

G Mike Makrigiorgos

List of Publications by Year in descending order

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104
papers

3,809
citations

126907

33
h-index

138484

58
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109
all docs

109
docs citations

109
times ranked

4685
citing authors

#	ARTICLE	IF	CITATIONS
1	Duplex-Repair enables highly accurate sequencing, despite DNA damage. <i>Nucleic Acids Research</i> , 2022, 50, e1-e1.	14.5	10
2	Boosting the Abscopal Effect Using Immunogenic Biomaterials With Varying Radiation Therapy Field Sizes. <i>International Journal of Radiation Oncology Biology Physics</i> , 2022, 112, 475-486.	0.8	13
3	Nuclease-Assisted, Multiplexed Minor-Allele Enrichment: Application in Liquid Biopsy of Cancer. <i>Methods in Molecular Biology</i> , 2022, 2394, 433-451.	0.9	3
4	Massively parallel enrichment of low-frequency alleles enables duplex sequencing at low depth. <i>Nature Biomedical Engineering</i> , 2022, 6, 257-266.	22.5	32
5	Mutation enrichment in human DNA samples via UV-mediated cross-linking. <i>Nucleic Acids Research</i> , 2022, 50, e32-e32.	14.5	7
6	Recent Developments in Mutation Enrichment and Detection Technologies. <i>Clinical Chemistry</i> , 2022, 68, 1250-1260.	3.2	6
7	Pre-PCR Mutation-Enrichment Methods for Liquid Biopsy Applications. <i>Cancers</i> , 2022, 14, 3143.	3.7	4
8	Sensitive detection of microsatellite instability in tissues and liquid biopsies: Recent developments and updates. <i>Computational and Structural Biotechnology Journal</i> , 2021, 19, 4931-4940.	4.1	10
9	ESR1 NAPA Assay: Development and Analytical Validation of a Highly Sensitive and Specific Blood-Based Assay for the Detection of ESR1 Mutations in Liquid Biopsies. <i>Cancers</i> , 2021, 13, 556.	3.7	9
10	NGS-based identification and tracing of microsatellite instability from minute amounts DNA using inter-Alu-PCR. <i>Nucleic Acids Research</i> , 2021, 49, e24-e24.	14.5	12
11	A bi-institutional multi-disciplinary failure mode and effects analysis (FMEA) for a Co-60 based total body irradiation technique. <i>Radiation Oncology</i> , 2021, 16, 224.	2.7	0
12	Noninvasive imaging of tumor hypoxia after nanoparticle-mediated tumor vascular disruption. <i>PLoS ONE</i> , 2020, 15, e0236245.	2.5	4
13	Sensitive Detection of Minimal Residual Disease in Patients Treated for Early-Stage Breast Cancer. <i>Clinical Cancer Research</i> , 2020, 26, 2556-2564.	7.0	109
14	Sensitive Detection of Microsatellite Instability (MSI) in Liquid Biopsies from Early Stage Colon Cancer Patients using Nuclease-based Enrichment and Standard-Marker or NGS based approaches. <i>International Journal of Radiation Oncology Biology Physics</i> , 2019, 105, S24-S25.	0.8	3
15	Nuclease-Assisted Minor Allele Enrichment Using Overlapping Probes-Assisted Amplification-Refractory Mutation System: An Approach for the Improvement of Amplification-Refractory Mutation System-Polymerase Chain Reaction Specificity in Liquid Biopsies. <i>Analytical Chemistry</i> , 2019, 91, 13105-13111.	6.5	29
16	Extreme PCR Meets High-Speed Melting: A Step Closer to Molecular Diagnostics "While You Wait". <i>Clinical Chemistry</i> , 2019, 65, 217-219.	3.2	1
17	<i>Nucleic Acid Techniques</i> , 2018, , 47-86.		4
18	Denaturation-Enhanced Droplet Digital PCR for Liquid Biopsies. <i>Clinical Chemistry</i> , 2018, 64, 1762-1771.	3.2	21

