

Donald Wlodkovic

List of Publications by Year in descending order

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128
papers

4,573
citations

100601

38
h-index

129628

63
g-index

128
all docs

128
docs citations

128
times ranked

7504
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent progress in cytometric technologies and their applications in ecotoxicology and environmental risk assessment. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2022, 101, 203-219.	1.1	3
2	Multi-generational impacts of exposure to antidepressant fluoxetine on behaviour, reproduction, and morphology of freshwater snail <i>Physa acuta</i> . <i>Science of the Total Environment</i> , 2022, 814, 152731.	3.9	13
3	Accelerating Chemobehavioral Phenotypic Screening in Neurotoxicology Using a Living Embryo Array System. <i>Zebrafish</i> , 2022, 19, 32-35.	0.5	8
4	Future prospects of accelerating neuroactive drug discovery with high-throughput behavioral phenotyping. <i>Expert Opinion on Drug Discovery</i> , 2022, 17, 305-308.	2.5	3
5	Bi-allelic variants in neuronal cell adhesion molecule cause a neurodevelopmental disorder characterized by developmental delay, hypotonia, neuropathy/spasticity. <i>American Journal of Human Genetics</i> , 2022, 109, 518-532.	2.6	8
6	Impact of test chamber design on spontaneous behavioral responses of model crustacean zooplankton <i>Artemia franciscana</i> . <i>Lab Animal</i> , 2022, 51, 81-88.	0.2	4
7	Noninvasive Electrophysiology: Emerging Prospects in Aquatic Neurotoxicity Testing. <i>Environmental Science & Technology</i> , 2022, 56, 4788-4794.	4.6	6
8	Beyond the behavioural phenotype: Uncovering mechanistic foundations in aquatic eco-neurotoxicology. <i>Science of the Total Environment</i> , 2022, 829, 154584.	3.9	10
9	The 2020 race towards SARS-CoV-2 specific vaccines. <i>Theranostics</i> , 2021, 11, 1690-1702.	4.6	71
10	Emerging prospects of integrated bioanalytical systems in neuro-behavioral toxicology. <i>Science of the Total Environment</i> , 2021, 756, 143922.	3.9	14
11	Toward High-Throughput Fish Embryo Toxicity Tests in Aquatic Toxicology. <i>Environmental Science & Technology</i> , 2021, 55, 3505-3513.	4.6	14
12	An Engineered sgsh Mutant Zebrafish Recapitulates Molecular and Behavioural Pathobiology of Sanfilippo Syndrome A/MPS IIIA. <i>International Journal of Molecular Sciences</i> , 2021, 22, 5948.	1.8	11
13	Applications of advanced neuro-behavioral analysis strategies in aquatic ecotoxicology. <i>Science of the Total Environment</i> , 2021, 772, 145577.	3.9	22
14	A review of 28 free animal-tracking software applications: current features and limitations. <i>Lab Animal</i> , 2021, 50, 246-254.	0.2	50
15	Advances in real-time monitoring of water quality using automated analysis of animal behaviour. <i>Science of the Total Environment</i> , 2021, 789, 147796.	3.9	23
16	Live-Cell Systems in Real-Time Biomonitoring of Water Pollution: Practical Considerations and Future Perspectives. <i>Sensors</i> , 2021, 21, 7028.	2.1	9
17	Foaming at the mouth: Ingestion of floral foam microplastics by aquatic animals. <i>Science of the Total Environment</i> , 2020, 705, 135826.	3.9	41
18	High-throughput animal tracking in chemobehavioral phenotyping: Current limitations and future perspectives. <i>Behavioural Processes</i> , 2020, 180, 104226.	0.5	30

