Michael Weinfeld

List of Publications by Year
in descending order

71 papers	4,602 citations	147801 31 h-index	98798 67 g-index
74 all docs	74 docs citations	74 times ranked	3213 citing authors

#	Article	IF	Citations
1	Gold Nanorods are Selective Cytotoxic Agents. Anti-Cancer Agents in Medicinal Chemistry, 2022, 22, 991-998.	1.7	1
2	Hydrazonoyl chlorides possess promising antitumor properties. Life Sciences, 2022, 295, 120380.	4.3	1
3	Modulation of ERCC1-XPF Heterodimerization Inhibition via Structural Modification of Small Molecule Inhibitor Side-Chains. Frontiers in Oncology, 2022, 12, 819172.	2.8	6
4	Mutations of the DNA repair gene PNKP in a patient with microcephaly, seizures, and developmental delay (MCSZ) presenting with a high-grade brain tumor. Scientific Reports, 2022, 12, 5386.	3.3	3
5	Cellular mechanism of action of 2-nitroimidazoles as hypoxia-selective therapeutic agents. Redox Biology, 2022, 52, 102300.	9.0	9
6	Biodistribution and Activity of EGFR Targeted Polymeric Micelles Delivering a New Inhibitor of DNA Repair to Orthotopic Colorectal Cancer Xenografts with Metastasis. Molecular Pharmaceutics, 2022, 19, 1825-1838.	4.6	5
7	Zika Virus Induces Mitotic Catastrophe in Human Neural Progenitors by Triggering Unscheduled Mitotic Entry in the Presence of DNA Damage While Functionally Depleting Nuclear PNKP. Journal of Virology, 2022, 96, e0033322.	3.4	5
8	Enhancing the activity of platinum-based drugs by improved inhibitors of ERCC1â€“XPF-mediated DNA repair. Cancer Chemotherapy and Pharmacology, 2021, 87, 259-267.	2.3	7
9	Identification of proteins and cellular pathways targeted by 2-nitroimidazole hypoxic cytotoxins. Redox Biology, 2021, 41, 101905.	9.0	5
10	A synthetically lethal nanomedicine delivering novel inhibitors of polynucleotide kinase 3â€²-phosphatase (PNKP) for targeted therapy of PTEN-deficient colorectal cancer. Journal of Controlled Release, 2021, 334, 335-352.	9.9	8
11	PNKP is required for maintaining the integrity of progenitor cell populations in adult mice. Life Science Alliance, 2021, 4, e202000790.	2.8	3
12	Nano-Delivery of a Novel Inhibitor of Polynucleotide Kinase/Phosphatase (PNKP) for Targeted Sensitization of Colorectal Cancer to Radiation-Induced DNA Damage. Frontiers in Oncology, 2021, 11, 772920.	2.8	6
13	Computerâ€aided drug design of small molecule inhibitors of the ERCC1â€XPF proteinâ€“protein interaction. Chemical Biology and Drug Design, 2020, 95, 460-471.	3.2	15
14	Design, synthesis and inÂvitro cell-free/cell-based biological evaluations of novel ERCC1-XPF inhibitors targeting DNA repair pathway. European Journal of Medicinal Chemistry, 2020, 204, 112658.	5.5	6
15	Development of Self-Associating SN-38-Conjugated Poly(ethylene oxide)-Poly(ester) Micelles for Colorectal Cancer Therapy. Pharmaceutics, 2020, 12, 1033.	4.5	9
16	Insulin Growth Factor Binding Protein 7 (IGFBP7)-Related Cancer and IGFBP3 and IGFBP7 Crosstalk. Frontiers in Oncology, 2020, 10, 727.	2.8	61
17	Synthesis and Analysis of ⁶⁴Cu-Labeled GE11-Modified Polymeric Micellar Nanoparticles for EGFR-Targeted Molecular Imaging in a Colorectal Cancer Model. Molecular Pharmaceutics, 2020, 17, 1470-1481.	4.6	27
18	Targeting DNA Repair in Tumor Cells via Inhibition of ERCC1â€“XPF. Journal of Medicinal Chemistry, 2019, 62, 7684-7696.	6.4	18

