

# Fernando Mut

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

46  
papers

928  
citations

18  
h-index

29  
g-index

53  
ext. papers

1,092  
ext. citations

4  
avg, IF

4.12  
L-index

#	Paper	IF	Citations
46	Regional Aneurysm Wall Enhancement is Affected by Local Hemodynamics: A 7T MRI Study. <i>American Journal of Neuroradiology</i> , <b>2021</b> , 42, 464-470	4.4	10
45	Hemodynamics in aneurysm blebs with different wall characteristics. <i>Journal of NeuroInterventional Surgery</i> , <b>2021</b> , 13, 642-646	7.8	8
44	Blebs in intracranial aneurysms: prevalence and general characteristics. <i>Journal of NeuroInterventional Surgery</i> , <b>2021</b> , 13, 226-230	7.8	4
43	Hemodynamic conditions that favor bleb formation in cerebral aneurysms. <i>Journal of NeuroInterventional Surgery</i> , <b>2021</b> , 13, 231-236	7.8	7
42	Analysis of hemodynamic changes from aneurysm inception to large sizes. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , <b>2021</b> , 37, e3415	2.6	1
41	A mathematical model of a single seed oleosome. <i>Results in Applied Mathematics</i> , <b>2021</b> , 9, 100128	1.7	
40	Evaluation of Outcome Prediction of Flow Diversion for Intracranial Aneurysms. <i>American Journal of Neuroradiology</i> , <b>2021</b> , 42, 1973-1978	4.4	0
39	Incorporating variability of patient inflow conditions into statistical models for aneurysm rupture assessment. <i>Acta Neurochirurgica</i> , <b>2020</b> , 162, 553-566	3	1
38	A new two-component approach in modeling red blood cells. <i>Communications in Applied and Industrial Mathematics</i> , <b>2020</b> , 11, 55-71	0.5	
37	A new two-component approach in modeling red blood cells. <i>Communications in Applied and Industrial Mathematics</i> , <b>2020</b> , 11, 55-71	0.5	
36	Comparison of statistical learning approaches for cerebral aneurysm rupture assessment. <i>International Journal of Computer Assisted Radiology and Surgery</i> , <b>2020</b> , 15, 141-150	3.9	15
35	Calcification in Human Intracranial Aneurysms Is Highly Prevalent and Displays Both Atherosclerotic and Nonatherosclerotic Types. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , <b>2019</b> , 39, 2157-2167	9.4	14
34	Image-based modeling of blood flow in cerebral aneurysms treated with intrasaccular flow diverting devices. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , <b>2019</b> , 35, e3202	2.6	7
33	Hemodynamic characteristics of stable and unstable vertebrobasilar dolichoectatic and fusiform aneurysms. <i>Journal of NeuroInterventional Surgery</i> , <b>2018</b> , 10, 1102-1107	7.8	4
32	Combining data from multiple sources to study mechanisms of aneurysm disease: Tools and techniques. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , <b>2018</b> , 34, e3133	2.6	12
31	Development and internal validation of an aneurysm rupture probability model based on patient characteristics and aneurysm location, morphology, and hemodynamics. <i>International Journal of Computer Assisted Radiology and Surgery</i> , <b>2018</b> , 13, 1767-1779	3.9	37
30	Development of a statistical model for discrimination of rupture status in posterior communicating artery aneurysms. <i>Acta Neurochirurgica</i> , <b>2018</b> , 160, 1643-1652	3	7

