

Faculty Profile of Dr.P.Christopher Selvin



Dr.P.Christopher Selvin
Professor (On Lien)
Department of Physics

Email:csphysics@buc.edu.in

Phone No:0422-2428444

Mobile No:9486243082

Research Area

- Luminescence
- Polymer & Nano Electrolytes
- Energy storage devices

Education & Career

Education

M. S.,

Subject: Education Management

Institution : Alagappa University

Affiliated University : Alagappa University

Year of Award : 2010

Ph. D.

Subject : Physics

Institution : Bharathiar University

Affiliated University : Bharathiar University

Year of Award : 1996

M.Phil.,

Subject : Physics

Institution : Bharathiar University

Affiliated University : Bharathiar University

Year of Award : 1990

M. Sc.,

Subject: Physics

Institution : NGM College, Pollachi

Affiliated University : Bharathiar University

Year of Award : 1989

B. Sc.,

Subject: Physics

Institution: NGM College, Pollachi

Affiliated University: Bharathiar University

Year of Award: 1987

Career**At Bharathiar University (Reverse Order)**

Professor : 01.12.2016 to Till Date

Past Experience

Associate Professor: 15.05.2011 to 30.11.2016 at N.G.M. College (TN Govt. aided & Affl. to Bharathiar University), Pollachi, Tamil Nadu, India

Assistant Professor (selection grade): 01.01.2009 to 15.05.2011 at N.G.M. College (TN Govt. aided &Affl. to Bharathiar University), Pollachi, Tamil Nadu, India

Lecturer: 01.11.1996 to 01.01.2009 at N.G.M. College (TN Govt. aided &Affl. to Bharathiar University), Pollachi, Tamil Nadu, India

Visiting Faculty, M.Tech –Nanotechnology: June. 2007 to May. 2008 at Anna University, Coimbatore, India

Lecturer in Physics: Jan. 1996 to Oct. 1996 at Karunya Institute of Technology, Coimbatore, India

Awards

Membership

Professional Bodies

Member

Life member: Luminescence society of India

Period: April 1993 to Till date

Member

Life member: Indian Association for Physics Teachers

Jan 2006 to Till date

Visits

Country Visited : China

Duration of Visit : August 2018

Purpose of Visit : 16th Asian Conference on Solid State Ionics (ACSSI-2018) at Shanghai

Country Visited : UAE

Duration of Visit : Januray 2018

Purpose of Visit : University Representative for the Conduct of School of Distance Education University Examinations

at Dubai

Collaborators

Others

Projects

Funded Projects(National Level)

- [Ongoing - 01](#)
- [Completed - 03](#)

1. BRNS, DAE

Title of the project: Rare Earth Doped, Perovskite based Nanophosphors for White LED Applications

Funding Agency: Board of Research in Nuclear Sciences (BRNS), Department of Atomic Energy (DAE) India

Amount: Rs. 26,05,148

Duration: April 2013 - September 2017

2. UGC

Title of the project: In search of a thin film nanoelectrolyte for lithium ion batteries

Funding Agency: University Grants Commission, India

Amount: Rs. 2,69,800

Duration: June 2012 - June 2015

3. BRNS, DAE

Title of the project: Natural Background Radiation Survey in and around (30km radius) Kudankulam Nuclear Power Project site

Funding Agency: Board of Research in Nuclear Sciences (BRNS),
Department of Atomic Energy (DAE) India

Amount: Rs. 21,08,000

Duration: September 2004 - August 2007

1. DST - SERB

Title of the project : Thirst for efficient anode materials for sodium ion batteries and all solid device assembly (A minor substitution to Li ion batteries)

Funding Agency : DST - SERB, India

Amount : Rs. 41,14,255

Duration : December 2020 - November 2023

Consultancy Projects

- [Ongoing](#)
 - [Completed](#)
-

- [Post Doc.](#)
- [Ph.D.](#)
- [M.Phil.](#)
- [M.Sc.](#)

Ongoing

Title

Name

Completed

Title

Name

Ongoing

Sample Data.

