

# Maria C Derosa

## List of Publications by Citations

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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.

81  
papers

3,095  
citations

25  
h-index

55  
g-index

86  
ext. papers

3,681  
ext. citations

5.4  
avg, IF

5.75  
L-index

#	Paper	IF	Citations
81	Nanotechnology in fertilizers. <i>Nature Nanotechnology</i> , <b>2010</b> , 5, 91	28.7	398
80	Microfluidics Integrated Biosensors: A Leading Technology towards Lab-on-a-Chip and Sensing Applications. <i>Sensors</i> , <b>2015</b> , 15, 30011-31	3.8	273
79	Challenges and opportunities for small molecule aptamer development. <i>Journal of Nucleic Acids</i> , <b>2012</b> , 2012, 748913	2.3	273
78	Iridium luminophore complexes for unimolecular oxygen sensors. <i>Journal of the American Chemical Society</i> , <b>2004</b> , 126, 7619-26	16.4	190
77	Small-Molecule Binding Aptamers: Selection Strategies, Characterization, and Applications. <i>Frontiers in Chemistry</i> , <b>2016</b> , 4, 14	5	177
76	Screening and initial binding assessment of fumonisin b(1) aptamers. <i>International Journal of Molecular Sciences</i> , <b>2010</b> , 11, 4864-81	6.3	109
75	In situ biosensing with a surface plasmon resonance fiber grating aptasensor. <i>Analytical Chemistry</i> , <b>2011</b> , 83, 7027-34	7.8	103
74	Comprehensive analytical comparison of strategies used for small molecule aptamer evaluation. <i>Analytical Chemistry</i> , <b>2015</b> , 87, 8608-12	7.8	100
73	Selection and characterization of a novel DNA aptamer for label-free fluorescence biosensing of ochratoxin A. <i>Toxins</i> , <b>2014</b> , 6, 2435-52	4.9	96
72	Retention of function in the DNA homolog of the RNA dopamine aptamer. <i>Biochemical and Biophysical Research Communications</i> , <b>2009</b> , 388, 732-5	3.4	92
71	Analysis of In Vitro Aptamer Selection Parameters. <i>Journal of Molecular Evolution</i> , <b>2015</b> , 81, 150-61	3.1	91
70	Determination of ochratoxin A in wheat after clean-up through a DNA aptamer-based solid phase extraction column. <i>Food Chemistry</i> , <b>2011</b> , 127, 1378-84	8.5	89
69	Rapid Detection of Circulating Breast Cancer Cells Using a Multiresonant Optical Fiber Aptasensor with Plasmonic Amplification. <i>ACS Sensors</i> , <b>2020</b> , 5, 454-463	9.2	67
68	Computational approaches toward the design of pools for the in vitro selection of complex aptamers. <i>Rna</i> , <b>2010</b> , 16, 2252-62	5.8	50
67	Preparation of functional aptamer films using layer-by-layer self-assembly. <i>Biomacromolecules</i> , <b>2009</b> , 10, 1149-54	6.9	49
66	Smart materials based on DNA aptamers: taking aptasensing to the next level. <i>Sensors</i> , <b>2014</b> , 14, 3156-71	3.8	48
65	Aptamers as promising molecular recognition elements for diagnostics and therapeutics in the central nervous system. <i>Nucleic Acid Therapeutics</i> , <b>2014</b> , 24, 388-404	4.8	45