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19	Fast Temperature-Gradient COLD PCR for the enrichment of the paternally inherited SNPs in cell free fetal DNA; an application to non-invasive prenatal diagnosis of β^2 -thalassaemia. PLoS ONE, 2018, 13, e0200348.	2.5	7
20	Enhanced detection of microsatellite instability using pre-PCR elimination of wild-type DNA homo-polymers in tissue and liquid biopsies. Nucleic Acids Research, 2018, 46, e74-e74.	14.5	36
21	Nanoformulation of Olaparib Amplifies PARP Inhibition and Sensitizes <i>PTEN/TP53</i> -Deficient Prostate Cancer to Radiation. Molecular Cancer Therapeutics, 2017, 16, 1279-1289.	4.1	37
22	Methylation-sensitive enrichment of minor DNA alleles using a double-strand DNA-specific nuclease. Nucleic Acids Research, 2017, 45, e39-e39.	14.5	22
23	Multiplexed Elimination of Wild-Type DNA and High-Resolution Melting Prior to Targeted Resequencing of Liquid Biopsies. Clinical Chemistry, 2017, 63, 1605-1613.	3.2	23
24	Advanced multimodal nanoparticles delay tumor progression with clinical radiation therapy. Journal of Controlled Release, 2016, 238, 103-113.	9.9	76
25	Elimination of unaltered DNA in mixed clinical samples via nuclease-assisted minor-allele enrichment. Nucleic Acids Research, 2016, 44, gkw650.	14.5	55
26	Closing the Cancer Divide Through Ubuntu: Information and Communication Technology-Powered Models for Global Radiation Oncology. International Journal of Radiation Oncology Biology Physics, 2016, 94, 440-449.	0.8	23
27	WE-FG-BRA-02: Docetaxel Eluting Brachytherapy Spacers for Local Chemo-Radiation Therapy in Prostate Cancer. Medical Physics, 2016, 43, 3823-3823.	3.0	0
28	Brachytherapy Application With In Situ Dose Painting Administered by Gold Nanoparticle Eluters. International Journal of Radiation Oncology Biology Physics, 2015, 91, 385-392.	0.8	37
29	Enhanced Ratio of Signals Enables Digital Mutation Scanning for Rare Allele Detection. Journal of Molecular Diagnostics, 2015, 17, 284-292.	2.8	26
30	Nanoparticle Mediated Tumor Vascular Disruption: A Novel Strategy in Radiation Therapy. Nano Letters, 2015, 15, 7488-7496.	9.1	143
31	DMSO Increases Mutation Scanning Detection Sensitivity of High-Resolution Melting in Clinical Samples. Clinical Chemistry, 2015, 61, 1354-1362.	3.2	9
32	Nanoparticle-aided Radiotherapy for Retinoblastoma and Choroidal Melanoma. IFMBE Proceedings, 2015, 51, 907-910.	0.3	1
33	Metastasis-associated <i>MCL1</i> and <i>P16</i> copy number alterations dictate resistance to vemurafenib in a <i>BRAFV600E</i> patient-derived papillary thyroid carcinoma preclinical model. Oncotarget, 2015, 6, 42445-42467.	1.8	40
34	TU-F-CAMPUS-T-02: Monte Carlo Evaluation of Kilovoltage Radiosurgery with AuNPs for Age Related Macular Degeneration (AMD). Medical Physics, 2015, 42, 3644-3644.	3.0	0
35	MOFCBRA05: Next Generation Radiotherapy Biomaterials Loaded With Gold Nanoparticles. Medical Physics, 2015, 42, 3565-3565.	3.0	0
36	COLD-PCR Amplification of Bisulfite-Converted DNA Allows the Enrichment and Sequencing of Rare Un-Methylated Genomic Regions. PLoS ONE, 2014, 9, e94103.	2.5	12