Completed-08

L. Sampath Kumar

Title of the thesis: Crafting tamarind seed polysaccharide biopolymer electrolytes for lithium ion batteries

Year of award: 2019

P. Perumal

Title of the thesis: Development of safety reinforced biopolymer electrolytes based on pectin polysaccharide for all solid state lithium ion batteries

Year of award: 2019

P. Sivaraj

Title of the thesis: Design and modification of nanostructured $\text{Li}_2\text{FeSiO}_4/\text{C}$ cathode towards the enhancement of energy storage performance in advanced lithium ion batteries

Year of award: 2019

K. Somasundaram

Title of the thesis: Electroluminescence and photoluminescence studies on transition metal and rare earth ions doped metal oxide nanophosphors for solid state lighting

Year of award: 2019

K. Kandaswamy

Title of the thesis: Tailoring of Antimony Sulfide Non-Stoichiometric Thinfilms by Bismuth incorporation for Photo Voltaic Applications

Year of award: 2017

K.P. Abhilash

Title of the thesis: An Integrated Study on the Ionic Migration Across the Nano LLTO/LFP-C Interface for all Solid State Batteries

Year of award: 2016

H. Nithya

Title of the thesis: Characterization of Polymer electrolyte poly(Epichlorohydrin-ethyleneoxide): LiClO₄

Year of award: 2011

Sakunthala

Title of the thesis: Synthesis and electrochemical studies of vanadium and manganese based cathode materials for rechargeable lithium batteries

Year of award: 2011

Ongoing

Sample Data.

Completed-14

T. Kiruthika

Title of the thesis: Biopolymer assisted spinel zinc ferrites nano anode material for lithium ion batteries

Year of award: 2019

B. Shanmugapriya

Title of the thesis: Preparation and characterization of PVdF/PAN/LiClO₄/LLTO nanocomposite polymer electrolytes for lithium polymer batteries

Year of award: 2019

P. Ranjani

Title of the thesis: Study on Mg-ion conducting biopolymer electrolytes based on tamarind seed polysaccharide for magnesium ion batteries

Year of award: 2018

G. G. Soundarya

Title of the thesis: Impact of calcination temperature on structural and electrical

properties of Li₂FeSiO₄-C composite nano cathode material for Lithium Ion Batteries

Year of award: 2016

U. Raghavi

Title of the thesis: Photoluminescence properties of pure and Dy³⁺ doped Ga₂O₃ nanophosphors for w-LED applications

Year of award: 2016

P. Sivaraj

Title of the thesis: Preparation and characterization of spin-coated LLTO thinfilm nano-electrolyte for rechargeable Lithium ion Batteries

Year of award: 2014

M. Padmasheela

Title of the thesis: Structural optical morphological and conductivity studies of pure and Samarium doped LLTO nano-crystalline electrolyte for rechargeable Lithium ion Batteries

Year of award: 2014

M. Ancy Martina

Title of the thesis: Structural optical morphological and conductivity studies of pure and Cerium doped LLTO nano-crystalline electrolyte for rechargeable Lithium ion Batteries

Year of award: 2014

V. Sulochana

Title of the thesis: Growth and characterization of pure and doped Al₂O₃ crystals

Year of award: 2014

K. Somasundaram

Title of the thesis: Investigations of Lithium Lanthanum Titanate (LLTO) nano-Electrolyte and Lithium ion Phosphate (LFP/C) nano-cathode interface for Lithium ion Batteries

Year of award: 2012

S. Mahalakshmi

Title of the thesis: Investigations of LiFePO₄/C nano-crystallite cathode materials for Lithium ion Batteries

Year of award: 2012

S. Kalaivani

Title of the thesis: Structural and Optical properties of pure and Mn²⁺ doped CdS nano-crystalline thinfilms for solar cell applications

Year of award: 2011

K. P. Abhilash

Title of the thesis: Investigations of Pure and Silver doped Lithium Lanthanum Titanate (LLTO) nano-crystalline Electrolytes for Rechargeable Batteries

Year of award: 2010

A. Neelaveni

Title of the thesis: Characterization of PVAc:PEG blend polymer electrolyte for lithium ion polymer Batteries

Year of award: 2008

Ongoing

Sample Data.

