

Subject Index of Volume 88

- Absorptive glass mat
Microglass; Separator; Stratification; Valve-regulated lead–acid batteries (Zguris, G.C. (88) 36)
- Adaptability
Cleanliness; Economy; Purity; Suitability; Versatility (Andrews, D. (88) 124)
- Alkaline storage batteries
Sealed cells; Nickel; Zinc (Jindra, J. (88) 202)
- Alloy
Corrosion; Float charging current; Negative electrode; Separator; Valve-regulated lead – acid battery (Onoda, Y. (88) 101)
- Aluminum substrate
Electrochemical stability; Lithium-ion battery; Low-temperature electrolyte (Plichta, E.J. (88) 192)
- Area specific impedance
Lithium-ion batteries; Reference electrode; Lithium cobalt oxide (Wu, Q. (88) 237)
- Automotive battery
Cranking; Dual-voltage; Lead–acid; Specific energy/power; Valve-regulated (Peters, K. (88) 83)
- Basel
Battery recycling; Environment and health; Lead exposure; Philippines; Secondary lead (Hoffmann, U. (88) 115)
- Battery
Flooded; Lead–acid; Service life; Valve-regulated (Moseley, P.T. (88) 71)
Lithium polymer electrolyte; Pyrite (Strauss, E. (88) 206)
- Battery life
Bismuth; Lead oxide; Purity; Soft lead; Valve-regulated lead-acid (Lam, L.T. (88) 2)
- Battery recycling
Basel; Environment and health; Lead exposure; Philippines; Secondary lead (Hoffmann, U. (88) 115)
- Bismuth
Battery life; Lead oxide; Purity; Soft lead; Valve-regulated lead-acid (Lam, L.T. (88) 2)
Capacity; Compression; Oxide; Purity; Valve-regulated lead-acid (Lam, L.T. (88) 11)
- Boric acid
Dry-charged batteries; Lead–acid batteries; Passivation; Positive plates (Chen, H.Y. (88) 78)
- Capacity
Bismuth; Compression; Oxide; Purity; Valve-regulated lead-acid (Lam, L.T. (88) 11)
Lithium-ion batteries; Nickel–silicon alloy; Iron–silicon alloy; Nano-size; Electrode (Wang, G.X. (88) 278)
- Capacity retention
Expanded grid; Motorcycle; Valve-regulated lead–acid battery; Wet charged design (Kato, E. (88) 98)
- Cast-on-strap
Defects; Fusion; Lug–strap interface; Strap alloys; Valve-regulated lead–acid batteries (Lakshmi, C.S. (88) 18)
- Cathode material
Lithium ion battery; Coating; Crystallization; MgO; LiNiO₂ (Kweon, H.-J. (88) 255)
- Cathode Pechini method
Lithium manganese spinel; Ethylene glycol; Cycleability; Secondary battery (Han, Y.-S. (88) 161)
- Charge/termination algorithms
Current-interrupt; Cycle-life; Oxygen cycle; Valve-regulated lead–acid (VRLA) batteries (Nelson, R.F. (88) 44)
- Cleanliness
Adaptability; Economy; Purity; Suitability; Versatility (Andrews, D. (88) 124)
- Coating
Lithium ion battery; Cathode material; Crystallization; MgO; LiNiO₂ (Kweon, H.-J. (88) 255)
- Compression
Bismuth; Capacity; Oxide; Purity; Valve-regulated lead-acid (Lam, L.T. (88) 11)
Electric vehicles; Expanders; Fast charging; Separators; Tubular plates; Valve-regulated lead–acid batteries (Cooper, A. (88) 53)
- Conductivity
 α -PbO₂; β -PbO₂; Electrocrystallisation (Abaci, S. (88) 232)
- Contact resistance
Diffusion limitations; Variable diffusion coefficient; Mathematical model; Plastic lithium-ion batteries; Gelled polymer electrolytes (Arora, P. (88) 219)
- Corrosion
Alloy; Float charging current; Negative electrode; Separator; Valve-regulated lead – acid battery (Onoda, Y. (88) 101)
