# Michael J Benedik

List of Publications by Year
in descending order



| | | | |
|---|---|---|---|
| 81 papers | 4,092 citations | 94269 37 h-index | 118652 62 g-index |
| 84 all docs | 84 docs citations | 84 times ranked | 3418 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Xenogeneic silencing relies on temperature-dependent phosphorylation of the host H-NS protein in <i>Shewanella</i>. Nucleic Acids Research, 2021, 49, 3427-3440. | 6.5 | 11 |
| 2 | <i>Escherichia coli</i> cryptic prophages sense nutrients to influence persister cell resuscitation. Environmental Microbiology, 2021, 23, 7245-7254. | 1.8 | 9 |
| 3 | Persister Cells Resuscitate Using Membrane Sensors that Activate Chemotaxis, Lower cAMP Levels, and Revive Ribosomes. IScience, 2020, 23, 100792. | 1.9 | 56 |
| 4 | Cyanide-degrading nitrilases in nature. Journal of General and Applied Microbiology, 2018, 64, 90-93. | 0.4 | 9 |
| 5 | Cyanide bioremediation: the potential of engineered nitrilases. Applied Microbiology and Biotechnology, 2017, 101, 3029-3042. | 1.7 | 53 |
| 6 | Bacillus pumilus Cyanide Dihydratase Mutants with Higher Catalytic Activity. Frontiers in Microbiology, 2016, 7, 1264. | 1.5 | 14 |
| 7 | Residue Y70 of the Nitrilase Cyanide Dihydratase from Bacillus pumilus Is Critical for Formation and Activity of the Spiral Oligomer. Journal of Microbiology and Biotechnology, 2016, 26, 2179-2183. | 0.9 | 3 |
| 8 | Catabolic plasmid specifying polychlorinated biphenyl degradation in <i>Cupriavidus</i> sp. strain SKâ€4: Mobilization and expression in a pseudomonad. Journal of Basic Microbiology, 2015, 55, 338-345. | 1.8 | 5 |
| 9 | Orphan Toxin OrtT (YdcX) of Escherichia coli Reduces Growth during the Stringent Response. Toxins, 2015, 7, 299-321. | 1.5 | 23 |
| 10 | Probing C-terminal interactions of the Pseudomonas stutzeri cyanide-degrading CynD protein. Applied Microbiology and Biotechnology, 2015, 99, 3093-3102. | 1.7 | 14 |
| 11 | C-terminal hybrid mutant of Bacillus pumilus cyanide dihydratase dramatically enhances thermal stability and pH tolerance by reinforcing oligomerization. Journal of Applied Microbiology, 2015, 118, 881-889. | 1.4 | 14 |
| 12 | The <scp>MqsR</scp>/<scp>MqsA</scp> toxin/antitoxin system protects <scp><i>E</i></scp><i>scherichia coli</i> during bile acid stress. Environmental Microbiology, 2015, 17, 3168-3181. | 1.8 | 55 |
| 13 | Toxin <scp>YafQ</scp> increases persister cell formation by reducing indole signalling. Environmental Microbiology, 2015, 17, 1275-1285. | 1.8 | 88 |
| 14 | Phosphodiesterase DosP increases persistence by reducing cAMP which reduces the signal indole. Biotechnology and Bioengineering, 2015, 112, 588-600. | 1.7 | 75 |
| 15 | Probing an Interfacial Surface in the Cyanide Dihydratase from Bacillus pumilus, A Spiral Forming Nitrilase. Frontiers in Microbiology, 2015, 6, 1479. | 1.5 | 8 |
| 16 | RalR (a DNase) and RalA (a small RNA) form a type I toxinâ€“antitoxin system in Escherichia coli. Nucleic Acids Research, 2014, 42, 6448-6462. | 6.5 | 98 |
| 17 | Interactions of the TnaC nascent peptide with rRNA in the exit tunnel enable the ribosome to respond to free tryptophan. Nucleic Acids Research, 2014, 42, 1245-1256. | 6.5 | 41 |
| 18 | Draft Genome Sequence of Cupriavidus sp. Strain SK-4, a di- ortho -Substituted Biphenyl-Utilizing Bacterium Isolated from Polychlorinated Biphenyl-Contaminated Sludge. Genome Announcements, 2014, 2, . | 0.8 | 3 |