Completed-02

A. Rifansha

Title of the thesis: Synthesis and analysis of SnO₂ anode for Lithium ion batteries

Year of award: 2020

P. Soundarya

Title of the thesis: Effect of calcination temperature on Physicochemical properties of SnO₂ nanoparticles

Year of award: 2020

Research Publication

- [International](#)
- [National](#)
- [Patents](#)
- [Conferences](#)
- [Books/Chapters](#)
- [Database](#)

Reverse Chronological Order

2021

79. [Fine-tuning of stannic oxide anodes' material properties through calcination](#)

D. Lakshmi, M. Infanta Diana, B. Nalini, G. G. Soundarya, P. Priyanka, S. Jayapandi, and P. Christopher Selvin

Journal of Materials Science: Materials in Electronics volume 32, 27384-27397 (2021)

78. A short investigation on LiMn₂O₄ wrapped with MWCNT as composite cathode for lithium-ion batteries

P. Perumal, K. P. Abhilash, P. Christopher Selvin, Zdenek Sofer

Bull Mater Sci 44, 243 (2021)

77. Physical and Interfacial Studies on $\text{Li}_{0.5}\text{La}_{0.5}\text{TiO}_3$ - Incorporated Poly(ethylene oxide)-Based Electrolytes for All-Solid-State Lithium Batteries
Swamickan Sathya, Sivaraj Pazhaniswamy, P. Christopher Selvin, S. Vengatesan, and A. Manuel Stephan
Energy & Fuels 35, 13402-13410 (2021)
76. Investigations on Na-ion conducting electrolyte based on sodium alginate biopolymer for all-solid-state sodium-ion batteries
M. Infanta Diana, P. Christopher Selvin, S. Selvasekarapandian, M. Vengadesh Krishna
Journal of Solid State Electrochemistry, 1-12 (2021)
75. Impact of lithium triflate (LiCF_3SO_3) salt on tamarind seed polysaccharide-based natural solid polymer electrolyte for application in electrochemical device
L. Sampath Kumar, P. Christopher Selvin, S. Selvasekarapandian
Polymer Bulletin, 78, 1797-1819 (2021)
74. Physical and Interfacial Studies on $\text{Li}_{0.5}\text{La}_{0.5}\text{TiO}_3$ - Incorporated Poly(ethylene oxide)-Based Electrolytes for All-Solid-State Lithium Batteries
Swamickan Sathya, Sivaraj Pazhaniswamy, P. Christopher Selvin, S. Vengatesan, A. Manuel Stephan
Energy & Fuels (2021)
73. Free-standing, high Li-ion conducting hybrid PAN/PVdF/ LiClO_4 / $\text{Li}_{0.5}\text{La}_{0.5}\text{TiO}_3$ nanocomposite solid polymer electrolytes for all-solid-state batteries
P. Sivaraj, K. P. Abhilash, B. Nalini, P. Perumal, P. Christopher Selvin
Journal of Solid State Electrochemistry, 25, 905-917 (2021)
72. Prediction Clue on the Fading Capacity of Multi-Walled Carbon Nanotube-Decorated $\text{Li}_2(\text{Fe}_{1-x}\text{Ti}_x)\text{SiO}_4/\text{C}$ High-Performance Cathode Materials
Sivaraj Pazhaniswamy, Abhilash Karuthedath Parameswaran, Nalini Balakrishnan, Sunkulp Goel, Zdeněk Sofer,

