

Dimiter P Prodanov

List of Publications by Year in descending order

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Version: 2024-02-01

60
papers

1,021
citations

516710

16
h-index

454955

30
g-index

67
all docs

67
docs citations

67
times ranked

1655
citing authors

#	ARTICLE	IF	CITATIONS
1	The Burgers equations and the Born rule. Chaos, Solitons and Fractals, 2021, 144, 110637.	5.1	0
2	Local generalizations of the derivatives on the real line. Communications in Nonlinear Science and Numerical Simulation, 2021, 96, 105576.	3.3	0
3	Comments on some analytical and numerical aspects of the SIR model. Applied Mathematical Modelling, 2021, 95, 236-243.	4.2	13
4	Preliminary Minimum Reporting Requirements for In-Vivo Neural Interface Research: I. Implantable Neural Interfaces. IEEE Open Journal of Engineering in Medicine and Biology, 2021, 2, 74-83.	2.3	7
5	Analytical Parameter Estimation of the SIR Epidemic Model. Applications to the COVID-19 Pandemic. Entropy, 2021, 23, 59.	2.2	28
6	The Active Segmentation Platform for Microscopic Image Classification and Segmentation. Brain Sciences, 2021, 11, 1645.	2.3	4
7	Generalized Differentiability of Continuous Functions. Fractal and Fractional, 2020, 4, 56.	3.3	1
8	Workshop Report: Governance of Emerging Nanotechnology Risks in the Semiconductor Industry. Frontiers in Public Health, 2020, 8, 275.	2.7	2
9	Failure Modes of Implanted Neural Interfaces. , 2020, , 123-172.		8
10	Self-Similar Decomposition of Digital Signals. Cybernetics and Information Technologies, 2020, 20, 20-37.	1.1	0
11	Probing the 3D architecture of the plant nucleus with microscopy approaches: challenges and solutions. Nucleus, 2019, 10, 181-212.	2.2	30
12	Characterization of the Local Growth of Two Cantor-Type Functions. Fractal and Fractional, 2019, 3, 45.	3.3	3
13	Self-similar decomposition of digital signals. , 2019, , .		2
14	Integral Representations and Algebraic Decompositions of the Fox-Wright Type of Special Functions. Fractal and Fractional, 2019, 3, 4.	3.3	3
15	Regularized Integral Representations of the Reciprocal Gamma Function. Fractal and Fractional, 2019, 3, 1.	3.3	31
16	Accurate label-free 3-part leukocyte recognition with single cell lens-free imaging flow cytometry. Computers in Biology and Medicine, 2018, 96, 147-156.	7.0	23
17	Generic assessment of novel risks related to the use of engineered nanomaterials. , 2018, , .		0
18	Analytical and Numerical Treatments of Conservative Diffusions and the Burgers Equation. Entropy, 2018, 20, 492.	2.2	3

#	ARTICLE	IF	CITATIONS
19	Fractional Velocity as a Tool for the Study of Non-Linear Problems. <i>Fractal and Fractional</i> , 2018, 2, 4.	3.3	13
20	Management of health risk related to use of engineered nanomaterials. An analogy with biosafety. <i>Biomedical Reviews</i> , 2018, 28, 100.	0.6	3
21	Conditions for continuity of fractional velocity and existence of fractional Taylor expansions. <i>Chaos, Solitons and Fractals</i> , 2017, 102, 236-244.	5.1	14
22	Action potential-based MEA platform for in vitro screening of drug-induced cardiotoxicity using human iPSCs and rat neonatal myocytes. <i>Journal of Pharmacological and Toxicological Methods</i> , 2017, 87, 48-52.	0.7	22
23	Banding approach for engineered nanomaterial risk assessment and control. <i>Journal of Physics: Conference Series</i> , 2017, 838, 012017.	0.4	2
24	Sparse Representations of Clifford and Tensor Algebras in Maxima. <i>Advances in Applied Clifford Algebras</i> , 2017, 27, 661-683.	1.0	4
25	And Then There Was Light: Perspectives of Optogenetics for Deep Brain Stimulation and Neuromodulation. <i>Frontiers in Neuroscience</i> , 2017, 11, 663.	2.8	70
26	Clifford Algebra Implementations in Maxima. <i>Journal of Geometry and Symmetry in Physics</i> , 2017, 43, 73-105.	0.3	0
27	Mechanical and Biological Interactions of Implants with the Brain and Their Impact on Implant Design. <i>Frontiers in Neuroscience</i> , 2016, 10, 11.	2.8	112
28	Regularization of derivatives on non-differentiable points. <i>Journal of Physics: Conference Series</i> , 2016, 701, 012031.	0.4	10
29	A model of space-fractional-order diffusion in the glial scar. <i>Journal of Theoretical Biology</i> , 2016, 403, 97-109.	1.7	14
30	Characterization of strongly non-linear and singular functions by scale space analysis. <i>Chaos, Solitons and Fractals</i> , 2016, 93, 14-19.	5.1	4
31	Some Applications of Fractional Velocities. <i>Fractional Calculus and Applied Analysis</i> , 2016, 19, 173-187.	2.2	9
32	Selected Applications of Scale Spaces in Microscopic Image Analysis. <i>Cybernetics and Information Technologies</i> , 2015, 15, 5-12.	1.1	3
33	Fractional variation of HÃ¶lderian functions. <i>Fractional Calculus and Applied Analysis</i> , 2015, 18, 580-602.	2.2	8
34	Three-part differential of unlabeled leukocytes with a compact lens-free imaging flow cytometer. <i>Lab on A Chip</i> , 2015, 15, 1123-1132.	6.0	65
35	Functional electric stimulation for sensory and motor functions: progress and problems. <i>Biomedical Reviews</i> , 2014, 14, 23.	0.6	22
36	Neuronal activity in the bed nucleus of the stria terminalis in a rat model for obsessive-compulsive disorder. <i>Behavioural Brain Research</i> , 2013, 240, 52-59.	2.2	8