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|---|---|---|---|
| 19 | Draft Genome Sequence of <i>Cupriavidus</i> sp. Strain SK-3, a 4-Chlorobiphenyl- and 4-Clorobenzoic Acid-Degrading Bacterium. Genome Announcements, 2014, 2, . | 0.8 | 2 |
| 20 | Toxin <scp>GhoT</scp> of the <scp>GhoT</scp>/<scp>GhoS</scp> toxin/antitoxin system damages the cell membrane to reduce adenosine triphosphate and to reduce growth under stress. Environmental Microbiology, 2014, 16, 1741-1754. | 1.8 | 79 |
| 21 | Arrested Protein Synthesis Increases Persister-Like Cell Formation. Antimicrobial Agents and Chemotherapy, 2013, 57, 1468-1473. | 1.4 | 286 |
| 22 | Type <scp>II</scp> toxin/antitoxin <scp>MqsR</scp>/<scp>MqsA</scp> controls type <scp>V</scp> toxin/antitoxin <scp>GhoT</scp>/<scp>GhoS</scp>. Environmental Microbiology, 2013, 15, 1734-1744. | 1.8 | 100 |
| 23 | Crucial elements that maintain the interactions between the regulatory TnaC peptide and the ribosome exit tunnel responsible for Trp inhibition of ribosome function. Nucleic Acids Research, 2012, 40, 2247-2257. | 6.5 | 17 |
| 24 | Draft Genome Sequence of the Cyanide-Utilizing Bacterium Pseudomonas fluorescens Strain NCIMB 11764. Journal of Bacteriology, 2012, 194, 6618-6619. | 1.0 | 9 |
| 25 | A new type V toxin-antitoxin system where mRNA for toxin GhoT is cleaved by antitoxin GhoS. Nature Chemical Biology, 2012, 8, 855-861. | 3.9 | 268 |
| 26 | Engineering pH-tolerant mutants of a cyanide dihydratase. Applied Microbiology and Biotechnology, 2012, 94, 131-140. | 1.7 | 15 |
| 27 | Bacterial persistence increases as environmental fitness decreases. Microbial Biotechnology, 2012, 5, 509-522. | 2.0 | 137 |
| 28 | Antitoxin DinJ influences the general stress response through transcript stabilizer CspE. Environmental Microbiology, 2012, 14, 669-679. | 1.8 | 68 |
| 29 | Antitoxin MqsA helps mediate the bacterial general stress response. Nature Chemical Biology, 2011, 7, 359-366. | 3.9 | 201 |
| 30 | Rapid generation of random mutant libraries. Bioengineered Bugs, 2010, 1, 337-340. | 2.0 | 13 |
| 31 | The cyanide hydratase from Neurospora crassa forms a helix which has a dimeric repeat. Applied Microbiology and Biotechnology, 2009, 82, 271-278. | 1.7 | 18 |
| 32 | Crystallization and preliminary X-ray study of alkaline alanine racemase from<i>Bacillus pseudofirmus</i>OF4. Acta Crystallographica Section F: Structural Biology Communications, 2009, 65, 166-168. | 0.7 | 4 |
| 33 | Microbial nitrilases: versatile, spiral forming, industrial enzymes. Journal of Applied Microbiology, 2009, 106, 703-727. | 1.4 | 131 |
| 34 | Antimicrobial Behavior of Polyelectrolyteâ˘Surfactant Thin Film Assemblies. Langmuir, 2009, 25, 10322-10328. | 1.6 | 79 |
| 35 | Genome mining of cyanide-degrading nitrilases from filamentous fungi. Applied Microbiology and Biotechnology, 2008, 80, 427-35. | 1.7 | 44 |
| 36 | Helical structure of unidirectionally shadowed metal replicas of cyanide hydratase from Gloeocercospora sorghi. Journal of Structural Biology, 2008, 161, 111-119. | 1.3 | 20 |

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|---|---|---|---|
| 37 | Purification and preliminary crystallization of alanine racemase from Streptococcus pneumoniae. BMC Microbiology, 2007, 7, 40. | 1.3 | 21 |
| 38 | Oligomeric Structure of Nitrilases: Effect of Mutating Interfacial Residues on Activity. Annals of the New York Academy of Sciences, 2005, 1056, 153-159. | 1.8 | 21 |