2020

71. [Performance Enhancement of PVDF/LiClO₄ Based Nanocomposite Solid Polymer Electrolytes via Incorporation of Li_{0.5}La_{0.5}TiO₃ Nano Filler for All-Solid-State Batteries.](#)
Pazhaniswamy Sivaraj, Karuthedath Parameswaran Abhilash,
Balakrishnan Nalini, Pandurangam Perumal,
Kalimuthu Somasundaram, Paneerselvam Christopher Selvin
Macromolecular Research 28, 739-750 (2020)
70. [Compound semiconducting SnSb alloy anodes for Li ion batteries: effect of elemental composition of Sn-Sb.](#)
D Lakshmi, S Jayapandi, B Nalini, P Christopher Selvin
Semiconductor Science and Technology 35, 045008 (2020)
69. [Tamarind seed polysaccharide biopolymer-assisted synthesis of spinel zinc iron oxide as a promising alternate anode material for lithium-ion batteries.](#)
P Perumal, T Kiruthika, P Sivaraj, D Lakshmi, P Christopher Selvin
Journal of Materials Science: Materials in Electronics 31, 10593-10604
(2020)
68. [Red algae-derived k-carrageenan-based proton-conducting electrolytes for the wearable electrical devices.](#)
P Perumal, P Christopher Selvin
Journal of Solid State Electrochemistry 24, 2249-2260 (2020)
67. [Mg-ion conducting electrolytes based on chitosan biopolymer host for the rechargeable Mg batteries.](#)
P Adlin Helen, P Perumal, P Sivaraj, M Infanta Diana, P Christopher Selvin
Materials Today: Proceedings (2020)
66. [Green synthesized spinel lithium titanate nano anode material using Aloe Vera extract for potential application to lithium ion batteries.](#)

P Perumal, P Sivaraj, KP Abhilash, GG Soundarya, P Balraju, P Christopher Selvin

Journal of Science: Advanced Materials and Devices 5, 346-353 (2020)

65. [Role of Cu, Ti and Ce dopants in SnSb matrix as Li-ion battery anodes.](#)

D Lakshmi, M Infanta Diana, B Nalini Balakrishnan, P Christopher Selvin.
Materials Today: Proceedings (2020)

64. [A correlative study on electrochemical and optical properties of LLZO \(Li₇La₃Zr₂O₁₂\) garnet electrolyte.](#)

K Ajith, P Christopher Selvin, KP Abhilash, P Sivaraj, B Nalini, GG Soundarya.
Materials Today: Proceedings (2020)

63. [Effects of bi-dopants Ni and Fe on tin antimonide alloy anodes: physico and electrochemical studies.](#)

D Lakshmi, B Nalini, S Jayapandi, P Christopher Selvin
Journal of Physics D: Applied Physics 54, 105503 (2020)

62. [Insight into cations substitution on structural and electrochemical properties of nanostructured Li₂FeSiO₄/C cathodes.](#)

Pazhaniswamy Sivaraj, Karuthedath Parameswaran Abhilash, Balakrishnan Nalini,
Paneerselvam Christopher Selvin, Sunkulp Goel, Sudheer Kumar Yadav
Journal of the American Ceramic Society 103, 1685-1697 (2020)

61. [Augmented conductivity in Li_{3-x}La_{2/3-x}TiO₃ nanoparticles: all-solid-state Li-ion battery applications.](#)

D Lakshmi, B Nalini, S Jayapandi, P Christopher Selvin.
Journal of Materials Science: Materials in Electronics 31, 1343-1354 (2020)

2019-1994

60. [Investigations on The Effect Of Sm³⁺ Doping on The Electrochemical Performance of The Li₂FeSiO₄/C](#)

[Nanocomposite Cathode Material for Lithium Ion Batteries.](#)

P Sivaraj, KP Abhilash, P Christopher Selvin, B Nalini

Materials Today: Proceedings 8, 346-351 (2019)

59. [Impact of lithium chlorate salts on structural and electrical properties of natural polymer electrolytes for all solid state lithium polymer batteries.](#)

P. Perumal, S. Selvasekarapandian, K. Abhilash, P. Sivaraj, R. Hemalatha, P. Selvin

Vacuum 159, 277-281 (2019)

58. [Plasticizer incorporated, novel eco-friendly bio-polymer based solid bio-membrane for electrochemical clean energy applications.](#)

P Perumal, P Christopher Selvin, S Selvasekarapandian, P Sivaraj, KP Abhilash, V Moniha, R Manjula Devi

Polymer Degradation and Stability 159, 43-53 (2019)

57. [Structural and Electrical Properties of Bio-polymer Pectin with LiClO₄ Solid Electrolytes for Lithium Ion Polymer Batteries.](#)

P Perumal, P Christopher Selvin, S Selvasekarapandian, P Sivaraj
Materials Today: Proceedings 8, 196-202 (2019)

56. [Synthesis and characterization of biopolymer electrolyte based on tamarind seed polysaccharide, lithium perchlorate and ethylene carbonate for electrochemical applications.](#)

L Sampathkumar, P Christopher Selvin, S Selvasekarapandian, P Perumal, R Chitra, M Muthukrishnan
Ionics 25, 1067-1082 (2019)

55. [Lanthanide ion induced phase decomposition of tetragonal CaWO₄.](#)

K Somasundaram, Chandresh Kumar Rastogi, Indrani Roy, P Christopher Selvin, V Sudarsan.

