

# Diane A De ZÃ©licourt

## List of Publications by Year in descending order

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Version: 2024-02-01

54  
papers

2,253  
citations

172207

29  
h-index

223531

46  
g-index

57  
all docs

57  
docs citations

57  
times ranked

1946  
citing authors

#	ARTICLE	IF	CITATIONS
1	Glymphatic solute transport does not require bulk flow. <i>Scientific Reports</i> , 2016, 6, 38635.	1.6	231
2	Physics-Driven CFD Modeling of Complex Anatomical Cardiovascular Flows?A TCPC Case Study. <i>Annals of Biomedical Engineering</i> , 2005, 33, 284-300.	1.3	106
3	Introduction of a New Optimized Total Cavopulmonary Connection. <i>Annals of Thoracic Surgery</i> , 2007, 83, 2182-2190.	0.7	94
4	Flow induced by ependymal cilia dominates near-wall cerebrospinal fluid dynamics in the lateral ventricles. <i>Journal of the Royal Society Interface</i> , 2014, 11, 20131189.	1.5	93
5	Patient-specific surgical planning and hemodynamic computational fluid dynamics optimization through free-form haptic anatomy editing tool (SURGEM). <i>Medical and Biological Engineering and Computing</i> , 2008, 46, 1139-1152.	1.6	88
6	Fontan hemodynamics from 100 patient-specific cardiac magnetic resonance studies: A computational fluid dynamics analysis. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2014, 148, 1481-1489.	0.4	86
7	Coupling Pediatric Ventricle Assist Devices to the Fontan Circulation: Simulations with a Lumped-Parameter Model. <i>ASAIO Journal</i> , 2005, 51, 618-628.	0.9	78
8	Correction of Pulmonary Arteriovenous Malformation Using Image-Based Surgical Planning. <i>JACC: Cardiovascular Imaging</i> , 2009, 2, 1024-1030.	2.3	75
9	How astrocyte networks may contribute to cerebral metabolite clearance. <i>Scientific Reports</i> , 2015, 5, 15024.	1.6	74
10	Fluid Dynamics in the HeartMate 3: Influence of the Artificial Pulse Feature and Residual Cardiac Pulsation. <i>Artificial Organs</i> , 2019, 43, 363-376.	1.0	72
11	Total Cavopulmonary Connection Flow With Functional Left Pulmonary Artery Stenosis. <i>Circulation</i> , 2005, 112, 3264-3271.	1.6	67
12	In Vitro Flow Analysis of a Patient-Specific Intraatrial Total Cavopulmonary Connection. <i>Annals of Thoracic Surgery</i> , 2005, 79, 2094-2102.	0.7	64
13	Blood Pump Design Variations and Their Influence on Hydraulic Performance and Indicators of Hemocompatibility. <i>Annals of Biomedical Engineering</i> , 2018, 46, 417-428.	1.3	64
14	Flow study of an extracardiac connection with persistent left superior vena cava. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2006, 131, 785-791.	0.4	60
15	Progress in the CFD Modeling of Flow Instabilities in Anatomical Total Cavopulmonary Connections. <i>Annals of Biomedical Engineering</i> , 2007, 35, 1840-1856.	1.3	52
16	Comparing Pre- and Post-operative Fontan Hemodynamic Simulations: Implications for the Reliability of Surgical Planning. <i>Annals of Biomedical Engineering</i> , 2012, 40, 2639-2651.	1.3	52
17	Rapid adaptation to microgravity in mammalian macrophage cells. <i>Scientific Reports</i> , 2017, 7, 43.	1.6	50
18	Single-Step Stereolithography of Complex Anatomical Models for Optical Flow Measurements. <i>Journal of Biomechanical Engineering</i> , 2005, 127, 204-207.	0.6	49