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19	RUNX3 Promotes the Tumorigenic Phenotype in KGN, a Human Granulosa Cell Tumor-Derived Cell Line. International Journal of Molecular Sciences, 2019, 20, 3471.	4.1	9
20	Domain analysis of PNKPâ€“XRCC1 interactions: Influence of genetic variants of XRCC1. Journal of Biological Chemistry, 2019, 294, 520-530.	3.4	10
21	Putative electron-affinic radiosensitizers and markers of hypoxic tissue: Synthesis and preliminary inÂvitro biological characterization of C3-amino-substituted benzotriazine dioxides (BTDOs). European Journal of Medicinal Chemistry, 2019, 165, 216-224.	5.5	2
22	Nanoencapsulation of Novel Inhibitors of PNKP for Selective Sensitization to Ionizing Radiation and Irinotecan and Induction of Synthetic Lethality. Molecular Pharmaceutics, 2018, 15, 2316-2326.	4.6	14
23	Persistent 3â€²-phosphate termini and increased cytotoxicity of radiomimetic DNA double-strand breaks in cells lacking polynucleotide kinase/phosphatase despite presence of an alternative 3â€²-phosphatase. DNA Repair, 2018, 68, 12-24.	2.8	20
24	Microhomology-mediated end joining is activated in irradiated human cells due to phosphorylation-dependent formation of the XRCC1 repair complex. Nucleic Acids Research, 2017, 45, gkw1262.	14.5	62
25	Photo-activation of the delocalized lipophilic cation D112 potentiates cancer selective ROS production and apoptosis. Cell Death and Disease, 2017, 8, e2587-e2587.	6.3	17
26	ATPase activity tightly regulates RecA nucleofilaments to promote homologous recombination. Cell Discovery, 2017, 3, 16053.	6.7	30
27	Characterization of DNA Substrate Binding to the Phosphatase Domain of the DNA Repair Enzyme Polynucleotide Kinase/Phosphatase. Biochemistry, 2017, 56, 1737-1745.	2.5	2
28	Structural and functional characterization of the PNKPâ€“XRCC4â€“LigIV DNA repair complex. Nucleic Acids Research, 2017, 45, 6238-6251.	14.5	39
29	Neurological disorders associated with DNA strand-break processing enzymes. Mechanisms of Ageing and Development, 2017, 161, 130-140.	4.6	39
30	The Rev1 interacting region (RIR) motif in the scaffold protein XRCC1 mediates a low-affinity interaction with polynucleotide kinase/phosphatase (PNKP) during DNA single-strand break repair. Journal of Biological Chemistry, 2017, 292, 16024-16031.	3.4	16
31	Processing Strand Break Termini in the DNA Single-Strand Break Repair Pathway. , 2017, , 281-321.		1
32	Characterization of Plasmodium falciparum ATP-dependent DNA helicase RuvB3. Malaria Journal, 2016, 15, 526.	2.3	5
33	Key Issues Related to Cryopreservation and Storage of Stem Cells and Cancer Stem Cells: Protecting Biological Integrity. Advances in Experimental Medicine and Biology, 2016, 951, 1-12.	1.6	18
34	Characterization of the Apoptotic Response Induced by the Cyanine Dye D112: A Potentially Selective Anti-Cancer Compound. PLoS ONE, 2015, 10, e0125381.	2.5	5
35	DNA ligase III acts as a DNA strand break sensor in the cellular orchestration of DNA strand break repair. Nucleic Acids Research, 2015, 43, 875-892.	14.5	32
36	Biobanking in the Twenty-First Century: Driving Population Metrics into Biobanking Quality. Advances in Experimental Medicine and Biology, 2015, 864, 95-114.	1.6	9

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37	siRNA therapy in cutaneous T-cell lymphoma cells using polymeric carriers. Biomaterials, 2014, 35, 9382-9394.	11.4	13
38	The human polynucleotide kinase/phosphatase (hPNKP) inhibitor A12B4C3 radiosensitizes human myeloid leukemia cells to Auger electron-emitting anti-CD123 111In-NLS-7G3 radioimmunoconjugates. Nuclear Medicine and Biology, 2014, 41, 377-383.	0.6	30
39	Synthetic Lethal Targeting of PTEN-Deficient Cancer Cells Using Selective Disruption of Polynucleotide Kinase/Phosphatase. Molecular Cancer Therapeutics, 2013, 12, 2135-2144.	4.1	27
40	Role of polynucleotide kinase/phosphatase in mitochondrial DNA repair. Nucleic Acids Research, 2012, 40, 3484-3495.	14.5	96
41	Genetic Screening for Synthetic Lethal Partners of Polynucleotide Kinase/Phosphatase: Potential for Targeting SHP-1â€"Depleted Cancers. Cancer Research, 2012, 72, 5934-5944.	0.9	36
42	Tidying up loose ends: the role of polynucleotide kinase/phosphatase in DNA strand break repair. Trends in Biochemical Sciences, 2011, 36, 262-271.	7.5	159
43	Phosphorylation of polynucleotide kinase/ phosphatase by DNA-dependent protein kinase and ataxia-telangiectasia mutated regulates its association with sites of DNA damage. Nucleic Acids Research, 2011, 39, 9224-9237.	14.5	61
44	Mechanism of Action of an Imidopiperidine Inhibitor of Human Polynucleotide Kinase/Phosphatase. Journal of Biological Chemistry, 2010, 285, 2351-2360.	3.4	40
45	Dual Modes of Interaction between XRCC4 and Polynucleotide Kinase/Phosphatase. Journal of Biological Chemistry, 2010, 285, 37619-37629.	3.4	57
46	Independent mechanisms of stimulation of polynucleotide kinase/phosphatase by phosphorylated and non-phosphorylated XRCC1. Nucleic Acids Research, 2010, 38, 510-521.	14.5	27
47	Identification of a Small Molecule Inhibitor of the Human DNA Repair Enzyme Polynucleotide Kinase/Phosphatase. Cancer Research, 2009, 69, 7739-7746.	0.9	73
48	DNA wrapping is required for DNA damage recognition in the Escherichia coli DNA nucleotide excision repair pathway. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 12849-12854.	7.1	46
49	XRCC1 Stimulates Polynucleotide Kinase by Enhancing Its Damage Discrimination and Displacement from DNA Repair Intermediates. Journal of Biological Chemistry, 2007, 282, 28004-28013.	3.4	46
50	Human Polynucleotide Kinase Participates in Repair of DNA Double-Strand Breaks by Nonhomologous End Joining but not Homologous Recombination. Cancer Research, 2007, 67, 6619-6625.	0.9	74
51	NEIL2-initiated, APE-independent repair of oxidized bases in DNA: Evidence for a repair complex in human cells. DNA Repair, 2006, 5, 1439-1448.	2.8	127
52	Involvement of Polynucleotide Kinase in a Poly(ADP-ribose) Polymerase-1-dependent DNA Double-strand Breaks Rejoining Pathway. Journal of Molecular Biology, 2006, 356, 257-265.	4.2	92
53	Defective DNA single-strand break repair in spinocerebellar ataxia with axonal neuropathy-1. Nature, 2005, 434, 108-113.	27.8	382
54	End-damage-specific proteins facilitate recruitment or stability of X-ray cross-complementing protein 1 at the sites of DNA single-strand break repair. FEBS Journal, 2005, 272, 5753-5763.	4.7	20