Materials Research Bulletin 113, 133-140 (2019)

54. [Study on Mg-ion conducting solid biopolymer electrolytes based on tamarind seed polysaccharide for magnesium ion batteries.](#)

P Perumal, KP Abhilash, P Sivaraj, P Christopher Selvin
Materials Research Bulletin 118, 110490 (2019)

53. [Preparation and characterization of proton-conducting polymer electrolyte based on PVA, amino acid proline, and NH₄Cl and its applications to electrochemical devices.](#)

R Hemalatha, M Alagar, S Selvasekarapandian, B Sundaresan, V Moniha, G Boopathi, P Christopher Selvin
Ionics 25, 141-154 (2019)

52. [Bio-host pectin complexed with dilithium borate based solid electrolytes for polymer batteries.](#)

P Perumal, P Christopher Selvin, S Selvasekarapandian, KP Abhilash
Materials Research Express 6, 115513 (2019)

51. [Correlation study on temperature dependent conductivity and line profile along the LLTO/LFP-C cross section for all solid-state lithium-ion batteries.](#)

KP Abhilash, P Christopher Selvin, B Nalini, Rajan Jose, Xia Hui, Hendry Izaac Elim, MV Reddy
Solid State Ionics 341, 115032 (2019)

50. [Structure, dielectric, and temperature-dependent conductivity studies of the Li₂FeSiO₄/C nano cathode material for lithium-ion batteries.](#)

P Sivaraj, KP Abhilash, B Nalini, P Balraju, Sudheer Kumar Yadav, S Jayapandi, P Christopher Selvin
Ionics 25, 2041-2056 (2019)

49. [Electrochemical analysis of the carbon-encapsulated lithium iron phosphate nanochains and their high-temperature conductivity profiles.](#)

KP Abhilash, P Christopher Selvin, B Nalini, Hui Xia, Stefan Adams, MV Reddy
ACS omega 3, 6446-6455 (2018)

48. [Characterization of biopolymer pectin with lithium chloride and its applications to electrochemical devices.](#)

P Perumal, P Christopher Selvin, S Selvasekarapandian
Ionics 24, 3259-3270 (2018)

47. [A study on blend polymer electrolyte based on poly \(vinyl alcohol\)-poly \(acrylonitrile\) with magnesium nitrate for magnesium battery.](#)

R Manjuladevi, S Selvasekarapandian, M Thamilselvan, R Mangalam, S Monisha, P Christopher Selvin.

Ionics 24, 3493-3506 (2018)

46. [Study on the influences of calcination temperature on structure and its electrochemical performance of Li₂FeSiO₄/C nano cathode for Lithium Ion Batteries.](#)

P Sivaraj, B Nalini, KP Abhilash, D Lakshmi, P Christopher Selvin, P Balraju.

Journal of Alloys and Compounds 740, 1116-1124 (2018)

45. [Tamarind seed polysaccharide biopolymer membrane for lithium-ion conducting battery.](#)

L Sampath Kumar, P Christopher Selvin, S Selvasekarapandian, R Manjuladevi, S Monisha, P Perumal

Ionics 24, 3793-3803 (2018)

44. [Lithium ion conducting biopolymer electrolyte based on pectin doped with Lithium nitrate.](#)

R Manjuladevi, P Christopher Selvin, S Selvasekarapandian, R Shilpa, V Moniha

AIP conference proceedings 1942, 140075 (2018)

43. [Study of proton-conducting polymer electrolyte based on K-carrageenan and NH₄SCN for electrochemical devices.](#)

P Christopher Selvin, P Perumal, S Selvasekarapandian, S Monisha, G Boopathi, MV Leena Chandra

Ionics 24, 3535-3542 (2018)

