

Subject Index of Volumes 119–121

- ac impedance
Lithium-ion battery; Cathode; Ion-doping (Wang, G.X. (119–121) 189)
- ac impedance
Multiwall carbon nanotubes; Chemical vapor deposition; Li-ion battery (Wang, G.X. (119–121) 16)
- Accelerated life tests
Lithium-ion battery; $\text{Li}_x\text{Ni}_{0.8}\text{Co}_{0.15}\text{Al}_{0.05}\text{O}_2$ cathode; Arrhenius plots; Activation energy (Liaw, B.Y. (119–121) 874)
- Accelerated test
Lithium-ion batteries; Calendar life; Backup use; Impedance; Capacity fade (Asakura, K. (119–121) 902)
- Accelerating rate calorimetry (ARC)
Differential scanning calorimetry (DSC); Thermal stability; Alkyl carbonate solutions (Gnanaraj, J.S. (119–121) 794)
- Accelerating rate calorimetry
EC/DEC electrolyte; $\text{Li}_3\text{CrMnO}_5$ (Argue, S. (119–121) 664)
- Acetonitrile
Calcium-ion battery; High energy density; High safety; Vanadium oxide (Hayashi, M. (119–121) 617)
- Acid to metal ions ratio (*R*)
Sol-gel; Orthorhombic LiMnO_2 (Guo, Z.P. (119–121) 221)
- Acrylate
Polymer electrolytes; Lithium battery; PEO; Polysiloxane (Kang, Y. (119–121) 448)
- Acrylic acid nitrile
Electrolyte additive; Solid electrolyte interphase (SEI); Electrochemical polymerisation; Lithium-ion battery (Santner, H.J. (119–121) 368)
- Acrylonitrile-butadiene-styrene terpolymer
High-capacity carbon; Anode materials; Lithium-ion batteries (Fey, G.T.K. (119–121) 39)
- Activation energy
 LiCoO_2 ; Temperature effect; Open-circuit voltage; Self-discharge; Spinel (Ozawa, Y. (119–121) 918)
- Activation energy
Lithium-ion battery; $\text{Li}_x\text{Ni}_{0.8}\text{Co}_{0.15}\text{Al}_{0.05}\text{O}_2$ cathode; Accelerated life tests; Arrhenius plots (Liaw, B.Y. (119–121) 874)
- Active materials
Lithium secondary batteries (Richardson, T.J. (119–121) 262)
- Additive
Lithium-ion battery; Graphite; LiMn_2O_4 ; Mn dissolution; SEI (Komaba, S. (119–121) 378)
- Additive
Lithium-ion battery; Non-flammable electrolyte; SEI (Ota, H. (119–121) 393)
- Additives in solution
Li-ion cells; Elevated temperatures; Storage; Capacity fading (Markovsky, B. (119–121) 504)
- Additives
Li-ion batteries; Graphite; Cathodes; Surface films; Impedance; Capacity-fading; XRD; AFM; FTIR; XPS (Aurbach, D. (119–121) 497)
- Advanced lithium-ion battery
Gel polymer electrolyte; Cell; Tetra (ethylene glycol) diacrylate; Benzoyl peroxide; Lithium-ion polymer battery (Kim, H.-S. (119–121) 482)
- AFM
Carbons; Li insertion; CVD; Pore design; BET; CV (Isaev, I. (119–121) 28)
- AFM
Graphite; Particle morphology; Irreversible capacity; XRD; PC; EC (Aurbach, D. (119–121) 2)
- AFM
Li-ion batteries; Graphite; Cathodes; Surface films; Impedance; Additives; Capacity-fading; XRD; FTIR; XPS (Aurbach, D. (119–121) 497)
- Aging
 $\text{LiNi}_{0.5}\text{Co}_{0.5}\text{O}_2$; Medical device; Cyclability (Belharouak, I. (119–121) 175)
- Al-substitution
 LiMn_2O_4 ; Phase transitions; In situ X-ray diffraction (Hwang, B.-J. (119–121) 727)
- Alkyl carbonate solutions
Accelerating rate calorimetry (ARC); Differential scanning calorimetry (DSC); Thermal stability (Gnanaraj, J.S. (119–121) 794)
- Alkyl carbonate
Decomposition mechanism; Lithium metal; Pyrolysis-gas chromatography-mass spectroscopy (Mogi, R. (119–121) 597)
- Alumina filler
Ionic conductivity; Composite polymer electrolyte; PEO (Dissanayake, M.A.K.L. (119–121) 409)
- Aluminium alloy
Intermetallic; Anode; Lithium battery (Lindsay, M.J. (119–121) 84)
- Aluminum doping
Lithium-ion battery; Cathode materials; Layered structure; Manganese oxide (Park, S.H. (119–121) 161)
- Amorphous carbon anode
Electrolyte; No-flash-point; Fluorinated ether; $\text{Li}_{1+x}\text{Mn}_2\text{O}_4$ cathode; $\text{LiN}[\text{SO}_2\text{C}_2\text{F}_5]_2$ (Arai, J. (119–121) 388)
- Amorphous phase
Lithium ion rechargeable batteries; Lithium alloy anodes; Metal anodes; Silicon; Thermodynamics (Limthongkul, P. (119–121) 604)
- Amorphous phases
PEO-based polymer electrolyte; Ionic conductivity; Nanoparticles; High-energy ball milling (Ahn, J.-H. (119–121) 422)
- Amorphous silicon
Silicon anodes; Silicides; Metal-metalloid alloys; Displacement reactions; SiO and SiB_3 (Netz, A. (119–121) 95)
- Amorphous
Tin; FT-IR; Raman spectroscopy (Gejke, C. (119–121) 576)
- Anode film
Microbattery; Sn-Zr; Sn-Zr-Ag alloys; Cycling performance (Kim, Y.-L. (119–121) 106)
- Anode material
Lithium batteries; Tin composite oxide; ^{119}Sn Mössbauer spectroscopy (Robert, F. (119–121) 581)
- Anode material
Lithium secondary battery; CeSn_3 ; Lithium storage intermetallic compound (Sakaguchi, H. (119–121) 50)
- Anode material
Vanadium oxide; Raman spectra; Lithium insertion; Cycling stability (Liu, P. (119–121) 305)

- Anode materials
High-capacity carbon; Lithium-ion batteries; Acrylonitrile-butadiene-styrene terpolymer (Fey, G.T.K. (119–121) 39)
- Anode materials
Mechanical alloying; Nanocrystalline alloys; Lithium-ion batteries; Tin oxides; Secondary batteries (Ahn, J.-H. (119–121) 45)
- Anode properties
MBO₃; Calcite; FeBO₃; VBO₃ (Okada, S. (119–121) 621)
- Anode
Carbon nanotube; Manganese acetate; Modification (Ishihara, T. (119–121) 24)
- Anode
Intermetallic; Lithium battery; Aluminium alloy (Lindsay, M.J. (119–121) 84)
- Anode
Li₄Ti₅O₁₂; Li-ion batteries; Insertion mechanisms; ⁵⁷Fe Mössbauer data (Kubiak, P. (119–121) 626)
- Anode
Lithium-ion battery; Natural graphite (Shim, J. (119–121) 934)
- Anode
Radio frequency sputtering; Thin films; Lithium batteries; LiNiVO₄ (Reddy, M.V. (119–121) 101)
- Anode
SnS₂; Nanoparticles; Sonochemical method (Mukaibo, H. (119–121) 60)
- Anodes
Lithium-ion batteries; Intermetallic electrodes; Silver antimony (Vaughey, J.T. (119–121) 64)
- ARC
Flame retardant; High power battery; Safety (Hyung, Y.E. (119–121) 383)
- ARC
LiPF₆; LiPF₃(CF₂CF₃)₃ (LiFAP); Li(SO₂CF₂CF₃)₂ (LiBETI); Thermal stability; Impedance spectroscopy; Surface films; Li-ion batteries (Gnanaraj, J.S. (119–121) 799)
- Arrhenius plots
Lithium-ion battery; Li_xNi_{0.8}Co_{0.15}Al_{0.05}O₂ cathode; Accelerated life tests; Activation energy (Liaw, B.Y. (119–121) 874)
- Artificial neural networks
Lithium-ion cell; Inductive modeling (Jungst, R.G. (119–121) 870)
- Backup use
Lithium-ion batteries; Calendar life; Accelerated test; Impedance; Capacity fade (Asakura, K. (119–121) 902)
- BATT program
LiFePO₄/gel/natural graphite cells; Calendar life test (Striebel, K. (119–121) 951)
- Batteries
Depth profiling; LiCoO₂; LiPON; Lithium; Nitrogen (Lamaze, G.P. (119–121) 680)
- Battery capacity
Lithium-ion batteries; Battery cycle-life; Battery power; Power fade; Capacity fade (Wright, R.B. (119–121) 865)
- Battery cycle-life
Lithium-ion batteries; Battery power; Power fade; Battery capacity; Capacity fade (Wright, R.B. (119–121) 865)
- Battery dimension
Thickness; Cycles; Lithium ion; LG's polymer cells (Lee, J.H. (119–121) 833)
- Battery material
First principles; LiNiO₂; Lithium intercalation (Arroyo y de Dompablo, M.E. (119–121) 654)
- Battery power
Lithium-ion batteries; Battery cycle-life; Power fade; Battery capacity; Capacity fade (Wright, R.B. (119–121) 865)
- Battery
⁶Li MAS NMR; In situ XRD; XAS; Lithium nickel manganese oxide (Yoon, W.-S. (119–121) 649)
- Battery
Electrolytes; Lithium (Blomgren, G.E. (119–121) 326)
- Battery
LiMn_xCr_{1-x}O₂; Lithium; Rietveld refinement; XANES; Emulsion drying method (Myung, S.-T. (119–121) 211)
- Battery
Lithium; Silver vanadium oxide; Mass transport (Schmidt, C. (119–121) 979)
- Battery
Olivine; Cathode; Iron; Phosphate; Lithium (Yamada, A. (119–121) 232)
- Benzoyl peroxide
Gel polymer electrolyte; Cell; Tetra (ethylene glycol) diacrylate; Lithium-ion polymer battery; Advanced lithium-ion battery (Kim, H.-S. (119–121) 482)
- BET
Carbons; Li insertion; CVD; Pore design; CV; AFM (Isaev, I. (119–121) 28)
- BETI
Heteropolymer electrolytes; Polyethylene oxide (Dixon, B.G. (119–121) 856)
- Bimetal substitution
LiMn₂O₄; X-ray diffraction; Differential scanning calorimetry (Tsai, Y.W. (119–121) 701)
- Bisphenol A ethoxylate diacrylate
Polymer electrolytes; Lithium battery (Kang, Y. (119–121) 432)
- Butyl methyl carbonate
Lithium-ion batteries; Electrolytes; Graphite electrode; Organic carbonates (Vetter, J. (119–121) 338)
- Butyrolactone
Lithium-ion batteries; Graphite anodes (Matsuo, Y. (119–121) 373)
- Calcite
Anode properties; MBO₃; FeBO₃; VBO₃ (Okada, S. (119–121) 621)
- Calcium-ion battery
High energy density; High safety; Acetonitrile; Vanadium oxide (Hayashi, M. (119–121) 617)
- Calendar life test
LiFePO₄/gel/natural graphite cells; BATT program (Striebel, K. (119–121) 951)
- Calendar life
Lithium-ion batteries; Backup use; Accelerated test; Impedance; Capacity fade (Asakura, K. (119–121) 902)
- Calendar-life
Chromatography; Microscopy; Spectroscopy (Abraham, D.P. (119–121) 511)
- Capacity and power fade
Lithium-ion batteries; Carbonate electrolyte; Lewis acid salts; Polymerization; CO₂ generation and reduction (Sloop, S.E. (119–121) 330)
- Capacity fade
Li-ion battery; Impedance (Osaka, T. (119–121) 929)
- Capacity fade
Lithium-ion batteries; Battery cycle-life; Battery power; Power fade; Battery capacity (Wright, R.B. (119–121) 865)
- Capacity fade
Lithium-ion batteries; Calendar life; Backup use; Accelerated test; Impedance (Asakura, K. (119–121) 902)
- Capacity fading mechanism
Lithium battery; LiMn₂O₄; LiAl_{0.15}Mn_{1.85}O₄; X-ray absorption spectroscopy (Lee, J.-F. (119–121) 721)
- Capacity fading
Li-ion cells; Elevated temperatures; Storage; Additives in solution (Markovsky, B. (119–121) 504)
- Capacity-fading
Li-ion batteries; Graphite; Cathodes; Surface films; Impedance; Additives; XRD; AFM; FTIR; XPS (Aurbach, D. (119–121) 497)

