Ivan Mijakovic

List of Publications by Year
in descending order

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122 papers	7,419 citations	47006 47 h-index	60623 81 g-index
123 all docs	123 docs citations	123 times ranked	8054 citing authors

#	Article	IF	Citations
1	Gold Nanoparticles in Diagnostics and Therapeutics for Human Cancer. International Journal of Molecular Sciences, 2018, 19, 1979.	4.1	709
2	Phosphoproteome Analysis of E. coli Reveals Evolutionary Conservation of Bacterial Ser/Thr/Tyr Phosphorylation. Molecular and Cellular Proteomics, 2008, 7, 299-307.	3.8	385
3	The Serine/Threonine/Tyrosine Phosphoproteome of the Model Bacterium Bacillus subtilis. Molecular and Cellular Proteomics, 2007, 6, 697-707.	3.8	359
4	Protein post-translational modifications in bacteria. Nature Reviews Microbiology, 2019, 17, 651-664.	28.6	223
5	Technologies for biological removal and recovery of nitrogen from wastewater. Biotechnology Advances, 2020, 43, 107570.	11.7	194
6	Synthetic promoter libraries â€“ tuning of gene expression. Trends in Biotechnology, 2006, 24, 53-55.	9.3	177
7	Tyrosine phosphorylation: an emerging regulatory device of bacterial physiology. Trends in Biochemical Sciences, 2007, 32, 86-94.	7.5	176
8	Boron nitride nanomaterials: biocompatibility and bio-applications. Biomaterials Science, 2018, 6, 2298-2311.	5.4	170
9	Green synthesis of gold and silver nanoparticles from Cannabis sativa (industrial) Tj ETQq1 1 0.784314 rgBT /O 13, 3571-3591.	6.7	165
10	The Ser/Thr/Tyr phosphoproteome of Lactococcus lactis IL1403 reveals multiply phosphorylated proteins. Proteomics, 2008, 8, 3486-3493.	2.2	145
11	Transmembrane modulator-dependent bacterial tyrosine kinase activates UDP-glucose dehydrogenases. EMBO Journal, 2003, 22, 4709-4718.	7.8	143
12	Antimicrobial Effects of Biogenic Nanoparticles. Nanomaterials, 2018, 8, 1009.	4.1	138
13	Bacterial single-stranded DNA-binding proteins are phosphorylated on tyrosine. Nucleic Acids Research, 2006, 34, 1588-1596.	14.5	122
14	Autophosphorylation of the Escherichia coli Protein Kinase Wzc Regulates Tyrosine Phosphorylation of Ugd, a UDP-glucose Dehydrogenase. Journal of Biological Chemistry, 2003, 278, 39323-39329.	3.4	119
15	Triterpenoid-biosynthetic UDP-glycosyltransferases from plants. Biotechnology Advances, 2019, 37, 107394.	11.7	114
16	Pyrophosphate-producing protein dephosphorylation by HPr kinase/phosphorylase: A relic of early life?. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 13442-13447.	7.1	112
17	Bacterial tyrosine kinases: evolution, biological function and structural insights. Philosophical Transactions of the Royal Society B: Biological Sciences, 2012, 367, 2640-2655.	4.0	109
18	Stable Isotope Labeling by Amino Acids in Cell Culture (SILAC) Applied to Quantitative Proteomics of Bacillus subtilis. Journal of Proteome Research, 2010, 9, 3638-3646.	3.7	108