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37	Image-guided radiotherapy platform using single nodule conditional lung cancer mouse models. <i>Nature Communications</i> , 2014, 5, 5870.	12.8	44
38	COLD-PCR Enriches Low-Level Variant DNA Sequences and Increases the Sensitivity of Genetic Testing. <i>Methods in Molecular Biology</i> , 2014, 1102, 623-639.	0.9	8
39	Enriching Mutant Sequences by Modulating the Denaturation Time during PCR. <i>Clinical Chemistry</i> , 2014, 60, 1014-1016.	3.2	2
40	SU-E-T-253: Open-Source Automatic Software for Quantifying Biological Assays of Radiation Effects. <i>Medical Physics</i> , 2014, 41, 281-282.	3.0	0
41	WE-G-BRE-06: New Potential for Enhancing External Beam Radiotherapy for Lung Cancer Using FDA-Approved Concentrations of Cisplatin Or Carboplatin Nanoparticles Administered Via Inhalation. <i>Medical Physics</i> , 2014, 41, 518-518.	3.0	0
42	SU-E-T-89: Comprehensive Quality Assurance Phantom for the Small Animal Radiation Research Platform. <i>Medical Physics</i> , 2014, 41, 242-242.	3.0	0
43	SU-F-19A-08: Optimal Time Release Schedule of In-Situ Drug Release During Permanent Prostate Brachytherapy. <i>Medical Physics</i> , 2014, 41, 389-390.	3.0	0
44	NRAS mutations with low allele burden have independent prognostic significance for patients with lower risk myelodysplastic syndromes. <i>Leukemia</i> , 2013, 27, 2077-2081.	7.2	57
45	In vitro radiosensitization by gold nanoparticles during continuous low-dose-rate gamma irradiation with I-125 brachytherapy seeds. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2013, 9, 25-27.	3.3	86
46	Differential strand separation at critical temperature: A minimally disruptive enrichment method for low-abundance unknown DNA mutations. <i>Nucleic Acids Research</i> , 2013, 41, e50-e50.	14.5	22
47	DISSECT Method Using PNA-LNA Clamp Improves Detection of EGFR T790m Mutation. <i>PLoS ONE</i> , 2013, 8, e67782.	2.5	34
48	Third generation gold nanoplatform optimized for radiation therapy. <i>Translational Cancer Research</i> , 2013, 2, .	1.0	39
49	SU-E-T-302; Customizable Radiotherapy Enhancement (CuRE) for Retinal Diseases Using Nanoparticles. <i>Medical Physics</i> , 2013, 40, 274-274.	3.0	0
50	COLD-PCR Enrichment of Rare Cancer Mutations prior to Targeted Amplicon Resequencing. <i>Clinical Chemistry</i> , 2012, 58, 580-589.	3.2	61
51	Temperature-Tolerant COLD-PCR Reduces Temperature Stringency and Enables Robust Mutation Enrichment. <i>Clinical Chemistry</i> , 2012, 58, 1130-1138.	3.2	32
52	Enrichment of Mutations in Multiple DNA Sequences Using COLD-PCR in Emulsion. <i>PLoS ONE</i> , 2012, 7, e51362.	2.5	8
53	Multiplex Amplification Coupled with COLD-PCR and High Resolution Melting Enables Identification of Low-Abundance Mutations in Cancer Samples with Low DNA Content. <i>Journal of Molecular Diagnostics</i> , 2011, 13, 220-232.	2.8	31
54	Gold nanoparticle-aided brachytherapy with vascular dose painting: Estimation of dose enhancement to the tumor endothelial cell nucleus. <i>Medical Physics</i> , 2011, 39, 392-398.	3.0	48

