed tungsten carbide for fuel cells with, 169
- aqueous alkaline behaviour of magnesium electrodes in, 221
- organic, discharge reaction mechanism of MoO_3 electrode in, 267
- Electron spin resonance studies of doped manganese dioxides, 73
- Ethylene glycol
anodic oxidation of, with noble metal alloy catalysts, 249
- Filling agents
influence of, on activity of tungsten carbide hydrogen electrodes, 277
- Fuel cell(s)
hydrogen-oxygen membrane, simplex optimization of carbon electrodes for, 323
solid electrolyte, with mixed conduction, thermal efficiency of, 311
with acidic electrolyte, highly dispersed tungsten carbide for, 169
- Fuel cell assemblies
with acidic electrolyte, 177
- Fuel cell batteries
high temperature, central role of electrode interconnection material in: choice of material — review, 91
study of selected highly conducting mixed oxides, 203
- Glycols
anodic oxidation of ethylene glycol with noble metal alloy catalysts, 249
- Grids
battery, present trends in lead alloys for manufacture of — review, 301
- Hydrogen
influence of bonding and filling agents on activity of tungsten carbide hydrogen electrodes, 277
simplex optimization of carbon electrodes for hydrogen-oxygen membrane fuel cell, 323
- Interconnection material
electrode; central role in high temperature fuel cell batteries: choice of material — review, 91
study of selected highly conducting mixed oxides, 203
- Iodates
use of silver iodate as cathode for lithium cells, 99
- Iodides
electrical conductivity of binary cells of type silver iodide-piperazinium and N, N' -alkyl-piperazinium diiodides, 359
- Lead-acid batteries
progressive discharge reaction of positive active mass in, 127
with low antimony alloys, 3
for manufacture of battery grids, present trends in — review, 301
- Lead electrodes
in sulphuric acid solution, cyclic voltammetry on, 257
- Lithium
solid-state power sources, review of, 333
- Lithium cells
based on silver salts as cathodes, 193
use of silver iodate as cathode for, 99
- Lithium-copper compound cells
in LiCl-KCl eutectic, some aspects of, 237
- Magnesium electrodes
in aqueous alkaline electrolytes, behaviour of, 221
- Magnesium-mercurous chloride battery system
performance characteristics of, 371
- Manganese dioxide electrode
molybdenum trioxide doped:
use as low temperature battery cathodes, 65
electron spin resonance studies of doped manganese dioxides, 73
- Mercurous chloride
performance characteristics of magnesium-mercurous chloride battery system, 371
- Molybdenum trioxide
doped manganese dioxide electrode:
use as low temperature battery cathodes, 65
electron spin resonance studies of doped manganese dioxides, 73
- Molybdenum trioxide electrode
in organic electrolytes, discharge reaction mechanism of, 267

- Nickel-cadmium cells**
 sintered plate, effect of tetra-alkyl ammonium compounds on performance of electrodes of, 81
- Noble metal alloy catalysts**
 anodic oxidation of ethylene glycol with, 249
- Organic electrolytes**
 discharge reaction mechanism of MoO_3 electrode in, 267
- Oxidation**
 anodic, of ethylene glycol with noble metal alloy catalysts, 249
- Oxides**
 selected highly conducting mixed, as possible electrode interconnection materials for high temperature fuel cells, 203
- Oxygen**
 simplex optimization of carbon electrodes for hydrogen-oxygen membrane fuel cell, 323
- Performance characteristics**
 of magnesium-mercurous chloride battery system, 371
- Piperazinium dioxide**
 electrical conductivity of binary cells of type silver iodide-piperazinium and *N,N'*-alkyl-piperazinium diiodides, 359
- Potassium**
 some aspects of lithium-copper compounds cells in LiCl-KCl eutectic, 237
- Power sources**
 silver, copper and lithium solid-state, review of, 333
- Progressive discharge reaction**
 of positive active mass in lead-acid batteries, 127
- Secondary battery**
 alkali metal alloy-chlorine, studies on, 159
- Silver**
 solid-state power sources, review of, 333
- Silver iodate**
 use of, as cathode for lithium cells, 99
- Silver iodide**
 electrical conductivity of binary cells of type silver iodide-piperazinium and *N,N'*-alkyl-piperazinium diiodides, 359
- Silver salts**
 as cathodes, lithium cells based on, 193
- Simplex optimization**
 of carbon electrodes for hydrogen-oxygen membrane fuel cell, 323
- Sodium-sulfur cells**
 some studies on, 109
- Solid-state power sources**
 copper, investigation on various cathodic materials in, 57
 silver, copper and lithium, review of, 333
- Sulfur**
 some studies on sodium-sulfur cells, 109
- Sulfuric acid solution**
 cyclic voltammetry on lead electrodes in, 257
- Thermal efficiency**
 of solid electrolyte fuel cells with mixed conduction, 311
- Tungsten carbide**
 highly dispersed, for fuel cells with acidic electrolyte, 169
- Tungsten carbide hydrogen electrodes**
 influence of bonding and filling agents on activity of, 277
- Vehicle power source**
 C.G.E. circulating zinc/air battery, 17
- Voltammetry**
 cyclic, on lead electrodes in sulphuric acid solution, 257
- Zinc/air battery**
 C.G.E. circulating; practical vehicle power source, 17