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19	Exploring the diversity of protein modifications: special bacterial phosphorylation systems. FEMS Microbiology Reviews, 2016, 40, 398-417.	8.6	100
20	Anti-biofilm effects of gold and silver nanoparticles synthesized by the Rhodiola rosea rhizome extracts. Artificial Cells, Nanomedicine and Biotechnology, 2018, 46, 886-899.	2.8	98
21	Structural Basis for the Regulation Mechanism of the Tyrosine Kinase CapB from Staphylococcus aureus. PLoS Biology, 2008, 6, e143.	5.6	89
22	Mutations lowering the phosphatase activity of HPr kinase/phosphatase switch off carbon metabolism. EMBO Journal, 2001, 20, 3928-3937.	7.8	88
23	Impact of phosphoproteomics on studies of bacterial physiology. FEMS Microbiology Reviews, 2012, 36, 877-892.	8.6	86
24	Quantitative Phosphoproteome Analysis of Bacillus subtilis Reveals Novel Substrates of the Kinase PrkC and Phosphatase PrpC. Molecular and Cellular Proteomics, 2014, 13, 1965-1978.	3.8	81
25	Protein phosphorylation in bacterial signal transduction. Biochimica Et Biophysica Acta - General Subjects, 2011, 1810, 989-994.	2.4	79
26	Protein-serine/threonine/tyrosine kinases in bacterial signaling and regulation. FEMS Microbiology Letters, 2013, 346, 11-19.	1.8	79
27	Serine/Threonine Protein Kinases from Bacteria, Archaea and Eukarya Share a Common Evolutionary Origin Deeply Rooted in the Tree of Life. Journal of Molecular Biology, 2018, 430, 27-32.	4.2	78
28	Tyrosine Phosphorylation of the UDP-Glucose Dehydrogenase of Escherichia coli Is at the Crossroads of Colanic Acid Synthesis and Polymyxin Resistance. PLoS ONE, 2008, 3, e3053.	2.5	76
29	Analysis of the serine/threonine/tyrosine phosphoproteome of the pathogenic bacterium Listeria monocytogenes reveals phosphorylated proteins related to virulence. Proteomics, 2011, 11, 4155-4165.	2.2	74
30	X-ray structure of a bifunctional protein kinase in complex with its protein substrate HPr. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 13437-13441.	7.1	73
31	Vertically Aligned Graphene Coating is Bactericidal and Prevents the Formation of Bacterial Biofilms. Advanced Materials Interfaces, 2018, 5, 1701331.	3.7	72
32	Cross-phosphorylation of bacterial serine/threonine and tyrosine protein kinases on key regulatory residues. Frontiers in Microbiology, 2014, 5, 495.	3.5	69
33	Is 2-Phosphoglycerate-dependent Automodification of Bacterial Enolases Implicated in their Export?. Journal of Molecular Biology, 2004, 337, 485-496.	4.2	67
34	NetPhosBac â€“ A predictor for Ser/Thr phosphorylation sites in bacterial proteins. Proteomics, 2009, 9, 116-125.	2.2	67
35	Low Concentrations of Vitamin C Reduce the Synthesis of Extracellular Polymers and Destabilize Bacterial Biofilms. Frontiers in Microbiology, 2017, 8, 2599.	3.5	66
36	P-Ser-HPrâ€”a link between carbon metabolism and the virulence of some pathogenic bacteria. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2005, 1754, 118-125.	2.3	63

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37	Phosphoproteomics in bacteria: towards a systemic understanding of bacterial phosphorylation networks. Expert Review of Proteomics, 2008, 5, 619-627.	3.0	62
38	Transcription Regulators Potentially Controlled by HPr Kinase/Phosphorylase in Gram-Negative Bacteria. Journal of Molecular Microbiology and Biotechnology, 2003, 5, 206-215.	1.0	61
39	Bacillus subtilis BYâ€kinase PtkA controls enzyme activity and localization of its protein substrates. Molecular Microbiology, 2010, 77, 287-299.	2.5	60
40	HPr kinase/phosphorylase, a Walker motif A-containing bifunctional sensor enzyme controlling catabolite repression in Gram-positive bacteria. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2004, 1697, 123-135.	2.3	54
41	Tunable promoters in systems biology. Current Opinion in Biotechnology, 2005, 16, 329-335.	6.6	54
42	Siteâ€specific analysis of bacterial phosphoproteomes. Proteomics, 2011, 11, 3002-3011.	2.2	54
43	Protein phosphorylation from the perspective of systems biology. Current Opinion in Biotechnology, 2012, 23, 585-590.	6.6	54
44	Role of Protein Phosphorylation in the Regulation of Cell Cycle and DNA-Related Processes in Bacteria. Frontiers in Microbiology, 2016, 7, 184.	3.5	54
45	Chitosan, chitosan nanoparticles and modified chitosan biomaterials, a potential tool to combat salinity stress in plants. Carbohydrate Polymers, 2022, 284, 119189.	10.2	54
46	Silver nanoparticles produced from Cedecea sp. exhibit antibiofilm activity and remarkable stability. Scientific Reports, 2021, 11, 12619.	3.3	53
47	Efficient surface modification of carbon nanotubes for fabricating high performance CNT based hybrid nanostructures. Carbon, 2017, 111, 402-410.	10.3	50
48	In Vitro Characterization of theBacillus subtilisProtein Tyrosine Phosphatase YwqE. Journal of Bacteriology, 2005, 187, 3384-3390.	2.2	49
49	Antibacterial effect of boron nitride flakes with controlled orientation in polymer composites. RSC Advances, 2019, 9, 33454-33459.	3.6	49
50	Protein-Tyrosine Phosphorylation in Bacillus subtilis. Journal of Molecular Microbiology and Biotechnology, 2005, 9, 189-197.	1.0	48
51	Bacillus subtilis strain deficient for the proteinâ€tyrosine kinase PtkA exhibits impaired DNA replication. Molecular Microbiology, 2007, 63, 1797-1805.	2.5	47
52	Bacillus subtilis Two-Component System Sensory Kinase DegS Is Regulated by Serine Phosphorylation in Its Input Domain. PLoS ONE, 2011, 6, e14653.	2.5	47
53	Vitamin C Pretreatment Enhances the Antibacterial Effect of Cold Atmospheric Plasma. Frontiers in Cellular and Infection Microbiology, 2017, 7, 43.	3.9	47
54	<scp>B</scp>acillus subtilis serine/threonine protein kinase <scp>YabT</scp> is involved in spore development via phosphorylation of a bacterial recombinase. Molecular Microbiology, 2013, 88, 921-935.	2.5	46