- Cranking
Automotive battery; Dual-voltage; Lead–acid; Specific energy/power; Valve-regulated (Peters, K. (88) 83)
- Crystallization
Lithium ion battery; Cathode material; Coating; MgO; LiNiO₂ (Kweon, H.-J. (88) 255)
- Current-interrupt
Charge/termination algorithms; Cycle-life; Oxygen cycle; Valve-regulated lead–acid (VRLA) batteries (Nelson, R.F. (88) 44)
- Current take-off
Double-Impact™; Fast charge; Hybrid electric vehicle; Valve-regulated lead–acid battery; State-of-charge (Lam, L.T. (88) 92)
- Cycleability
Lithium manganese spinel; Cathode Pechini method; Ethylene glycol; Secondary battery (Han, Y.-S. (88) 161)
- Cycle-life
Charge/termination algorithms; Current-interrupt; Oxygen cycle; Valve-regulated lead–acid (VRLA) batteries (Nelson, R.F. (88) 44)

- Cyclic voltammetry
Intercalation; De-intercalation; Modeling; Thin layer model (Noel, M. (88) 243)
- Defects
Cast-on-strap; Fusion; Lug-strap interface; Strap alloys; Valve-regulated lead-acid batteries (Lakshmi, C.S. (88) 18)
- De-intercalation
Intercalation; Cyclic voltammetry; Modeling; Thin layer model (Noel, M. (88) 243)
- Design
Grid alloy; Lead-acid battery; Performance; Manufacture; Quality assurance (Lambert, D.W.H. (88) 130)
Fuel cell; Immobilized-alkali; Electrode preparation (Rowshanzamir, S. (88) 262)
- Diffusion limitations
Contact resistance; Variable diffusion coefficient; Mathematical model; Plastic lithium-ion batteries; Gelled polymer electrolytes (Arora, P. (88) 219)
- Double-Impact™
Current take-off; Fast charge; Hybrid electric vehicle; Valve-regulated lead-acid battery; State-of-charge (Lam, L.T. (88) 92)
- Dry-charged batteries
Boric acid; Lead-acid batteries; Passivation; Positive plates (Chen, H.Y. (88) 78)
- Dry solid systems
Polymer electrolytes; Secondary lithium batteries (Dias, F.B. (88) 169)
- Dual-voltage
Automotive battery; Cranking; Lead-acid; Specific energy/power; Valve-regulated (Peters, K. (88) 83)
- Economy
Adaptability; Cleanliness; Purity; Suitability; Versatility (Andrews, D. (88) 124)
- Electric vehicles
Compression; Expanders; Fast charging; Separators; Tubular plates; Valve-regulated lead-acid batteries (Cooper, A. (88) 53)
- Electrochemical stability
Aluminum substrate; Lithium-ion battery; Low-temperature electrolyte (Plichta, E.J. (88) 192)
- Electrocrystallisation
 α -PbO₂; β -PbO₂; Conductivity (Abaci, S. (88) 232)
- Electrode
Lithium-ion batteries; Nickel-silicon alloy; Iron-silicon alloy; Nanosize; Capacity (Wang, G.X. (88) 278)
- Electrode preparation
Fuel cell; Immobilized-alkali; Design (Rowshanzamir, S. (88) 262)
- Environment and health
Basel; Battery recycling; Lead exposure; Philippines; Secondary lead (Hoffmann, U. (88) 115)
- Ethylene glycol
Lithium manganese spinel; Cathode Pechini method; Cycleability; Secondary battery (Han, Y.-S. (88) 161)
- Expanded grid
Capacity retention; Motorcycle; Valve-regulated lead-acid battery; Wet charged design (Kato, E. (88) 98)
- Expanders
Compression; Electric vehicles; Fast charging; Separators; Tubular plates; Valve-regulated lead-acid batteries (Cooper, A. (88) 53)
- Fast charge
Current take-off; Double-Impact™; Hybrid electric vehicle; Valve-regulated lead-acid battery; State-of-charge (Lam, L.T. (88) 92)