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19	Pulmonary hepatic flow distribution in total cavopulmonary connections: Extracardiac versus intracardiac. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2011, 141, 207-214.	0.4	49
20	Flow simulations in arbitrarily complex cardiovascular anatomies – An unstructured Cartesian grid approach. <i>Computers and Fluids</i> , 2009, 38, 1749-1762.	1.3	48
21	Individualized computer-based surgical planning to address pulmonary arteriovenous malformations in patients with a single ventricle with an interrupted inferior vena cava and azygous continuation. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2011, 141, 1170-1177.	0.4	48
22	Visualization of flow structures in Fontan patients using 3-dimensional phase contrast magnetic resonance imaging. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2012, 143, 1108-1116.	0.4	45
23	Hemodynamic Modeling of Surgically Repaired Coarctation of the Aorta. <i>Cardiovascular Engineering and Technology</i> , 2011, 2, 288-295.	0.7	44
24	Preliminary clinical experience with a bifurcated Y-graft Fontan procedure – A feasibility study. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2012, 144, 383-389.	0.4	42
25	Hemodynamic Performance of Stage-2 Univentricular Reconstruction: Glenn vs. Hemi-Fontan Templates. <i>Annals of Biomedical Engineering</i> , 2009, 37, 50-63.	1.3	41
26	Virtual surgical planning, flow simulation, and 3-dimensional electrospinning of patient-specific grafts to optimize Fontan hemodynamics. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2018, 155, 1734-1742.	0.4	41
27	Power loss and right ventricular efficiency in patients after tetralogy of Fallot repair with pulmonary insufficiency: Clinical implications. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2012, 143, 1279-1285.	0.4	39
28	Simulating hemodynamics of the Fontan Y-graft based on patient-specific in vivo connections. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2013, 145, 663-670.	0.4	39
29	Imaging and patient-specific simulations for the Fontan surgery: Current methodologies and clinical applications. <i>Progress in Pediatric Cardiology</i> , 2010, 30, 31-44.	0.2	34
30	Hemodynamic Energy Dissipation in the Cardiovascular System: Generalized Theoretical Analysis on Disease States. <i>Annals of Biomedical Engineering</i> , 2009, 37, 661-673.	1.3	31
31	Thrombotic Risk of Rotor Speed Modulation Regimes of Contemporary Centrifugal Continuous-flow Left Ventricular Assist Devices. <i>ASAIO Journal</i> , 2021, 67, 737-745.	0.9	30
32	Patient-Specific Surgical Planning, Where Do We Stand? The Example of the Fontan Procedure. <i>Annals of Biomedical Engineering</i> , 2016, 44, 174-186.	1.3	26
33	Hypoxia sensing by hepatic stellate cells leads to VEGF-dependent angiogenesis and may contribute to accelerated liver regeneration. <i>Scientific Reports</i> , 2020, 10, 4392.	1.6	26
34	Three-Dimensional Velocity Field Reconstruction. <i>Journal of Biomechanical Engineering</i> , 2004, 126, 727-735.	0.6	22
35	Larger aortic reconstruction corresponds to diminished left pulmonary artery size in patients with single-ventricle physiology. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2010, 139, 557-561.	0.4	21
36	Effect of flow pulsatility on modeling the hemodynamics in the total cavopulmonary connection. <i>Journal of Biomechanics</i> , 2012, 45, 2376-2381.	0.9	20

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37	Influence of Standard Laboratory Procedures on Measures of Erythrocyte Damage. <i>Frontiers in Physiology</i> , 2017, 8, 731.	1.3	18
38	Rapid Cellular Perception of Gravitational Forces in Human Jurkat T Cells and Transduction into Gene Expression Regulation. <i>International Journal of Molecular Sciences</i> , 2020, 21, 514.	1.8	17
39	Numerical and experimental investigation of pulsatile hemodynamics in the total cavopulmonary connection. <i>Journal of Biomechanics</i> , 2013, 46, 373-382.	0.9	15
40	Assessment of intracranial dynamics in hydrocephalus: effects of viscoelasticity on the outcome of infusion tests. <i>Journal of Neurosurgery</i> , 2013, 119, 1511-1519.	0.9	15
41	Barrier dysfunction or drainage reduction: differentiating causes of CSF protein increase. <i>Fluids and Barriers of the CNS</i> , 2017, 14, 14.	2.4	15
42	Modified control grid interpolation for the volumetric reconstruction of fluid flows. <i>Experiments in Fluids</i> , 2008, 45, 987-997.	1.1	14
43	Cannulation Strategy for Aortic Arch Reconstruction Using Deep Hypothermic Circulatory Arrest. <i>Annals of Thoracic Surgery</i> , 2012, 94, 614-620.	0.7	13
44	In Vitro Testing and Comparison of Additively Manufactured Polymer Impellers for the CentriMag Blood Pump. <i>ASAIO Journal</i> , 2021, 67, 306-313.	0.9	12
45	Insights Into the Low Rate of In-Pump Thrombosis With the HeartMate 3: Does the Artificial Pulse Improve Washout?. <i>Frontiers in Cardiovascular Medicine</i> , 2022, 9, 775780.	1.1	12
46	Advances in Cardiovascular Fluid Mechanics: Bench to Bedside. <i>Annals of the New York Academy of Sciences</i> , 2009, 1161, 1-25.	1.8	10
47	Anatomically Realistic Patient-Specific Surgical Planning of Complex Congenital Heart Defects Using MRI and CFD. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society</i> , 2007, 2007, 202-5.	0.5	9
48	Pulsatile Hemodynamics of the Fontan Connection: A Tri-Modal Investigation. , 2011, , ,		1
49	Patient-Specific Surgery Planning for the Fontan Procedure. , 2013, , 217-228.		1
50	Advances in Computational Simulations for Interventional Treatments and Surgical Planning. , 2010, , 343-373.		0
51	Hemodynamic Energy Dissipation in the Cardiovascular System: Generalized Theoretical Analysis on Disease States. , 2008, , ,		0
52	Importance of Pre-Operative Hemodynamics in the Surgical Planning of Complex Single Ventricle Patients. , 2010, , ,		0
53	Comparing Pre-Operative Predictions and Post-Operative Fontan Hemodynamic Outcomes: Implications for Computer-Based Surgery Planning. , 2012, , ,		0
54	Effect of Flow Pulsatility on Modeling the Total Cavopulmonary Hemodynamics: A Numerical Investigation. , 2012, , ,		0