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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	""Cover""; ""Title page""; ""Contents""; ""Preface""; ""Simulating Biofluid-Structure Interactions with an Immersed Boundary Framework a€?A Review""; ""1. Introduction""; ""2. Numerical formulations""; ""3. Recent advances""; ""4. Applications""; ""5. Discussion""; ""6. Summary""; ""References""; ""The Development and Advances of the Immersed Finite Element Method""; ""1. Introduction""; ""2. Kinematics and assumptions""; ""3. The Immersed Finite Element Method""; ""4. Semi-implicit IFEM""; ""5. The Modified IFEM""; ""6. Examples""; ""7. Conclusion""; ""8. Acknowledgement""; ""References"" ""Simulating Mucociliary Transport Using the Method of Regularized Stokeslets""""1. Introduction""; ""2. Methods""; ""3. Results""; ""4. Conclusions""; ""References""; ""A Regularization Method for the Numerical Solution of Doubly-Periodic Stokes Flow""; ""1. Introduction""; ""2. The Stokeslet""; ""3. Greena€?s Function for Doubly-Periodic Stokes Flow""; ""4. Regularization Method""; ""5. Results""; ""6. Conclusions and Future Studies""; ""References""; ""Dynamics of a

primary cilium in time-periodic flows""; ""1. Introduction""; ""2. Formulation""; ""3. Results""

""4. Discussion and Conclusion""""Acknowledgments""; ""References"";

""Motion of Filaments with Planar and Helical Bending Waves in a Viscous Fluid""; ""1. Introduction""; ""2. Methods""; ""3. Results""; ""4. Discussion""; ""5. Conclusion""; ""References""; ""Numerical Study of Scaling Effects in Peristalsis and Dynamic Suction Pumping""; ""1. Introduction""; ""2. Methods""; ""3. Results""; ""4. Conclusion""; ""5. Acknowledgements""; ""References""; ""Multi-Bond Models for Platelet Adhesion and Cohesion""; ""1. Introduction""; ""2. Immersed Boundary Method""

""3. Force required to immobilize platelet""""4. Early platelet-vessel wall adhesion with GPIb-vWF bonds""; ""5. Platelet activation and α IIb β 3 bonds""; ""6. Discussion""; ""7. Acknowledgements""; ""References"";

""Effects of Grouping Behavior, Pulse Timing, and Organism Size on Fluid Flow Around the Upside-Down Jellyfish *Cassiopea xamachana*""; ""1. Introduction""; ""2. Materials and Methods""; ""3. Results""; ""4. Discussion/Conclusions""; ""References""; ""Impacts of Facilitated Urea Transporters on the Urine-Concentrating Mechanism in the Rat Kidney""; ""1. Introduction""

""2. Model Formulation""""3. Model Results""; ""4. Discussion""; ""References""; ""Feedback-Mediated Dynamics in a Model of Coupled Nephrons with Compliant Short Loop of Henle""; ""1. Introduction""; ""2. Mathematical Model""; ""3. Characteristic Equation""; ""4. Results""; ""5. Discussion""; ""References""; ""Back Cover""
