

1. Record Nr.	UNINA9910789585103321
Titolo	Positron and positronium chemistry X : selected, peer reviewed papers from the 10th International Workshop on Positron and Positronium Chemistry (PPC-10), September 5-9, 2011, Smolenic Castle, Slovakia / / edited by Jozef Kristiak, Jan Kuriplach and Pradeep K. Pujari
Pubbl/distr/stampa	Durnten-Zurich, Switzerland : , : Trans Tech Publications, , [2013] ©2013
ISBN	3-03813-438-4
Descrizione fisica	1 online resource (336 p.)
Collana	Materials science forum ; ; 733
Altri autori (Persone)	KristiakJ <1942-> (Jozef) KuriplachJan PujariPradeep K
Disciplina	620.11
Soggetti	Positronium Positrons
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Positron and Positronium Chemistry X; Preface, Committees and Sponsors; Table of Contents; Positrons and Free Volume Related Issues in Polymeric Systems: A Sketch of Gunter Dlubek's Contributions; Chapter 1: Fundamental Aspects; Beyond the Point Ps Approximation; Effects of Local Heating and Premelting in the Terminal Part of the e+ Track; Towards the Positronium and Radiolytic Hydrogen Formation Mechanisms in Liquid Hydrocarbons; Testing of the Extended Tao-Eldrup Model on Porous VP-DVB Copolymers; Ps Bubble in Liquids; The Free Volume Dynamics Study of Unbound HePs Using Exact Diagonalization Technique Chapter 2: Membranes; Layer Structures of Composite Membranes for Water Filtration Elucidated by Variable-Energy Positron Annihilation; Effect of Water on the Size Distribution of Free-Volume Holes in Nafion Membrane; Annihilation Process of Positron in Degraded Nafion®-117; Study of Thin Nafion® Films for Fuel Cells Using Energy Variable Slow Positron Annihilation Spectroscopy; Positronium Lifetimes and Gas Permeation in Aquivion® for Fuel Cells; Chapter 3: Molecular Systems;

## Positronium in Normal Alkanes

The Influence of Admixtures in n-Alkanes on Electron Traps Motion of Molecules at Plateau Region: Case of Propylene Glycol; "In Situ" Observation of Crystallization in Propylene Carbonate, Salol and M-Toluidine; Encapsulation of Natural Flavors in Cyclodextrins: Free Volume Studies by PALS; Modification of the Crystallographic Structure of Olanzapine during Solvation by PALS and X-Ray Diffraction Methods; Molecular Packing of Carbohydrate Oligomer Encapsulants - A Free Volume Perspective; Chapter 4: Confined Systems; Annihilation Characteristics of Confined 2D Positronium  
Hexadecane in SiO<sub>2</sub> Aerogels Phase Transition of Water Confined in Saponites Using Positron Annihilation Spectroscopy; Topological Quasi-Positroniums in Graphite-Alkali Metal Intercalation Compounds; Chapter 5: Liquids; Positron Annihilation Parameters in Connection to Surface Phenomenon of Liquids; Location of Phase Boundaries of Lyotropic Liquid Crystal Employing Positron Lifetime Spectroscopy and Electrical Conductivity Measurement; Positron and Charged Ion Diffusion and the Effective Interactions in the Liquid Phase; Chapter 6: Polymers  
In Situ Positron Lifetime Measurement for the Strained Polyethylene  
Positron Irradiation Effects in HDPE during PAL Measurement at Ambient Temperature; Positron Lifetimes and Mechanical Properties of Gamma-Irradiated Ultra High Molecular Weight Polyethylene; Positron Annihilation Lifetime of Irradiated Polyimide; Effect of Crosslinkers on the Microstructure and Swelling Properties of the N-Isopropyl Acrylamide Gels: A Positron Annihilation Study; Effect of Hydrophilicity of the Sidechains on the Amorphous Structure of Polypropylene Derivatives Studied by Positronium Lifetime Measurements  
Positron Lifetimes and Crystallinity of -Irradiated Polypropylenes

---

### Sommario/riassunto

These proceedings, comprising 66 peer-review papers, are divided into 10 chapters covering: fundamental aspects (of positron and positronium chemistry), membranes, molecular systems, confined systems, liquids, polymers, porous systems, non-metallic materials, nuclear materials, experimental techniques. This work owes a lot to the authors' commitment to positron and positronium chemistry and related subjects. Review from Book News Inc.: The result of a conference that took place in September 2011 at Smolenice Castle in Slovakia, this work contains 66 relatively short papers on subjects ranging

---