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55	COLD-PCR: improving the sensitivity of molecular diagnostics assays. <i>Expert Review of Molecular Diagnostics</i> , 2011, 11, 159-169.	3.1	50
56	Ice-COLD-PCR enables rapid amplification and robust enrichment for low-abundance unknown DNA mutations. <i>Nucleic Acids Research</i> , 2011, 39, e2-e2.	14.5	92
57	Full COLD-PCR Protocol for Noninvasive Prenatal Diagnosis of Genetic Diseases. <i>Clinical Chemistry</i> , 2011, 57, 136-138.	3.2	55
58	Biotinylated Probe Isolation of Targeted Gene Region Improves Detection of T790M Epidermal Growth Factor Receptor Mutation via Peptide Nucleic Acid-Enriched Real-Time PCR. <i>Clinical Chemistry</i> , 2011, 57, 770-773.	3.2	13
59	Solid-tumor radionuclide therapy dosimetry: New paradigms in view of tumor microenvironment and angiogenesis. <i>Medical Physics</i> , 2010, 37, 2974-2984.	3.0	29
60	Chitosan Film Containing Poly(D,L-Lactic-Co-Glycolic Acid) Nanoparticles: A Platform for Localized Dual-Drug Release. <i>Pharmaceutical Research</i> , 2010, 27, 1738-1745.	3.5	25
61	s-RT-MELT: A Novel Technology for Mutation Screening. <i>Methods in Molecular Biology</i> , 2010, 653, 207-219.	0.9	0
62	Methylation-Specific Loop-Mediated Isothermal Amplification for Detecting Hypermethylated DNA in Simplex and Multiplex Formats. <i>Clinical Chemistry</i> , 2010, 56, 1287-1296.	3.2	32
63	Coamplification at Lower Denaturation Temperature-PCR Increases Mutation-Detection Selectivity of TaqMan-Based Real-Time PCR. <i>Clinical Chemistry</i> , 2009, 55, 748-756.	3.2	55
64	Two-round coamplification at lower denaturation temperature-PCR (COLD-PCR)-based sanger sequencing identifies a novel spectrum of low-level mutations in lung adenocarcinoma. <i>Human Mutation</i> , 2009, 30, 1583-1590.	2.5	58
65	COLD-PCR-Enhanced High-Resolution Melting Enables Rapid and Selective Identification of Low-Level Unknown Mutations. <i>Clinical Chemistry</i> , 2009, 55, 2130-2143.	3.2	69
66	PCR-Based Methods for the Enrichment of Minority Alleles and Mutations. <i>Clinical Chemistry</i> , 2009, 55, 632-640.	3.2	155
67	COLD-PCR: a new platform for highly improved mutation detection in cancer and genetic testing. <i>Biochemical Society Transactions</i> , 2009, 37, 427-432.	3.4	68
68	Effect of dental restorations and prostheses on radiotherapy dose distribution: a Monte Carlo study. <i>Journal of Applied Clinical Medical Physics</i> , 2009, 10, 80-89.	1.9	45
69	Replacing PCR with COLD-PCR enriches variant DNA sequences and redefines the sensitivity of genetic testing. <i>Nature Medicine</i> , 2008, 14, 579-584.	30.7	346
70	Preferential Amplification of Apoptotic DNA from Plasma: Potential for Enhancing Detection of Minor DNA Alterations in Circulating DNA. <i>Clinical Chemistry</i> , 2008, 54, 1582-1584.	3.2	12
71	Adsorption of metallic radionuclides on plastic phantom walls. <i>Medical Physics</i> , 2008, 35, 1606-1610.	3.0	20
72	FLAG assay as a novel method for real-time signal generation during PCR: application to detection and genotyping of KRAS codon 12 mutations. <i>Nucleic Acids Research</i> , 2007, 35, e131.	14.5	47

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73	s-RT-MELT for rapid mutation scanning using enzymatic selection and real time DNA-melting: new potential for multiplex genetic analysis. <i>Nucleic Acids Research</i> , 2007, 35, e84.	14.5	25
74	Build-up and surface dose measurements on phantoms using micro-MOSFET in 6 and 10MV x-ray beams and comparisons with Monte Carlo calculations. <i>Medical Physics</i> , 2007, 34, 1266-1273.	3.0	41
75	DNA Degradation Test Predicts Success in Whole-Genome Amplification from Diverse Clinical Samples. <i>Journal of Molecular Diagnostics</i> , 2007, 9, 441-451.	2.8	56
76	MS-FLAG, a Novel Real-Time Signal Generation Method for Methylation-Specific PCR. <i>Clinical Chemistry</i> , 2007, 53, 2119-2127.	3.2	30
77	Anti-primer quenching-based real-time PCR for simplex or multiplex DNA quantification and single-nucleotide polymorphism genotyping. <i>Nature Protocols</i> , 2007, 2, 50-58.	12.0	22
78	Precision and Performance Characteristics of Bisulfite Conversion and Real-Time PCR (MethyLight) for Quantitative DNA Methylation Analysis. <i>Journal of Molecular Diagnostics</i> , 2006, 8, 209-217.	2.8	361
79	Whole Genome Amplification of Plasma-Circulating DNA Enables Expanded Screening for Allelic Imbalance in Plasma. <i>Journal of Molecular Diagnostics</i> , 2006, 8, 22-30.	2.8	33
80	Methylation of the ATM promoter in glioma cells alters ionizing radiation sensitivity. <i>Biochemical and Biophysical Research Communications</i> , 2006, 344, 821-826.	2.1	60
81	Antiprimer Quenching-Based Real-Time PCR and Its Application to the Analysis of Clinical Cancer Samples. <i>Clinical Chemistry</i> , 2006, 52, 624-633.	3.2	32
82	Genotype-Specific Signal Generation Based on Digestion of 3-Way DNA Junctions: Application to KRAS Variation Detection. <i>Clinical Chemistry</i> , 2006, 52, 1855-1863.	3.2	13
83	DNA amplification method tolerant to sample degradation. <i>Genome Research</i> , 2004, 14, 2357-2366.	5.5	79
84	Inverse PCR-Based RFLP Scanning Identifies Low-Level Mutation Signatures in Colon Cells and Tumors. <i>Cancer Research</i> , 2004, 64, 2544-2551.	0.9	14
85	Balanced-PCR amplification allows unbiased identification of genomic copy changes in minute cell and tissue samples. <i>Nucleic Acids Research</i> , 2004, 32, e76-e76.	14.5	55
86	PCR-Based detection of minority point mutations. <i>Human Mutation</i> , 2004, 23, 406-412.	2.5	20
87	Stable siRNA-mediated silencing of ATM alters the transcriptional profile of HeLa cells. <i>Biochemical and Biophysical Research Communications</i> , 2004, 317, 1037-1044.	2.1	26
88	Detection of hotspot mutations and polymorphisms using an enhanced PCR-RFLP approach. <i>Human Mutation</i> , 2003, 21, 535-541.	2.5	9
89	Sensitive and quantitative detection of mutations associated with clinical resistance to STI-571. <i>Leukemia Research</i> , 2003, 27, 979-982.	0.8	22
90	Novel amplification of DNA in a hairpin structure: towards a radical elimination of PCR errors from amplified DNA. <i>Nucleic Acids Research</i> , 2003, 31, 26e-26.	14.5	15