42. [Preparation and characterization of blend polymer electrolyte film based on poly\(vinyl alcohol\)-poly\(acrylonitrile\)/MgCl₂ for energy storage devices.](#)

R Manjuladevi, M Thamilselvan, S Selvasekarapandian, P Christopher Selvin, R Mangalam, S Monisha

Ionics 24, 1083-1095 (2018)

41. [Blue electroluminescence from ZnGa₂O₄: Eu powder samples.](#)
K Somasundaram, KG Girija, P Christopher Selvin, V Sudarsan, RM Kadam, RK Vatsa
Journal of Luminescence 185, 145-150 (2017)
40. [Investigations on the influence of Sm³⁺ ion on the nano TiO₂ matrix as the anode material for lithium ion batteries.](#)
KP Abhilash, P Christopher Selvin, B Nalini, Rajan Jose, R Vijayaraghavan, BVR Chowdari, S Adams, MV Reddy
Journal of Alloys and Compounds 710, 205-215 (2017)
39. Fabrication and electrochemical evaluation of the lithium battery, Li_{0.5}La_{0.5}TiO₃/LiFePO₄-c interface.
KP Abhilash, P Christopher Selvin, B Nalini, MV Reddy
Pattimura Proceeding: Conference of Science and Technology 1, 011-024 (2017)
38. [Study of the temperature dependent transport properties in nanocrystalline lithium lanthanum titanate for lithium ion batteries.](#)
KP Abhilash, P Christopher Selvin, B Nalini, K Somasundaram, P Sivaraj, A Chandra Bose
Journal of Physics and Chemistry of Solids, 91, 114-121, 2016.
37. [Accomplishment of highly porous-lithium lanthanum titanate through microwave treatment.](#)
D Lakshmi, B Nalini, KP Abhilash, P Christopher Selvin
AIP Conference Proceedings 1731, 050079 (2016)
36. [Structural and optical characterization of terbium doped ZnGa₂O₄ thin films deposited by RF magnetron sputtering.](#)
K Somasundaram, KG Girija, V Sudarsan, P Christopher Selvin, RK Vatsa
AIP Conference Proceedings 1731, 080081 (2016)
35. [Defect luminescence and lattice strain in Mn²⁺ doped ZnGa₂O₄.](#)
K Somasundaram, KP Abhilash, V Sudarsan, P Christopher Selvin, RM Kadam.

34. Synthesis and characterization of thermally evaporated (Bi, Sb)₂S₃ thin films.

K Kandaswamy, P Christopher Selvin, B Nalini, I Mohamed Abdulla, KP Abhilash

Journal of Optoelectronics and Advanced Materials 17, 145-150 (2015)

33. [Investigation on spin coated LLTO thin film nano-electrolytes for rechargeable lithium ion batteries.](#)

KP Abhilash, P Sivaraj, P Christopher Selvin, B Nalini, K Somasundaram. Ceramics International, 41, 13823-13829, 2015.

32. [Investigations on pure and Ag doped lithium lanthanum titanate \(LLTO\) nanocrystalline ceramic electrolytes for rechargeable lithium-ion batteries.](#)

KP Abhilash, P Christopher Selvin, B Nalini, P Nithyadharseni, BC Pillai Ceramics International 39, 947-952 (2013)

31. Structural and Optical Properties of Pure and Mn²⁺ Doped CdS Nanocrystalline Thin Films Prepared by Chemical Bath Deposition.

KP Abhilash, S Kalaivani, P Christopher Selvin, B Nalini, K Kandaswamy, K Somasundaram

Asian Journal of Chemistry 25, S179-S184 (2013)

30. [Synthesis of Li\(1+x\)V₃O₈ by chemical route and its characterization](#)

Selvasekarapandian Subramanian, Sakunthala Ayyasamy, P Christopher Selvin, MV Reddy, BVR Chowdari,

Nithya Heller, Arunkumar Dorai, Hema Muthusamy

Journal of nanoscience and nanotechnology 12, 737-742 (2012)

29. [Effect of propylene carbonate and dimethylformamide on ionic conductivity of P\(ECH-EO\) based polymer electrolyte.](#)

