

SUBJECT INDEX

- Accumulators**
 current distribution in lead/acid and Ni/Cd, 45
- a.c. impedance behaviour**
 of Ni hydroxide and Ni/Co hydroxide electrodes in alkaline solution, 15
- Active mass**
 of lead/acid cell, role of additives in positive, 127
- Additives**
 role of, in positive active mass of lead/acid cell, 127
- Alloys**
 of commercial Al (2S) with Zn, In, Sn, and Bi as anodes for alkaline batteries, development of new, 235
- Aluminium**
 development of new alloys of commercial Al (2S) with Zn, In, Sn, and Bi as anodes for alkaline batteries, 235
- Anode gel**
 effect of amount of electrolyte in, on rechargeability of alkaline MnO₂-Zn cells, 145
- Anodes**
 for alkaline batteries, development of new alloys of commercial Al (2S) with Zn, In, Sn, and Bi as, 235
- Batteries**
 anodes for alkaline, development of new alloys of commercial Al (2S) with Zn, In, Sn, and Bi as, 235
 lead-acid
 determination of state-of-charge in, by means of reference cell, 297
 with electrolyte circulation, new method of establishing state of charge of, 189
 estimation of residual capacity of maintenance-free; identification of parameter for prediction of state-of-charge, 287
 oxygen cycle in sealed, 91
 Pb/Pb sulphate reference electrode for, new, 167
 positive plate reactions, effect of ligno-sulphate type additive on, 245
 voltage noise measurements on sealed, 177
- lithium**
 application of chemical synthesized polypyrrole for rechargeable, 59
 improved cathode material for high rate rechargeable; small particle-size Li-V oxide, 35
 new graphite fluorides as electrode materials in, 81
 pulse discharge characteristics of solid-state, 3
 synthesis of FeS for, 337
- Bibliography**
 historical; development of Redox flow batteries, 219
- Bismuth**
 development of new alloys of commercial Al (2S) with Zn, In, Sn, and Bi as anodes for alkaline batteries, 235
 primary 1.5 V Li cells with BiVO₄ cathodes, 29
- Cadmium**
 current distribution in lead/acid and Ni/Cd accumulators, 45
- Cathode material**
 small particle-size Li-V oxide; improved, for high rate rechargeable Li batteries, 35
- Cathodes**
 BiVO₄, primary 1.5 V Li cells with, 29
- Cell(s)**
 galvanic, performance of 30Li₂SO₄: 70Ag₂SO₄ solid electrolyte in, 331
 lead/acid, role of additives in positive active mass of, 127
 lead-acid traction, real-time charge efficiency monitoring and on-charge gas evolution in tall, 155
 Li, primary 1.5 V, with BiVO₄ cathodes, 29
 Li-MnO₂, comparison of electrolytic and chemical MnO₂ in Li button cells at high discharge rates, 261
 MnO₂-Zn, effect of amount of electrolyte in anode gel on rechargeability of alkaline, 145

- N-H, storage capacity, effect of pre-charge on, 69
- PbO₂/Pb, operation of oxygen cycle during charge and discharge of sealed, using separator as electrolyte carrier, 201
- redox-flow, Fe(III)/Fe(II)-ligand systems for use as negative half-cells in, 119
- Charge efficiency monitoring
 - real-time, and on-charge gas evolution in tall lead-acid traction cells, 155
- Cobalt
 - a.c. impedance behaviour of Ni hydroxide and Ni/Co hydroxide electrodes in alkaline solution, 15
- Current distribution
 - in lead/acid and Ni/Cd accumulators, 45
- Electrical conductivity
 - of system of Ag₂SO₄:AgI eutectic added to 30Li₂SO₄:70Ag₂SO₄, 323
- Electrode(s)
 - Au, electro-oxidation mechanism of glyoxal on, in acidic media, 273
 - Ni hydroxide and Ni/Co hydroxide, in alkaline solution, aspects of a.c. impedance behaviour of, 15
- Electrode materials
 - new graphite fluorides as, in Li batteries, 81
- Electrolyte
 - effect of amount of, in anode gel on rechargeability of alkaline MnO₂-Zn cells, 145
 - lead-acid batteries with, circulation, new method of establishing state of charge of, 189
 - performance of 30Li₂SO₄:70Ag₂SO₄ solid, in galvanic cells, 331
- Electrolyte carrier
 - operation of oxygen cycle during charge and discharge of sealed PbO₂/Pb cell using separator as, 201
- Electro-oxidation mechanism
 - of glyoxal on Au electrode in acidic media, 273
- Galvanic cells
 - performance of 30Li₂SO₄:70Ag₂SO₄ solid electrolyte in, 331
- Gas evolution
 - real-time charge efficiency monitoring and on-charge, in tall lead-acid traction cells, 155
- Glyoxal
 - electro-oxidation mechanism of, on Au electrode in acidic media, 273
- Gold electrode
 - electro-oxidation mechanism of glyoxal on, in acidic media, 273
- Graphite fluorides
 - as electrode materials in Li batteries, new, 81
- Hydrogen
 - effect of precharge on Ni-H cell storage capacity, 69
- Indium
 - development of new alloys of commercial Al (2S) with Zn, In, Sn, and Bi as anodes for alkaline batteries, 235
- Iron
 - Fe(III)/Fe(II)-ligand systems for use as negative half-cells in redox-flow cells, 119
 - Ni-Fe cell, assessment of performance characteristics of, 311
 - synthesis of FeS for Li batteries, 337
- Lead
 - PbO₂/Pb cell, operation of oxygen cycle during charge and discharge of sealed, using separator as electrolyte carrier, 201
 - Pb/Pb sulphate reference electrode for lead/acid battery research, new, 167
- Lead/acid accumulators
 - current distribution in, 45
- Lead-acid batteries
 - determination of state-of-charge in, by means of reference cell, 297
 - with electrolyte circulation, new method of establishing state of charge of, 189
 - estimation of residual capacity of maintenance-free; identification of parameter for prediction of state-of-charge, 287
 - oxygen cycle in sealed, 91
 - positive plate reactions, effect of ligno-sulphate type additive on, 245
 - voltage noise measurements on sealed, 177
- Lead/acid battery research
 - new Pb/Pb sulphate reference electrode for, 167