64	Aptamer Base: a collaborative knowledge base to describe aptamers and SELEX experiments. <i>Database: the Journal of Biological Databases and Curation</i> , <b>2012</b> , 2012, bas006	5	45
63	HER2 breast cancer biomarker detection using a sandwich optical fiber assay. <i>Talanta</i> , <b>2021</b> , 221, 121452-2	6.2	45
62	Aptamer-based sandwich assay for on chip detection of Ochratoxin A by an array of amorphous silicon photosensors. <i>Sensors and Actuators B: Chemical</i> , <b>2016</b> , 230, 31-39	8.5	38
61	An aptamer-based colorimetric lateral flow assay for the detection of human epidermal growth factor receptor 2 (HER2). <i>Analytical Biochemistry</i> , <b>2020</b> , 588, 113471	3.1	35
60	Recent advances in cancer early detection and diagnosis: Role of nucleic acid based aptasensors. <i>TrAC - Trends in Analytical Chemistry</i> , <b>2020</b> , 124, 115806	14.6	34
59	Aptamers: Promising Tools for the Detection of Circulating Tumor Cells. <i>Nucleic Acid Therapeutics</i> , <b>2016</b> , 26, 335-347	4.8	31
58	Strategic Role of Nanotechnology in Fertilizers: Potential and Limitations <b>2015</b> , 25-67		29
57	Label-free aptasensors based on fluorescent screening assays for the detection of Salmonella typhimurium. <i>Analytical Biochemistry</i> , <b>2018</b> , 559, 17-23	3.1	28
56	HER2 biosensing through SPR-envelope tracking in plasmonic optical fiber gratings. <i>Biomedical Optics Express</i> , <b>2020</b> , 11, 4862-4871	3.5	25
55	pH-Control in Aptamer-Based Diagnostics, Therapeutics, and Analytical Applications. <i>Pharmaceuticals</i> , <b>2018</b> , 11,	5.2	24
54	Current Status and Future Prospects for Aptamer-Based Mycotoxin Detection. <i>Journal of AOAC INTERNATIONAL</i> , <b>2016</b> , 99, 865-877	1.7	23
53	Target binding influences permeability in aptamer-polyelectrolyte microcapsules. <i>Small</i> , <b>2011</b> , 7, 1219-261	6.1	23
52	Screening and Identification of DNA Aptamers to Tyramine Using in Vitro Selection and High-Throughput Sequencing. <i>ACS Combinatorial Science</i> , <b>2016</b> , 18, 302-13	3.9	22
51	High-sensitivity detection of metastatic breast cancer cells via terahertz chemical microscopy using aptamers. <i>Sensors and Actuators B: Chemical</i> , <b>2019</b> , 287, 595-601	8.5	21
50	Development of a bead-based aptamer/antibody detection system for C-reactive protein. <i>Analytical Biochemistry</i> , <b>2015</b> , 472, 67-74	3.1	21
49	Multimodal plasmonic optical fiber grating aptasensor. <i>Optics Express</i> , <b>2020</b> , 28, 7539-7551	3.3	21
48	In vitro selections of mammaglobin A and mammaglobin B aptamers for the recognition of circulating breast tumor cells. <i>Scientific Reports</i> , <b>2017</b> , 7, 14487	4.9	20
47	Target-molecule-triggered rupture of aptamer-encapsulated polyelectrolyte microcapsules. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 5500-7	9.5	20