- Carbon black
Li ion batteries; Cathode; Kinetics (Dominko, R. (119–121) 770)
- Carbon disordering
Li intercalation; Graphite anode; Solid electrolyte interphase (SEI) (Kostecki, R. (119–121) 550)
- Carbon materials
Thermogravimetric analysis; N₂-adsorption (Sandí, G. (119–121) 34)
- Carbon nanotube
Anode; Manganese acetate; Modification (Ishihara, T. (119–121) 24)
- Carbon nanotubes
Microbatteries; Nanobatteries; Nanocathodes; V₂O₅ xerogels (Dewan, C. (119–121) 310)
- Carbon
Lithium; Entropy; Enthalpy; Intercalation; Open-circuit voltage; Raman spectroscopy; Phonons (Reynier, Y. (119–121) 850)
- Carbonaceous mesophase spherules
Lithium alloy; Composite anode; Lithium-ion batteries (Liu, Y. (119–121) 572)
- Carbonate electrolyte
Lithium-ion batteries; Lewis acid salts; Polymerization; CO₂ generation and reduction; Capacity and power fade (Sloop, S.E. (119–121) 330)
- Carbonate-based electrolytes
Low-temperature performance; Lithium-ion cells (Smart, M.C. (119–121) 349)
- Carbons
Li insertion; CVD; Pore design; BET; CV; AFM (Isaev, I. (119–121) 28)
- Cathode active material
Lithium manganese spinel; First-principles calculation; Substitution; MEM; Electronic states (Ito, Y. (119–121) 733)
- Cathode material
LiFePO₄; Microwave processing; Lithium-ion batteries (Higuchi, M. (119–121) 258)
- Cathode material
Lithium manganese spinel; Crystal structure; Oxygen content; Neutron diffraction; Nickel substitution (Idemoto, Y. (119–121) 125)
- Cathode material
Lithium-ion batteries; Co-precipitation; Co_xMn_yNi_{1-x-y}(OH)₂; LiCo_xMn_yNi_{1-x-y}O₂ (Chen, Y. (119–121) 184)
- Cathode material
PDTDA; Chemical polymerization; Doping; Electrical properties (Lee, Y.-G. (119–121) 321)
- Cathode materials
Lithium iron phosphate; Inorganic synthesis; Lithium batteries (Franger, S. (119–121) 252)
- Cathode materials
Lithium secondary batteries; Sol-gel method; Layered manganese; Li₂MnO₃ (Kim, J.-H. (119–121) 166)
- Cathode materials
Lithium-ion battery; Aluminum doping; Layered structure; Manganese oxide (Park, S.H. (119–121) 161)
- Cathode materials
Lithium-ion rechargeable battery; Lithium manganese nickel oxides; Layered structure (Kang, S.-H. (119–121) 150)
- Cathode materials
Spray-dry method; LiCoO₂ phase (Konstantinov, K. (119–121) 195)
- Cathode
Electro-conductive additive; Ketjen black; Charge-discharge property; Dispersion state; Pre-dispersed carbon suspension (Kuroda, S. (119–121) 924)
- Cathode
Li ion batteries; Carbon black; Kinetics (Dominko, R. (119–121) 770)
- Cathode
Li-ion battery; Vanadyl phosphate; VOPO₄ (Azmi, B.M. (119–121) 273)
- Cathode
Lithium battery; Manganese oxide (Eriksson, T.A. (119–121) 145)
- Cathode
Lithium-ion battery; Ion-doping; ac impedance (Wang, G.X. (119–121) 189)
- Cathode
Olivine; Iron; Phosphate; Lithium; Battery (Yamada, A. (119–121) 232)
- Cathodes
Li-ion batteries; Graphite; Surface films; Impedance; Additives; Capacity-fading; XRD; AFM; FTIR; XPS (Aurbach, D. (119–121) 497)
- Cathodes
Lithium batteries; Lithium; Silver; Vanadium (Takeuchi, K.J. (119–121) 973)
- Cell impedance-controlled lithium transport
Vanadium pentoxide film electrode; Electrodeposition; Potentiostatic current transient technique; Chemical diffusivity of lithium (Lee, J.-W. (119–121) 760)
- Cell
Gel polymer electrolyte; Tetra (ethylene glycol) diacrylate; Benzoyl peroxide; Lithium-ion polymer battery; Advanced lithium-ion battery (Kim, H.-S. (119–121) 482)
- Cell-impedance-controlled lithium transport
Current transient; Li[Ti_{5/3}Li_{1/3}]O₄ film electrode; Monte Carlo simulation; Two-phase coexistence (Jung, K.-N. (119–121) 637)
- CeSn₃
Lithium secondary battery; Anode material; Lithium storage intermetallic compound (Sakaguchi, H. (119–121) 50)
- Charge-discharge property
Electro-conductive additive; Cathode; Ketjen black; Dispersion state; Pre-dispersed carbon suspension (Kuroda, S. (119–121) 924)
- Charge-discharge studies
Phase inversion technique; Pore diameter; Solid-state reaction; Nano-composite cathode (Manuel Stephan, A. (119–121) 460)
- Charge-discharge
Lithium electrode; Protection layer; Crosslinked polymer electrolyte; SEI layer (Choi, N.-S. (119–121) 610)
- Charged electrodes
Lithium nickel cobalt mixed oxides; Cycling stability (Albrecht, S. (119–121) 178)
- Chemical delithiation
Li-ion batteries; Li_xCoO₂; Lithiated graphite; 1 M LiPF₆/EC + DMC; Thermal stability (Yamaki, J.-i. (119–121) 789)
- Chemical diffusivity of lithium
Vanadium pentoxide film electrode; Electrodeposition; Potentiostatic current transient technique; Cell impedance-controlled lithium transport (Lee, J.-W. (119–121) 760)
- Chemical polymerization
PDTDA; Doping; Cathode material; Electrical properties (Lee, Y.-G. (119–121) 321)
- Chemical vapor deposition
Multiwall carbon nanotubes; Li-ion battery; ac impedance (Wang, G.X. (119–121) 16)
- Chemical
Lithium intercalation; Natural graphite; Purification; Thermal treatment (Zaghib, K. (119–121) 8)
- Chemically synthesized PAN
PVDF-based electrolyte; Lithium polymer battery; LiMnO₂; LiMnO₂-PAN-DMcT composite (Kim, J.-U. (119–121) 686)
- Chromatography
Calendar-life; Microscopy; Spectroscopy (Abraham, D.P. (119–121) 511)
- Chromium
Dissolution; Lithium manganate (Wang, H.-C. (119–121) 738)
- Co-precipitation
Cathode material; Lithium-ion batteries; Co_xMn_yNi_{1-x-y}(OH)₂; LiCo_xMn_yNi_{1-x-y}O₂ (Chen, Y. (119–121) 184)
- CO₂ generation and reduction
Lithium-ion batteries; Carbonate electrolyte; Lewis acid salts; Polymerization; Capacity and power fade (Sloop, S.E. (119–121) 330)

- $\text{Co}_x\text{Mn}_y\text{Ni}_{1-x-y}(\text{OH})_2$
 Cathode material; Lithium-ion batteries; Co-precipitation; $\text{LiCo}_x\text{Mn}_y\text{Ni}_{1-x-y}\text{O}_2$ (Chen, Y. (119–121) 184)
- Combinatorial chemistry
 Lithium copper iron oxide; $\gamma\text{-LiFeO}_2$ type; Lithium-ion batteries; Negative electrode materials; Exploratory synthesis (Chang, S.-K. (119–121) 69)
- Combinatorial
 High throughput; Percolation; Lithium ion cell; Lithium manganese oxide spinel (Spong, A.D. (119–121) 778)
- Composite anode
 Lithium alloy; Carbonaceous mesophase spherules; Lithium-ion batteries (Liu, Y. (119–121) 572)
- Composite anode
 Solid polymer electrolyte battery; Composite polymer electrolyte; Lithium-solid polymer battery; Thermal stability (Capiglia, C. (119–121) 826)
- Composite anodes
 SnSb alloy; $\text{Li}_{2.6}\text{Co}_{0.4}\text{N}$; Solid polymer electrolyte; Li-ion cells (Yang, J. (119–121) 56)
- Composite electrodes
 Lithium cuprate (Li_2CuO_2); Lithium manganese oxide (LiMn_2O_4); Lithium cells; Lithium ion cells (Vitins, G. (119–121) 938)
- Composite electrolyte
 Polyethylene oxide; Silicon dioxide (Kim, J.-W. (119–121) 415)
- Composite graphite electrode
 Scanning probe microscopy; Lithium-ion batteries (Jeong, S.-K. (119–121) 555)
- Composite polymer electrolyte
 Alumina filler; Ionic conductivity; PEO (Dissanayake, M.A.K.L. (119–121) 409)
- Composite polymer electrolyte
 Poly(ethylene oxide); Hyperbranched polymer; $\text{LiN}(\text{CF}_3\text{CF}_2\text{SO}_2)_2$; Ionic conductivity; Thermal stability; Electrochemical stability; Interfacial stability (Itoh, T. (119–121) 403)
- Composite polymer electrolyte
 Solid polymer electrolyte battery; Lithium-solid polymer battery; Composite anode; Thermal stability (Capiglia, C. (119–121) 826)
- Composite
 Poly(ethylene oxide); Saponite; Lithium conductor; Ionic transference number (Wen, Z. (119–121) 427)
- Conducting polymer
 Li-ion battery; pEDOT; Non-stoichiometric spinel (Arbizzani, C. (119–121) 695)
- Conducting polymer
 Positive electrode; Rechargeable lithium battery; Organic polymer; ICP (Le Gall, T. (119–121) 316)
- Conductivity
 Gel polymer electrolyte; Poly(alkylene oxide); Rechargeable lithium cell (Matsuda, Y. (119–121) 473)
- Conductivity
 Lithium battery; Model; Transference number; Side reactions; Heat of mixing; Thermal model; Molecular dynamics; Diffusion coefficient (Newman, J. (119–121) 838)
- Conductivity
 Nonaqueous electrolytes; Lithium salts; Li-ion batteries; High temperature; Low temperature; Solid electrolyte interface (SEI); Glass transition temperature (Jow, T.R. (119–121) 343)
- Crosslinked polymer electrolyte
 Lithium electrode; Protection layer; SEI layer; Charge–discharge (Choi, N.-S. (119–121) 610)
- Crystal structure
 Electronic structure; $\text{Li}_{1-x}[\text{Co}_{1/3}\text{Ni}_{1/3}\text{Mn}_{1/3}]\text{O}_2$ ($0 \leq x \leq 1$) (Koyama, Y. (119–121) 644)
- Crystal structure
 Lithium manganese spinel; Oxygen content; Cathode material; Neutron diffraction; Nickel substitution (Idemoto, Y. (119–121) 125)
- Crystallinity index
 LiMn_2O_4 spinel; Electrochemical properties; Lattice constant (Wu, S.-h. (119–121) 134)
- Crystallographic
 Structural study; Monoclinic (Patoux, S. (119–121) 278)
- Current collector
 Li-ion; LiTFSI solutions; Organic solvent (Morita, M. (119–121) 784)
- Current transient
 Cell-impedance-controlled lithium transport; $\text{Li}[\text{Ti}_{5/3}\text{Li}_{1/3}]\text{O}_4$ film electrode; Monte Carlo simulation; Two-phase coexistence (Jung, K.-N. (119–121) 637)
- CV
 Carbons; Li insertion; CVD; Pore design; BET; AFM (Isaev, I. (119–121) 28)
- CVD
 Carbons; Li insertion; Pore design; BET; CV; AFM (Isaev, I. (119–121) 28)
- Cyclability
 $\text{LiNi}_{0.5}\text{Co}_{0.5}\text{O}_2$; Medical device; Aging (Belharouak, I. (119–121) 175)
- Cycle life
 Lithium-ion polymer cell; Electrolyte additives; Vinylene carbonate; Organic borates (Contestabile, M. (119–121) 943)
- Cycleability
 $\text{LiMn}_{2-x}\text{Cr}_x\text{O}_4$; Special capacity; Discharge voltage plateau (Du, K. (119–121) 130)
- Cycleability
 Nano-crystalline; Orthorhombic LiFeO_2 ; LiFe_5O_8 ; Phase change (Lee, Y.S. (119–121) 285)
- Cycleability
 Si film anode; Li-ion secondary batteries; Vacuum evaporation; Initial charge loss (Ohara, S. (119–121) 591)
- Cycles
 Thickness; Battery dimension; Lithium ion; LG's polymer cells (Lee, J.H. (119–121) 833)
- Cycling performance
 Anode film; Microbattery; Sn–Zr; Sn–Zr–Ag alloys (Kim, Y.-L. (119–121) 106)
- Cycling stability
 Lithium nickel cobalt mixed oxides; Charged electrodes (Albrecht, S. (119–121) 178)
- Cycling stability
 Vanadium oxide; Raman spectra; Lithium insertion; Anode material (Liu, P. (119–121) 305)
- Cycling
 LiBETI; Organic electrolyte; Impedance (Nagasubramanian, G. (119–121) 811)
- Decomposition mechanism
 Alkyl carbonate; Lithium metal; Pyrolysis-gas chromatography-mass spectroscopy (Mogi, R. (119–121) 597)
- Delithiation
 Lithium cobalt oxide; Nonstoichiometry; Electronic structure; XPS; EDRS; Magnetic measurements (Kosova, N.V. (119–121) 669)
- Depth profile analysis
 X-ray photoelectron spectroscopy; Electrochemically lithiated graphite; SEI (Andersson, A.M. (119–121) 522)
- Depth profiling
 Batteries; LiCoO_2 ; LiPON; Lithium; Nitrogen (Lamaze, G.P. (119–121) 680)
- Differential scanning calorimetry (DSC)
 Accelerating rate calorimetry (ARC); Thermal stability; Alkyl carbonate solutions (Gnanaraj, J.S. (119–121) 794)
- Differential scanning calorimetry
 LiMn_2O_4 ; Bimetal substitution; X-ray diffraction (Tsai, Y.W. (119–121) 701)

- Diffusion coefficient
Lithium battery; Model; Transference number; Side reactions; Heat of mixing; Thermal model; Conductivity; Molecular dynamics (Newman, J. (119–121) 838)
- Discharge voltage plateau
LiMn_{2-x}Cr_xO₄; Special capacity; Cycleability (Du, K. (119–121) 130)
- Dispersion state
Electro-conductive additive; Cathode; Ketjen black; Charge–discharge property; Pre-dispersed carbon suspension (Kuroda, S. (119–121) 924)
- Displacement reactions
Silicon anodes; Amorphous silicon; Silicides; Metal–metalloid alloys; SiO and SiB₃ (Netz, A. (119–121) 95)
- Dissolution
Chromium; Lithium manganate (Wang, H.-C. (119–121) 738)
- DLC
LiMn₂O₄; Protective layer; rf magnetron sputtering; Lithium micro-battery (Moon, H.-S. (119–121) 713)
- Doping
PDTDA; Chemical polymerization; Cathode material; Electrical properties (Lee, Y.-G. (119–121) 321)
- EC
Graphite; Particle morphology; Irreversible capacity; AFM; XRD; PC (Aurbach, D. (119–121) 2)
- EC/DEC electrolyte
Accelerating rate calorimetry; Li₃CrMnO₅ (Argue, S. (119–121) 664)
- EDRS
Lithium cobalt oxide; Nonstoichiometry; Electronic structure; Delithiation; XPS; Magnetic measurements (Kosova, N.V. (119–121) 669)
- Electric power storage
Lithium ion batteries; Performance test; Electric vehicle (Takei, K. (119–121) 887)
- Electric vehicle
Lithium ion batteries; Performance test; Electric power storage (Takei, K. (119–121) 887)
- Electrical properties
PDTDA; Chemical polymerization; Doping; Cathode material (Lee, Y.-G. (119–121) 321)
- Electro-conductive additive
Cathode; Ketjen black; Charge–discharge property; Dispersion state; Pre-dispersed carbon suspension (Kuroda, S. (119–121) 924)
- Electrochemical characteristics
Gel polymer electrolyte; Lithium-ion polymer battery; Polyacrylonitrile; Porous membrane (Min, H.-S. (119–121) 469)
- Electrochemical generators
Solid-state reaction; Zero strain; Nano particles; Li₄Ti₅O₁₂ (Guerfi, A. (119–121) 88)
- Electrochemical graphite exfoliation
Graphite surface groups; Graphite surface aging; Electrochemical lithium insertion; Rechargeable lithium batteries (Spahr, M.E. (119–121) 543)
- Electrochemical lithium insertion
Graphite surface groups; Graphite surface aging; Electrochemical graphite exfoliation; Rechargeable lithium batteries (Spahr, M.E. (119–121) 543)
- Electrochemical performance
Lithium/sulfur batteries; Protected Li anodes; Protection layer (Lee, Y.M. (119–121) 964)
- Electrochemical polymerisation
Electrolyte additive; Solid electrolyte interphase (SEI); Acrylic acid nitrile; Lithium-ion battery (Santner, H.J. (119–121) 368)
- Electrochemical polymerization
Lithium-ion batteries; Electrolyte additives; Film formation; Solid electrolyte interphase (SEI) (Möller, K.-C. (119–121) 561)
- Electrochemical properties
LiMn₂O₄ spinel; Lattice constant; Crystallinity index (Wu, S.-h. (119–121) 134)
- Electrochemical stability
Composite polymer electrolyte; Poly(ethylene oxide); Hyperbranched polymer; LiN(CF₃CF₂SO₂)₂; Ionic conductivity; Thermal stability; Interfacial stability (Itoh, T. (119–121) 403)
- Electrochemical stability
Gel polymer electrolyte; Ionic conductivity; Methyl methacrylate-styrene copolymer; Porous membrane (Jo, S.I. (119–121) 478)
- Electrochemically lithiated graphite
X-ray photoelectron spectroscopy; SEI; Depth profile analysis (Anderson, A.M. (119–121) 522)
- Electrode
Lithium cell; Li₂RuO₃; Lithium ruthenate (Moore, G.J. (119–121) 216)
- Electrodeposition
Vanadium pentoxide film electrode; Potentiostatic current transient technique; Cell impedance-controlled lithium transport; Chemical diffusivity of lithium (Lee, J.-W. (119–121) 760)
- Electrolyte additive
Graphite anode; Lithium-ion battery; Solid electrolyte interphase (SEI); Rhombohedral phase (Kohs, W. (119–121) 528)
- Electrolyte additive
Solid electrolyte interphase (SEI); Acrylic acid nitrile; Electrochemical polymerisation; Lithium-ion battery (Santner, H.J. (119–121) 368)
- Electrolyte additives
Lithium-ion batteries; Film formation; Solid electrolyte interphase (SEI); Electrochemical polymerization (Möller, K.-C. (119–121) 561)
- Electrolyte additives
Lithium-ion polymer cell; Vinylene carbonate; Organic borates; Cycle life (Contestabile, M. (119–121) 943)
- Electrolyte decomposition
Lithium-ion battery; Organic carbonate based electrolyte (Ravdel, B. (119–121) 805)
- Electrolyte decomposition
Modified Reactive System Screening Tool; Thermal stability; Thermal runaway; Gas evolution (Botte, G.G. (119–121) 815)
- Electrolyte
No-flash-point; Fluorinated ether; Amorphous carbon anode; Li_{1+x}Mn₂O₄ cathode; Li[SO₂C₂F₅]₂ (Arai, J. (119–121) 388)
- Electrolytes
Lithium-ion batteries; Butyl methyl carbonate; Graphite electrode; Organic carbonates (Vetter, J. (119–121) 338)
- Electrolytes
Lithium; Battery (Blomgren, G.E. (119–121) 326)
- Electron microscopy
LiCoO₂; Spinel; Phase transformation (Gabrisch, H. (119–121) 674)
- Electronic states
Lithium manganese spinel; First-principles calculation; Substitution; MEM; Cathode active material (Ito, Y. (119–121) 733)
- Electronic structure
Crystal structure; Li_{1-x}[Co_{1/3}Ni_{1/3}Mn_{1/3}]O₂ (0 ≤ x ≤ 1) (Koyama, Y. (119–121) 644)
- Electronic structure
Lithium cobalt oxide; Nonstoichiometry; Delithiation; XPS; EDRS; Magnetic measurements (Kosova, N.V. (119–121) 669)
- Elevated temperatures
Li-ion cells; Storage; Capacity fading; Additives in solution (Markovsky, B. (119–121) 504)
- Elevated temperatures
Lithium rechargeable batteries; Lithiated graphite electrodes; The chemical diffusion coefficient of Li-ion; Staging phase diagram (Levi, M.D. (119–121) 538)
- Emulsion drying method
LiMn_xCr_{1-x}O₂; Lithium; Battery; Rietveld refinement; XANES (Myung, S.-T. (119–121) 211)

