

# Franck PlourabouÃ©

## List of Publications by Year in descending order

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Version: 2024-02-01

62  
papers

1,391  
citations

279798

23  
h-index

345221

36  
g-index

62  
all docs

62  
docs citations

62  
times ranked

1551  
citing authors

#	ARTICLE	IF	CITATIONS
1	Multi-inception patterns of emitter array/collector systems in DC corona discharge. Journal Physics D: Applied Physics, 2022, 55, 185203.	2.8	7
2	Source Identification of Propagating Waves Inside a Network. IEEE Transactions on Network Science and Engineering, 2022, 9, 1437-1450.	6.4	1
3	Image-based effective medium approximation for fast permeability evaluation of porous media core samples. Computational Geosciences, 2021, 25, 105-117.	2.4	1
4	Numerical study of ElectroAeroDynamic force and current resulting from ionic wind in emitter/collector systems. Journal of Applied Physics, 2021, 129, .	2.5	8
5	Multi-scale two-domain numerical modeling of stationary positive DC corona discharge/drift-region coupling. Journal of Computational Physics, 2021, 443, 110517.	3.8	5
6	Analytical properties of Graetz modes in parallel and concentric configurations. Meccanica, 2020, 55, 1545-1559.	2.0	2
7	From whole-organ imaging to in-silico blood flow modeling: A new multi-scale network analysis for revisiting tissue functional anatomy. PLoS Computational Biology, 2020, 16, e1007322.	3.2	10
8	3D analysis of the whole subcutaneous adipose tissue reveals a complex spatial network of interconnected lobules with heterogeneous browning ability. Scientific Reports, 2019, 9, 6684.	3.3	23
9	Thermal significance and optimal transfer in vessels bundles is influenced by vascular density. International Journal of Heat and Mass Transfer, 2019, 138, 1-10.	4.8	2
10	Flying with ionic wind. Nature, 2018, 563, 476-477.	27.8	9
11	New objective measurements of semen wave motion are associated with fertility in sheep. Reproduction, Fertility and Development, 2018, 30, 889.	0.4	6
12	Simulations of Brownian tracer transport in squirmer suspensions. IMA Journal of Applied Mathematics, 2018, 83, 680-699.	1.6	11
13	Revisiting the positive DC corona discharge theory: Beyond Peek's and Townsend's law. Physics of Plasmas, 2018, 25, .	1.9	24
14	Electrohydrodynamic ionic wind, force field, and ionic mobility in a positive dc wire-to-cylinders corona discharge in air. Physical Review Fluids, 2018, 3, .	2.5	30
15	Toward quantitative three-dimensional microvascular networks segmentation with multiview light-sheet fluorescence microscopy. Journal of Biomedical Optics, 2018, 23, 1.	2.6	13
16	Identification of internal properties of fibres and micro-swimmers. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2017, 473, 20160517.	2.1	5
17	Analysis of vascular homogeneity and anisotropy on high-resolution primate brain imaging. Human Brain Mapping, 2017, 38, 5756-5777.	3.6	3
18	Electrohydrodynamic Thrust for In-Atmosphere Propulsion. AIAA Journal, 2017, 55, 4296-4305.	2.6	52

#	ARTICLE	IF	CITATIONS
19	Theoretical and numerical analysis of counter-flow parallel convective exchangers considering axial diffusion. <i>International Journal of Heat and Mass Transfer</i> , 2017, 107, 154-167.	4.8	9
20	Regionalization of browning revealed by whole subcutaneous adipose tissue imaging. <i>Obesity</i> , 2016, 24, 1081-1089.	3.0	46
21	Symmetry-breaking phase transitions in highly concentrated semen. <i>Journal of the Royal Society Interface</i> , 2016, 13, 20160575.	3.4	42
22	Enhanced evaporation from an oscillating liquid in a capillary tube. <i>International Journal of Heat and Mass Transfer</i> , 2016, 95, 288-295.	4.8	5
23	Turbulence of swarming sperm. <i>Physical Review E</i> , 2015, 92, 032722.	2.1	54
24	A general formulation of Bead Models applied to flexible fibers and active filaments at low Reynolds number. <i>Journal of Computational Physics</i> , 2015, 286, 14-37.	3.8	44
25	Large-scale simulation of steady and time-dependent active suspensions with the force-coupling method. <i>Journal of Computational Physics</i> , 2015, 302, 524-547.	3.8	33
26	MATHEMATICAL ANALYSIS OF PARALLEL CONVECTIVE EXCHANGERS WITH GENERAL LATERAL BOUNDARY CONDITIONS USING GENERALIZED GRAETZ MODES. <i>Mathematical Models and Methods in Applied Sciences</i> , 2014, 24, 627-665.	3.3	4
27	Shape optimization for the generalized Graetz problem. <i>Structural and Multidisciplinary Optimization</i> , 2014, 49, 993-1008.	3.5	9
28	Numerical computation of 3D heat transfer in complex parallel heat exchangers using generalized Graetz modes. <i>Journal of Computational Physics</i> , 2014, 268, 84-105.	3.8	8
29	On the Normalization of Cerebral Blood Flow. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2013, 33, 669-672.	4.3	8
30	Broadband converging plasmon resonance at a conical nanotip. <i>Optics Express</i> , 2013, 21, 6609.	3.4	14
31	The Generalized Graetz Problem in Finite Domains. <i>SIAM Journal on Applied Mathematics</i> , 2012, 72, 99-123.	1.8	17
32	Simple Patient-Based Transmantle Pressure and Shear Estimate From Cine Phase-Contrast MRI in Cerebral Aqueduct. <i>IEEE Transactions on Biomedical Engineering</i> , 2012, 59, 2874-2883.	4.2	9
33	Coupling and robustness of intra-cortical vascular territories. <i>NeuroImage</i> , 2012, 62, 408-417.	4.2	18
34	Electrolyte Stability in a Nanochannel with Charge Regulation. <i>Langmuir</i> , 2011, 27, 11187-11198.	3.5	2
35	Steady streaming confined between three-dimensional wavy surfaces. <i>Journal of Fluid Mechanics</i> , 2010, 657, 430-455.	3.4	4
36	A New Approach to Model Confined Suspensions Flows in Complex Networks: Application to Blood Flow. <i>Transport in Porous Media</i> , 2010, 83, 171-194.	2.6	22