46	Development of a DNA aptamer for direct and selective homocysteine detection in human serum. <i>RSC Advances</i> , <b>2013</b> , 3, 24415	3.7	19
45	Synthesis, transfer, and characterization of core-shell gold-coated magnetic nanoparticles. <i>MethodsX</i> , <b>2019</b> , 6, 333-354	1.9	18
44	Intra-accumbens injection of a dopamine aptamer abates MK-801-induced cognitive dysfunction in a model of schizophrenia. <i>PLoS ONE</i> , <b>2011</b> , 6, e22239	3.7	18
43	In Vivo Use of a Multi-DNA Aptamer-Based Payload/Targeting System To Study Dopamine Dysregulation in the Central Nervous System. <i>ACS Chemical Neuroscience</i> , <b>2019</b> , 10, 371-383	5.7	18
42	Comparison of In-Solution Biorecognition Properties of Aptamers against Ochratoxin A. <i>Toxins</i> , <b>2016</b> , 8,	4.9	16
41	Lateral flow assays for Ochratoxin A using metal nanoparticles: comparison of "adsorption-desorption" approach to linkage inversion assembled nano-aptasensors (LIANA). <i>Analyst, The</i> , <b>2018</b> , 143, 4566-4574	5	15
40	Linkage inversion assembled nano-aptasensors (LIANAs) for turn-on fluorescence detection. <i>Chemical Communications</i> , <b>2015</b> , 51, 14346-9	5.8	14
39	In Vitro Selection and Characterization of DNA Aptamers to a Small Molecule Target. <i>Current Protocols in Chemical Biology</i> , <b>2017</b> , 9, 233-268	1.8	14
38	Advances in Medical Imaging: Aptamer- and Peptide-Targeted MRI and CT Contrast Agents. <i>ACS Omega</i> , <b>2020</b> , 5, 22691-22701	3.9	14
37	Morphological Transformation of Silver Nanoparticles from Commercial Products: Modeling from Product Incorporation, Weathering through Use Scenarios, and Leaching into Wastewater. <i>Nanomaterials</i> , <b>2019</b> , 9,	5.4	13
36	An in solution assay for interrogation of affinity and rational minimizer design for small molecule-binding aptamers. <i>Analyst, The</i> , <b>2015</b> , 140, 6643-51	5	13
35	Target binding improves relaxivity in aptamer-gadolinium conjugates. <i>Journal of Biological Inorganic Chemistry</i> , <b>2012</b> , 17, 1159-75	3.7	13
34	Comparison of turn-on and ratiometric fluorescent G-quadruplex aptasensor approaches for the detection of ATP. <i>Analytical and Bioanalytical Chemistry</i> , <b>2019</b> , 411, 1319-1330	4.4	13
33	Selective dopamine detection using aptamer-functionalized glassy carbon electrodes. <i>Canadian Journal of Chemistry</i> , <b>2015</b> , 93, 572-577	0.9	11
32	Semiconductor properties in an iodine-doped platinum(II) dinuclear complex. <i>Inorganic Chemistry</i> , <b>2001</b> , 40, 1406-7	5.1	11
31	DNA aptamers against bacterial cells can be efficiently selected by a SELEX process using state-of-the art qPCR and ultra-deep sequencing. <i>Scientific Reports</i> , <b>2020</b> , 10, 20917	4.9	11
30	Development of a Biocompatible Layer-by-Layer Film System Using Aptamer Technology for Smart Material Applications. <i>Polymers</i> , <b>2014</b> , 6, 1631-1654	4.5	10
29	Iridium(III) complexes as polymer bound oxygen sensors. <i>Macromolecular Symposia</i> , <b>2003</b> , 196, 235-248	0.8	10