- Enthalpy
Carbon; Lithium; Entropy; Intercalation; Open-circuit voltage; Raman spectroscopy; Phonons (Reynier, Y. (119–121) 850)
- Entropy
Carbon; Lithium; Enthalpy; Intercalation; Open-circuit voltage; Raman spectroscopy; Phonons (Reynier, Y. (119–121) 850)
- Entropy
Thermal model; Heat of mixing (Thomas, K.E. (119–121) 844)
- Expanded metal
Lithium alloy; Li-ion polymer; V_2O_5 ; $FePO_4$; $LiCoO_2$ ARC; Safety (Zaghib, K. (119–121) 76)
- Exploratory synthesis
Lithium copper iron oxide; γ - $LiFeO_2$ type; Lithium-ion batteries; Negative electrode materials; Combinatorial chemistry (Chang, S.-K. (119–121) 69)
- Fe(II)
 $LiFePO_4$; X-ray diffraction (Arnold, G. (119–121) 247)
- $FeBO_3$
Anode properties; MBO_3 ; Calcite; VBO_3 (Okada, S. (119–121) 621)
- ^{57}Fe Mössbauer data
 $Li_4Ti_5O_{12}$; Anode; Li-ion batteries; Insertion mechanisms (Kubiak, P. (119–121) 626)
- β - $FeOOH$
PVdF; Vanadium ferrite positive electrode (Funabiki, A. (119–121) 290)
- $FePO_4$
Lithium alloy; Expanded metal; Li-ion polymer; V_2O_5 ; $LiCoO_2$ ARC; Safety (Zaghib, K. (119–121) 76)
- Film formation
Lithium-ion batteries; Electrolyte additives; Solid electrolyte interphase (SEI); Electrochemical polymerization (Möller, K.-C. (119–121) 561)
- First principles
 $LiNiO_2$; Lithium intercalation; Battery material (Arroyo y de Dompablo, M.E. (119–121) 654)
- First-principles calculation
Lithium manganese spinel; Substitution; MEM; Cathode active material; Electronic states (Ito, Y. (119–121) 733)
- Flame retardant
High power battery; Safety; ARC (Hyung, Y.E. (119–121) 383)
- Fluorinated carbonate-based electrolytes
Lithium-ion cells; Performance (Smart, M.C. (119–121) 359)
- Fluorinated ether
Electrolyte; No-flash-point; Amorphous carbon anode; $Li_{1+x}Mn_2O_4$ cathode; $LiN[SO_2C_2F_5]_2$ (Arai, J. (119–121) 388)
- FT-IR
Amorphous; Tin; Raman spectroscopy (Gejke, C. (119–121) 576)
- FTIR spectroscopy
Transition-metal oxides; Manganese dioxides (MDOs) (Julien, C.M. (119–121) 743)
- FTIR
Li-ion batteries; Graphite; Cathodes; Surface films; Impedance; Additives; Capacity-fading; XRD; AFM; XPS (Aurbach, D. (119–121) 497)
- Gas evolution
Modified Reactive System Screening Tool; Thermal stability; Electrolyte decomposition; Thermal runaway (Botte, G.G. (119–121) 815)
- Gel polymer electrolyte
Cell; Tetra (ethylene glycol) diacrylate; Benzoyl peroxide; Lithium-ion polymer battery; Advanced lithium-ion battery (Kim, H.-S. (119–121) 482)
- Gel polymer electrolyte
Electrochemical characteristics; Lithium-ion polymer battery; Polyacrylonitrile; Porous membrane (Min, H.-S. (119–121) 469)
- Gel polymer electrolyte
Electrochemical stability; Ionic conductivity; Methyl methacrylate-styrene copolymer; Porous membrane (Jo, S.I. (119–121) 478)
- Gel polymer electrolyte
Poly(alkylene oxide); Conductivity; Rechargeable lithium cell (Matsuda, Y. (119–121) 473)
- GEO
Lithium-ion battery; Spacecraft; LEO; Rechargeable (Fellner, J.P. (119–121) 911)
- Glass transition temperature
Nonaqueous electrolytes; Lithium salts; Li-ion batteries; High temperature; Low temperature; Solid electrolyte interface (SEI); Conductivity (Jow, T.R. (119–121) 343)
- Graphite anode
Li intercalation; Carbon disordering; Solid electrolyte interphase (SEI) (Kostecki, R. (119–121) 550)
- Graphite anode
Lithium-ion battery; Solid electrolyte interphase (SEI); Electrolyte additive; Rhombohedral phase (Kohs, W. (119–121) 528)
- Graphite anodes
Butyrolactone; Lithium-ion batteries (Matsuo, Y. (119–121) 373)
- Graphite electrode
Lithium-ion batteries; Electrolytes; Butyl methyl carbonate; Organic carbonates (Vetter, J. (119–121) 338)
- Graphite surface aging
Graphite surface groups; Electrochemical graphite exfoliation; Electrochemical lithium insertion; Rechargeable lithium batteries (Spahr, M.E. (119–121) 543)
- Graphite surface groups
Graphite surface aging; Electrochemical graphite exfoliation; Electrochemical lithium insertion; Rechargeable lithium batteries (Spahr, M.E. (119–121) 543)
- Graphite
Li-ion batteries; Cathodes; Surface films; Impedance; Additives; Capacity-fading; XRD; AFM; FTIR; XPS (Aurbach, D. (119–121) 497)
- Graphite
Lithium-ion battery; $LiMn_2O_4$; Mn dissolution; Additive; SEI (Komaba, S. (119–121) 378)
- Graphite
Particle morphology; Irreversible capacity; AFM; XRD; PC; EC (Aurbach, D. (119–121) 2)
- Heat of mixing
Lithium battery; Model; Transference number; Side reactions; Thermal model; Conductivity; Molecular dynamics; Diffusion coefficient (Newman, J. (119–121) 838)
- Heat of mixing
Thermal model; Entropy (Thomas, K.E. (119–121) 844)
- Heteropolymer electrolytes
Polyethylene oxide; BETI (Dixon, B.G. (119–121) 856)
- High energy density
Calcium-ion battery; High safety; Acetonitrile; Vanadium oxide (Hayashi, M. (119–121) 617)
- High power battery
Flame retardant; Safety; ARC (Hyung, Y.E. (119–121) 383)
- High safety
Calcium-ion battery; High energy density; Acetonitrile; Vanadium oxide (Hayashi, M. (119–121) 617)
- High temperature
Nonaqueous electrolytes; Lithium salts; Li-ion batteries; Low temperature; Solid electrolyte interface (SEI); Conductivity; Glass transition temperature (Jow, T.R. (119–121) 343)
- High throughput
Combinatorial; Percolation; Lithium ion cell; Lithium manganese oxide spinel (Spong, A.D. (119–121) 778)

- High-capacity carbon
Anode materials; Lithium-ion batteries; Acrylonitrile-butadiene-styrene terpolymer (Fey, G.T.K. (119–121) 39)
- High-energy ball milling
PEO-based polymer electrolyte; Ionic conductivity; Nanoparticles; Amorphous phases (Ahn, J.-H. (119–121) 422)
- Hybrid electric vehicle
Manganese-based lithium batteries; Lithium ion batteries (Horiba, T. (119–121) 893)
- Hydrothermal-electrochemical synthesis
Manganese dioxides; Morphology; Lithium insertion properties (Hill, L.I. (119–121) 226)
- Hyperbranched polymer
Composite polymer electrolyte; Poly(ethylene oxide); $\text{LiN}(\text{CF}_3\text{CF}_2\text{SO}_2)_2$; Ionic conductivity; Thermal stability; Electrochemical stability; Interfacial stability (Itoh, T. (119–121) 403)
- ICP
Positive electrode; Rechargeable lithium battery; Organic polymer; Conducting polymer (Le Gall, T. (119–121) 316)
- Impedance spectroscopy
 LiPF_6 ; $\text{LiPF}_3(\text{CF}_2\text{CF}_3)_3$ (LiFAP); $\text{LiN}(\text{SO}_2\text{CF}_2\text{CF}_3)_2$ (LiBETI); Thermal stability; ARC; Surface films; Li-ion batteries (Gnanaraj, J.S. (119–121) 799)
- Impedance
Layered oxides; Lithium nickel cobalt oxides; Thermal stability; Spectroscopy; Lithium-ion battery (Fey, G.T.K. (119–121) 658)
- Impedance
Li-ion batteries; Graphite; Cathodes; Surface films; Additives; Capacity-fading; XRD; AFM; FTIR; XPS (Aurbach, D. (119–121) 497)
- Impedance
Li-ion battery; Capacity fade (Osaka, T. (119–121) 929)
- Impedance
LiBETI; Organic electrolyte; Cycling (Nagasubramanian, G. (119–121) 811)
- Impedance
Lithium-ion batteries; Calendar life; Backup use; Accelerated test; Capacity fade (Asakura, K. (119–121) 902)
- Impedance
Lithium-ion batteries; Polymer lithium-ion; Safety; Thermal characteristics (Uchida, I. (119–121) 821)
- In situ X-ray diffraction
 LiMn_2O_4 ; Al-substitution; Phase transitions (Hwang, B.-J. (119–121) 727)
- In situ XRD
 ^6Li MAS NMR; XAS; Lithium nickel manganese oxide; Battery (Yoon, W.-S. (119–121) 649)
- Inductive modeling
Lithium-ion cell; Artificial neural networks (Jungst, R.G. (119–121) 870)
- Initial charge loss
Si film anode; Li-ion secondary batteries; Vacuum evaporation; Cycle-ability (Ohara, S. (119–121) 591)
- Inorganic synthesis
Lithium iron phosphate; Cathode materials; Lithium batteries (Franger, S. (119–121) 252)
- Insertion mechanisms
 $\text{Li}_4\text{Ti}_5\text{O}_{12}$; Anode; Li-ion batteries; ^{57}Fe Mössbauer data (Kubiak, P. (119–121) 626)
- Intercalation
Carbon; Lithium; Entropy; Enthalpy; Open-circuit voltage; Raman spectroscopy; Phonons (Reynier, Y. (119–121) 850)
- Intercalation
Lithium vanadium phosphates; Lithium batteries; Structure (Saïdi, M.Y. (119–121) 266)
- Interfacial stability
Composite polymer electrolyte; Poly(ethylene oxide); Hyperbranched polymer; $\text{LiN}(\text{CF}_3\text{CF}_2\text{SO}_2)_2$; Ionic conductivity; Thermal stability; Electrochemical stability (Itoh, T. (119–121) 403)
- Intermetallic electrodes
Lithium-ion batteries; Anodes; Silver antimony (Vaughey, J.T. (119–121) 64)
- Intermetallic
Anode; Lithium battery; Aluminium alloy (Lindsay, M.J. (119–121) 84)
- Interpenetrating network
Poly(siloxane-*g*-ethylene oxide); Solid polymer electrolyte (Oh, B. (119–121) 442)
- Ion-doping
Lithium-ion battery; Cathode; ac impedance (Wang, G.X. (119–121) 189)
- Ionic conductivity
Alumina filler; Composite polymer electrolyte; PEO (Dissanayake, M.A.K.L. (119–121) 409)
- Ionic conductivity
Composite polymer electrolyte; Poly(ethylene oxide); Hyperbranched polymer; $\text{LiN}(\text{CF}_3\text{CF}_2\text{SO}_2)_2$; Thermal stability; Electrochemical stability; Interfacial stability (Itoh, T. (119–121) 403)
- Ionic conductivity
Electrochemical stability; Gel polymer electrolyte; Methyl methacrylate-styrene copolymer; Porous membrane (Jo, S.I. (119–121) 478)
- Ionic conductivity
Lithium salt; Polymer electrolyte; Transference number (Fujinami, T. (119–121) 438)
- Ionic conductivity
PEO-based polymer electrolyte; Nanoparticles; High-energy ball milling; Amorphous phases (Ahn, J.-H. (119–121) 422)
- Ionic transference number
Poly(ethylene oxide); Composite; Saponite; Lithium conductor (Wen, Z. (119–121) 427)
- Iron phosphate
Lithium battery; Manganese oxide; Vanadium oxide; XPS (Yang, S. (119–121) 239)
- Iron
Olivine; Cathode; Phosphate; Lithium; Battery (Yamada, A. (119–121) 232)
- Irreversible capacity
Graphite; Particle morphology; AFM; XRD; PC; EC (Aurbach, D. (119–121) 2)
- Ketjen black
Electro-conductive additive; Cathode; Charge-discharge property; Dispersion state; Pre-dispersed carbon suspension (Kuroda, S. (119–121) 924)
- Kinetics
Li ion batteries; Cathode; Carbon black (Dominko, R. (119–121) 770)
- Lattice constant
 LiMn_2O_4 spinel; Electrochemical properties; Crystallinity index (Wu, S.-h. (119–121) 134)
- Layered electrodes
Lithium batteries; Lithium-nickel-manganese oxides (Johnson, C.S. (119–121) 139)
- Layered manganese
Lithium secondary batteries; Sol-gel method; Cathode materials; Li_2MnO_3 (Kim, J.-H. (119–121) 166)
- Layered oxides
Lithium nickel cobalt oxides; Thermal stability; Impedance; Spectroscopy; Lithium-ion battery (Fey, G.T.K. (119–121) 658)
- Layered structure
Lithium-ion battery; Aluminum doping; Cathode materials; Manganese oxide (Park, S.H. (119–121) 161)
- Layered structure
Lithium-ion rechargeable battery; Cathode materials; Lithium manganese nickel oxides (Kang, S.-H. (119–121) 150)
- LEO
Lithium-ion battery; Spacecraft; GEO; Rechargeable (Fellner, J.P. (119–121) 911)