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91	Bystander effect produced by radiolabeled tumor cells in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 13765-13770.	7.1	177
92	Ligation of a primer at a mutation: a method to detect low level mutations in DNA. Mutagenesis, 2002, 17, 365-374.	2.6	20
93	An amplification and ligation-based method to scan for unknown mutations in DNA. Human Mutation, 2002, 20, 139-147.	2.5	21
94	A PCR-based amplification method retaining the quantitative difference between two complex genomes. Nature Biotechnology, 2002, 20, 936-939.	17.5	74
95	Reproducible and inexpensive probe preparation for oligonucleotide arrays. Nucleic Acids Research, 2001, 29, 66e-66.	14.5	24
96	Novel Visible and Ultraviolet Light Photogeneration of Hydroxyl Radicals by 2-Methyl-4-nitro-quinoline-N-oxide (MNO) and 4, 4'-Dinitro-(2, 2') bipyridinyl-N, N'-dioxide (DBD). Photochemistry and Photobiology, 1998, 67, 635-640.	2.5	7
97	Generation of Hydroxyl Radicals by Nucleohistone-Bound Metal-Adriamycin Complexes. Free Radical Research, 1996, 25, 207-220.	3.3	15
98	Auger electron emitters: Insights gained from in vitro experiments. Radiation and Environmental Biophysics, 1990, 29, 75-91.	1.4	39
99	Cellular Radiation Dosimetry and Its Implications for Estimation of Radiation Risks. JAMA - Journal of the American Medical Association, 1990, 264, 592.	7.4	23
100	Measurement of the restricted linear energy transfer of stray radiation close to the treatment volume of 12 and 18 MeV clinical photon beams. Medical Physics, 1989, 16, 302-304.	3.0	0
101	Characteristics of an ethylene-polyethylene high-pressure ionization chamber and its potential for deriving radiation dose and quality information in neutron-gamma radiation fields. Medical Physics, 1988, 15, 36-39.	3.0	1
102	Initial recombination of ions in electron tracks: an evaluation of the predictions of Lea's model and a modified track structure model. The International Journal of Applied Radiation and Isotopes, 1985, 36, 813-818.	0.7	12
103	On a modification of Lea's model for initial recombination of electrons. The International Journal of Applied Radiation and Isotopes, 1985, 36, 509-510.	0.7	9
104	The Measurement of the Restricted Dose Mean LET Ratios of Two Photon Spectra on the Basis of Initial Recombination Theory. Radiation Protection Dosimetry, 1985, 13, 383-386.	0.8	0