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55	The Molecular Architecture of the Mammalian DNA Repair Enzyme, Polynucleotide Kinase. Molecular Cell, 2005, 17, 657-670.	9.7	191
56	Stable down-regulation of human polynucleotide kinase enhances spontaneous mutation frequency and sensitizes cells to genotoxic agents. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 6905-6910.	7.1	139
57	Xrcc4 physically links DNA end processing by polynucleotide kinase to DNA ligation by DNA ligase IV. EMBO Journal, 2004, 23, 3874-3885.	7.8	218
58	Biophysical Characterization of Human XRCC1 and Its Binding to Damaged and Undamaged DNAâ€. Biochemistry, 2004, 43, 16505-16514.	2.5	55
59	AP Endonuclease-Independent DNA Base Excision Repair in Human Cells. Molecular Cell, 2004, 15, 209-220.	9.7	434
60	Spectroscopic Studies of DNA and ATP Binding to Human Polynucleotide Kinase:Â Evidence for a Ternary Complexâ€. Biochemistry, 2003, 42, 12077-12084.	2.5	18
61	Association of XRCC1 and tyrosyl DNA phosphodiesterase (Tdp1) for the repair of topoisomerase I-mediated DNA lesions. DNA Repair, 2003, 2, 1087-1100.	2.8	181
62	Pnk1, a DNA Kinase/Phosphatase Required for Normal Response to DNA Damage by Î³-Radiation or Camptothecin inSchizosaccharomyces pombe. Journal of Biological Chemistry, 2002, 277, 4050-4055.	3.4	103
63	Immunofluorescence Detection of Radiation-Induced DNA Base Damage. Military Medicine, 2002, 167, 2-4.	0.8	5
64	Involvement of human polynucleotide kinase in double-strand break repair by non-homologous end joining. EMBO Journal, 2002, 21, 2827-2832.	7.8	234
65	XRCC1 Stimulates Human Polynucleotide Kinase Activity at Damaged DNA Termini and Accelerates DNA Single-Strand Break Repair. Cell, 2001, 104, 107-117.	28.9	554
66	Physical Properties of Human Polynucleotide Kinase:Â Hydrodynamic and Spectroscopic Studiesâ€. Biochemistry, 2001, 40, 12967-12973.	2.5	25
67	Production, Characterization, and Epitope Mapping of Monoclonal Antibodies Against Human Polydeoxyribonucleotide Kinase. Hybridoma, 2001, 20, 237-242.	0.6	14
68	Molecular Characterization of a Human DNA Kinase. Journal of Biological Chemistry, 1999, 274, 24187-24194.	3.4	215
69	Inducible Repair of Thymine Glycol Detected by an Ultrasensitive Assay for DNA Damage. Science, 1998, 280, 1066-1069.	12.6	209
70	Purification and substrate specificity of polydeoxyribonucleotide kinases isolated from calf thymus and rat liver. Journal of Cellular Biochemistry, 1997, 64, 258-272.	2.6	34
71	Influence of nitrogen, oxygen, and nitroimidazole radiosensitizers on DNA damage induced by ionizing radiation. Biochemistry, 1993, 32, 2186-2193.	2.5	40