- Lewis acid salts
Lithium-ion batteries; Carbonate electrolyte; Polymerization; CO₂ generation and reduction; Capacity and power fade (Sloop, S.E. (119–121) 330)
- LG's polymer cells
Thickness; Battery dimension; Cycles; Lithium ion (Lee, J.H. (119–121) 833)
- Li battery
Power storage system; Manganese oxide (Adachi, K. (119–121) 897)
- Li insertion
Carbons; CVD; Pore design; BET; CV; AFM (Isaev, I. (119–121) 28)
- Li intercalation
Graphite anode; Carbon disordering; Solid electrolyte interphase (SEI) (Kostecki, R. (119–121) 550)
- Li ion batteries
Cathode; Carbon black; Kinetics (Dominko, R. (119–121) 770)
- Li ion cells
Nickel; Mixed oxide (Broussely, M. (119–121) 859)
- Li-battery
Li_xM₂(PO₄)₃; NASICON (Morgan, D. (119–121) 755)
- Li-ion batteries
Chemical delithiation; Li_xCoO₂; Lithiated graphite; 1 M LiPF₆/EC + DMC; Thermal stability (Yamaki, J.-i. (119–121) 789)
- Li-ion batteries
Graphite; Cathodes; Surface films; Impedance; Additives; Capacity-fading; XRD; AFM; FTIR; XPS (Aurbach, D. (119–121) 497)
- Li-ion batteries
Li₄Ti₅O₁₂; Anode; Insertion mechanisms; ⁵⁷Fe Mössbauer data (Kubiak, P. (119–121) 626)
- Li-ion batteries
LiMn₂O₄ properties; Phase transition (Dziembaj, R. (119–121) 121)
- Li-ion batteries
LiPF₆; LiPF₃(CF₂CF₃)₃ (LiFAP); LiN(SO₂CF₂CF₃)₂ (LiBETI); Thermal stability; ARC; Impedance spectroscopy; Surface films (Gnanaraj, J.S. (119–121) 799)
- Li-ion batteries
Nonaqueous electrolytes; Lithium salts; High temperature; Low temperature; Solid electrolyte interface (SEI); Conductivity; Glass transition temperature (Jow, T.R. (119–121) 343)
- Li-ion battery
Cathode; Vanadyl phosphate; VOPO₄ (Azmi, B.M. (119–121) 273)
- Li-ion battery
Conducting polymer; pEDOT; Non-stoichiometric spinel (Arbizzani, C. (119–121) 695)
- Li-ion battery
Impedance; Capacity fade (Osaka, T. (119–121) 929)
- Li-ion battery
Multiwall carbon nanotubes; Chemical vapor deposition; ac impedance (Wang, G.X. (119–121) 16)
- Li-ion battery
Solid-state battery; Multi-layered battery; LiMn₂O₄ cathode (Baba, M. (119–121) 914)
- Li-ion cells
Elevated temperatures; Storage; Capacity fading; Additives in solution (Markovsky, B. (119–121) 504)
- Li-ion cells
SnSb alloy; Li_{2.6}Co_{0.4}N; Composite anodes; Solid polymer electrolyte (Yang, J. (119–121) 56)
- Li-ion polymer
Lithium alloy; Expanded metal; V₂O₅; FePO₄; LiCoO₂ ARC; Safety (Zaghib, K. (119–121) 76)
- Li-ion secondary batteries
Si film anode; Vacuum evaporation; Cycleability; Initial charge loss (Ohara, S. (119–121) 591)
- Li-ion
LiTFSI solutions; Current collector; Organic solvent (Morita, M. (119–121) 784)
- Li_{1-x}Mn₂O₄
Soft X-ray absorption spectroscopy; Lithium rechargeable batteries; XAS (Yoon, W.-S. (119–121) 706)
- Li_{1-x}[Co_{1/3}Ni_{1/3}Mn_{1/3}]O₂ (0 ≤ x ≤ 1)
Crystal structure; Electronic structure (Koyama, Y. (119–121) 644)
- Li_{1+x}Mn₂O₄ cathode
Electrolyte; No-flash-point; Fluorinated ether; Amorphous carbon anode; LiN[SO₂C₂F₅]₂ (Arai, J. (119–121) 388)
- Li_{2.6}Co_{0.4}N
SnSb alloy; Composite anodes; Solid polymer electrolyte; Li-ion cells (Yang, J. (119–121) 56)
- Li₂MnO₃
Lithium secondary batteries; Sol-gel method; Layered manganese; Cathode materials (Kim, J.-H. (119–121) 166)
- Li₂RuO₃
Lithium cell; Electrode; Lithium ruthenate (Moore, G.J. (119–121) 216)
- Li₃CrMnO₅
EC/DEC electrolyte; Accelerating rate calorimetry (Argue, S. (119–121) 664)
- 1 M LiPF₆/EC + DMC
Li-ion batteries; Chemical delithiation; Li_xCoO₂; Lithiated graphite; Thermal stability (Yamaki, J.-i. (119–121) 789)
- Li_{4/3+x}Ti_{5/3}O₄
⁷Li nuclear magnetic resonance; Ti K-edge X-ray absorption fine structure (Ronci, F. (119–121) 631)
- Li₄Ti₅O₁₂
Anode; Li-ion batteries; Insertion mechanisms; ⁵⁷Fe Mössbauer data (Kubiak, P. (119–121) 626)
- Li₄Ti₅O₁₂
Electrochemical generators; Solid-state reaction; Zero strain; Nano particles (Guerrí, A. (119–121) 88)
- Li_xCoO₂
Li-ion batteries; Chemical delithiation; Lithiated graphite; 1 M LiPF₆/EC + DMC; Thermal stability (Yamaki, J.-i. (119–121) 789)
- Li_xM₂(PO₄)₃
NASICON; Li-battery (Morgan, D. (119–121) 755)
- Li_xNi_{0.8}Co_{0.15}Al_{0.05}O₂ cathode
Lithium-ion battery; Accelerated life tests; Arrhenius plots; Activation energy (Liaw, B.Y. (119–121) 874)
- LiAl_{0.15}Mn_{1.85}O₄
Lithium battery; LiMn₂O₄; Capacity fading mechanism; X-ray absorption spectroscopy (Lee, J.-F. (119–121) 721)
- LiBETI
Organic electrolyte; Impedance; Cycling (Nagasubramanian, G. (119–121) 811)
- LiCo_xMn_yNi_{1-x-y}O₂
Cathode material; Lithium-ion batteries; Co-precipitation; Co_xMn_yNi_{1-x-y}(OH)₂ (Chen, Y. (119–121) 184)
- LiCoO₂ ARC
Lithium alloy; Expanded metal; Li-ion polymer; V₂O₅; FePO₄; Safety (Zaghib, K. (119–121) 76)
- LiCoO₂ phase
Spray-dry method; Cathode materials (Konstantinov, K. (119–121) 195)
- LiCoO₂
Batteries; Depth profiling; LiPON; Lithium; Nitrogen (Lamaze, G.P. (119–121) 680)
- LiCoO₂
Electron microscopy; Spinel; Phase transformation (Gabrisch, H. (119–121) 674)
- LiCoO₂
Temperature effect; Open-circuit voltage; Self-discharge; Activation energy; Spinel (Ozawa, Y. (119–121) 918)
- LiCoO₂
Thin-film battery; Microbattery; Lithium battery; Lipon; Lithium diffusion (Dudney, N.J. (119–121) 300)

- LiFe₂O₈
Nanocrystalline; Orthorhombic LiFeO₂; Cycleability; Phase change (Lee, Y.S. (119–121) 285)
- LiFePO₄
Cathode material; Microwave processing; Lithium-ion batteries (Higuchi, M. (119–121) 258)
- LiFePO₄
Fe(II); X-ray diffraction (Arnold, G. (119–121) 247)
- LiFePO₄
Lithium-ion batteries; Natural graphite (Shim, J. (119–121) 955)
- LiFePO₄/gel/natural graphite cells
BATT program; Calendar life test (Striebel, K. (119–121) 951)
- γ-LiFeO₂ type
Lithium copper iron oxide; Lithium-ion batteries; Negative electrode materials; Combinatorial chemistry; Exploratory synthesis (Chang, S.-K. (119–121) 69)
- ⁶Li MAS NMR
In situ XRD; XAS; Lithium nickel manganese oxide; Battery (Yoon, W.-S. (119–121) 649)
- LiMn_{2-x}Cr_xO₄
Special capacity; Cycleability; Discharge voltage plateau (Du, K. (119–121) 130)
- LiMn₂O₄ cathode
Solid-state battery; Li-ion battery; Multi-layered battery (Baba, M. (119–121) 914)
- LiMn₂O₄ properties
Li-ion batteries; Phase transition (Dziembaj, R. (119–121) 121)
- LiMn₂O₄ spinel
Electrochemical properties; Lattice constant; Crystallinity index (Wu, S.-h. (119–121) 134)
- LiMn₂O₄
Al-substitution; Phase transitions; In situ X-ray diffraction (Hwang, B.-J. (119–121) 727)
- LiMn₂O₄
Bimetal substitution; X-ray diffraction; Differential scanning calorimetry (Tsai, Y.W. (119–121) 701)
- LiMn₂O₄
DLC; Protective layer; rf magnetron sputtering; Lithium microbattery (Moon, H.-S. (119–121) 713)
- LiMn₂O₄
Lithium battery; LiAl_{0.15}Mn_{1.85}O₄; Capacity fading mechanism; X-ray absorption spectroscopy (Lee, J.-F. (119–121) 721)
- LiMn₂O₄
Lithium-ion battery; Graphite; Mn dissolution; Additive; SEI (Komaba, S. (119–121) 378)
- LiMn₂O₄
Thin-film stress; Post annealing; Radio frequency magnetron sputter; Microbattery (Moon, H.-S. (119–121) 710)
- LiMn₂O₄
Transition-metal substitution; rf magnetron sputter; Microbattery; Lithium rechargeable batteries (Moon, H.-S. (119–121) 717)
- LiMn_xCr_{1-x}O₂
Lithium; Battery; Rietveld refinement; XANES; Emulsion drying method (Myung, S.-T. (119–121) 211)
- LiMnO₂
PVDF-based electrolyte; Lithium polymer battery; Chemically synthesized PAN; LiMnO₂-PAN-DMcT composite (Kim, J.-U. (119–121) 686)
- LiMnO₂-PAN-DMcT composite
PVDF-based electrolyte; Lithium polymer battery; LiMnO₂; Chemically synthesized PAN (Kim, J.-U. (119–121) 686)
- LiN(CF₃CF₂SO₂)₂
Composite polymer electrolyte; Poly(ethylene oxide); Hyperbranched polymer; Ionic conductivity; Thermal stability; Electrochemical stability; Interfacial stability (Itoh, T. (119–121) 403)
- LiN(SO₂CF₂CF₃)₂ (LiBETI)
LiPF₆; LiPF₃(CF₂CF₃)₃ (LiFAP); Thermal stability; ARC; Impedance spectroscopy; Surface films; Li-ion batteries (Gnanaraj, J.S. (119–121) 799)
- LiNi_{0.5}Co_{0.5}O₂
Medical device; Cyclability; Aging (Belharouak, I. (119–121) 175)
- LiNiO₂
First principles; Lithium intercalation; Battery material (Arroyo y de Dompablo, M.E. (119–121) 654)
- LiNiVO₄
Radio frequency sputtering; Thin films; Lithium batteries; Anode (Reddy, M.V. (119–121) 101)
- LiN[SO₂C₂F₅]₂
Electrolyte; No-flash-point; Fluorinated ether; Amorphous carbon anode; Li_{1+x}Mn₂O₄ cathode (Arai, J. (119–121) 388)
- LiPF₃(CF₂CF₃)₃ (LiFAP)
LiPF₆; LiN(SO₂CF₂CF₃)₂ (LiBETI); Thermal stability; ARC; Impedance spectroscopy; Surface films; Li-ion batteries (Gnanaraj, J.S. (119–121) 799)
- LiPF₆
LiPF₃(CF₂CF₃)₃ (LiFAP); LiN(SO₂CF₂CF₃)₂ (LiBETI); Thermal stability; ARC; Impedance spectroscopy; Surface films; Li-ion batteries (Gnanaraj, J.S. (119–121) 799)
- LiPON
Batteries; Depth profiling; LiCoO₂; Lithium; Nitrogen (Lamaze, G.P. (119–121) 680)
- Lipon
Thin-film batteries; Lithium cobalt oxide; Transmission electron microscopy; Nanocrystalline cathode (Jang, Y.-I. (119–121) 295)
- Lipon
Thin-film battery; Microbattery; Lithium battery; LiCoO₂; Lithium diffusion (Dudney, N.J. (119–121) 300)
- Liquid polymer electrolytes (LPE)
Polymer electrolytes; Lithium batteries (Scott Morris, R. (119–121) 487)
- LiTFSI solutions
Li-ion; Current collector; Organic solvent (Morita, M. (119–121) 784)
- Lithiated graphite electrodes
Lithium rechargeable batteries; The chemical diffusion coefficient of Li-ion; Elevated temperatures; Staging phase diagram (Levi, M.D. (119–121) 538)
- Lithiated graphite
Li-ion batteries; Chemical delithiation; Li_xCoO₂; 1 M LiPF₆/EC + DMC; Thermal stability (Yamaki, J.-i. (119–121) 789)
- Lithium alloy anodes
Lithium ion rechargeable batteries; Metal anodes; Amorphous phase; Silicon; Thermodynamics (Limthongkul, P. (119–121) 604)
- Lithium alloy
Carbonaceous mesophase spherules; Composite anode; Lithium-ion batteries (Liu, Y. (119–121) 572)
- Lithium alloy
Expanded metal; Li-ion polymer; V₂O₅; FePO₄; LiCoO₂ ARC; Safety (Zaghib, K. (119–121) 76)
- Lithium batteries
Anode material; Tin composite oxide; ¹¹⁹Sn Mössbauer spectroscopy (Robert, F. (119–121) 581)
- Lithium batteries
Layered electrodes; Lithium-nickel-manganese oxides (Johnson, C.S. (119–121) 139)
- Lithium batteries
Lithium iron phosphate; Cathode materials; Inorganic synthesis (Franger, S. (119–121) 252)
- Lithium batteries
Lithium vanadium phosphates; Intercalation; Structure (Saïdi, M.Y. (119–121) 266)
- Lithium batteries
Lithium; Cathodes; Silver; Vanadium (Takeuchi, K.J. (119–121) 973)