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19	Chemosensory avoidance behaviors of marine amphipods <i>Allorchestes compressa</i> revealed using a millifluidic perfusion technology. <i>Biomicrofluidics</i> , 2020, 14, 014110.	1.2	10
20	Pyrazolo-benzothiazole hybrids: Synthesis, anticancer properties and evaluation of antiangiogenic activity using in vitro VEGFR-2 kinase and in vivo transgenic zebrafish model. <i>European Journal of Medicinal Chemistry</i> , 2019, 182, 111609.	2.6	65
21	Additives migrating from 3D-printed plastic induce developmental toxicity and neuro-behavioural alterations in early life zebrafish (<i>Danio rerio</i>). <i>Aquatic Toxicology</i> , 2019, 213, 105227.	1.9	41
22	Towards High-Throughput Chemobehavioural Phenomics in Neuropsychiatric Drug Discovery. <i>Marine Drugs</i> , 2019, 17, 340.	2.2	23
23	Synthesis of Gold(I) Complexes Containing Cinnamide: In Vitro Evaluation of Anticancer Activity in 2D and 3D Spheroidal Models of Melanoma and In Vivo Angiogenesis. <i>Inorganic Chemistry</i> , 2019, 58, 5988-5999.	1.9	18
24	A Modular Millifluidic Homeostatic Imaging Plate for Imaging of Larval Zebrafish. <i>Zebrafish</i> , 2019, 16, 37-46.	0.5	4
25	Impact of digital video analytics on accuracy of chemobehavioural phenotyping in aquatic toxicology. <i>PeerJ</i> , 2019, 7, e7367.	0.9	26
26	Ecotoxicology Goes on a Chip: Embracing Miniaturized Bioanalysis in Aquatic Risk Assessment. <i>Environmental Science & Technology</i> , 2018, 52, 932-946.	4.6	34
27	Unsuitable use of DMSO for assessing behavioral endpoints in aquatic model species. <i>Science of the Total Environment</i> , 2018, 615, 107-114.	3.9	37
28	Lab-on-a-Chip imaging micro-echocardiography (iM ³ EC) for rapid assessment of cardiovascular activity in zebrafish larvae. <i>Sensors and Actuators B: Chemical</i> , 2018, 256, 1131-1141.	4.0	16
29	The undiscovered country: Ecotoxicology meets microfluidics. <i>Sensors and Actuators B: Chemical</i> , 2018, 257, 692-704.	4.0	22
30	Characterization of 3D-Printed Moulds for Soft Lithography of Millifluidic Devices. <i>Micromachines</i> , 2018, 9, 116.	1.4	21
31	3D-Printed Chips: Compatibility of Additive Manufacturing Photopolymeric Substrata with Biological Applications. <i>Micromachines</i> , 2018, 9, 91.	1.4	85
32	Caging of planktonic rotifers in microfluidic environment for sub-lethal aquatic toxicity tests. <i>Biomicrofluidics</i> , 2018, 12, 044111.	1.2	6
33	Rapid Fabrication of Chip-Based Physiometers for Neurobehavioral Toxicity Assays Using Rotifers <i>Brachionus calyciflorus</i> . <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2018, 93, 837-847.	1.1	4
34	Development of chorion-less zebrafish embryos in millifluidic living embryo arrays. <i>Biomicrofluidics</i> , 2017, 11, .	1.2	11
35	A Millifluidic System for Analysis of <i>Daphnia magna</i> Locomotory Responses to Water-born Toxicants. <i>Scientific Reports</i> , 2017, 7, 17603.	1.6	30
36	Applications of microalgal biofilms for wastewater treatment and bioenergy production. <i>Biotechnology for Biofuels</i> , 2017, 10, 120.	6.2	122

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37	Millifluidic Lab-on-a-Chip technology for automated toxicity tests using the marine amphipod <i>Allorchestes compressa</i> . <i>Sensors and Actuators B: Chemical</i> , 2017, 239, 660-670.	4.0	26
38	Automatic multiple zebrafish larvae tracking in unconstrained microscopic video conditions. <i>Scientific Reports</i> , 2017, 7, 17596.	1.6	21
39	Miniaturized video-microscopy system for near real-time water quality biomonitoring using microfluidic chip-based devices. , 2016, , .		2
40	Optofluidic technology for monitoring rotifer <i>Brachionus calyciflorus</i> responses to regular light pulses. , 2016, , .		1
41	Applications of stereolithography for rapid prototyping of biologically compatible chip-based physiometers. , 2016, , .		0
42	Optical tracking of embryonic vertebrates behavioural responses using automated time-resolved video-microscopy system. , 2016, , .		1
43	Bioelectric signalling via potassium channels: a mechanism for craniofacial dysmorphogenesis in KCNJ2-associated Andersenâ€™Tawil Syndrome. <i>Journal of Physiology</i> , 2016, 594, 3245-3270.	1.3	110
44	Enabling sub-lethal behavioral ecotoxicity biotests using microfluidic Lab-on-a-Chip technology. <i>Sensors and Actuators B: Chemical</i> , 2016, 226, 289-298.	4.0	34
45	Assessment of biocompatibility of 3D printed photopolymers using zebrafish embryo toxicity assays. <i>Lab on A Chip</i> , 2016, 16, 291-297.	3.1	135
46	Assessment of the biocompatibility of three-dimensional-printed polymers using multispecies toxicity tests. <i>Biomicrofluidics</i> , 2015, 9, 061103.	1.2	50
47	A homeostatic, chip-based platform for zebrafish larvae immobilization and long-term imaging. , 2015, , .		0
48	3D printed polymers toxicity profiling: a caution for biodevice applications. <i>Proceedings of SPIE</i> , 2015, , .	0.8	19
49	Testing organic toxicants on biomicrofluidic devices: why polymeric substrata can lead you into trouble. , 2015, , .		0
50	Enabling rapid behavioral ecotoxicity studies using an integrated lab-on-a-chip systems. <i>Proceedings of SPIE</i> , 2015, , .	0.8	2
51	Automation of daphtoxkit-F biotest using a microfluidic lab-on-a-chip technology. <i>Proceedings of SPIE</i> , 2015, , .	0.8	2
52	Lab-on-a-chip technology for a non-invasive and real-time visualisation of metabolic activities in larval vertebrates. , 2015, , .		1
53	Successes and future outlook for microfluidics-based cardiovascular drug discovery. <i>Expert Opinion on Drug Discovery</i> , 2015, 10, 231-244.	2.5	27
54	An integrated micromechanical large particle in flow sorter (MILPIS). , 2015, , .		1