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55	Grapheneâ€Based Antimicrobial Biomedical Surfaces. ChemPhysChem, 2021, 22, 250-263.	2.1	46
56	Regulatory potential of post-translational modifications in bacteria. Frontiers in Microbiology, 2015, 6, 500.	3.5	44
57	Graphene oxide based coatings on nitinol for biomedical implant applications: effectively promote mammalian cell growth but kill bacteria. RSC Advances, 2016, 6, 38124-38134.	3.6	44
58	Elucidating Hostâ€“Pathogen Interactions Based on Post-Translational Modifications Using Proteomics Approaches. Frontiers in Microbiology, 2015, 6, 1313.	3.5	42
59	Graphene-based biosensors for the detection of prostate cancer protein biomarkers: a review. BMC Chemistry, 2019, 13, 112.	3.8	40
60	Tyrosine-kinases in bacteria: from a matter of controversy to the status of key regulatory enzymes. Amino Acids, 2009, 37, 499-507.	2.7	38
61	Serine/threonine/tyrosine phosphorylation regulates DNA binding of bacterial transcriptional regulators. Microbiology (United Kingdom), 2015, 161, 1720-1729.	1.8	37
62	Evolution of Bacterial Protein-Tyrosine Kinases and Their Relaxed Specificity Toward Substrates. Genome Biology and Evolution, 2014, 6, 800-817.	2.5	35
63	Phosphorylation of <scp>B</scp>acillus subtilis gene regulator <scp>AbrB</scp> modulates its <scp>DNA</scp>â€binding properties. Molecular Microbiology, 2014, 92, 1129-1141.	2.5	34
64	Precontrolled Alignment of Graphite Nanoplatelets in Polymeric Composites Prevents Bacterial Attachment. Small, 2020, 16, e1904756.	10.0	34
65	Synthetic Promoter Library for Modulation of Actinorhodin Production in Streptomyces coelicolor A3(2). PLoS ONE, 2014, 9, e99701.	2.5	34
66	A Sustainable Approach for the Green Synthesis of Silver Nanoparticles from Solibacillus isronensis sp. and Their Application in Biofilm Inhibition. Molecules, 2020, 25, 2783.	3.8	32
67	TheLactobacillus casei ptsHI47T Mutation Causes Overexpression of a LevR-Regulated but RpoN-Independent Operon Encoding a Mannose Class Phosphotransferase System. Journal of Bacteriology, 2004, 186, 4543-4555.	2.2	31
68	Membrane properties and anti-bacterial/anti-biofouling activity of polysulfoneâ€“graphene oxide composite membranes phase inversed in graphene oxide non-solvent. RSC Advances, 2017, 7, 4378-4386.	3.6	31
69	Production of 3-Hydroxypropanoic Acid From Glycerol by Metabolically Engineered Bacteria. Frontiers in Bioengineering and Biotechnology, 2019, 7, 124.	4.1	31
70	Insights from site-specific phosphoproteomics in bacteria. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2008, 1784, 186-192.	2.3	30
71	BYKdb: the Bacterial protein tYrosine Kinase database. Nucleic Acids Research, 2012, 40, D321-D324.	14.5	30
72	Antibacterial Effect of Silver Nanoparticles Is Stronger If the Production Host and the Targeted Pathogen Are Closely Related. Biomedicines, 2022, 10, 628.	3.2	30