- Lithium batteries
Polymer electrolytes; Liquid polymer electrolytes (LPE) (Scott Morris, R. (119–121) 487)
- Lithium batteries
Polymer electrolytes; Lithium phosphate electrodes (Croce, F. (119–121) 399)
- Lithium batteries
Radio frequency sputtering; Thin films; Anode; LiNiVO_4 (Reddy, M.V. (119–121) 101)
- Lithium battery
Cathode; Manganese oxide (Eriksson, T.A. (119–121) 145)
- Lithium battery
Intermetallic; Anode; Aluminium alloy (Lindsay, M.J. (119–121) 84)
- Lithium battery
 LiMn_2O_4 ; $\text{LiAl}_{0.15}\text{Mn}_{1.85}\text{O}_4$; Capacity fading mechanism; X-ray absorption spectroscopy (Lee, J.-F. (119–121) 721)
- Lithium battery
Manganese oxide; Vanadium oxide; Iron phosphate; XPS (Yang, S. (119–121) 239)
- Lithium battery
Model; Transference number; Side reactions; Heat of mixing; Thermal model; Conductivity; Molecular dynamics; Diffusion coefficient (Newman, J. (119–121) 838)
- Lithium battery
Polymer composite; Oxysulfide glass; Thio-LISICON; Solid electrolytes (Inada, T. (119–121) 948)
- Lithium battery
Polymer electrolytes; Bisphenol A ethoxylate diacrylate (Kang, Y. (119–121) 432)
- Lithium battery
Polymer electrolytes; PEO; Polysiloxane; Acrylate (Kang, Y. (119–121) 448)
- Lithium battery
Thin film anode; Microbattery; Multilayer; Si–Ag; Si (–Zr)–Ag (Lee, S.-J. (119–121) 117)
- Lithium battery
Thin-film battery; Microbattery; LiCoO_2 ; Lipon; Lithium diffusion (Dudney, N.J. (119–121) 300)
- Lithium battery
Zr–Si; Microbattery; Thin-film battery; Thin-film anode (Lee, S.-J. (119–121) 113)
- Lithium cell
Electrode; Li_2RuO_3 ; Lithium ruthenate (Moore, G.J. (119–121) 216)
- Lithium cells
Lithium cuprate (Li_2CuO_2); Lithium manganese oxide (LiMn_2O_4); Composite electrodes; Lithium ion cells (Vitins, G. (119–121) 938)
- Lithium cobalt nickel manganese oxides
Lithium insertion material; Lithium-ion battery (Yabuuchi, N. (119–121) 171)
- Lithium cobalt oxide
Nonstoichiometry; Electronic structure; Delithiation; XPS; EDRS; Magnetic measurements (Kosova, N.V. (119–121) 669)
- Lithium cobalt oxide
Thin-film batteries; Lipon; Transmission electron microscopy; Nanocrystalline cathode (Jang, Y.-I. (119–121) 295)
- Lithium conductor
Poly(ethylene oxide); Composite; Saponite; Ionic transference number (Wen, Z. (119–121) 427)
- Lithium copper iron oxide
 $\gamma\text{-LiFeO}_2$ type; Lithium-ion batteries; Negative electrode materials; Combinatorial chemistry; Exploratory synthesis (Chang, S.-K. (119–121) 69)
- Lithium cuprate (Li_2CuO_2)
Lithium manganese oxide (LiMn_2O_4); Composite electrodes; Lithium cells; Lithium ion cells (Vitins, G. (119–121) 938)
- Lithium diffusion
Thin-film battery; Microbattery; Lithium battery; LiCoO_2 ; Lipon (Dudney, N.J. (119–121) 300)
- Lithium electrode
Protection layer; Crosslinked polymer electrolyte; SEI layer; Charge-discharge (Choi, N.-S. (119–121) 610)
- Lithium insertion material
Lithium-ion battery; Lithium cobalt nickel manganese oxides (Yabuuchi, N. (119–121) 171)
- Lithium insertion mechanism
Sb-based materials; ^{121}Sb Mössbauer data (Aldon, L. (119–121) 585)
- Lithium insertion properties
Manganese dioxides; Hydrothermal-electrochemical synthesis; Morphology (Hill, L.I. (119–121) 226)
- Lithium insertion
Lithium intercalation; Vanadium oxide; Transition metal oxides; Vanadium oxide bronzes (Andrukaitis, E. (119–121) 205)
- Lithium insertion
Lithium vanadium oxide; Sol–gel (Eguchi, M. (119–121) 201)
- Lithium insertion
Vanadium oxide; Raman spectra; Cycling stability; Anode material (Liu, P. (119–121) 305)
- Lithium intercalation
First principles; LiNiO_2 ; Battery material (Arroyo y de Dompablo, M.E. (119–121) 654)
- Lithium intercalation
Lithium insertion; Vanadium oxide; Transition metal oxides; Vanadium oxide bronzes (Andrukaitis, E. (119–121) 205)
- Lithium intercalation
Natural graphite; Chemical; Purification; Thermal treatment (Zaghib, K. (119–121) 8)
- Lithium ion batteries
Manganese-based lithium batteries; Hybrid electric vehicle (Horiba, T. (119–121) 893)
- Lithium ion batteries
Performance test; Electric power storage; Electric vehicle (Takei, K. (119–121) 887)
- Lithium ion cell
Combinatorial; High throughput; Percolation; Lithium manganese oxide spinel (Spong, A.D. (119–121) 778)
- Lithium ion cells
Lithium cuprate (Li_2CuO_2); Lithium manganese oxide (LiMn_2O_4); Composite electrodes; Lithium cells (Vitins, G. (119–121) 938)
- Lithium ion rechargeable batteries
Lithium alloy anodes; Metal anodes; Amorphous phase; Silicon; Thermodynamics (Limthongkul, P. (119–121) 604)
- Lithium ion
Thickness; Battery dimension; Cycles; LG's polymer cells (Lee, J.H. (119–121) 833)
- Lithium iron phosphate
Cathode materials; Inorganic synthesis; Lithium batteries (Franger, S. (119–121) 252)
- Lithium manganate
Dissolution; Chromium (Wang, H.-C. (119–121) 738)
- Lithium manganese nickel oxides
Lithium-ion rechargeable battery; Cathode materials; Layered structure (Kang, S.-H. (119–121) 150)
- Lithium manganese oxide (LiMn_2O_4)
Lithium cuprate (Li_2CuO_2); Composite electrodes; Lithium cells; Lithium ion cells (Vitins, G. (119–121) 938)
- Lithium manganese oxide spinel
Combinatorial; High throughput; Percolation; Lithium ion cell (Spong, A.D. (119–121) 778)
- Lithium manganese spinel
Crystal structure; Oxygen content; Cathode material; Neutron diffraction; Nickel substitution (Idemoto, Y. (119–121) 125)

- Lithium manganese spinel
First-principles calculation; Substitution; MEM; Cathode active material; Electronic states (Ito, Y. (119–121) 733)
- Lithium metal
Alkyl carbonate; Decomposition mechanism; Pyrolysis-gas chromatography-mass spectroscopy (Mogi, R. (119–121) 597)
- Lithium microbattery
LiMn₂O₄; DLC; Protective layer; rf magnetron sputtering (Moon, H.-S. (119–121) 713)
- Lithium nickel cobalt mixed oxides
Cycling stability; Charged electrodes (Albrecht, S. (119–121) 178)
- Lithium nickel cobalt oxides
Layered oxides; Thermal stability; Impedance; Spectroscopy; Lithium-ion battery (Fey, G.T.K. (119–121) 658)
- Lithium nickel manganese oxide
⁶Li MAS NMR; In situ XRD; XAS; Battery (Yoon, W.-S. (119–121) 649)
- Lithium nickel manganese oxide
Lithium-ion battery; Nickel manganese double hydroxide (Makimura, Y. (119–121) 156)
- Lithium nickel manganese oxide
Lithium-ion cell; Lithium titanium oxide (Ariyoshi, K. (119–121) 959)
- Lithium phosphate electrodes
Lithium batteries; Polymer electrolytes (Croce, F. (119–121) 399)
- Lithium polymer battery
PVDF-based electrolyte; LiMnO₂; Chemically synthesized PAN; LiMnO₂-PAN-DMcT composite (Kim, J.-U. (119–121) 686)
- Lithium rechargeable batteries
LiMn₂O₄; Transition-metal substitution; rf magnetron sputter; Micro-battery (Moon, H.-S. (119–121) 717)
- Lithium rechargeable batteries
Lithiated graphite electrodes; The chemical diffusion coefficient of Li-ion; Elevated temperatures; Staging phase diagram (Levi, M.D. (119–121) 538)
- Lithium rechargeable batteries
Soft X-ray absorption spectroscopy; Li_{1-x}Mn₂O₄; XAS (Yoon, W.-S. (119–121) 706)
- Lithium ruthenate
Lithium cell; Electrode; Li₂RuO₃ (Moore, G.J. (119–121) 216)
- Lithium salt
Polymer electrolyte; Transference number; Ionic conductivity (Fujinami, T. (119–121) 438)
- Lithium salts
Nonaqueous electrolytes; Li-ion batteries; High temperature; Low temperature; Solid electrolyte interface (SEI); Conductivity; Glass transition temperature (Jow, T.R. (119–121) 343)
- Lithium secondary batteries
Active materials (Richardson, T.J. (119–121) 262)
- Lithium secondary batteries
Sol-gel method; Layered manganese; Cathode materials; Li₂MnO₃ (Kim, J.-H. (119–121) 166)
- Lithium secondary battery
Anode material; CeSn₃; Lithium storage intermetallic compound (Sakaguchi, H. (119–121) 50)
- Lithium storage intermetallic compound
Lithium secondary battery; Anode material; CeSn₃ (Sakaguchi, H. (119–121) 50)
- Lithium titanium oxide
Lithium-ion cell; Lithium nickel manganese oxide (Ariyoshi, K. (119–121) 959)
- Lithium vanadium oxide
Sol-gel; Lithium insertion (Eguchi, M. (119–121) 201)
- Lithium vanadium phosphates
Lithium batteries; Intercalation; Structure (Saïdi, M.Y. (119–121) 266)
- Lithium
Batteries; Depth profiling; LiCoO₂; LiPON; Nitrogen (Lamaze, G.P. (119–121) 680)
- Lithium
Battery; Silver vanadium oxide; Mass transport (Schmidt, C. (119–121) 979)
- Lithium
Carbon; Entropy; Enthalpy; Intercalation; Open-circuit voltage; Raman spectroscopy; Phonons (Reynier, Y. (119–121) 850)
- Lithium
Electrolytes; Battery (Blomgren, G.E. (119–121) 326)
- Lithium
LiMn_xCr_{1-x}O₂; Battery; Rietveld refinement; XANES; Emulsion drying method (Myung, S.-T. (119–121) 211)
- Lithium
Lithium batteries; Cathodes; Silver; Vanadium (Takeuchi, K.J. (119–121) 973)
- Lithium
Olivine; Cathode; Iron; Phosphate; Battery (Yamada, A. (119–121) 232)
- Lithium-nickel-manganese oxides
Lithium batteries; Layered electrodes (Johnson, C.S. (119–121) 139)
- Lithium-ion batteries
Battery cycle-life; Battery power; Power fade; Battery capacity; Capacity fade (Wright, R.B. (119–121) 865)
- Lithium-ion batteries
Butyrolactone; Graphite anodes (Matsuo, Y. (119–121) 373)
- Lithium-ion batteries
Calendar life; Backup use; Accelerated test; Impedance; Capacity fade (Asakura, K. (119–121) 902)
- Lithium-ion batteries
Carbonate electrolyte; Lewis acid salts; Polymerization; CO₂ generation and reduction; Capacity and power fade (Sloop, S.E. (119–121) 330)
- Lithium-ion batteries
Cathode material; Co-precipitation; Co_xMn_yNi_{1-x-y}(OH)₂; LiCo_xMn_yNi_{1-x-y}O₂ (Chen, Y. (119–121) 184)
- Lithium-ion batteries
Composite graphite electrode; Scanning probe microscopy (Jeong, S.-K. (119–121) 555)
- Lithium-ion batteries
Electrolyte additives; Film formation; Solid electrolyte interphase (SEI); Electrochemical polymerization (Möller, K.-C. (119–121) 561)
- Lithium-ion batteries
Electrolytes; Butyl methyl carbonate; Graphite electrode; Organic carbonates (Vetter, J. (119–121) 338)
- Lithium-ion batteries
High-capacity carbon; Anode materials; Acrylonitrile-butadiene-styrene terpolymer (Fey, G.T.K. (119–121) 39)
- Lithium-ion batteries
Intermetallic electrodes; Anodes; Silver antimony (Vaughey, J.T. (119–121) 64)
- Lithium-ion batteries
LiFePO₄; Cathode material; Microwave processing (Higuchi, M. (119–121) 258)
- Lithium-ion batteries
Lithium alloy; Carbonaceous mesophase spherules; Composite anode (Liu, Y. (119–121) 572)
- Lithium-ion batteries
Lithium copper iron oxide; γ -LiFeO₂ type; Negative electrode materials; Combinatorial chemistry; Exploratory synthesis (Chang, S.-K. (119–121) 69)
- Lithium-ion batteries
Mechanical alloying; Nanocrystalline alloys; Tin oxides; Anode materials; Secondary batteries (Ahn, J.-H. (119–121) 45)
- Lithium-ion batteries
Natural graphite; LiFePO₄ (Shim, J. (119–121) 955)
- Lithium-ion batteries
Polymer electrolytes; Microporous PVdF (Saunier, J. (119–121) 454)