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55	GammarusChip: innovative lab-on-a-chip technology for ecotoxicological testing using the marine amphipod <i>Allorchestes compressa</i> . , 2015, , .		2
56	Biological implications of lab-on-a-chip devices fabricated using multi-jet modelling and stereolithography processes. Proceedings of SPIE, 2015, , .	0.8	6
57	Real-time visualization of metabolic activities in zebrafish embryos using a microfluidic technology. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2015, 87, 446-450.	1.1	21
58	Integrated microfluidic technology for sub-lethal and behavioral marine ecotoxicity biotests. Proceedings of SPIE, 2015, , .	0.8	2
59	Automated Lab-on-a-Chip Technology for Fish Embryo Toxicity Tests Performed under Continuous Microperfusion (1/4FET). Environmental Science & Technology, 2015, 49, 14570-14578.	4.6	38
60	Interfacing Lab-on-a-Chip Embryo Technology with High-Definition Imaging Cytometry. Zebrafish, 2015, 12, 315-318.	0.5	8
61	Three-dimensional printed millifluidic devices for zebrafish embryo tests. Biomicrofluidics, 2015, 9, 046502.	1.2	62
62	Microfluidic device for a rapid immobilization of Zebrafish larvae in environmental scanning electron microscopy. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2015, 87, 190-194.	1.1	7
63	Affordable Multi-legged Robots for Research and STEM Education: A Case Study of Design and Technological Aspects. Advances in Intelligent Systems and Computing, 2015, , 23-34.	0.5	5
64	Immunology on chip: Promises and opportunities. Biotechnology Advances, 2014, 32, 333-346.	6.0	40
65	Integrated chip-based physiometer for automated fish embryo toxicity biotests in pharmaceutical screening and ecotoxicology. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2014, 85, 537-547.	1.1	29
66	Fishing on chips: Upcoming technological advances in analysis of zebrafish and <i>Xenopus</i> embryos. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2014, 85, 921-932.	1.1	36
67	OpenSource Lab-on-a-Chip Physiometer for Accelerated Zebrafish Embryo Biotests. Current Protocols in Cytometry, 2014, 67, 9.44.1-9.44.16.	3.7	3
68	Dynamic analysis of angiogenesis in transgenic zebrafish embryos using a 3D multilayer chip-based technology. , 2013, , .		2
69	Toward embedded laboratory automation for smart lab-on-a-chip embryo arrays. Biosensors and Bioelectronics, 2013, 48, 188-196.	5.3	29
70	Real-time cell viability assays using a new anthracycline derivative DRAQ7 [®] . Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2013, 83A, 227-234.	1.1	40
71	Microflow cytometry in studies of programmed tumor cell death. Sensors and Actuators B: Chemical, 2013, 189, 2-10.	4.0	5
72	Multiparameter Lab-on-a-Chip flow cytometry of the cellcycle. Biosensors and Bioelectronics, 2013, 42, 586-591.	5.3	30