- Fast charging
Compression; Electric vehicles; Expanders; Separators; Tubular plates; Valve-regulated lead-acid batteries (Cooper, A. (88) 53)
- Float charging current
Alloy; Corrosion; Negative electrode; Separator; Valve-regulated lead-acid battery (Onoda, Y. (88) 101)
- Flooded
Battery; Lead-acid; Service life; Valve-regulated (Moseley, P.T. (88) 71)
- FTIR
Polymer electrolyte; PVC/PMMA blend; LiBF₄; Plasticizer; Impedance studies (Rajendran, S. (88) 282)
- Fuel cell
Immobilized-alkali; Design; Electrode preparation (Rowshanzamir, S. (88) 262)
- Fusion
Cast-on-strap; Defects; Lug-strap interface; Strap alloys; Valve-regulated lead-acid batteries (Lakshmi, C.S. (88) 18)
- Gelled polymer electrolytes
Diffusion limitations; Contact resistance; Variable diffusion coefficient; Mathematical model; Plastic lithium-ion batteries (Arora, P. (88) 219)
- Gel polymer
Plasticizer; Ionic conductivity (Periasamy, P. (88) 269)
- Grid alloy
Design; Lead-acid battery; Performance; Manufacture; Quality assurance (Lambert, D.W.H. (88) 130)
- Hedging
Industry structure; Lead market; London Metal Exchange (LME); Prices (Keen, A. (88) 27)
- Household lighting
Photovoltaic power-supply systems; Remote areas; Valve-regulated lead-acid batteries (Lambert, D.W.H. (88) 108)
- Hybrid electric vehicle
Current take-off; Double-Impact™; Fast charge; Valve-regulated lead-acid battery; State-of-charge (Lam, L.T. (88) 92)
- Immobilized-alkali
Fuel cell; Design; Electrode preparation (Rowshanzamir, S. (88) 262)
- Impedance studies
Polymer electrolyte; PVC/PMMA blend; LiBF₄; Plasticizer; FTIR (Rajendran, S. (88) 282)
- Industry structure
Hedging; Lead market; London Metal Exchange (LME); Prices (Keen, A. (88) 27)
- Intercalation
De-intercalation; Cyclic voltammetry; Modeling; Thin layer model (Noel, M. (88) 243)
- Ionic conductivity
Gel polymer; Plasticizer (Periasamy, P. (88) 269)
- Iron-silicon alloy
Lithium-ion batteries; Nickel-silicon alloy; Nanosize; Capacity; Electrode (Wang, G.X. (88) 278)
- Lead-acid
Battery; Flooded; Service life; Valve-regulated (Moseley, P.T. (88) 71)
Automotive battery; Cranking; Dual-voltage; Specific energy/power; Valve-regulated (Peters, K. (88) 83)
- Lead-acid batteries
Boric acid; Dry-charged batteries; Passivation; Positive plates (Chen, H.Y. (88) 78)
- Lead-acid battery
Design; Grid alloy; Performance; Manufacture; Quality assurance (Lambert, D.W.H. (88) 130)
- Lead exposure
Basel; Battery recycling; Environment and health; Philippines; Secondary lead (Hoffmann, U. (88) 115)

- Lead market
Industry structure; Hedging; London Metal Exchange (LME); Prices (Keen, A. (88) 27)
- Lead oxide
Battery life; Bismuth; Purity; Soft lead; Valve-regulated lead-acid (Lam, L.T. (88) 2)
- LiBF₄
Polymer electrolyte; PVC/PMMA blend; Plasticizer; FTIR; Impedance studies (Rajendran, S. (88) 282)
- LiMn₂O₄
Tin oxide; Thin film; SnO₂; Thin-film battery; Microbattery (Park, Y.J. (88) 250)
Pretreatment; Lithium-ion; Particle size; Rechargeable battery; Sol-gel (Jang, S.-W. (88) 274)
- LiNiO₂
Lithium ion battery; Cathode material; Coating; Crystallization; MgO (Kweon, H.-J. (88) 255)
- Lithium cobalt oxide
