

1.	Record Nr.	UNINA9910219254203321
	Titolo	Handbook of experimental stress analysis / edited by M. Hetényi
	Pubbl/distr/stampa	New York : Wiley & Sons London : Chapman & Hall, 1954
	Edizione	[2nd printing]
	Descrizione fisica	XII, 1077 p. : ill. ; 24 cm
	Localione	DINED
	Collocazione	NN 132
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
2.	Record Nr.	UNINA9910349476303321
	Titolo	Chromosome Translocation // edited by Yu Zhang
	Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2018
	ISBN	9789811305931 981-13-0593-5
	Edizione	[1st ed. 2018.]
	Descrizione fisica	1 online resource (V, 168 p. 29 illus., 27 illus. in color.)
	Collana	Advances in Experimental Medicine and Biology, , 0065-2598 ; ; 1044
	Disciplina	611.01816 599.935
	Soggetti	Human genetics Cytology Human Genetics Cell Biology
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	Nota di contenuto	Chapter 1: Historical and clinical overview of chromosome

translocations -- Chapter 2: Next generation sequencing to identify chromosome translocation -- Chapter 3: The experimental models to study chromosome translocations -- Chapter 4: High throughput translocation sequencing to identify mechanistic factors shaping translocation -- Chapter 5: Live cell imaging to study chromosome translocation -- Chapter 6: CRISPR/Cas9 to induce chromosome translocation in vivo -- Chapter 7: Generation of DNA double strand breaks (DSBs) -- Chapter 8: The role of DSB response pathway in regulating chromosome translocation -- Chapter 9: DSB repair and ligation of chromosome translocation -- Chapter 10: 3D genome organization defines the chromosome translocation pattern -- Chapter 11: Mechanisms of chromosome deletion -- Chapter 12: Chromothripsis: The role of DNA double strand break form on repair pathway selection.

Sommario/riassunto

This volume discusses various aspects of mechanisms and methodologies of chromosome translocations, ranging from a historical and clinical overview of chromosome translocations to the rapid development of the next-generation sequencing technologies, which has dramatically increased our understanding of the spectrum of chromosome translocations in human diseases. The book also introduces the mechanistic studies on chromosome deletions and their implications in cancer, and discusses the mechanisms of regulating chromothripsis, a unique complex type of chromosome translocation. It is a valuable resource for students and researchers alike, providing insights into chromosome translocations and, potentially, other genomic aberrations involved in understanding and curing human diseases.