- Lithium-ion batteries
 Polymer lithium-ion; Safety; Thermal characteristics; Impedance (Uchida, I. (119–121) 821)
- Lithium-ion battery
 Aluminum doping; Cathode materials; Layered structure; Manganese oxide (Park, S.H. (119–121) 161)
- Lithium-ion battery
 Cathode; Ion-doping; ac impedance (Wang, G.X. (119–121) 189)
- Lithium-ion battery
 Electrolyte additive; Solid electrolyte interphase (SEI); Acrylic acid nitrile; Electrochemical polymerisation (Santner, H.J. (119–121) 368)
- Lithium-ion battery
 Graphite anode; Solid electrolyte interphase (SEI); Electrolyte additive; Rhombohedral phase (Kohs, W. (119–121) 528)
- Lithium-ion battery
 Graphite; LiMn_2O_4 ; Mn dissolution; Additive; SEI (Komaba, S. (119–121) 378)
- Lithium-ion battery
 Layered oxides; Lithium nickel cobalt oxides; Thermal stability; Impedance; Spectroscopy (Fey, G.T.K. (119–121) 658)
- Lithium-ion battery
 $\text{Li}_x\text{Ni}_{0.8}\text{Co}_{0.15}\text{Al}_{0.05}\text{O}_2$ cathode; Accelerated life tests; Arrhenius plots; Activation energy (Liaw, B.Y. (119–121) 874)
- Lithium-ion battery
 Lithium insertion material; Lithium cobalt nickel manganese oxides (Yabuuchi, N. (119–121) 171)
- Lithium-ion battery
 Lithium nickel manganese oxide; Nickel manganese double hydroxide (Makimura, Y. (119–121) 156)
- Lithium-ion battery
 Natural graphite; Anode (Shim, J. (119–121) 934)
- Lithium-ion battery
 Non-flammable electrolyte; SEI; Additive (Ota, H. (119–121) 393)
- Lithium-ion battery
 Organic carbonate based electrolyte; Electrolyte decomposition (Ravdel, B. (119–121) 805)
- Lithium-ion battery
 Spacecraft; LEO; GEO; Rechargeable (Fellner, J.P. (119–121) 911)
- Lithium-ion battery
 Spinel LiMn_2O_4 ; Mechanical alloying; Particle size (Jeong, W.T. (119–121) 690)
- Lithium-ion battery
 XAFS; S K-edge XANES; TOF-SIMS; SEI (Ota, H. (119–121) 567)
- Lithium-ion cell
 Inductive modeling; Artificial neural networks (Jungst, R.G. (119–121) 870)
- Lithium-ion cell
 Lithium nickel manganese oxide; Lithium titanium oxide (Ariyoshi, K. (119–121) 959)
- Lithium-ion cells
 Fluorinated carbonate-based electrolytes; Performance (Smart, M.C. (119–121) 359)
- Lithium-ion cells
 Low-temperature performance; Carbonate-based electrolytes (Smart, M.C. (119–121) 349)
- Lithium-ion cells
 Porous polymer; PVdF (Sasaki, H. (119–121) 774)
- Lithium-ion polymer battery
 Electrochemical characteristics; Gel polymer electrolyte; Polyacrylonitrile; Porous membrane (Min, H.-S. (119–121) 469)
- Lithium-ion polymer battery
 Gel polymer electrolyte; Cell; Tetra (ethylene glycol) diacrylate; Benzoyl peroxide; Advanced lithium-ion battery (Kim, H.-S. (119–121) 482)
- Lithium-ion polymer cell
 Electrolyte additives; Vinylene carbonate; Organic borates; Cycle life (Contestabile, M. (119–121) 943)
- Lithium-ion rechargeable battery
 Cathode materials; Lithium manganese nickel oxides; Layered structure (Kang, S.-H. (119–121) 150)
- Lithium-solid polymer battery
 Solid polymer electrolyte battery; Composite polymer electrolyte; Composite anode; Thermal stability (Capiglia, C. (119–121) 826)
- Lithium/polymer battery
 PVDF/PAN-based electrolyte; VO-flyash composite (Kim, J.-U. (119–121) 766)
- Lithium/sulfur batteries
 Electrochemical performance; Protected Li anodes; Protection layer (Lee, Y.M. (119–121) 964)
- $\text{Li}[\text{Ti}_{5/3}\text{Li}_{1/3}]\text{O}_4$ film electrode
 Cell-impedance-controlled lithium transport; Current transient; Monte Carlo simulation; Two-phase coexistence (Jung, K.-N. (119–121) 637)
- ^7Li nuclear magnetic resonance
 Ti K-edge X-ray absorption fine structure; $\text{Li}_{4/3+x}\text{Ti}_{5/3}\text{O}_4$ (Ronci, F. (119–121) 631)
- Low temperature
 Nonaqueous electrolytes; Lithium salts; Li-ion batteries; High temperature; Solid electrolyte interface (SEI); Conductivity; Glass transition temperature (Jow, T.R. (119–121) 343)
- Low-temperature performance
 Lithium-ion cells; Carbonate-based electrolytes (Smart, M.C. (119–121) 349)
- Magnetic measurements
 Lithium cobalt oxide; Nonstoichiometry; Electronic structure; Delithiation; XPS; EDRS (Kosova, N.V. (119–121) 669)
- Manganese acetate
 Carbon nanotube; Anode; Modification (Ishihara, T. (119–121) 24)
- Manganese dioxides (MDOs)
 FTIR spectroscopy; Transition-metal oxides (Julien, C.M. (119–121) 743)
- Manganese dioxides
 Hydrothermal-electrochemical synthesis; Morphology; Lithium insertion properties (Hill, L.I. (119–121) 226)
- Manganese oxide
 Cathode; Lithium battery (Eriksson, T.A. (119–121) 145)
- Manganese oxide
 Lithium battery; Vanadium oxide; Iron phosphate; XPS (Yang, S. (119–121) 239)
- Manganese oxide
 Lithium-ion battery; Aluminum doping; Cathode materials; Layered structure (Park, S.H. (119–121) 161)
- Manganese oxide
 Power storage system; Li battery (Adachi, K. (119–121) 897)
- Manganese-based lithium batteries
 Hybrid electric vehicle; Lithium ion batteries (Horiba, T. (119–121) 893)
- Mars Exploration Rover
 Martian rocks; Mars Pathfinder (Ratnakumar, B.V. (119–121) 906)
- Mars Pathfinder
 Mars Exploration Rover; Martian rocks (Ratnakumar, B.V. (119–121) 906)
- Martian rocks
 Mars Exploration Rover; Mars Pathfinder (Ratnakumar, B.V. (119–121) 906)
- Mass transport
 Lithium; Battery; Silver vanadium oxide (Schmidt, C. (119–121) 979)
- MBO_3
 Anode properties; Calcite; FeBO_3 ; VBO_3 (Okada, S. (119–121) 621)
- Mechanical alloying
 Nanocrystalline alloys; Lithium-ion batteries; Tin oxides; Anode materials; Secondary batteries (Ahn, J.-H. (119–121) 45)

- Mechanical alloying
 Spinel LiMn_2O_4 ; Particle size; Lithium-ion battery (Jeong, W.T. (119–121) 690)
- Medical device
 $\text{LiNi}_{0.5}\text{Co}_{0.5}\text{O}_2$; Cyclability; Aging (Belharouak, I. (119–121) 175)
- MEM
 Lithium manganese spinel; First-principles calculation; Substitution; Cathode active material; Electronic states (Ito, Y. (119–121) 733)
- Metal anodes
 Lithium ion rechargeable batteries; Lithium alloy anodes; Amorphous phase; Silicon; Thermodynamics (Limthongkul, P. (119–121) 604)
- Metal–metalloid alloys
 Silicon anodes; Amorphous silicon; Silicides; Displacement reactions; SiO and SiB_3 (Netz, A. (119–121) 95)
- Methyl methacrylate-styrene copolymer
 Electrochemical stability; Gel polymer electrolyte; Ionic conductivity; Porous membrane (Jo, S.I. (119–121) 478)
- Microbatteries
 Nanobatteries; Nanocathodes; V_2O_5 xerogels; Carbon nanotubes (Dewan, C. (119–121) 310)
- Microbattery
 Anode film; Sn–Zr; Sn–Zr–Ag alloys; Cycling performance (Kim, Y.-L. (119–121) 106)
- Microbattery
 LiMn_2O_4 ; Transition-metal substitution; rf magnetron sputter; Lithium rechargeable batteries (Moon, H.-S. (119–121) 717)
- Microbattery
 Thin film anode; Multilayer; Si–Ag; Si (–Zr)–Ag; Lithium battery (Lee, S.-J. (119–121) 117)
- Microbattery
 Thin-film battery; Lithium battery; LiCoO_2 ; Lipon; Lithium diffusion (Dudney, N.J. (119–121) 300)
- Microbattery
 Thin-film stress; LiMn_2O_4 ; Post annealing; Radio frequency magnetron sputter (Moon, H.-S. (119–121) 710)
- Microbattery
 Zr–Si; Thin-film battery; Thin-film anode; Lithium battery (Lee, S.-J. (119–121) 113)
- Microporous PVdF
 Lithium-ion batteries; Polymer electrolytes (Saunier, J. (119–121) 454)
- Microscopy
 Calendar-life; Chromatography; Spectroscopy (Abraham, D.P. (119–121) 511)
- Microwave processing
 LiFePO_4 ; Cathode material; Lithium-ion batteries (Higuchi, M. (119–121) 258)
- Mixed oxide
 Li ion cells; Nickel (Broussely, M. (119–121) 859)
- Mn dissolution
 Lithium-ion battery; Graphite; LiMn_2O_4 ; Additive; SEI (Komaba, S. (119–121) 378)
- Mn/Fe dissolution
 Olivine LiFePO_4 ; Spinel LiMn_2O_4 (Itchev, N. (119–121) 749)
- Model
 Lithium battery; Transference number; Side reactions; Heat of mixing; Thermal model; Conductivity; Molecular dynamics; Diffusion coefficient (Newman, J. (119–121) 838)
- Modification
 Carbon nanotube; Anode; Manganese acetate (Ishihara, T. (119–121) 24)
- Modified Reactive System Screening Tool
 Thermal stability; Electrolyte decomposition; Thermal runaway; Gas evolution (Botte, G.G. (119–121) 815)
- Molecular dynamics
 Lithium battery; Model; Transference number; Side reactions; Heat of mixing; Thermal model; Conductivity; Diffusion coefficient (Newman, J. (119–121) 838)
- Monoclinic
 Structural study; Crystallographic (Patoux, S. (119–121) 278)
- Monte Carlo simulation
 Cell-impedance-controlled lithium transport; Current transient; $\text{Li}[\text{Ti}_{5/3}\text{Li}_{1/3}]\text{O}_4$ film electrode; Two-phase coexistence (Jung, K.-N. (119–121) 637)
- Morphology
 Manganese dioxides; Hydrothermal-electrochemical synthesis; Lithium insertion properties (Hill, L.I. (119–121) 226)
- Multi-layered battery
 Solid-state battery; Li-ion battery; LiMn_2O_4 cathode (Baba, M. (119–121) 914)
- Multilayer
 Thin film anode; Microbattery; Si–Ag; Si (–Zr)–Ag; Lithium battery (Lee, S.-J. (119–121) 117)
- Multiwall carbon nanotubes
 Chemical vapor deposition; Li-ion battery; ac impedance (Wang, G.X. (119–121) 16)
- N_2 -adsorption
 Thermogravimetric analysis; Carbon materials (Sandí, G. (119–121) 34)
- Nano particles
 Electrochemical generators; Solid-state reaction; Zero strain; $\text{Li}_4\text{Ti}_5\text{O}_{12}$ (Guerfi, A. (119–121) 88)
- Nano-crystalline
 Orthorhombic LiFeO_2 ; Cycleability; LiFe_5O_8 ; Phase change (Lee, Y.S. (119–121) 285)
- Nanobatteries
 Microbatteries; Nanocathodes; V_2O_5 xerogels; Carbon nanotubes (Dewan, C. (119–121) 310)
- Nanocathodes
 Microbatteries; Nanobatteries; V_2O_5 xerogels; Carbon nanotubes (Dewan, C. (119–121) 310)
- Nanocomposite cathode
 Phase inversion technique; Pore diameter; Solid-state reaction; Charge-discharge studies (Manuel Stephan, A. (119–121) 460)
- Nanocomposite
 PEO; SLH (Sandí, G. (119–121) 492)
- Nanocrystalline alloys
 Mechanical alloying; Lithium-ion batteries; Tin oxides; Anode materials; Secondary batteries (Ahn, J.-H. (119–121) 45)
- Nanocrystalline cathode
 Thin-film batteries; Lithium cobalt oxide; Lipon; Transmission electron microscopy (Jang, Y.-I. (119–121) 295)
- Nanocrystalline
 Thin-film electrodes; Pulsed laser deposition (Song, S.-W. (119–121) 110)
- Nanomaterials
 Rechargeable lithium batteries; Sonochemistry (Odani, A. (119–121) 517)
- Nanoparticles
 PEO-based polymer electrolyte; Ionic conductivity; High-energy ball milling; Amorphous phases (Ahn, J.-H. (119–121) 422)
- Nanoparticles
 SnS_2 ; Sonochemical method; Anode (Mukaibo, H. (119–121) 60)
- NASICON
 $\text{Li}_x\text{M}_2(\text{PO}_4)_3$; Li-battery (Morgan, D. (119–121) 755)
- Natural graphite
 Lithium intercalation; Chemical; Purification; Thermal treatment (Zaghib, K. (119–121) 8)
- Natural graphite
 Lithium-ion batteries; LiFePO_4 (Shim, J. (119–121) 955)
- Natural graphite
 Lithium-ion battery; Anode (Shim, J. (119–121) 934)
- Negative electrode materials
 Lithium copper iron oxide; $\gamma\text{-LiFeO}_2$ type; Lithium-ion batteries; Combinatorial chemistry; Exploratory synthesis (Chang, S.-K. (119–121) 69)

- Neutron diffraction
Lithium manganese spinel; Crystal structure; Oxygen content; Cathode material; Nickel substitution (Idemoto, Y. (119–121) 125)
- Nickel manganese double hydroxide
Lithium-ion battery; Lithium nickel manganese oxide (Makimura, Y. (119–121) 156)
- Nickel substitution
Lithium manganese spinel; Crystal structure; Oxygen content; Cathode material; Neutron diffraction (Idemoto, Y. (119–121) 125)
- Nickel
Li ion cells; Mixed oxide (Broussely, M. (119–121) 859)
- Nitrogen
Batteries; Depth profiling; LiCoO₂; LiPON; Lithium (Lamaze, G.P. (119–121) 680)
- No-flash-point
Electrolyte; Fluorinated ether; Amorphous carbon anode; Li_{1+x}Mn₂O₄ cathode; LiN[SO₂C₂F₅]₂ (Arai, J. (119–121) 388)
- Non-flammable electrolyte
Lithium-ion battery; SEI; Additive (Ota, H. (119–121) 393)
- Non-stoichiometric spinel
Conducting polymer; Li-ion battery; pEDOT (Arbizzani, C. (119–121) 695)
- Nonaqueous electrolytes
Lithium salts; Li-ion batteries; High temperature; Low temperature; Solid electrolyte interface (SEI); Conductivity; Glass transition temperature (Jow, T.R. (119–121) 343)
- Nonstoichiometry
Lithium cobalt oxide; Electronic structure; Delithiation; XPS; EDRS; Magnetic measurements (Kosova, N.V. (119–121) 669)
- Olivine LiFePO₄
Spinel LiMn₂O₄; Mn/Fe dissolution (Iltchev, N. (119–121) 749)
- Olivine
Cathode; Iron; Phosphate; Lithium; Battery (Yamada, A. (119–121) 232)
- Open-circuit voltage
Carbon; Lithium; Entropy; Enthalpy; Intercalation; Raman spectroscopy; Phonons (Reynier, Y. (119–121) 850)
- Open-circuit voltage
LiCoO₂; Temperature effect; Self-discharge; Activation energy; Spinel (Ozawa, Y. (119–121) 918)
- Organic borates
Lithium-ion polymer cell; Electrolyte additives; Vinylene carbonate; Cycle life (Contestabile, M. (119–121) 943)
- Organic carbonate based electrolyte
Lithium-ion battery; Electrolyte decomposition (Ravdel, B. (119–121) 805)
- Organic carbonates
Lithium-ion batteries; Electrolytes; Butyl methyl carbonate; Graphite electrode (Vetter, J. (119–121) 338)
- Organic electrolyte
LiBETI; Impedance; Cycling (Nagasubramanian, G. (119–121) 811)
- Organic polymer
Positive electrode; Rechargeable lithium battery; Conducting polymer; ICP (Le Gall, T. (119–121) 316)
- Organic solvent
Li-ion; LiTFSI solutions; Current collector (Morita, M. (119–121) 784)
- Orthorhombic LiFeO₂
Nano-crystalline; Cycleability; LiFe₅O₈; Phase change (Lee, Y.S. (119–121) 285)
- Orthorhombic LiMnO₂
Sol-gel; Acid to metal ions ratio (*R*) (Guo, Z.P. (119–121) 221)
- Oxygen content
Lithium manganese spinel; Crystal structure; Cathode material; Neutron diffraction; Nickel substitution (Idemoto, Y. (119–121) 125)
- Oxysulfide glass
Polymer composite; Thio-LISICON; Solid electrolytes; Lithium battery (Inada, T. (119–121) 948)
- Particle morphology
Graphite; Irreversible capacity; AFM; XRD; PC; EC (Aurbach, D. (119–121) 2)
- Particle size
Spinel LiMn₂O₄; Mechanical alloying; Lithium-ion battery (Jeong, W.T. (119–121) 690)
- PC
Graphite; Particle morphology; Irreversible capacity; AFM; XRD; EC (Aurbach, D. (119–121) 2)
- PDTDA
Chemical polymerization; Doping; Cathode material; Electrical properties (Lee, Y.-G. (119–121) 321)
- pEDOT
Conducting polymer; Li-ion battery; Non-stoichiometric spinel (Arbizzani, C. (119–121) 695)
- PEO
Alumina filler; Ionic conductivity; Composite polymer electrolyte (Dissanayake, M.A.K.L. (119–121) 409)
- PEO
Polymer electrolytes; Lithium battery; Polysiloxane; Acrylate (Kang, Y. (119–121) 448)
- PEO
SLH; Nanocomposite (Sandí, G. (119–121) 492)
- PEO-based polymer electrolyte
Ionic conductivity; Nanoparticles; High-energy ball milling; Amorphous phases (Ahn, J.-H. (119–121) 422)
- Percolation
Combinatorial; High throughput; Lithium ion cell; Lithium manganese oxide spinel (Spong, A.D. (119–121) 778)
- Performance test
Lithium ion batteries; Electric power storage; Electric vehicle (Takei, K. (119–121) 887)
- Performance
Lithium-ion cells; Fluorinated carbonate-based electrolytes (Smart, M.C. (119–121) 359)
- Phase change
Nano-crystalline; Orthorhombic LiFeO₂; Cycleability; LiFe₅O₈ (Lee, Y.S. (119–121) 285)
- Phase inversion technique
Pore diameter; Solid-state reaction; Charge-discharge studies; Nano-composite cathode (Manuel Stephan, A. (119–121) 460)
- Phase transformation
Electron microscopy; LiCoO₂; Spinel (Gabrisch, H. (119–121) 674)
- Phase transition
Li-ion batteries; LiMn₂O₄ properties (Dziembaj, R. (119–121) 121)
- Phase transitions
LiMn₂O₄; Al-substitution; In situ X-ray diffraction (Hwang, B.-J. (119–121) 727)
- Phonons
Carbon; Lithium; Entropy; Enthalpy; Intercalation; Open-circuit voltage; Raman spectroscopy (Reynier, Y. (119–121) 850)
- Phosphate
Olivine; Cathode; Iron; Lithium; Battery (Yamada, A. (119–121) 232)
- Poly(alkylene oxide)
Gel polymer electrolyte; Conductivity; Rechargeable lithium cell (Matsuda, Y. (119–121) 473)
- Poly(ethylene oxide)
Composite polymer electrolyte; Hyperbranched polymer; LiN(CF₃CF₂SO₂)₂; Ionic conductivity; Thermal stability; Electrochemical stability; Interfacial stability (Itoh, T. (119–121) 403)
- Poly(ethylene oxide)
Composite; Saponite; Lithium conductor; Ionic transference number (Wen, Z. (119–121) 427)
- Poly(siloxane-g-ethylene oxide)
Interpenetrating network; Solid polymer electrolyte (Oh, B. (119–121) 442)

