

1. Record Nr.	UNINA9910299922003321
Autore	Alimohammadi Mona
Titolo	Aortic Dissection: Simulation Tools for Disease Management and Understanding / / by Mona Alimohammadi
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-56327-0
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (XXIX, 179 p. 92 illus., 85 illus. in color.)
Collana	Springer Theses, Recognizing Outstanding Ph.D. Research, , 2190-5053
Disciplina	617.413
Soggetti	Biomedical engineering Fluid mechanics Heart - Surgery Biomedical Engineering and Bioengineering Engineering Fluid Dynamics Cardiac Surgery
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Sommario/riassunto	This thesis addresses computation fluid dynamics modelling of aortic dissection (AD), in order to generate in silico diagnostic information and assess 'virtual surgery' outcomes. The thesis introduces several important advances in the modelling of aortic dissection and lays essential groundwork for further development of this technology. The work thesis represents a unique and major step forward in our understanding of AD using a patient-specific, systematic and coherent simulation approach, and is currently the most advanced work available on AD. .