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37	Substrate Topography Determines Neuronal Polarization and Growth In Vitro. <i>PLoS ONE</i> , 2013, 8, e66170.	2.5	69
38	A Multichannel Integrated Circuit for Electrical Recording of Neural Activity, With Independent Channel Programmability. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2012, 6, 101-110.	4.0	66
39	Data Ontology and an Information System Realization for Web-Based Management of Image Measurements. <i>Frontiers in Neuroinformatics</i> , 2011, 5, 25.	2.5	4
40	Migraine preventive drugs differentially affect cortical spreading depression in rat. <i>Neurobiology of Disease</i> , 2011, 41, 430-435.	4.4	96
41	A Post-ischaemic Single Administration of Galanthamine, a Cholinesterase Inhibitor, Improves Learning Ability in Rats. <i>Journal of Pharmacy and Pharmacology</i> , 2010, 52, 1151-1156.	2.4	19
42	New Trends and Challenges in the Development of Microfabricated Probes for Recording and Stimulating of Excitable Cells. , 2010, , .		1
43	Using reciprocal derivative chronopotentiometry as a technique to determine safe charge injection limits of electrodes used for neural stimulation. , 2010, 2010, 2943-6.		0
44	In vitro and In vivo electrochemical characterization of a microfabricated neural Probe. , 2009, 2009, 7143-6.		14
45	DBS for obsessive-compulsive disorder. , 2009, , 179-186.		0
46	Automated characterization of nerve fibers labeled fluorescently: Determination of size, class and spatial distribution. <i>Brain Research</i> , 2008, 1233, 35-50.	2.2	13
47	Morphometric analysis of the fiber populations of the rat sciatic nerve, its spinal roots, and its major branches. <i>Journal of Comparative Neurology</i> , 2007, 503, 85-100.	1.6	38
48	Spatial clustering analysis in neuroanatomy: Applications of different approaches to motor nerve fiber distribution. <i>Journal of Neuroscience Methods</i> , 2007, 160, 93-108.	2.5	40
49	Automatic morphometry of synaptic boutons of cultured cells using granulometric analysis of digital images. <i>Journal of Neuroscience Methods</i> , 2006, 151, 168-177.	2.5	37
50	Three-dimensional topography of the motor endplates of the rat gastrocnemius muscle. <i>Muscle and Nerve</i> , 2005, 32, 292-302.	2.2	22
51	Effect of the acetylcholinesterase inhibitor galanthamine on learning and memory in prolonged alcohol intake rat model of acetylcholine deficit. <i>Methods and Findings in Experimental and Clinical Pharmacology</i> , 1999, 21, 297.	0.8	25
52	Effects Of Dexamethasone In Rat Neonatal Model Of Axotomy-Induced Motoneuronal Cell Death. <i>Archives of Physiology and Biochemistry</i> , 1998, 106, 355-361.	2.1	15
53	Automated Segmentation and Morphometry of Cell and Tissue Structures. <i>Selected Algorithms in ImageJ</i> . , 0, , .		15
54	Tools for Assessment of Occupational Health Risks of some Engineered Nanoparticles and Carbon Materials Used in Semiconductor Applications. , 0, , .		3

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55	Open source image analysis software toolboxes for microscopic applications. <i>Frontiers in Neuroinformatics</i> , 0, 7, .	2.5	1
56	Data ontology and information system for management of image measurements over the Internet. <i>Frontiers in Neuroinformatics</i> , 0, 3, .	2.5	1
57	Comparison of parallelized gray-scale zonal operations on CPU and GPU. <i>Frontiers in Neuroinformatics</i> , 0, 7, .	2.5	0
58	Scale-space based segmentation of cells in functional two-photon in vivo images. <i>Frontiers in Neuroinformatics</i> , 0, 7, .	2.5	0
59	Shining light on the role of Parvalbumin interneurons in cortical spreading depression. <i>Frontiers in Aging Neuroscience</i> , 0, 8, .	3.4	0
60	Multiscale Segmentation of Microscopic Images. , 0, , .		0