# Raoul van Loon

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/8895507/publications.pdf

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|---|---|---|---|
| 32 papers | 873 citations | 567281 15 h-index | 477307 29 g-index |
| 34 all docs | 34 docs citations | 34 times ranked | 856 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Personalising cardiovascular network models in pregnancy: A twoâ€tiered parameter estimation approach. International Journal for Numerical Methods in Biomedical Engineering, 2020, 37, e3267. | 2.1 | 13 |
| 2 | Mathematical Techniques for Circulatory Systems. , 2019, , 79-94. | | 2 |
| 3 | A data-driven model to study utero-ovarian blood flow physiology during pregnancy. Biomechanics and Modeling in Mechanobiology, 2019, 18, 1155-1176. | 2.8 | 15 |
| 4 | Computational investigation of the Laplace law in compression therapy. Journal of Biomechanics, 2019, 85, 6-17. | 2.1 | 7 |
| 5 | A fully coupled fluid-structure interaction model of the secondary lymphatic valve. Computer Methods in Biomechanics and Biomedical Engineering, 2018, 21, 813-823. | 1.6 | 10 |
| 6 | Investigation of Shape with Patients Suffering from Unilateral Lymphoedema. Annals of Biomedical Engineering, 2018, 46, 108-121. | 2.5 | 12 |
| 7 | Formulation of Generalized Mass Transfer Correlations for Blood Oxygenator Design. Journal of Biomechanical Engineering, 2017, 139, . | 1.3 | 12 |
| 8 | Integrated geometric and mechanical analysis of an image-based lymphatic valve. Journal of Biomechanics, 2017, 64, 172-179. | 2.1 | 6 |
| 9 | Three-dimensional computational model of a blood oxygenator reconstructed from micro-CT scans. Medical Engineering and Physics, 2017, 47, 190-197. | 1.7 | 14 |
| 10 | A novel method for non-invasively detecting the severity and location of aortic aneurysms. Biomechanics and Modeling in Mechanobiology, 2017, 16, 1225-1242. | 2.8 | 28 |
| 11 | Data-driven modelling of the FRC network for studying the fluid flow in the conduit system. Engineering Applications of Artificial Intelligence, 2017, 62, 341-349. | 8.1 | 17 |
| 12 | An implicit solver for 1D arterial network models. International Journal for Numerical Methods in Biomedical Engineering, 2017, 33, e2837. | 2.1 | 27 |
| 13 | Critical Issues in Modelling Lymph Node Physiology. Computation, 2017, 5, 3. | 2.0 | 10 |
| 14 | A comparative study of fractional step method in its quasi-implicit, semi-implicit and fully-explicit forms for incompressible flows. International Journal of Numerical Methods for Heat and Fluid Flow, 2016, 26, 595-623. | 2.8 | 23 |
| 15 | Pore-Scale Modeling of Non-Newtonian Shear-Thinning Fluids in Blood Oxygenator Design. Journal of Biomechanical Engineering, 2016, 138, 051001. | 1.3 | 7 |
| 16 | Determining the combined effect of the lymphatic valve leaflets and sinus on resistance to forward flow. Journal of Biomechanics, 2015, 48, 3584-3590. | 2.1 | 28 |
| 17 | An improved baseline model for a human arterial network to study the impact of aneurysms on pressureâ€flow waveforms. International Journal for Numerical Methods in Biomedical Engineering, 2012, 28, 1224-1246. | 2.1 | 30 |
| 18 | Influences of domain extensions to a moderately stenosed patientâ€specific carotid bifurcation. International Journal of Numerical Methods for Heat and Fluid Flow, 2011, 21, 952-979. | 2.8 | 7 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Patient-specific blood flow simulation through an aneurysmal thoracic aorta with a folded proximal neck. International Journal for Numerical Methods in Biomedical Engineering, 2011, 27, 1167-1184. | 2.1 | 14 |
| 20 | Modelling pipeline for subjectâ€specific arterial blood flowâ€"A review. International Journal for Numerical Methods in Biomedical Engineering, 2011, 27, 1868-1910. | 2.1 | 34 |
| 21 | Hydrodynamic Evaluation of a Bioreactor for Tissue Engineering Heart Valves. Cardiovascular Engineering and Technology, 2010, 1, 10-17. | 1.6 | 5 |
| 22 | Application of a locally conservative Galerkin (LCG) method for modelling blood flow through a patientâ€specific carotid bifurcation. International Journal for Numerical Methods in Fluids, 2010, 64, 1274-1295. | 1.6 | 21 |
| 23 | Towards computational modelling of aortic stenosis. International Journal for Numerical Methods in Biomedical Engineering, 2010, 26, 405-420. | 2.1 | 34 |
| 24 | A comparison of fictitious domain methods appropriate for spectral/hp element discretisations. Computer Methods in Applied Mechanics and Engineering, 2008, 197, 2275-2289. | 6.6 | 36 |
| 25 | Comparison of various fluidâ€"structure interaction methods for deformable bodies. Computers and Structures, 2007, 85, 833-843. | 4.4 | 124 |
| 26 | A fluid-structure interaction model of the aortic heart valve. Journal of Biomechanics, 2006, 39, S293. | 2.1 | 0 |
| 27 | A fluidâ€"structure interaction method with solid-rigid contact for heart valve dynamics. Journal of Computational Physics, 2006, 217, 806-823. | 3.8 | 123 |
| 28 | A three-dimensional fluidâ€"structure interaction method for heart valve modelling. Comptes Rendus - Mecanique, 2005, 333, 856-866. | 2.1 | 37 |
| 29 | A combined fictitious domain/adaptive meshing method for fluidâ€"structure interaction in heart valves. International Journal for Numerical Methods in Fluids, 2004, 46, 533-544. | 1.6 | 100 |
| 30 | Fluid-solid mixtures and electrochemomechanics: the simplicity of Lagrangian mixture theory. Computational and Applied Mathematics, 2004, 23, . | 1.3 | 1 |
| 31 | 3D FE implementation of an incompressible quadriphasic mixture model. International Journal for Numerical Methods in Engineering, 2003, 57, 1243-1258. | 2.8 | 63 |
| 32 | DEVELOPING COMPUTATIONAL FLUID-STRUCTURE INTERACTION MODELS OF THE LYMPHATIC VALVE. , 0, , . | | 0 |