- Polyacrylonitrile
Electrochemical characteristics; Gel polymer electrolyte; Lithium-ion polymer battery; Porous membrane (Min, H.-S. (119–121) 469)
- Polyethylene oxide
Composite electrolyte; Silicon dioxide (Kim, J.-W. (119–121) 415)
- Polyethylene oxide
Heteropolymer electrolytes; BETI (Dixon, B.G. (119–121) 856)
- Polymer composite
Oxysulfide glass; Thio-LISICON; Solid electrolytes; Lithium battery (Inada, T. (119–121) 948)
- Polymer electrolyte
Lithium salt; Transference number; Ionic conductivity (Fujinami, T. (119–121) 438)
- Polymer electrolytes
Lithium batteries; Liquid polymer electrolytes (LPE) (Scott Morris, R. (119–121) 487)
- Polymer electrolytes
Lithium batteries; Lithium phosphate electrodes (Croce, F. (119–121) 399)
- Polymer electrolytes
Lithium battery; Bisphenol A ethoxylate diacrylate (Kang, Y. (119–121) 432)
- Polymer electrolytes
Lithium battery; PEO; Polysiloxane; Acrylate (Kang, Y. (119–121) 448)
- Polymer electrolytes
Lithium-ion batteries; Microporous PVdF (Saunier, J. (119–121) 454)
- Polymer lithium-ion
Lithium-ion batteries; Safety; Thermal characteristics; Impedance (Uchida, I. (119–121) 821)
- Polymerization
Lithium-ion batteries; Carbonate electrolyte; Lewis acid salts; CO₂ generation and reduction; Capacity and power fade (Sloop, S.E. (119–121) 330)
- Polysiloxane
Polymer electrolytes; Lithium battery; PEO; Acrylate (Kang, Y. (119–121) 448)
- Pore design
Carbons; Li insertion; CVD; BET; CV; AFM (Isaev, I. (119–121) 28)
- Pore diameter
Phase inversion technique; Solid-state reaction; Charge–discharge studies; Nanocomposite cathode (Manuel Stephan, A. (119–121) 460)
- Porous membrane
Electrochemical characteristics; Gel polymer electrolyte; Lithium-ion polymer battery; Polyacrylonitrile (Min, H.-S. (119–121) 469)
- Porous membrane
Electrochemical stability; Gel polymer electrolyte; Ionic conductivity; Methyl methacrylate-styrene copolymer (Jo, S.I. (119–121) 478)
- Porous polymer
Lithium-ion cells; PVdF (Sasaki, H. (119–121) 774)
- Positive electrode
Rechargeable lithium battery; Organic polymer; Conducting polymer; ICP (Le Gall, T. (119–121) 316)
- Post annealing
Thin-film stress; LiMn₂O₄; Radio frequency magnetron sputter; Microbattery (Moon, H.-S. (119–121) 710)
- Potentiostatic current transient technique
Vanadium pentoxide film electrode; Electrodeposition; Cell impedance-controlled lithium transport; Chemical diffusivity of lithium (Lee, J.-W. (119–121) 760)
- Power fade
Lithium-ion batteries; Battery cycle-life; Battery power; Battery capacity; Capacity fade (Wright, R.B. (119–121) 865)
- Power storage system
Li battery; Manganese oxide (Adachi, K. (119–121) 897)
- Pre-dispersed carbon suspension
Electro-conductive additive; Cathode; Ketjen black; Charge–discharge property; Dispersion state (Kuroda, S. (119–121) 924)
- Protected Li anodes
Electrochemical performance; Lithium/sulfur batteries; Protection layer (Lee, Y.M. (119–121) 964)
- Protection layer
Electrochemical performance; Lithium/sulfur batteries; Protected Li anodes (Lee, Y.M. (119–121) 964)
- Protection layer
Lithium electrode; Crosslinked polymer electrolyte; SEI layer; Charge–discharge (Choi, N.-S. (119–121) 610)
- Protective layer
LiMn₂O₄; DLC; rf magnetron sputtering; Lithium microbattery (Moon, H.-S. (119–121) 713)
- Pulsed laser deposition
Nanocrystalline; Thin-film electrodes (Song, S.-W. (119–121) 110)
- Purification
Lithium intercalation; Natural graphite; Chemical; Thermal treatment (Zaghib, K. (119–121) 8)
- PVdF
β-FeOOH; Vanadium ferrite positive electrode (Funabiki, A. (119–121) 290)
- PVdF
Porous polymer; Lithium-ion cells (Sasaki, H. (119–121) 774)
- PVDF-based electrolyte
Lithium polymer battery; LiMnO₂; Chemically synthesized PAN; LiMnO₂–PAN–DMcT composite (Kim, J.-U. (119–121) 686)
- PVDF/PAN-based electrolyte
Lithium/polymer battery; VO–flyash composite (Kim, J.-U. (119–121) 766)
- Pyrolysis-gas chromatography-mass spectroscopy
Alkyl carbonate; Decomposition mechanism; Lithium metal (Mogi, R. (119–121) 597)
- Radio frequency magnetron sputter
Thin-film stress; LiMn₂O₄; Post annealing; Microbattery (Moon, H.-S. (119–121) 710)
- Radio frequency sputtering
Thin films; Lithium batteries; Anode; LiNiVO₄ (Reddy, M.V. (119–121) 101)
- Raman spectra
Vanadium oxide; Lithium insertion; Cycling stability; Anode material (Liu, P. (119–121) 305)
- Raman spectroscopy
Amorphous; Tin; FT-IR (Gejke, C. (119–121) 576)
- Raman spectroscopy
Carbon; Lithium; Entropy; Enthalpy; Intercalation; Open-circuit voltage; Phonons (Reynier, Y. (119–121) 850)
- Rechargeable lithium cell
Gel polymer electrolyte; Poly(alkylene oxide); Conductivity (Matsuda, Y. (119–121) 473)
- Rechargeable lithium batteries
Graphite surface groups; Graphite surface aging; Electrochemical graphite exfoliation; Electrochemical lithium insertion (Spahr, M.E. (119–121) 543)
- Rechargeable lithium batteries
Nanomaterials; Sonochemistry (Odani, A. (119–121) 517)
- Rechargeable lithium batteries
VDF–HFP–CTFE terpolymer (Jarvis, C.R. (119–121) 465)
- Rechargeable lithium battery
Positive electrode; Organic polymer; Conducting polymer; ICP (Le Gall, T. (119–121) 316)
- Rechargeable
Lithium-ion battery; Spacecraft; LEO; GEO (Fellner, J.P. (119–121) 911)
- rf magnetron sputter
LiMn₂O₄; Transition-metal substitution; Microbattery; Lithium rechargeable batteries (Moon, H.-S. (119–121) 717)

- rf magnetron sputtering
LiMn₂O₄; DLC; Protective layer; Lithium microbattery (Moon, H.-S. (119–121) 713)
- Rhombohedral phase
Graphite anode; Lithium-ion battery; Solid electrolyte interphase (SEI); Electrolyte additive (Kohs, W. (119–121) 528)
- Rietveld refinement
LiMn_xCr_{1-x}O₂; Lithium; Battery; XANES; Emulsion drying method (Myung, S.-T. (119–121) 211)
- S K-edge XANES
Lithium-ion battery; XAFS; TOF-SIMS; SEI (Ota, H. (119–121) 567)
- Safety
Flame retardant; High power battery; ARC (Hyung, Y.E. (119–121) 383)
- Safety
Lithium alloy; Expanded metal; Li-ion polymer; V₂O₅; FePO₄; LiCoO₂ ARC (Zaghib, K. (119–121) 76)
- Safety
Lithium-ion batteries; Polymer lithium-ion; Thermal characteristics; Impedance (Uchida, I. (119–121) 821)
- Saponite
Poly(ethylene oxide); Composite; Lithium conductor; Ionic transference number (Wen, Z. (119–121) 427)
- Sb-based materials
Lithium insertion mechanism; ¹²¹Sb Mössbauer data (Aldon, L. (119–121) 585)
- ¹²¹Sb Mössbauer data
Lithium insertion mechanism; Sb-based materials (Aldon, L. (119–121) 585)
- Scanning probe microscopy
Composite graphite electrode; Lithium-ion batteries (Jeong, S.-K. (119–121) 555)
- Secondary batteries
Mechanical alloying; Nanocrystalline alloys; Lithium-ion batteries; Tin oxides; Anode materials (Ahn, J.-H. (119–121) 45)
- SEI layer
Lithium electrode; Protection layer; Crosslinked polymer electrolyte; Charge-discharge (Choi, N.-S. (119–121) 610)
- SEI
Lithium-ion battery; Graphite; LiMn₂O₄; Mn dissolution; Additive (Komaba, S. (119–121) 378)
- SEI
Lithium-ion battery; Non-flammable electrolyte; Additive (Ota, H. (119–121) 393)
- SEI
Lithium-ion battery; XAFS; S K-edge XANES; TOF-SIMS (Ota, H. (119–121) 567)
- SEI
X-ray photoelectron spectroscopy; Electrochemically lithiated graphite; Depth profile analysis (Andersson, A.M. (119–121) 522)
- Self-discharge
LiCoO₂; Temperature effect; Open-circuit voltage; Activation energy; Spinel (Ozawa, Y. (119–121) 918)
- Si (-Zr)-Ag
Thin film anode; Microbattery; Multilayer; Si-Ag; Lithium battery (Lee, S.-J. (119–121) 117)
- Si film anode
Li-ion secondary batteries; Vacuum evaporation; Cycleability; Initial charge loss (Ohara, S. (119–121) 591)
- Si-Ag
Thin film anode; Microbattery; Multilayer; Si (-Zr)-Ag; Lithium battery (Lee, S.-J. (119–121) 117)
- Side reactions
Lithium battery; Model; Transference number; Heat of mixing; Thermal model; Conductivity; Molecular dynamics; Diffusion coefficient (Newman, J. (119–121) 838)
- Silicides
Silicon anodes; Amorphous silicon; Metal-metalloid alloys; Displacement reactions; SiO and SiB₃ (Netz, A. (119–121) 95)
- Silicon anodes
Amorphous silicon; Silicides; Metal-metalloid alloys; Displacement reactions; SiO and SiB₃ (Netz, A. (119–121) 95)
- Silicon dioxide
Polyethylene oxide; Composite electrolyte (Kim, J.-W. (119–121) 415)
- Silicon
Lithium ion rechargeable batteries; Lithium alloy anodes; Metal anodes; Amorphous phase; Thermodynamics (Limthongkul, P. (119–121) 604)
- Silver antimony
Lithium-ion batteries; Intermetallic electrodes; Anodes (Vaughey, J.T. (119–121) 64)
- Silver vanadium oxide
Lithium; Battery; Mass transport (Schmidt, C. (119–121) 979)
- Silver
Lithium batteries; Lithium; Cathodes; Vanadium (Takeuchi, K.J. (119–121) 973)
- SiO and SiB₃
Silicon anodes; Amorphous silicon; Silicides; Metal-metalloid alloys; Displacement reactions (Netz, A. (119–121) 95)
- SLH
PEO; Nanocomposite (Sandí, G. (119–121) 492)
- ¹¹⁹Sn Mössbauer spectroscopy
Anode material; Lithium batteries; Tin composite oxide (Robert, F. (119–121) 581)
- Sn-Zr
Anode film; Microbattery; Sn-Zr-Ag alloys; Cycling performance (Kim, Y.-L. (119–121) 106)
- Sn-Zr-Ag alloys
Anode film; Microbattery; Sn-Zr; Cycling performance (Kim, Y.-L. (119–121) 106)
- SnS₂
Nanoparticles; Sonochemical method; Anode (Mukaibo, H. (119–121) 60)
- SnSb alloy
Li_{2.6}Co_{0.4}N; Composite anodes; Solid polymer electrolyte; Li-ion cells (Yang, J. (119–121) 56)
- Soft X-ray absorption spectroscopy
Li_{1-x}Mn₂O₄; Lithium rechargeable batteries; XAS (Yoon, W.-S. (119–121) 706)
- Sol-gel method
Lithium secondary batteries; Layered manganese; Cathode materials; Li₂MnO₃ (Kim, J.-H. (119–121) 166)
- Sol-gel
Acid to metal ions ratio (R); Orthorhombic LiMnO₂ (Guo, Z.P. (119–121) 221)
- Sol-gel
Lithium vanadium oxide; Lithium insertion (Eguchi, M. (119–121) 201)
- Solid electrolyte interface (SEI)
Nonaqueous electrolytes; Lithium salts; Li-ion batteries; High temperature; Low temperature; Conductivity; Glass transition temperature (Jow, T.R. (119–121) 343)
- Solid electrolyte interphase (SEI)
Electrolyte additive; Acrylic acid nitrile; Electrochemical polymerisation; Lithium-ion battery (Santner, H.J. (119–121) 368)
- Solid electrolyte interphase (SEI)
Graphite anode; Lithium-ion battery; Electrolyte additive; Rhombohedral phase (Kohs, W. (119–121) 528)
- Solid electrolyte interphase (SEI)
Li intercalation; Graphite anode; Carbon disordering (Kostecki, R. (119–121) 550)
- Solid electrolyte interphase (SEI)
Lithium-ion batteries; Electrolyte additives; Film formation; Electrochemical polymerization (Möller, K.-C. (119–121) 561)