H Nithya, S Selvasekarapandian, P Christopher Selvin, D Arun Kumar,

Junichi Kawamura

Electrochimica acta 66, 110-120 (2012)

28. [Laser Raman and conductivity studies of plasticized polymer electrolyte P\(ECH-EO\):propylenecarbonate:γ-butyrolactone:LiClO₄.](#)

H Nithya, S Selvasekarapandian, P Christopher Selvin, D Arun Kumar, M Hema,

Junichi Kawamura

Journal of Solid State Electrochemistry 16, 1791-1797 (2012)

27. [Energy storage studies of bare and doped vanadium pentoxide, \(V_{1.95}M_{0.05}\)O₅, M = Nb, Ta, for lithium ion batteries.](#)

A Sakunthala, MV Reddy, S Selvasekarapandian, BVR Chowdari, P Christopher selvin

Energy & Environmental Science 4, 1712-1725 (2011)

26. [Structural and ionic conductivity studies on P\(ECH-EO\):γ-BL:LiClO₄ plasticized polymer electrolyte.](#)

Hellar Nithya, S Selvasekarapandian, P Christopher Selvin, Dorai Arun Kumar, Muthusamy Hema.

Ionics 17, 587-593 (2011)

25. [Characterization of nanocomposite polymer electrolyte based on P \(ECH-EO\)](#)

H Nithya, S Selvasekarapandian, P Christopher Selvin, D Arun Kumar, M Hema, D Prakash

Physica B: Condensed Matter 406, 3367-3373 (2011)

24. [Synthesis and Characterization of P \(ECH-EO\) Based Solid Polymer Electrolyte for Lithium-Ion Rechargeable Battery.](#)

Nithya Hellar, Selvasekarapandian Subramanian, Arun Kumar Dorai, Sakunthala Ayyasamy, Hema Muthusamy,

Junichi Kawamura, Baskaran Rangasami, PC Selvin.

ECS Meeting Abstracts 381 (2010)

23. [Preparation, characterization, and electrochemical performance of lithium trivanadate rods by a surfactant-assisted polymer precursor method for lithium batteries.](#)

A Sakunthala, MV Reddy, S Selvasekarapandian, BVR Chowdari, P Christopher Selvin

The Journal of Physical Chemistry C 114, 8099-8107 (2010)

22. [Synthesis of compounds, \$\text{Li}\(\text{MMn}_{11/6}\)\text{O}_4\$ \(\$\text{M} = \text{Mn}_{1/6}, \text{Co}_{1/6}, \(\text{Co}_{1/12}\text{Cr}_{1/12}\), \(\text{Co}_{1/12}\text{Al}_{1/12}\), \(\text{Cr}_{1/12}\text{Al}_{1/12}\)\$ \) by polymer precursor method and its electrochemical performance for lithium-ion batteries.](#)

A Sakunthala, MV Reddy, S Selvasekarapandian, BVR Chowdari, P Christopher Selvin

Electrochimica acta 55, 4441-4450 (2010)

21. [Observation of \$\text{NO}_x\$ species in a \$\text{N}_2/\text{O}_2/\text{H}_2\text{O}\$ microwave discharge plasma: A laboratory simulation of Earth's atmosphere](#)

Toshihiro Fujii, Keiichiro Iwase, P. Christopher Selvin.

Journal of Geophysical Research: Atmospheres 108 (2003)

20. [Thermally stimulated luminescence, optical absorption and EPR studies on kyanite crystals](#)

SO Souza, PC Selvin, S Watanabe

Journal of luminescence 102, 575-580 (2003)

19. [Design and performance of an atmospheric pressure inlet system for lithium ion attachment mass spectrometry.](#)

P Christopher Selvin, Keiichiro Iwase, Toshihiro Fujii

Analytical chemistry 74, 2053-2057 (2002)

18. [Mass spectrometric analysis of a \$\text{N}_2/\text{H}_2\$ microwave discharge plasma.](#)

Toshihiro Fujii, Keiichiro Iwase, P Christopher Selvin.