| 39 | Comparison of cyanide-degrading nitrilases. Applied Microbiology and Biotechnology, 2005, 68, 327-335. | 1.7 | 44 |
| 40 | Nonlinear dielectric spectroscopy of live cells using superconducting quantum interference devices. Applied Physics Letters, 2005, 86, 023902. | 1.5 | 18 |
| 41 | The 1.9 Ã… Crystal Structure of Alanine Racemase from Mycobacterium tuberculosis Contains a Conserved Entryway into the Active Site,. Biochemistry, 2005, 44, 1471-1481. | 1.2 | 86 |
| 42 | Low-frequency, low-field dielectric spectroscopy of living cell suspensions. Journal of Applied Physics, 2004, 95, 3754-3756. | 1.1 | 67 |
| 43 | Recombinant carbazole-degrading strains for enhanced petroleum processing. Journal of Industrial Microbiology and Biotechnology, 2003, 30, 6-12. | 1.4 | 32 |
| 44 | The Cyanide Degrading Nitrilase from Pseudomonas stutzeri AK61 Is a Two-Fold Symmetric, 14-Subunit Spiral. Structure, 2003, 11, 1413-1422. | 1.6 | 47 |
| 45 | CynD, the Cyanide Dihydratase from Bacillus pumilus: Gene Cloning and Structural Studies. Applied and Environmental Microbiology, 2003, 69, 4794-4805. | 1.4 | 65 |
| 46 | Crystal Structure at 1.45 Ã… Resolution of Alanine Racemase from a Pathogenic Bacterium, Pseudomonas aeruginosa, Contains Both Internal and External Aldimine Forms,. Biochemistry, 2003, 42, 14752-14761. | 1.2 | 44 |
| 47 | Purification and properties of 2-hydroxy-6-oxo-6-(2â€²-aminophenyl)hexa-2,4-dienoic acid hydrolase involved in microbial degradation of carbazole. Protein Expression and Purification, 2003, 28, 182-189. | 0.6 | 13 |
| 48 | Purification and characterization of 2â€²aminobiphenyl-2,3-diol 1,2-dioxygenase from Pseudomonas sp. LD2. Protein Expression and Purification, 2003, 32, 35-43. | 0.6 | 6 |
| 49 | Cadaverine Inhibition of Porin Plays a Role in Cell Survival at Acidic pH. Journal of Bacteriology, 2003, 185, 13-19. | 1.0 | 95 |
| 50 | N(2)-Substituted D,L-Cycloserine Derivatives: Synthesis and Evaluation as Alanine Racemase Inhibitors.. Journal of Antibiotics, 2003, 56, 160-168. | 1.0 | 24 |
| 51 | Characterization of a Cytotoxic Factor in Culture Filtrates of Serratia marcescens. Infection and Immunity, 2002, 70, 1121-1128. | 1.0 | 50 |
| 52 | Mutant Analysis Shows that Alanine Racemases from Pseudomonas aeruginosa and Escherichia coli Are Dimeric. Journal of Bacteriology, 2002, 184, 4321-4325. | 1.0 | 42 |
| 53 | Multi-Copy Repression of Serratia marcescens Nuclease Expression by dinI. Current Microbiology, 2002, 44, 44-48. | 1.0 | 3 |
| 54 | Study of the mechanism of action of p-chloromercuribenzoate on endonuclease from the bacterium Serratia marcescens. Biochemistry (Moscow), 2001, 66, 323-327. | 0.7 | 5 |

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|---|---|---|---|
| 55 | Characterization of the alanine racemases from two Mycobacteria. FEMS Microbiology Letters, 2001, 196, 93-98. | 0.7 | 88 |
| 56 | Characterization of the Alanine Racemases from Pseudomonas aeruginosa PAO1. Current Microbiology, 2000, 41, 290-294. | 1.0 | 56 |
| 57 | The NucE and NucD lysis proteins are not essential for secretion of the Serratia marcescens extracellular nuclease. Microbiology (United Kingdom), 1999, 145, 1209-1216. | 0.7 | 3 |
| 58 | Temperature- and solvent-tolerant mutants of filamentous bacteriophage helper M13 KO7. Biotechnology Letters, 1999, 21, 87-90. | 1.1 | 3 |
| 59 | A New Member of the Sin3 Family of Corepressors Is Essential for Cell Viability and Required for Retroelement Propagation in Fission Yeast. Molecular and Cellular Biology, 1999, 19, 2351-2365. | 1.1 | 31 |