- Lead/acid cell**
 role of additives in positive active mass of, 127
- Lead-acid traction cells**
 real-time charge efficiency monitoring and on-charge gas evolution in tall, 155
- Ligand systems**
 Fe(III)/Fe(II)-, for use as negative half-cells in redox-flow cells, 119
- Lignosulphate type additive**
 effect of, on lead-acid battery positive plate reactions, 245
- Lithium**
 electrical conductivity of system of Ag_2SO_4 :AgI eutectic added to $30\text{Li}_2\text{SO}_4$: $70\text{Ag}_2\text{SO}_4$, 323
 performance of $30\text{Li}_2\text{SO}_4$: $70\text{Ag}_2\text{SO}_4$ solid electrolyte in galvanic cells, 331
 small particle-size Li-V oxide; improved cathode material for high rate rechargeable Li batteries, 35
- Lithium batteries**
 application of chemical synthesized polypyrrole for rechargeable, 59
 improved cathode material for high rate rechargeable; small particle-size Li-V oxide, 35
 new graphite fluorides as electrode materials in, 81
 pulse discharge characteristics of solid-state, 3
 synthesis of FeS for, 337
- Lithium button cells**
 comparison of electrolytic and chemical MnO_2 in, at high discharge rates, 261
- Lithium cells**
 primary 1.5 V, with BiVO_4 cathodes, 29
- Manganese dioxide**
 comparison of electrolytic and chemical MnO_2 in Li button cells at high discharge rates, 261
 -Zn cells, effect of amount of electrolyte in anode gel on rechargeability of alkaline, 145
- Nickel**
 a.c. impedance behaviour of Ni hydroxide and Ni/Co hydroxide electrodes in alkaline solution, 15
 current distribution in lead/acid and Ni/Cd accumulators, 45
 effect of precharge on Ni-H cell storage capacity, 69
 -Fe cell, assessment of performance characteristics of, 311
- Oxygen cycle**
 operation of, during charge and discharge of sealed PbO_2 /Pb cell using separator as electrolyte carrier, 201
 in sealed lead-acid batteries, 91
- Performance characteristics**
 of Ni-Fe cell, assessment of, 311
- Polypyrrole**
 application of chemical synthesized, for rechargeable Li battery, 59
- Positive active mass**
 of lead/acid cell, role of additives in, 127
- Positive plate reactions**
 lead-acid battery, effect of lignosulphate type additive on, 245
- Precharge**
 effect of, on Ni-H cell storage capacity, 69
- Pulse discharge characteristics**
 of solid-state Li batteries, 3
- Rechargeability**
 of alkaline MnO_2 -Zn cells, effect of amount of electrolyte in anode gel on, 145
- Redox flow batteries**
 development of; historical bibliography, 219
- Redox-flow cells**
 Fe(III)/Fe(II)-ligand systems for use as negative half-cells in, 119
- Reference electrode**
 new Pb/Pb sulphate, for lead/acid battery research, 167
- Residual capacity**
 estimation of, of maintenance-free lead-acid batteries; identification of parameter for prediction of state-of-charge, 287
- Silver**
 electrical conductivity of system of Ag_2SO_4 :AgI eutectic added to $30\text{Li}_2\text{SO}_4$: $70\text{Ag}_2\text{SO}_4$, 323
 performance of $30\text{Li}_2\text{SO}_4$: $70\text{Ag}_2\text{SO}_4$ solid electrolyte in galvanic cells, 331

State-of-charge

determination of, in lead-acid batteries
by means of reference cell, 297

identification of parameter for prediction of; estimation of residual capacity of maintenance-free lead-acid batteries, 287

of lead-acid batteries with electrolyte circulation, new method of establishing, 189

Storage capacity

effect of precharge on Ni-H cell, 69

Tin

development of new alloys of commercial Al (2S) with Zn, In, Sn, and Bi as anodes for alkaline batteries, 235

Traction cells

lead-acid, real-time charge efficiency

monitoring and on-charge gas evolution in tall, 155

Vanadium

primary 1.5 V Li cells with BiVO_4 cathodes, 29

small particle-size Li-V oxide; improved cathode material for high rate rechargeable Li batteries, 35

Voltage noise measurements

on sealed lead-acid batteries, 177

Zinc

development of new alloys of commercial Al (2S) with Zn, In, Sn, and Bi as anodes for alkaline batteries, 235

MnO_2 -Zn cells, effect of amount of electrolyte in anode gel on rechargeability of alkaline, 145