28	Outlook for aptamers after twenty five years. <i>Current Topics in Medicinal Chemistry</i> , <b>2015</b> , 15, 1153-9	3	9
27	Status and Prospects of Aptamers as Drug Components. <i>BioDrugs</i> , <b>2015</b> , 29, 151-65	7.9	8
26	Envisioning the scientific paper of the future. <i>Facets</i> , <b>2020</b> , 5, 1-16	2.3	8
25	Exploring the Unique Contrast Properties of Aptamer-Gadolinium Conjugates in Magnetic Resonance Imaging for Targeted Imaging of Thrombi. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 9412-9424	9.5	6
24	An In-Silico Pipeline for Rapid Screening of DNA Aptamers against Mycotoxins: The Case-Study of Fumonisin B1, Aflatoxin B1 and Ochratoxin A. <i>Polymers</i> , <b>2020</b> , 12,	4.5	5
23	Personalized Medicine for Crops? Opportunities for the Application of Molecular Recognition in Agriculture. <i>Journal of Agricultural and Food Chemistry</i> , <b>2018</b> , 66, 6457-6461	5.7	5
22	A review of Cryptosporidium spp. and their detection in water. <i>Water Science and Technology</i> , <b>2021</b> , 83, 1-25	2.2	5
21	Overview and emerging trends in optical fiber aptasensing. <i>Biosensors and Bioelectronics</i> , <b>2022</b> , 196, 113694	11.8	5
20	Highly sensitive magnetic-microparticle-based aptasensor for Cryptosporidium parvum oocyst detection in river water and wastewater: Effect of truncation on aptamer affinity. <i>Talanta</i> , <b>2021</b> , 222, 121618	6.2	5
19	Impact of anaerobically digested silver and copper oxide nanoparticles in biosolids on soil characteristics and bacterial community. <i>Chemosphere</i> , <b>2021</b> , 263, 128173	8.4	5
18	Development and Evaluation of a Quantitative Fluorescent Lateral Flow Immunoassay for Cystatin-C, a Renal Dysfunction Biomarker. <i>Sensors</i> , <b>2021</b> , 21,	3.8	4
17	Aptamer-Modified Ultrastable Gold Nanoparticles for Dopamine Detection. <i>IEEE Sensors Journal</i> , <b>2021</b> , 21, 2517-2525	4	3
16	Polymer Brush-GaAs Interface and Its Use as an Antibody-Compatible Platform for Biosensing. <i>ACS Omega</i> , <b>2021</b> , 6, 7286-7295	3.9	3
15	Incorporating Aptamers in the Multiple Analyte Profiling Assays (xMAP): Detection of C-Reactive Protein. <i>Methods in Molecular Biology</i> , <b>2017</b> , 1575, 303-322	1.4	2
14	Assessment of Aptamer-Targeted Contrast Agents for Monitoring of Blood Clots in Computed Tomography and Fluoroscopy Imaging. <i>Bioconjugate Chemistry</i> , <b>2020</b> , 31, 2737-2749	6.3	2
13	Soil invertebrate toxicity and bioaccumulation of nano copper oxide and copper sulphate in soils, with and without biosolids amendment. <i>Ecotoxicology and Environmental Safety</i> , <b>2021</b> , 217, 112222	7	2
12	Immobilization of Aptamers on Substrates <b>2018</b> , 85-126		2
11	Advancements in Canadian Biomaterials Research in Neurotraumatic Diagnosis and Therapies. <i>Processes</i> , <b>2019</b> , 7, 336	2.9	1

10	Preparation and characterization of aptamer-polyelectrolyte films and microcapsules for biosensing and delivery applications. <i>Methods</i> , <b>2016</b> , 97, 75-87	4.6	1
9	Weak Ferromagnetic Ground State in Copper(II) Linear Chains. <i>Molecular Crystals and Liquid Crystals</i> , <b>2002</b> , 376, 289-294	0.5	1
8	Fibrinogen aptamer functionalized gold-coated iron-oxide nanoparticles for targeted imaging of thrombi.. <i>Chemical Communications</i> , <b>2022</b> ,	5.8	1
7	Progress in graphene-based optical and electrochemical aptasensors <b>2016</b> , 393-431		1
6	Selection of DNA Aptamers for Root Exudate L-Serine Using Multiple Selection Strategies. <i>Journal of Agricultural and Food Chemistry</i> , <b>2021</b> , 69, 4294-4306	5.7	1
5	Development and characterization of a DNA aptamer for MLL-AF9 expressing acute myeloid leukemia cells using whole cell-SELEX. <i>Scientific Reports</i> , <b>2021</b> , 11, 19174	4.9	1
4	Transformation of Silver Nanoparticles (AgNPs) during Lime Treatment of Wastewater Sludge and Their Impact on Soil Bacteria. <i>Nanomaterials</i> , <b>2021</b> , 11,	5.4	1
3	Fate and removal of silver nanoparticles during sludge conditioning and their impact on soil health after simulated land application. <i>Water Research</i> , <b>2021</b> , 206, 117757	12.5	0
2	Adsorption-desorption nano-aptasensors: fluorescent screening assays for ochratoxin A.. <i>RSC Advances</i> , <b>2022</b> , 12, 13727-13739	3.7	0
1	Optimized experimental pre-treatment strategy for temporary inhibition of islet amyloid polypeptide aggregation. <i>Biochemistry and Biophysics Reports</i> , <b>2021</b> , 26, 100964	2.2	