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73	Interaction of bacterial fatty-acid-displaced regulators with DNA is interrupted by tyrosine phosphorylation in the helix-turn-helix domain. Nucleic Acids Research, 2013, 41, 9371-9381.	14.5	28
74	Protein-tyrosine phosphorylation interaction network in Bacillus subtilis reveals new substrates, kinase activators and kinase cross-talk. Frontiers in Microbiology, 2014, 5, 538.	3.5	28
75	Protein-tyrosine phosphorylation in Bacillus subtilis: a 10-year retrospective. Frontiers in Microbiology, 2015, 6, 18.	3.5	28
76	hipBA toxin-antitoxin systems mediate persistence in Caulobacter crescentus. Scientific Reports, 2020, 10, 2865.	3.3	28
77	Strong Antimicrobial Activity of Silver Nanoparticles Obtained by the Green Synthesis in Viridibacillus sp. Extracts. Frontiers in Microbiology, 2022, 13, 820048.	3.5	28
78	Engineering of Bacillus subtilis 168 for Increased Nisin Resistance. Applied and Environmental Microbiology, 2009, 75, 6688-6695.	3.1	27
79	Importance of protein Ser/Thr/Tyr phosphorylation for bacterial pathogenesis. FEBS Letters, 2020, 594, 2339-2369.	2.8	25
80	Embryo-Like Features in Developing Bacillus subtilis Biofilms. Molecular Biology and Evolution, 2021, 38, 31-47.	8.9	25
81	Activation of Bacillus subtilis Ugd by the BY-Kinase PtkA Proceeds via Phosphorylation of Its Residue Tyrosine 70. Journal of Molecular Microbiology and Biotechnology, 2009, 17, 83-89.	1.0	23
82	Green synthesis and antibacterial applications of gold and silver nanoparticles from Ligustrum vulgare berries. Scientific Reports, 2022, 12, 7902.	3.3	23
83	Conversion of Glycerol to 3-Hydroxypropanoic Acid by Genetically Engineered Bacillus subtilis. Frontiers in Microbiology, 2017, 8, 638.	3.5	22
84	In-depth analysis of Bacillus subtilis proteome identifies new ORFs and traces the evolutionary history of modified proteins. Scientific Reports, 2018, 8, 17246.	3.3	22
85	<scp>B</scp>acillus subtilisâ€...<scp>SalA</scp> is a phosphorylationâ€dependent transcription regulator that represses <scp>scoC</scp> and activates the production of the exoprotease <scp>AprE</scp>. Molecular Microbiology, 2015, 97, 1195-1208.	2.5	21
86	Manually curated genome-scale reconstruction of the metabolic network of Bacillus megaterium DSM319. Scientific Reports, 2019, 9, 18762.	3.3	21
87	The Exo-Polysaccharide Component of Extracellular Matrix is Essential for the Viscoelastic Properties of Bacillus subtilis Biofilms. International Journal of Molecular Sciences, 2020, 21, 6755.	4.1	21
88	The Global Acetylome of the Human Pathogen Vibrio cholerae V52 Reveals Lysine Acetylation of Major Transcriptional Regulators. Frontiers in Cellular and Infection Microbiology, 2017, 7, 537.	3.9	20
89	Insights into the Mechanism for Vertical Graphene Growth by Plasma-Enhanced Chemical Vapor Deposition. ACS Applied Materials & Interfaces, 2022, 14, 7152-7160.	8.0	20
90	Phosphoglycerate Mutase Is a Highly Efficient Enzyme without Flux Control in Lactococcus lactis. Journal of Molecular Microbiology and Biotechnology, 2010, 18, 174-180.	1.0	19