Lithium-ion batteries; Reference electrode; Area specific impedance (Wu, Q. (88) 237)
- Lithium-ion
LiMn₂O₄; Pretreatment; Particle size; Rechargeable battery; Sol-gel (Jang, S.-W. (88) 274)
- Lithium-ion batteries
Reference electrode; Lithium cobalt oxide; Area specific impedance (Wu, Q. (88) 237)
Nickel-silicon alloy; Iron-silicon alloy; Nanosize; Capacity; Electrode (Wang, G.X. (88) 278)
- Lithium-ion battery
Aluminum substrate; Electrochemical stability; Low-temperature electrolyte (Plichta, E.J. (88) 192)
- Lithium ion battery
Cathode material; Coating; Crystallization; MgO; LiNiO₂ (Kweon, H.-J. (88) 255)
- Lithium manganese spinel
Cathode Pechini method; Ethylene glycol; Cycleability; Secondary battery (Han, Y.-S. (88) 161)
- Lithium polymer electrolyte
Pyrite; Battery (Strauss, E. (88) 206)
- Lithium salt doping
Polyaniline; Polymer electrode; Lithium secondary battery (Ryu, K.S. (88) 197)
- Lithium secondary battery
Polyaniline; Lithium salt doping; Polymer electrode (Ryu, K.S. (88) 197)
- London Metal Exchange (LME)
Industry structure; Hedging; Lead market; Prices (Keen, A. (88) 27)
- Low-temperature electrolyte
Aluminum substrate; Electrochemical stability; Lithium-ion battery (Plichta, E.J. (88) 192)
- Lug-strap interface
Cast-on-strap; Defects; Fusion; Strap alloys; Valve-regulated lead-acid batteries (Lakshmi, C.S. (88) 18)
- Manufacture
Design; Grid alloy; Lead - acid battery; Performance; Quality assurance (Lambert, D.W.H. (88) 130)
- Mathematical model
Diffusion limitations; Contact resistance; Variable diffusion coefficient; Plastic lithium-ion batteries; Gelled polymer electrolytes (Arora, P. (88) 219)
- MgO
Lithium ion battery; Cathode material; Coating; Crystallization; LiNiO₂ (Kweon, H.-J. (88) 255)
- Microbattery
LiMn₂O₄; Tin oxide; Thin film; SnO₂; Thin-film battery (Park, Y.J. (88) 250)
- Microglass
Absorptive glass mat; Separator; Stratification; Valve-regulated lead-acid batteries (Zguris, G.C. (88) 36)
- Modeling
Intercalation; De-intercalation; Cyclic voltammetry; Thin layer model (Noel, M. (88) 243)
- Motorcycle
Capacity retention; Expanded grid; Valve-regulated lead-acid battery; Wet charged design (Kato, E. (88) 98)
- Nanosize
Lithium-ion batteries; Nickel-silicon alloy; Iron-silicon alloy; Capacity; Electrode (Wang, G.X. (88) 278)
- Negative electrode
Alloy; Corrosion; Float charging current; Separator; Valve-regulated lead - acid battery (Onoda, Y. (88) 101)
- Nickel
Alkaline storage batteries; Sealed cells; Zinc (Jindra, J. (88) 202)
- Nickel-silicon alloy
Lithium-ion batteries; Iron-silicon alloy; Nanosize; Capacity; Electrode (Wang, G.X. (88) 278)
- Oxide
Bismuth; Capacity; Compression; Purity; Valve-regulated lead-acid (Lam, L.T. (88) 11)
- Oxygen cycle
Charge/termination algorithms; Current-interrupt; Cycle-life; Valve-regulated lead-acid (VRLA) batteries (Nelson, R.F. (88) 44)
- Particle size
LiMn₂O₄; Pretreatment; Lithium-ion; Rechargeable battery; Sol-gel (Jang, S.-W. (88) 274)
- Passivation
Boric acid; Dry-charged batteries; Lead-acid batteries; Positive plates (Chen, H.Y. (88) 78)
- α -PbO₂
 β -PbO₂; Conductivity; Electrocrystallisation (Abaci, S. (88) 232)
- β -PbO₂
 α -PbO₂; Conductivity; Electrocrystallisation (Abaci, S. (88) 232)