International Journal of Mass Spectrometry 216, 169-175 (2002)

17. [Structures, potential energy curves, and torsional barrier heights for selected polychlorinated biphenyls:](#)

[A density functional theory study.](#)

Sundaram Arulmozhiraja, P Christopher Selvin, Toshihiro Fujii
The Journal of Physical Chemistry A 106, 1765-1769 (2002)

16. [Mass spectrometric analysis of ionic and neutral species produced in an N₂/O₂ microwave discharge plasma](#)

P Christopher Selvin, Keiichiro Iwase, Toshihiro Fujii.
Journal of Physics D: Applied Physics 35, 675 (2002)

15. [Analysis of Hydronitrogen Species Generated by a Microwave Discharge in \(N₂H₄\)/He](#)

Toshihiro Fujii, Christopher P Selvin, Michel Sablier, Keiichiro Iwase
The Journal of Physical Chemistry A 106, 3102-3105 (2002)

14. [Thermoluminescence and EPR studies on natural petalite crystals](#)

SO Souza, JFD Chubaci, P Christopher Selvin, MD Sastry, S Watanabe
Journal of Physics D: Applied Physics 35, 1562 (2002)

13. [Determination of the ionic and neutral chemical components of a H₂O microwave discharge plasma](#)

Toshihiro Fujii, P Christopher Selvin, Keiichiro Iwase
Chemical physics letters 360, 367-373 (2002)

12. [Mass spectrometric studies of ionic products in CF₄/He and CF₄/O₂/He microwave discharge plasmas](#)

Keiichiro Iwase, P Christopher Selvin, Gen Sato, Toshihiro Fujii
Journal of Physics D: Applied Physics 35, 1934 (2002)

11. [Lithium ion attachment mass spectrometry: Instrumentation and features](#)

P Christopher Selvin, Toshihiro Fujii
Review of Scientific Instruments 72, 2248-2252 (2001)

10. [Lithium ion attachment mass spectrometry for on-line analysis of trace components in air: direct introduction](#)

Toshihiro Fujii, P Christopher Selvin, Michel Sablier, Keiichiro Iwase
International Journal of Mass Spectrometry 209, 39-45 (2001)

9. [Thermoluminescence and electron paramagnetic resonance \(EPR\) studies of mineral chrysocolla \(diopside\)](#)
P Christopher Selvin, S Watanabe, JS Ayala-Arenas
Radiation Physics and Chemistry 61, 531-533 (2001)
8. [Lithium ion attachment mass spectrometry for on-line analysis of trace components in air: direct introduction.](#)
Toshihiro Fujii, P Christopher Selvin, Michel Sablier, Keiichiro Iwase
International Journal of Mass Spectrometry 209, 39-45 (2001)
7. [Optical absorption, photoluminescence, and thermally stimulated luminescence of CsCl: Tb crystals](#)
P Christopher Selvan, S Selvasekarapandian, P Neelamegam
physica status solidi (b) 194, 747-756 (1996)
6. [Thermoluminescence studies on Sr²⁺ doped cesium halides and their application to dosimetry](#)
S Selvasekarapandian, P Christopher Selvan, P Neelamegam
Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms
111, 290-296 (1996)
5. [Thermoluminescence and optical studies on CsBr: Ca²⁺ and CsCl: Ca²⁺ crystals and its application to dosimetry](#)
S Selvasekarapandian, P Neelamegam, P Christopher Selvan
physica status solidi (a) 48, 311-320 (1995)
4. Thermoluminescence and optical studies on chromium-doped caesium chloride crystals
P Christopher Selvan, S Selvasekarapandian
Journal of Physics: Condensed Matter 7, 5395 (1995)
3. [Thermoluminescence studies on CsCl: Ni crystals](#)
P Christopher Selvan, S Selvasekarapandian
Materials chemistry and physics 37, 94-96 (1994)

2. [Thermoluminescence studies on CsCl: NO₃⁻ crystals irradiated with X-rays](#)

P Christopher Selvan, S Selvasekarapandian

Materials chemistry and physics 37, 299-301 (1994)

1. [Optical absorption and thermoluminescence of Dy³⁺ doped BaSO₄ gamma irradiated at room temperature](#)

MD Morgan, TG Stoebe, PC Selvan, S Selvasekarapandian, Y Rangeela Devi, S Dorendrajit Singh, E Bayer

Alumini Reflections: