

1. Record Nr.	UNINA9910484476503321
Autore	Sharon Maheshwar
Titolo	Nuclear Chemistry / / by Maheshwar Sharon, Madhuri Sharon
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2021
ISBN	3-030-62018-2
Edizione	[2nd ed. 2021.]
Descrizione fisica	1 online resource (xix, 235 pages : 77 illustrations, 1 illustration in color)
Disciplina	541.38
Soggetti	Nuclear chemistry Reaction mechanisms (Chemistry) Nuclear Chemistry Reaction Mechanisms
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. Nuclear Chemistry -- 2. Radioactivity -- 3. Nuclear Reaction -- 4. Interaction of Radiation with Matter -- 5. Ionization Counters -- 6. Scintillation Counter -- 7. Non-conventional Detection Techniques -- 8. Sample Preparation for Counting -- 9. Factors Affecting the Counting Efficiency -- 10. Identification of Radioactive Isotopes -- 11. Statistics of Counting -- 12. Health Hazards and Protection -- 13. Radiochemical Separation Techniques -- 14. Hot Atom-Nuclear Reaction. .
Sommario/riassunto	This book is designed to serve as a textbook for core courses offered to postgraduate students enrolled in chemistry. This book can also be used as a core or supplementary text for nuclear chemistry courses offered to students of chemical engineering. The book covers various topics of nuclear chemistry like Shell model, fission/fusion reaction, natural radioactive equilibrium series, nuclear reactions carried by various types of accelerators. In addition, it describes the law of decay of radioactivity, type of decay, and interaction of radiation with matter. It explains the difference between ionization counter, scintillation counter and solid state detector. This book also consists of end-of-book problems to help readers aid self-learning. The detailed coverage and pedagogical tools make this an ideal textbook for postgraduate

students and researchers enrolled in various chemistry and engineering courses. This book will also be beneficial for industry professionals in the allied fields.