- Performance
Design; Grid alloy; Lead - acid battery; Manufacture; Quality assurance (Lambert, D.W.H. (88) 130)
- Philippines
Basel; Battery recycling; Environment and health; Lead exposure; Secondary lead (Hoffmann, U. (88) 115)
- Photovoltaic power-supply systems
Household lighting; Remote areas; Valve-regulated lead - acid batteries (Lambert, D.W.H. (88) 108)
- Plasticizer
Gel polymer; Ionic conductivity (Periasamy, P. (88) 269)
Polymer electrolyte; PVC/PMMA blend; LiBF₄; FTIR; Impedance studies (Rajendran, S. (88) 282)
- Plastic lithium-ion batteries
Diffusion limitations; Contact resistance; Variable diffusion coefficient; Mathematical model; Gelled polymer electrolytes (Arora, P. (88) 219)
- Polyaniline
Lithium salt doping; Polymer electrode; Lithium secondary battery (Ryu, K.S. (88) 197)
- Polymer electrode
Polyaniline; Lithium salt doping; Lithium secondary battery (Ryu, K.S. (88) 197)
- Polymer electrolyte
PVC/PMMA blend; LiBF₄; Plasticizer; FTIR; Impedance studies (Rajendran, S. (88) 282)
- Polymer electrolytes
Secondary lithium batteries; Dry solid systems (Dias, F.B. (88) 169)
- Positive plates
Boric acid; Dry-charged batteries; Lead-acid batteries; Passivation (Chen, H.Y. (88) 78)

- Pretreatment
LiMn₂O₄; Lithium-ion; Particle size; Rechargeable battery; Sol–gel (Jang, S.-W. (88) 274)
- Prices
Industry structure; Hedging; Lead market; London Metal Exchange (LME) (Keen, A. (88) 27)
- Purity
Battery life; Bismuth; Lead oxide; Soft lead; Valve-regulated lead-acid (Lam, L.T. (88) 2)
Bismuth; Capacity; Compression; Oxide; Valve-regulated lead-acid (Lam, L.T. (88) 11)
Adaptability; Cleanliness; Economy; Suitability; Versatility (Andrews, D. (88) 124)
- PVC/PMMA blend
Polymer electrolyte; LiBF₄; Plasticizer; FTIR; Impedance studies (Rajendran, S. (88) 282)
- Pyrite
Lithium polymer electrolyte; Battery (Strauss, E. (88) 206)
- Quality assurance
Design; Grid alloy; Lead – acid battery; Performance; Manufacture (Lambert, D.W.H. (88) 130)
- Rechargeable battery
LiMn₂O₄; Pretreatment; Lithium-ion; Particle size; Sol–gel (Jang, S.-W. (88) 274)
- Reference electrode
Lithium-ion batteries; Lithium cobalt oxide; Area specific impedance (Wu, Q. (88) 237)
- Remote areas
Household lighting; Photovoltaic power-supply systems; Valve-regulated lead – acid batteries (Lambert, D.W.H. (88) 108)
- Sealed cells
Alkaline storage batteries; Nickel; Zinc (Jindra, J. (88) 202)
- Secondary battery
Lithium manganese spinel; Cathode Pechini method; Ethylene glycol; Cycleability (Han, Y.-S. (88) 161)
- Secondary lead
Basel; Battery recycling; Environment and health; Lead exposure; Philippines (Hoffmann, U. (88) 115)
- Secondary lithium batteries
Polymer electrolytes; Dry solid systems (Dias, F.B. (88) 169)
- Separator
Absorptive glass mat; Microglass; Stratification; Valve-regulated lead–acid batteries (Zguris, G.C. (88) 36)
Alloy; Corrosion; Float charging current; Negative electrode; Valve-regulated lead – acid battery (Onoda, Y. (88) 101)
- Separators
Compression; Electric vehicles; Expanders; Fast charging; Tubular plates; Valve-regulated lead–acid batteries (Cooper, A. (88) 53)
- Service life
Battery; Flooded; Lead–acid; Valve-regulated (Moseley, P.T. (88) 71)