29	External validation of cerebral aneurysm rupture probability model with data from two patient cohorts. <i>Acta Neurochirurgica</i> , <b>2018</b> , 160, 2425-2434	3	10
28	Identification of Hostile Hemodynamics and Geometries of Cerebral Aneurysms: A Case-Control Study. <i>American Journal of Neuroradiology</i> , <b>2018</b> , 39, 1860-1866	4.4	20
27	Recent Advances in Scaling Up Complex Fluid-Structure Interaction Simulations <b>2017</b> ,		1
26	Understanding Angiography-Based Aneurysm Flow Fields through Comparison with Computational Fluid Dynamics. <i>American Journal of Neuroradiology</i> , <b>2017</b> , 38, 1180-1186	4.4	9
25	Hemodynamic Characteristics of Ruptured and Unruptured Multiple Aneurysms at Mirror and Ipsilateral Locations. <i>American Journal of Neuroradiology</i> , <b>2017</b> , 38, 2301-2307	4.4	18
24	Angioarchitectures and Hemodynamic Characteristics of Posterior Communicating Artery Aneurysms and Their Association with Rupture Status. <i>American Journal of Neuroradiology</i> , <b>2017</b> , 38, 2111-2118	4.4	13
23	Flow Conditions in the Intracranial Aneurysm Lumen Are Associated with Inflammation and Degenerative Changes of the Aneurysm Wall. <i>American Journal of Neuroradiology</i> , <b>2017</b> , 38, 119-126	4.4	102
22	Regional Mapping of Flow and Wall Characteristics of Intracranial Aneurysms. <i>Annals of Biomedical Engineering</i> , <b>2016</b> , 44, 3553-3567	4.7	26
21	Relationship between aneurysm occlusion and flow diverting device oversizing in a rabbit model. <i>Journal of NeuroInterventional Surgery</i> , <b>2016</b> , 8, 94-8	7.8	12
20	Mechanisms Involved in the Formation of Biocompatible Lipid Polymeric Hollow Patchy Particles. <i>Langmuir</i> , <b>2015</b> , 31, 6639-48	4	4
19	A semi-implicit finite element method for viscous lipid membranes. <i>Journal of Computational Physics</i> , <b>2015</b> , 298, 565-584	4.1	13
18	Hemodynamic analysis of fast and slow aneurysm occlusions by flow diversion in rabbits. <i>Journal of NeuroInterventional Surgery</i> , <b>2015</b> , 7, 931-5	7.8	20
17	Association between hemodynamic conditions and occlusion times after flow diversion in cerebral aneurysms. <i>Journal of NeuroInterventional Surgery</i> , <b>2015</b> , 7, 286-90	7.8	67
16	Strategy for analysis of flow diverting devices based on multi-modality image-based modeling. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , <b>2014</b> , 30, 951-68	2.6	10
15	Morphometric, geographic, and territorial characterization of brain arterial trees. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , <b>2014</b> , 30, 755-66	2.6	33
14	Analysis of flow changes in side branches jailed by flow diverters in rabbit models. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , <b>2014</b> , 30, 988-99	2.6	28
13	Effects of changing physiologic conditions on the in vivo quantification of hemodynamic variables in cerebral aneurysms treated with flow diverting devices. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , <b>2014</b> , 30, 135-42	2.6	18
12	Hemodynamics in two tandem aneurysms treated with flow diverters. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , <b>2014</b> , 30, 517-24	2.6	7

11	CFD and PIV analysis of hemodynamics in a growing intracranial aneurysm. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , <b>2012</b> , 28, 214-28	2.6	50
10	Semi-automatic porting of a large-scale Fortran CFD code to GPUs. <i>International Journal for Numerical Methods in Fluids</i> , <b>2012</b> , 69, 314-331	1.9	35
9	Timings of FEFLO on the SGI-Ice Machines <b>2011</b> ,		4
8	Deflated preconditioned conjugate gradient solvers for the pressure-Poisson equation: Extensions and improvements. <i>International Journal for Numerical Methods in Engineering</i> , <b>2011</b> , 87, 2-14	2.4	38
7	Computational Hemodynamics Framework for the Analysis of Cerebral Aneurysms. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , <b>2011</b> , 27, 822-839	2.6	58
6	Fast Numerical Solutions of Patient-Specific Blood Flows in 3D Arterial Systems. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , <b>2010</b> , 26, 73-85	2.6	49
5	Simulation of intracranial aneurysm stenting: Techniques and challenges. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2009</b> , 198, 3567-3582	5.7	71
4	Computational modelling of blood flow in side arterial branches after stenting of cerebral aneurysms. <i>International Journal of Computational Fluid Dynamics</i> , <b>2008</b> , 22, 669-676	1.2	27
3	Simulation of Stent Deployment in Patient-Specific Cerebral Aneurysm Models for Their Hemodynamics Analysis <b>2008</b> ,		7
2	Deflated preconditioned conjugate gradient solvers for the Pressure-Poisson equation. <i>Journal of Computational Physics</i> , <b>2008</b> , 227, 10196-10208	4.1	32
1	New Mass-Conserving Algorithm for Level Set Redistancing on Unstructured Meshes. <i>Journal of Applied Mechanics, Transactions ASME</i> , <b>2006</b> , 73, 1011-1016	2.7	19