| 60 | Nup124p Is a Nuclear Pore Factor of <i>Schizosaccharomyces pombe</i> That Is Important for Nuclear Import and Activity of Retrotransposon Tf1. Molecular and Cellular Biology, 1999, 19, 5768-5784. | 1.1 | 43 |
| 61 | Serratia marcescensand its extracellular nuclease. FEMS Microbiology Letters, 1998, 165, 1-13. | 0.7 | 85 |
| 62 | Microbial denitrogenation of fossil fuels. Trends in Biotechnology, 1998, 16, 390-395. | 4.9 | 85 |
| 63 | Nuclease Overexpression Mutants of <i>Serratia marcescens</i>. Journal of Bacteriology, 1998, 180, 2262-2264. | 1.0 | 6 |
| 64 | Disruption of polyamine modulation by a single amino acid substitution on the L3 loop of the OmpC porin channel. Biochimica Et Biophysica Acta - Biomembranes, 1997, 1326, 201-212. | 1.4 | 18 |
| 65 | Rapid Detection of Mutagens by Induction of Luciferase-Bearing Prophage inEscherichia coli. Environmental Science & Technology, 1996, 30, 2478-2483. | 4.6 | 6 |
| 66 | Inhibition of Serratia marcescens nuclease secretion by a truncated nuclease peptide. Gene, 1996, 172, 9-16. | 1.0 | 4 |
| 67 | Regulation of theSerratia marcescensExtracellular Nuclease: Positive Control by a Homolog of P2 Ogr Encoded by a Cryptic Prophage. Journal of Molecular Biology, 1996, 256, 264-278. | 2.0 | 29 |
| 68 | Induction of phospholipase- and flagellar synthesis in Serratia liquefaciens is controlled by expression of the flagellar master operon flhD. Molecular Microbiology, 1995, 15, 445-454. | 1.2 | 96 |
| 69 | Bacteriophage Surface Display of an Immunoglobulinâ€“binding Domain of Staphylococcus aureus Protein A. Nature Biotechnology, 1994, 12, 169-172. | 9.4 | 24 |
| 70 | 2.1 Å… structure of Serratia endonuclease suggests a mechanism for binding to double-stranded DNA. Nature Structural and Molecular Biology, 1994, 1, 461-468. | 3.6 | 91 |
| 71 | Sequences of the Serratia marcescens rplS and trmD genes. Gene, 1994, 145, 147-148. | 1.0 | 2 |
| 72 | Disulfide bonds are required forSerratia marcescensnuclease activity. Nucleic Acids Research, 1992, 20, 4971-4974. | 6.5 | 36 |

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|---|---|---|---|
| 73 | Regulatory mutants and transcriptional control of the Serratia marcescens extracellular nuclease gene. Molecular Microbiology, 1992, 6, 643-651. | 1.2 | 30 |
| 74 | Crystallization and preliminary crystallographic analysis of a novel nuclease from Serratia marcescens. Journal of Molecular Biology, 1991, 222, 27-30. | 2.0 | 23 |
| 75 | The metalloprotease gene ofSerratia marcescens strain SM6. Molecular Genetics and Genomics, 1990, 222, 446-451. | 2.4 | 47 |
| 76 | High efficiency transduction of single strand plasmid DNA into enteric bacteria. Molecular Genetics and Genomics, 1989, 218, 353-354. | 2.4 | 2 |
| 77 | Genetic analysis of extracellular proteins of Serratia marcescens. Journal of Bacteriology, 1988, 170, 4141-4146. | 1.0 | 90 |
| 78 | The extracellular nuclease gene of Serratia marcescens and its secretion from Escherichia coli. Gene, 1987, 57, 183-192. | 1.0 | 106 |
| 79 | Activation of mouse T-helper cells induces abundant preproenkephalin mRNA synthesis. Science, 1986, 232, 772-775. | 6.0 | 284 |
| 80 | DNA sequence of regulatory region for integration gene of bacteriophage Â. Proceedings of the National Academy of Sciences of the United States of America, 1980, 77, 2477-2481. | 3.3 | 45 |
| 81 | Serratia marcescens and its extracellular nuclease. , 0, . | | 2 |