- SnO₂
LiMn₂O₄; Tin oxide; Thin film; Thin-film battery; Microbattery (Park, Y.J. (88) 250)
- Soft lead
Battery life; Bismuth; Lead oxide; Purity; Valve-regulated lead-acid (Lam, L.T. (88) 2)
- Sol–gel
LiMn₂O₄; Pretreatment; Lithium-ion; Particle size; Rechargeable battery (Jang, S.-W. (88) 274)
- Specific energy/power
Automotive battery; Cranking; Dual-voltage; Lead–acid; Valve-regulated (Peters, K. (88) 83)
- State-of-charge
Current take-off; Double-Impact™; Fast charge; Hybrid electric vehicle; Valve-regulated lead–acid battery (Lam, L.T. (88) 92)
- Strap alloys
Cast-on-strap; Defects; Fusion; Lug–strap interface; Valve-regulated lead–acid batteries (Lakshmi, C.S. (88) 18)
- Stratification
Absorptive glass mat; Microglass; Separator; Valve-regulated lead–acid batteries (Zguris, G.C. (88) 36)
- Suitability
Adaptability; Cleanliness; Economy; Purity; Versatility (Andrews, D. (88) 124)
- Thin film
LiMn₂O₄; Tin oxide; SnO₂; Thin-film battery; Microbattery (Park, Y.J. (88) 250)
- Thin-film battery
LiMn₂O₄; Tin oxide; Thin film; SnO₂; Microbattery (Park, Y.J. (88) 250)
- Thin layer model
Intercalation; De-intercalation; Cyclic voltammetry; Modeling (Noel, M. (88) 243)
- Tin oxide
LiMn₂O₄; Thin film; SnO₂; Thin-film battery; Microbattery (Park, Y.J. (88) 250)
- Tubular plates
Compression; Electric vehicles; Expanders; Fast charging; Separators; Valve-regulated lead–acid batteries (Cooper, A. (88) 53)
- Valve-regulated
Battery; Flooded; Lead–acid; Service life (Moseley, P.T. (88) 71)
Automotive battery; Cranking; Dual-voltage; Lead–acid; Specific energy/power (Peters, K. (88) 83)
- Valve-regulated lead-acid
Battery life; Bismuth; Lead oxide; Purity; Soft lead (Lam, L.T. (88) 2)
Bismuth; Capacity; Compression; Oxide; Purity (Lam, L.T. (88) 11)
- Valve-regulated lead–acid batteries
Cast-on-strap; Defects; Fusion; Lug–strap interface; Strap alloys (Lakshmi, C.S. (88) 18)
Absorptive glass mat; Microglass; Separator; Stratification (Zguris, G.C. (88) 36)
Compression; Electric vehicles; Expanders; Fast charging; Separators; Tubular plates (Cooper, A. (88) 53)
- Valve-regulated lead–acid battery
Current take-off; Double-Impact™; Fast charge; Hybrid electric vehicle; State-of-charge (Lam, L.T. (88) 92)
Capacity retention; Expanded grid; Motorcycle; Wet charged design (Kato, E. (88) 98)
- Valve-regulated lead – acid battery
Alloy; Corrosion; Float charging current; Negative electrode; Separator (Onoda, Y. (88) 101)
- Valve-regulated lead – acid batteries
Household lighting; Photovoltaic power-supply systems; Remote areas (Lambert, D.W.H. (88) 108)
- Valve-regulated lead–acid (VRLA) batteries
Charge/termination algorithms; Current-interrupt; Cycle-life; Oxygen cycle (Nelson, R.F. (88) 44)
- Variable diffusion coefficient
Diffusion limitations; Contact resistance; Mathematical model; Plastic lithium-ion batteries; Gelled polymer electrolytes (Arora, P. (88) 219)
- Versatility
Adaptability; Cleanliness; Economy; Purity; Suitability (Andrews, D. (88) 124)
- Wet charged design
Capacity retention; Expanded grid; Motorcycle; Valve-regulated lead–acid battery (Kato, E. (88) 98)
- Zinc
Alkaline storage batteries; Sealed cells; Nickel (Jindra, J. (88) 202)