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73	Fish on chips: Microfluidic living embryo array for accelerated in vivo angiogenesis assays. Sensors and Actuators B: Chemical, 2013, 189, 11-20.	4.0	35
74	Multivariate analysis of apoptotic markers versus cell cycle phase in living human cancer cells by microfluidic cytometry. Proceedings of SPIE, 2013, 8615, .	0.8	1
75	Additive manufacturing of lab-on-a-chip devices: promises and challenges. , 2013, , .		13
76	Immobilization of zebrafish larvae on a chip-based device for environmental scanning electron microscopy (ESEM) imaging. , 2013, , .		2
77	A high-throughput lab-on-a-chip interface for zebrafish embryo tests in drug discovery and ecotoxicology. , 2013, , .		5
78	Microfluidic EmbryoSort technology: towards in flow analysis, sorting and dispensing of individual vertebrate embryos. Proceedings of SPIE, 2013, , .	0.8	2
79	Multiparameter Analysis of Apoptosis Using Lab-on-a-Chip Flow Cytometry. Current Protocols in Cytometry, 2013, 66, 9.42.1-9.42.15.	3.7	8
80	Kinetic Viability Assays Using DRAQ7 Probe. Current Protocols in Cytometry, 2013, 65, Unit 9.41.	3.7	11
81	DNA damage signaling assessed in individual cells in relation to the cell cycle phase and induction of apoptosis. Critical Reviews in Clinical Laboratory Sciences, 2012, 49, 199-217.	2.7	45
82	Fish on Chips: Automated Microfluidic Living Embryo Arrays. Procedia Engineering, 2012, 47, 84-87.	1.2	10
83	New rationale for large metazoan embryo manipulations on chip-based devices. Biomicrofluidics, 2012, 6, 024102.	1.2	33
84	Automated Bio Cybernetic System: A Lab-on-Chip case study. , 2012, , .		10
85	Microflow Cytometry in Studies of Programmed Tumour Cell Death. Procedia Engineering, 2012, 47, 88-91.	1.2	2
86	The case for multiparameter cytometry in neurobiology. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2012, 81A, 544-545.	1.1	2
87	On-chip separation of Lactobacillus bacteria from yeasts using dielectrophoresis. Microfluidics and Nanofluidics, 2012, 12, 597-606.	1.0	47
88	Miniaturized Embryo Array for Automated Trapping, Immobilization and Microperfusion of Zebrafish Embryos. PLoS ONE, 2012, 7, e36630.	1.1	74
89	Dynamic Analysis of Drug-Induced Cytotoxicity Using Chip-Based Dielectrophoretic Cell Immobilization Technology. Analytical Chemistry, 2011, 83, 2133-2144.	3.2	56
90	Interfacing Cell-Based Assays in Environmental Scanning Electron Microscopy Using Dielectrophoresis. Analytical Chemistry, 2011, 83, 3217-3221.	3.2	23

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91	Rapid Quantification of Cell Viability and Apoptosis in B-Cell Lymphoma Cultures Using Cyanine SYTO Probes. <i>Methods in Molecular Biology</i> , 2011, 740, 81-89.	0.4	15
92	Apoptosis goes on a chip: advances in the microfluidic analysis of programmed cell death. <i>Analytical Chemistry</i> , 2011, 83, 6439-6446.	3.2	29
93	Apoptosis and Beyond: Cytometry in Studies of Programmed Cell Death. <i>Methods in Cell Biology</i> , 2011, 103, 55-98.	0.5	339
94	Timing is everything: stochastic origins of cell-to-cell variability in cancer cell death. <i>Frontiers in Bioscience - Landmark</i> , 2011, 16, 307.	3.0	17
95	Dielectrophoresis of micro/nano particles using curved microelectrodes. <i>Proceedings of SPIE</i> , 2011, , .	0.8	1
96	Trapping and imaging of micron-sized embryos using dielectrophoresis. <i>Electrophoresis</i> , 2011, 32, 3129-3132.	1.3	22
97	Wormometry—a chip: Innovative technologies for in situ analysis of small multicellular organisms. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2011, 79A, 799-813.	1.1	55
98	Analysis of Individual Molecular Events of DNA Damage Response by Flow- and Image-Assisted Cytometry. <i>Methods in Cell Biology</i> , 2011, 103, 115-147.	0.5	24
99	Rise of the Micromachines: Microfluidics and the Future of Cytometry. <i>Methods in Cell Biology</i> , 2011, 102, 105-125.	0.5	26
100	Real-Time Cytotoxicity Assays. <i>Methods in Molecular Biology</i> , 2011, 731, 285-291.	0.4	23
101	Microfluidic cell arrays in tumor analysis: new prospects for integrated cytomics. <i>Expert Review of Molecular Diagnostics</i> , 2010, 10, 521-530.	1.5	18
102	Microfabricated analytical systems for integrated cancer cytomics. <i>Analytical and Bioanalytical Chemistry</i> , 2010, 398, 193-209.	1.9	49
103	Rationale for the real-time and dynamic cell death assays using propidium iodide. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2010, 77A, 399-405.	1.1	54
104	Cytometry in cell necrobiology revisited. Recent advances and new vistas. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2010, 77A, 591-606.	1.1	76
105	Tumors on chips: oncology meets microfluidics. <i>Current Opinion in Chemical Biology</i> , 2010, 14, 556-567.	2.8	159
106	Cell death goes LIVE: Technological advances in real-time tracking of cell death. <i>Cell Cycle</i> , 2010, 9, 2330-2341.	1.3	29
107	Microfluidics: Emerging prospects for anti-cancer drug screening. <i>World Journal of Clinical Oncology</i> , 2010, 1, 18.	0.9	15
108	Dynamic analysis of apoptosis using cyanine SYTO probes: From classical to microfluidic cytometry. <i>Experimental Cell Research</i> , 2009, 315, 1706-1714.	1.2	47