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37	Cerebral Blood Flow Modeling in Primate Cortex. Journal of Cerebral Blood Flow and Metabolism, 2010, 30, 1860-1873.	4.3	59
38	Attraction between two similar particles in an electrolyte: effects of Stern layer absorption. Anais Da Academia Brasileira De Ciencias, 2010, 82, 95-108.	0.8	1
39	A 3D investigation shows that angiogenesis in primate cerebral cortex mainly occurs at capillary level. International Journal of Developmental Neuroscience, 2009, 27, 185-196.	1.6	62
40	Numerical Analysis of a New Mixed Formulation for Eigenvalue Convection-Diffusion Problems. SIAM Journal on Applied Mathematics, 2009, 70, 658-676.	1.8	14
41	Gap Filling of 3-D Microvascular Networks by Tensor Voting. IEEE Transactions on Medical Imaging, 2008, 27, 674-687.	8.9	54
42	Stationary convection-diffusion between two co-axial cylinders. International Journal of Heat and Mass Transfer, 2007, 50, 4901-4907.	4.8	4
43	From Homogeneous to Fractal Normal and Tumorous Microvascular Networks in the Brain. Journal of Cerebral Blood Flow and Metabolism, 2007, 27, 293-303.	4.3	105
44	Critical point network for drainage between rough surfaces. Transport in Porous Media, 2007, 70, 257-277.	2.6	1
45	Quasi-static liquid-air drainage in narrow channels with variations in the gap. Journal of Colloid and Interface Science, 2006, 294, 165-175.	9.4	7
46	Convergence of the Generalized Volume Averaging Method on a Convection-Diffusion Problem: A Spectral Perspective. SIAM Journal on Applied Mathematics, 2005, 66, 122-152.	1.8	2
47	X-ray high-resolution vascular network imaging. Journal of Microscopy, 2004, 215, 139-148.	1.8	82
48	Kelvin-Helmholtz instability in a Hele-Shaw cell. Physics of Fluids, 2002, 14, 922-929.	4.0	35
49	Averaged Reynolds Equation for Flows between Rough Surfaces in Sliding Motion. Transport in Porous Media, 2002, 48, 291-313.	2.6	42
50	Light scattering from cold rolled aluminum surfaces. Optics Communications, 2001, 187, 289-294.	2.1	7
51	Title is missing!. Transport in Porous Media, 2001, 44, 281-304.	2.6	1
52	Experimental study of the transport properties of rough self-affine fractures. Journal of Contaminant Hydrology, 2000, 46, 295-318.	3.3	45
53	Multi-scale roughness transfer in cold metal rolling. Tribology International, 1999, 32, 45-57.	5.9	34
54	Tracer Dispersion in Rough Open Cracks. Transport in Porous Media, 1998, 32, 97-116.	2.6	64

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55	Learning Induced Criticality In Consumers' Adoption Pattern: A Neural Network Approach. Economics of Innovation and New Technology, 1998, 6, 73-90.	3.4	28
56	Numerical study of geometrical dispersion in self-affine rough fractures. Physical Review E, 1998, 58, 3334-3346.	2.1	24
57	Experimental study of the roughness of crumpled surfaces. Physica A: Statistical Mechanics and Its Applications, 1996, 227, 173-182.	2.6	26
58	Fluctuation dynamics of a single magnetic chain. Physical Review E, 1996, 54, 5502-5510.	2.1	30
59	Experimental study of fracture surface roughness on rocks with crack velocity. Physical Review E, 1996, 53, 277-283.	2.1	21
60	Aperture of rough cracks. Physical Review E, 1995, 51, 1675-1685.	2.1	73
61	Title is missing!. Fractals, 1995, 3, 113.	3.7	5
62	A network model of the coupling of ion channels with secondary messenger in cell signalling. Network: Computation in Neural Systems, 1992, 3, 393-406.	3.6	5