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91	Bacterial response to graphene oxide and reduced graphene oxide integrated in agar plates. Royal Society Open Science, 2018, 5, 181083.	2.4	19
92	A Systems-Based Approach for Cyanide Overproduction by Bacillus megaterium for Gold Bioleaching Enhancement. Frontiers in Bioengineering and Biotechnology, 2020, 8, 528.	4.1	19
93	In silico exploration of Red Sea Bacillus genomes for natural product biosynthetic gene clusters. BMC Genomics, 2018, 19, 382.	2.8	17
94	Rowan Berries: A Potential Source for Green Synthesis of Extremely Monodisperse Gold and Silver Nanoparticles and Their Antimicrobial Property. Pharmaceutics, 2022, 14, 82.	4.5	17
95	Global Transcriptional Analysis of <i>Bacillus licheniformis</i> Reveals an Overlap between Heat Shock and Iron Limitation Stimulon. Journal of Molecular Microbiology and Biotechnology, 2010, 18, 162-173.	1.0	16
96	Evolutionary Analysis of the Bacillus subtilis Genome Reveals New Genes Involved in Sporulation. Molecular Biology and Evolution, 2020, 37, 1667-1678.	8.9	16
97	Sustained release of usnic acid from graphene coatings ensures long term antibiofilm protection. Scientific Reports, 2021, 11, 9956.	3.3	16
98	Interactions Between Grapheneâ€Based Materials and Biological Surfaces: A Review of Underlying Molecular Mechanisms. Advanced Materials Interfaces, 2021, 8, 2101132.	3.7	15
99	Design strategy of a graphene based bio-sensor for glucose. Carbon, 2018, 137, 343-348.	10.3	14
100	How Tyrosine Phosphorylation Affects the UDP-Glucose Dehydrogenase Activity of <i>Bacillus subtilis </i>YwqF. Journal of Molecular Microbiology and Biotechnology, 2004, 8, 19-25.	1.0	13
101	Tyrosine 601 of Bacillus subtilis DnaK Undergoes Phosphorylation and Is Crucial for Chaperone Activity and Heat Shock Survivalâ€¡. Frontiers in Microbiology, 2016, 7, 533.	3.5	13
102	Graphene based nanosensor for aqueous phase detection of nitroaromatics. RSC Advances, 2017, 7, 25519-25527.	3.6	13
103	Bacterial Protein-Tyrosine Kinases. Current Proteomics, 2010, 7, 188-194.	0.3	12
104	Evolution and tinkering: what do a protein kinase, a transcriptional regulator and chromosome segregation/cell division proteins have in common?. Current Genetics, 2016, 62, 67-70.	1.7	11
105	In silico screening for candidate chassis strains of free fatty acid-producing cyanobacteria. BMC Genomics, 2017, 18, 33.	2.8	11
106	Cold-Resistant Heterotrophic Ammonium and Nitrite-Removing Bacteria Improve Aquaculture Conditions of Rainbow Trout (Oncorhynchus mykiss). Microbial Ecology, 2020, 80, 266-277.	2.8	11
107	Phosphoproteome Study of Escherichia coli Devoid of Ser/Thr Kinase YeaG During the Metabolic Shift From Glucose to Malate. Frontiers in Microbiology, 2021, 12, 657562.	3.5	11
108	Maize Seryl-tRNA Synthetase: Specificity of Substrate Recognition by the Organellar Enzyme. Archives of Biochemistry and Biophysics, 2002, 397, 40-50.	3.0	10

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109	Building a bio-based industry in the Middle East through harnessing the potential of the Red Sea biodiversity. Applied Microbiology and Biotechnology, 2017, 101, 4837-4851.	3.6	10
110	Phosphorylation of the Bacillus subtilis Replication Controller YabA Plays a Role in Regulation of Sporulation and Biofilm Formation. Frontiers in Microbiology, 2018, 9, 486.	3.5	10
111	Highly structured graphene polyethylene nanocomposites. AIP Conference Proceedings, 2019, , .	0.4	9
112	Mining biosynthetic gene clusters in Virgibacillus genomes. BMC Genomics, 2019, 20, 696.	2.8	7
113	PATH^{cre8}: A Tool That Facilitates the Searching for Heterologous Biosynthetic Routes. ACS Synthetic Biology, 2020, 9, 3217-3227.	3.8	7
114	Enriched microbial communities for ammonium and nitrite removal from recirculating aquaculture systems. Chemosphere, 2022, 295, 133811.	8.2	6
115	Graphene-Based Sensor for Detection of Bacterial Pathogens. Sensors, 2021, 21, 8085.	3.8	6
116	Photometric assay for measuring the intracellular concentration of branched-chain amino acids in bacteria. Journal of Microbiological Methods, 2004, 56, 133-136.	1.6	5
117	BioPS: System for screening and assessment of biofuel-production potential of cyanobacteria. PLoS ONE, 2018, 13, e0202002.	2.5	4
118	Resources for Assignment of Phosphorylation Sites on Peptides and Proteins. Methods in Molecular Biology, 2016, 1355, 293-306.	0.9	4
119	Substrate Specificity of the Bacillus subtilis BY-Kinase PtkA Is Controlled by Alternative Activators: TkmA and SalA. Frontiers in Microbiology, 2016, 7, 1525.	3.5	3
120	Structural Analysis of the Hanks-Type Protein Kinase YabT From Bacillus subtilis Provides New Insights in its DNA-Dependent Activation. Frontiers in Microbiology, 2018, 9, 3014.	3.5	3
121	Bacillus subtilis single-stranded DNA-binding protein SsbA is phosphorylated at threonine 38 by the serine/threonine kinase YabT. Periodicum Biologorum, 2017, 118, .	0.1	2
122	Graphene coated magnetic nanoparticles facilitate the release of biofuels and oleochemicals from yeast cell factories. Scientific Reports, 2021, 11, 20612.	3.3	1