- Solid electrolytes
 Polymer composite; Oxysulfide glass; Thio-LISICON; Lithium battery (Inada, T. (119–121) 948)
- Solid polymer electrolyte battery
 Composite polymer electrolyte; Lithium-solid polymer battery; Composite anode; Thermal stability (Capiglia, C. (119–121) 826)
- Solid polymer electrolyte
 Poly(siloxane-*g*-ethylene oxide); Interpenetrating network (Oh, B. (119–121) 442)
- Solid polymer electrolyte
 SnSb alloy; $\text{Li}_{2.6}\text{Co}_{0.4}\text{N}$; Composite anodes; Li-ion cells (Yang, J. (119–121) 56)
- Solid-state battery
 Li-ion battery; Multi-layered battery; LiMn_2O_4 cathode (Baba, M. (119–121) 914)
- Solid-state reaction
 Electrochemical generators; Zero strain; Nano particles; $\text{Li}_4\text{Ti}_5\text{O}_{12}$ (Guerfi, A. (119–121) 88)
- Solid-state reaction
 Phase inversion technique; Pore diameter; Charge–discharge studies; Nanocomposite cathode (Manuel Stephan, A. (119–121) 460)
- Sonochemical method
 SnS_2 ; Nanoparticles; Anode (Mukaibo, H. (119–121) 60)
- Sonochemistry
 Nanomaterials; Rechargeable lithium batteries (Odani, A. (119–121) 517)
- Spacecraft
 Lithium-ion battery; LEO; GEO; Rechargeable (Fellner, J.P. (119–121) 911)
- Special capacity
 $\text{LiMn}_{2-x}\text{Cr}_x\text{O}_4$; Cycleability; Discharge voltage plateau (Du, K. (119–121) 130)
- Spectroscopy
 Calendar-life; Chromatography; Microscopy (Abraham, D.P. (119–121) 511)
- Spectroscopy
 Layered oxides; Lithium nickel cobalt oxides; Thermal stability; Impedance; Lithium-ion battery (Fey, G.T.K. (119–121) 658)
- Spinel LiMn_2O_4
 Mechanical alloying; Particle size; Lithium-ion battery (Jeong, W.T. (119–121) 690)
- Spinel LiMn_2O_4
 Olivine LiFePO_4 ; Mn/Fe dissolution (Ilchev, N. (119–121) 749)
- Spinel
 Electron microscopy; LiCoO_2 ; Phase transformation (Gabrisch, H. (119–121) 674)
- Spinel
 LiCoO_2 ; Temperature effect; Open-circuit voltage; Self-discharge; Activation energy (Ozawa, Y. (119–121) 918)
- Spray-dry method
 Cathode materials; LiCoO_2 phase (Konstantinov, K. (119–121) 195)
- Staging phase diagram
 Lithium rechargeable batteries; Lithiated graphite electrodes; The chemical diffusion coefficient of Li-ion; Elevated temperatures (Levi, M.D. (119–121) 538)
- Storage
 Li-ion cells; Elevated temperatures; Capacity fading; Additives in solution (Markovsky, B. (119–121) 504)
- Structural study
 Monoclinic; Crystallographic (Patoux, S. (119–121) 278)
- Structure
 Lithium vanadium phosphates; Lithium batteries; Intercalation (Saïdi, M.Y. (119–121) 266)
- Substitution
 Lithium manganese spinel; First-principles calculation; MEM; Cathode active material; Electronic states (Ito, Y. (119–121) 733)
- Surface films
 Li-ion batteries; Graphite; Cathodes; Impedance; Additives; Capacity-fading; XRD; AFM; FTIR; XPS (Aurbach, D. (119–121) 497)
- Surface films
 LiPF_6 ; $\text{LiPF}_3(\text{CF}_2\text{CF}_3)_3$ (LiFAP); $\text{LiN}(\text{SO}_2\text{CF}_2\text{CF}_3)_2$ (LiBETI); Thermal stability; ARC; Impedance spectroscopy; Li-ion batteries (Gnanaraj, J.S. (119–121) 799)
- Temperature effect
 LiCoO_2 ; Open-circuit voltage; Self-discharge; Activation energy; Spinel (Ozawa, Y. (119–121) 918)
- Tetra (ethylene glycol) diacrylate
 Gel polymer electrolyte; Cell; Benzoyl peroxide; Lithium-ion polymer battery; Advanced lithium-ion battery (Kim, H.-S. (119–121) 482)
- The chemical diffusion coefficient of Li-ion
 Lithium rechargeable batteries; Lithiated graphite electrodes; Elevated temperatures; Staging phase diagram (Levi, M.D. (119–121) 538)
- Thermal characteristics
 Lithium-ion batteries; Polymer lithium-ion; Safety; Impedance (Uchida, I. (119–121) 821)
- Thermal model
 Entropy; Heat of mixing (Thomas, K.E. (119–121) 844)
- Thermal model
 Lithium battery; Model; Transference number; Side reactions; Heat of mixing; Conductivity; Molecular dynamics; Diffusion coefficient (Newman, J. (119–121) 838)
- Thermal runaway
 Modified Reactive System Screening Tool; Thermal stability; Electrolyte decomposition; Gas evolution (Botte, G.G. (119–121) 815)
- Thermal stability
 Accelerating rate calorimetry (ARC); Differential scanning calorimetry (DSC); Alkyl carbonate solutions (Gnanaraj, J.S. (119–121) 794)
- Thermal stability
 Composite polymer electrolyte; Poly(ethylene oxide); Hyperbranched polymer; $\text{LiN}(\text{CF}_3\text{CF}_2\text{SO}_2)_2$; Ionic conductivity; Electrochemical stability; Interfacial stability (Itoh, T. (119–121) 403)
- Thermal stability
 Layered oxides; Lithium nickel cobalt oxides; Impedance; Spectroscopy; Lithium-ion battery (Fey, G.T.K. (119–121) 658)
- Thermal stability
 Li-ion batteries; Chemical delithiation; Li_xCoO_2 ; Lithiated graphite; 1 M $\text{LiPF}_6/\text{EC} + \text{DMC}$ (Yamaki, J.-i. (119–121) 789)
- Thermal stability
 LiPF_6 ; $\text{LiPF}_3(\text{CF}_2\text{CF}_3)_3$ (LiFAP); $\text{LiN}(\text{SO}_2\text{CF}_2\text{CF}_3)_2$ (LiBETI); ARC; Impedance spectroscopy; Surface films; Li-ion batteries (Gnanaraj, J.S. (119–121) 799)
- Thermal stability
 Modified Reactive System Screening Tool; Electrolyte decomposition; Thermal runaway; Gas evolution (Botte, G.G. (119–121) 815)
- Thermal stability
 Solid polymer electrolyte battery; Composite polymer electrolyte; Lithium-solid polymer battery; Composite anode (Capiglia, C. (119–121) 826)
- Thermal treatment
 Lithium intercalation; Natural graphite; Chemical; Purification (Zaghib, K. (119–121) 8)
- Thermodynamics
 Lithium rechargeable batteries; Lithium alloy anodes; Metal anodes; Amorphous phase; Silicon (Limthongkul, P. (119–121) 604)
- Thermogravimetric analysis
 N_2 -adsorption; Carbon materials (Sandí, G. (119–121) 34)
- Thickness
 Battery dimension; Cycles; Lithium ion; LG's polymer cells (Lee, J.H. (119–121) 833)

- Thin film anode
Microbattery; Multilayer; Si–Ag; Si (–Zr)–Ag; Lithium battery (Lee, S.-J. (119–121) 117)
- Thin films
Radio frequency sputtering; Lithium batteries; Anode; LiNiVO₄ (Reddy, M.V. (119–121) 101)
- Thin-film anode
Zr–Si; Microbattery; Thin-film battery; Lithium battery (Lee, S.-J. (119–121) 113)
- Thin-film batteries
Lithium cobalt oxide; Lipon; Transmission electron microscopy; Nanocrystalline cathode (Jang, Y.-I. (119–121) 295)
- Thin-film battery
Microbattery; Lithium battery; LiCoO₂; Lipon; Lithium diffusion (Dudney, N.J. (119–121) 300)
- Thin-film battery
Zr–Si; Microbattery; Thin-film anode; Lithium battery (Lee, S.-J. (119–121) 113)
- Thin-film electrodes
Nanocrystalline; Pulsed laser deposition (Song, S.-W. (119–121) 110)
- Thin-film stress
LiMn₂O₄; Post annealing; Radio frequency magnetron sputter; Microbattery (Moon, H.-S. (119–121) 710)
- Thio-LISICON
Polymer composite; Oxysulfide glass; Solid electrolytes; Lithium battery (Inada, T. (119–121) 948)
- Ti K-edge X-ray absorption fine structure
⁷Li nuclear magnetic resonance; Li_{4/3+x}Ti_{5/3}O₄ (Ronci, F. (119–121) 631)
- Tin composite oxide
Anode material; Lithium batteries; ¹¹⁹Sn Mössbauer spectroscopy (Robert, F. (119–121) 581)
- Tin oxides
Mechanical alloying; Nanocrystalline alloys; Lithium-ion batteries; Anode materials; Secondary batteries (Ahn, J.-H. (119–121) 45)
- Tin
Amorphous; FT-IR; Raman spectroscopy (Gejke, C. (119–121) 576)
- TOF–SIMS
Lithium-ion battery; XAFS; S K-edge XANES; SEI (Ota, H. (119–121) 567)
- Transference number
Lithium battery; Model; Side reactions; Heat of mixing; Thermal model; Conductivity; Molecular dynamics; Diffusion coefficient (Newman, J. (119–121) 838)
- Transference number
Lithium salt; Polymer electrolyte; Ionic conductivity (Fujinami, T. (119–121) 438)
- Transition metal oxides
Lithium insertion; Lithium intercalation; Vanadium oxide; Vanadium oxide bronzes (Andrukaitis, E. (119–121) 205)
- Transition-metal oxides
FTIR spectroscopy; Manganese dioxides (MDOs) (Julien, C.M. (119–121) 743)
- Transition-metal substitution
LiMn₂O₄; rf magnetron sputter; Microbattery; Lithium rechargeable batteries (Moon, H.-S. (119–121) 717)
- Transmission electron microscopy
Thin-film batteries; Lithium cobalt oxide; Lipon; Nanocrystalline cathode (Jang, Y.-I. (119–121) 295)
- Two-phase coexistence
Cell-impedance-controlled lithium transport; Current transient; Li[Ti_{5/3}Li_{1/3}]O₄ film electrode; Monte Carlo simulation (Jung, K.-N. (119–121) 637)
- V₂O₅ xerogels
Microbatteries; Nanobatteries; Nanocathodes; Carbon nanotubes (Dewan, C. (119–121) 310)
- V₂O₅
Lithium alloy; Expanded metal; Li-ion polymer; FePO₄; LiCoO₂ ARC; Safety (Zaghib, K. (119–121) 76)
- Vacuum evaporation
Si film anode; Li-ion secondary batteries; Cycleability; Initial charge loss (Ohara, S. (119–121) 591)
- Vanadium ferrite positive electrode
β-FeOOH; PVdF (Funabiki, A. (119–121) 290)
- Vanadium oxide bronzes
Lithium insertion; Lithium intercalation; Vanadium oxide; Transition metal oxides (Andrukaitis, E. (119–121) 205)
- Vanadium oxide
Calcium-ion battery; High energy density; High safety; Acetonitrile (Hayashi, M. (119–121) 617)
- Vanadium oxide
Lithium battery; Manganese oxide; Iron phosphate; XPS (Yang, S. (119–121) 239)
- Vanadium oxide
Lithium insertion; Lithium intercalation; Transition metal oxides; Vanadium oxide bronzes (Andrukaitis, E. (119–121) 205)
- Vanadium oxide
Raman spectra; Lithium insertion; Cycling stability; Anode material (Liu, P. (119–121) 305)
- Vanadium pentoxide film electrode
Electrodeposition; Potentiostatic current transient technique; Cell impedance-controlled lithium transport; Chemical diffusivity of lithium (Lee, J.-W. (119–121) 760)
- Vanadium
Lithium batteries; Lithium; Cathodes; Silver (Takeuchi, K.J. (119–121) 973)
- Vanadyl phosphate
Li-ion battery; Cathode; VOPO₄ (Azmi, B.M. (119–121) 273)
- VBO₃
Anode properties; MBO₃; Calcite; FeBO₃ (Okada, S. (119–121) 621)
- VDF–HFP–CTFE terpolymer
Rechargeable lithium batteries (Jarvis, C.R. (119–121) 465)
- Vinylene carbonate
Lithium-ion polymer cell; Electrolyte additives; Organic borates; Cycle life (Contestabile, M. (119–121) 943)
- VO–flyash composite
PVDF/PAN-based electrolyte; Lithium/polymer battery (Kim, J.-U. (119–121) 766)
- VOPO₄
Li-ion battery; Cathode; Vanadyl phosphate (Azmi, B.M. (119–121) 273)
- X-ray absorption spectroscopy
Lithium battery; LiMn₂O₄; LiAl_{0.15}Mn_{1.85}O₄; Capacity fading mechanism (Lee, J.-F. (119–121) 721)
- X-ray diffraction
LiFePO₄; Fe(II) (Arnold, G. (119–121) 247)
- X-ray diffraction
LiMn₂O₄; Bimetal substitution; Differential scanning calorimetry (Tsai, Y.W. (119–121) 701)
- X-ray photoelectron spectroscopy
Electrochemically lithiated graphite; SEI; Depth profile analysis (Andersson, A.M. (119–121) 522)
- XAFS
Lithium-ion battery; S K-edge XANES; TOF–SIMS; SEI (Ota, H. (119–121) 567)
- XANES
LiMn_xCr_{1-x}O₂; Lithium; Battery; Rietveld refinement; Emulsion drying method (Myung, S.-T. (119–121) 211)
- XAS
⁶Li MAS NMR; In situ XRD; Lithium nickel manganese oxide; Battery (Yoon, W.-S. (119–121) 649)

- XAS
Soft X-ray absorption spectroscopy; $\text{Li}_{1-x}\text{Mn}_2\text{O}_4$; Lithium rechargeable batteries (Yoon, W.-S. (119–121) 706)
- XPS
Li-ion batteries; Graphite; Cathodes; Surface films; Impedance; Additives; Capacity-fading; XRD; AFM; FTIR (Aurbach, D. (119–121) 497)
- XPS
Lithium battery; Manganese oxide; Vanadium oxide; Iron phosphate (Yang, S. (119–121) 239)
- XPS
Lithium cobalt oxide; Nonstoichiometry; Electronic structure; Delithiation; EDRS; Magnetic measurements (Kosova, N.V. (119–121) 669)
- XRD
Graphite; Particle morphology; Irreversible capacity; AFM; PC; EC (Aurbach, D. (119–121) 2)
- XRD
Li-ion batteries; Graphite; Cathodes; Surface films; Impedance; Additives; Capacity-fading; AFM; FTIR; XPS (Aurbach, D. (119–121) 497)
- Zero strain
Electrochemical generators; Solid-state reaction; Nano particles; $\text{Li}_4\text{Ti}_5\text{O}_{12}$ (Guerfi, A. (119–121) 88)
- Zr–Si
Microbattery; Thin-film battery; Thin-film anode; Lithium battery (Lee, S.-J. (119–121) 113)