Ivan Matic

List of Publications by Year
in descending order

40 papers	3,063 citations	236925 25 h-index	289244 40 g-index
40 all docs	40 docs citations	40 times ranked	3644 citing authors

#	Article	IF	Citations
1	TisB Protein Protects Escherichia coli Cells Suffering Massive DNA Damage from Environmental Toxic Compounds. MBio, 2022, 13, e0038522.	4.1	4
2	rRNA operon multiplicity as a bacterial genome stability insurance policy. Nucleic Acids Research, 2022, 50, 12601-12620.	14.5	11
3	The Impact of Neutral Mutations on Genome Evolvability. Current Biology, 2020, 30, R527-R534.	3.9	9
4	Mutation Rate Heterogeneity Increases Odds of Survival in Unpredictable Environments. Molecular Cell, 2019, 75, 421-425.	9.7	31
5	A multiplexable assay for screening antibiotic lethality against drug-tolerant bacteria. Nature Methods, 2019, 16, 303-306.	19.0	30
6	Method for Detecting and Studying Genome-Wide Mutations in Single Living Cells in Real Time. Methods in Molecular Biology, 2018, 1736, 29-39.	0.9	2
7	Mutation dynamics and fitness effects followed in single cells. Science, 2018, 359, 1283-1286.	12.6	120
8	The major contribution of the DNA damage-triggered reactive oxygen species production to cell death: implications for antimicrobial and cancer therapy. Current Genetics, 2018, 64, 567-569.	1.7	19
9	Antibiotic-Induced Genetic Variation: How It Arises and How It Can Be Prevented. Annual Review of Microbiology, 2018, 72, 209-230.	7.3	81
10	Our Evolving Understanding of the Mechanism of Quinolones. Antibiotics, 2018, 7, 32.	3.7	21
11	Strong increase in the autofluorescence of cells signals struggle for survival. Scientific Reports, 2018, 8, 12088.	3.3	87
12	Heterogeneity of spontaneous DNA replication errors in single isogenic <i>Escherichia coli</i> cells. Science Advances, 2018, 4, eaat1608.	10.3	21
13	The SOS and RpoS Regulons Contribute to Bacterial Cell Robustness to Genotoxic Stress by Synergistically Regulating DNA Polymerase Pol II. Genetics, 2017, 206, 1349-1360.	2.9	33
14	Maladaptive DNA repair is the ultimate contributor to the death of trimethoprim-treated cells under aerobic and anaerobic conditions. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 11512-11517.	7.1	64
15	Antibiotic Susceptibility Testing of the Gram-Negative Bacteria Based on Flow Cytometry. Frontiers in Microbiology, 2016, 7, 1121.	3.5	33
16	Discovery and Function of a General Core Hormetic Stress Response in E.Âcoli Induced by Sublethal Concentrations of Antibiotics. Cell Reports, 2016, 17, 46-57.	6.4	82
17	High Recombinant Frequency in Extraintestinal PathogenicEscherichia coliStrains. Molecular Biology and Evolution, 2015, 32, 1708-1716.	8.9	21
18	High transcript levels of heat-shock genes are associated with shorter lifespan of Caenorhabditis elegans. Experimental Gerontology, 2014, 60, 12-17.	2.8	14

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19	Massive Diversification in Aging Colonies of Escherichia coli. Journal of Bacteriology, 2014, 196, 3059-3073.	2.2	46
20	Î²-lactam antibiotics promote bacterial mutagenesis via an RpoS-mediated reduction in replication fidelity. Nature Communications, 2013, 4, 1610.	12.8	320
21	Bacterial Responses and Genome Instability Induced by Subinhibitory Concentrations of Antibiotics. Antibiotics, 2013, 2, 100-114.	3.7	75
22	Stoichiometry of MutS and MutL at unrepaired mismatches in vivo suggests a mechanism of repair. Nucleic Acids Research, 2012, 40, 3929-3938.	14.5	42
23	Pathogen-induced Caenorhabditis elegans developmental plasticity has a hormetic effect on the resistance to biotic and abiotic stresses. BMC Evolutionary Biology, 2012, 12, 187.	3.2	22
24	Bacterium-Induced Internal Egg Hatching Frequency Is Predictive of Life Span in Caenorhabditis elegans Populations. Applied and Environmental Microbiology, 2011, 77, 8189-8192.	3.1	21
25	Running Worms: C. elegans Self-Sorting by Electrotaxis. PLoS ONE, 2011, 6, e16637.	2.5	47
26	Modulation of aging profiles in isogenic populations of Caenorhabditis elegans by bacteria causing different extrinsic mortality rates. Biogerontology, 2010, 11, 53-65.	3.9	25
27	Seeing Mutations in Living Cells. Current Biology, 2010, 20, 1432-1437.	3.9	61
28	Reliable Detection of Dead Microbial Cells by Using Fluorescent Hydrazides. Applied and Environmental Microbiology, 2010, 76, 1674-1678.	3.1	18
29	Pathogenicity-Associated Islands in Extraintestinal Pathogenic<i>Escherichia coli</i>Are Fitness Elements Involved in Intestinal Colonization. Journal of Bacteriology, 2010, 192, 4885-4893.	2.2	105
30	Involvement of Escherichia coli DNA Polymerase IV in Tolerance of Cytotoxic Alkylating DNA Lesions in Vivo. Genetics, 2007, 176, 1431-1440.	2.9	77
31	Caenorhabditis elegans as a simple model to study phenotypic and genetic virulence determinants of extraintestinal pathogenic Escherichia coli. Microbes and Infection, 2007, 9, 214-223.	1.9	59
32	Antibiotic-mediated recombination: ciprofloxacin stimulates SOS-independent recombination of divergent sequences in Escherichia coli. Molecular Microbiology, 2007, 64, 83-93.	2.5	115
33	Evolution of mutation rates in bacteria. Molecular Microbiology, 2006, 60, 820-827.	2.5	319
34	Interplay between replication and recombination in Escherichia coli: Impact of the alternative DNA polymerases. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 4564-4569.	7.1	34
35	Intermediate Mutation Frequencies Favor Evolution of Multidrug Resistance in Escherichia coli. Genetics, 2005, 171, 825-827.	2.9	47
36	Cellular response to horizontally transferred DNA in Escherichia coli is tuned by DNA repair systems. DNA Repair, 2005, 4, 221-229.	2.8	18

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37	Evolutionary significance of stress-induced mutagenesis in bacteria. Trends in Microbiology, 2004, 12, 264-270.	7.7	116
38	Stress-Induced Mutagenesis in Bacteria. Science, 2003, 300, 1404-1409.	12.6	508
39	Evolution-driving genes. Research in Microbiology, 2000, 151, 91-95.	2.1	59
40	Evolutionary Implications of the Frequent Horizontal Transfer of Mismatch Repair Genes. Cell, 2000, 103, 711-721.	28.9	246