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109	Impaired DNA damage response – An Achilles' heel sensitizing cancer to chemotherapy and radiotherapy. <i>European Journal of Pharmacology</i> , 2009, 625, 143-150.	1.7	64
110	Induction of DNA damage response by the supravital probes of nucleic acids. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2009, 75A, 510-519.	1.1	65
111	ER – Golgi network – A future target for anti-cancer therapy. <i>Leukemia Research</i> , 2009, 33, 1440-1447.	0.4	115
112	Microfluidic Single-Cell Array Cytometry for the Analysis of Tumor Apoptosis. <i>Analytical Chemistry</i> , 2009, 81, 5517-5523.	3.2	197
113	Chip-Based Dynamic Real-Time Quantification of Drug-Induced Cytotoxicity in Human Tumor Cells. <i>Analytical Chemistry</i> , 2009, 81, 6952-6959.	3.2	51
114	Flow Cytometry-Based Apoptosis Detection. <i>Methods in Molecular Biology</i> , 2009, 559, 19-32.	0.4	208
115	Biological Implications of Polymeric Microdevices for Live Cell Assays. <i>Analytical Chemistry</i> , 2009, 81, 9828-9833.	3.2	39
116	Microfluidic single cell arrays to interrogate signalling dynamics of individual, patient-derived hematopoietic stem cells. <i>Lab on A Chip</i> , 2009, 9, 2659.	3.1	134
117	SYTO probes in the cytometry of tumor cell death. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2008, 73A, 496-507.	1.1	65
118	Multiparameter detection of apoptosis using red – excitable SYTO probes. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2008, 73A, 563-569.	1.1	30
119	Please do not disturb: Destruction of chromatin structure by supravital nucleic acid probes revealed by a novel assay of DNA – histone interaction. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2008, 73A, 877-879.	1.1	10
120	SYTO Probes: Markers of Apoptotic Cell Demise. <i>Current Protocols in Cytometry</i> , 2007, 42, Unit7.33.	3.7	8
121	Towards an understanding of apoptosis detection by SYTO dyes. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2007, 71A, 61-72.	1.1	39
122	Larger than life: Mitochondria and the Bcl-2 family. <i>Leukemia Research</i> , 2007, 31, 277-286.	0.4	80
123	CXCR4 expression during tumour cell death. <i>Leukemia Research</i> , 2007, 31, 1155-1156.	0.4	6
124	Brefeldin A triggers apoptosis associated with mitochondrial breach and enhances HA14-1- and anti-Fas-mediated cell killing in follicular lymphoma cells. <i>Leukemia Research</i> , 2007, 31, 1687-1700.	0.4	29
125	Gene-expression profiling during curcumin-induced apoptosis reveals downregulation of CXCR4. <i>Experimental Hematology</i> , 2007, 35, 84-95.	0.2	42
126	HA14-1, a small molecule Bcl-2 antagonist, induces apoptosis and modulates action of selected anticancer drugs in follicular lymphoma B cells. <i>Leukemia Research</i> , 2006, 30, 322-331.	0.4	223

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127	Multiparametric analysis of HA14-1-induced apoptosis in follicular lymphoma cells. <i>Leukemia Research</i> , 2006, 30, 1187-1192.	0.4	24
128	Cellular foundation of curcumin-induced apoptosis in follicular lymphoma cell lines. <i>Experimental Hematology</i> , 2006, 34, 463-474.	0.2	55