

# Roland Freudl

## List of Publications by Year in descending order

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70  
papers

3,061  
citations

136885

32  
h-index

168321

53  
g-index

75  
all docs

75  
docs citations

75  
times ranked

2030  
citing authors

#	ARTICLE	IF	CITATIONS
1	Biosensor-Based Optimization of Cutinase Secretion by <i>Corynebacterium glutamicum</i> . <i>Frontiers in Microbiology</i> , 2021, 12, 750150.	1.5	7
2	Improved pEKEx2-derived expression vectors for tightly controlled production of recombinant proteins in <i>Corynebacterium glutamicum</i> . <i>Plasmid</i> , 2020, 112, 102540.	0.4	21
3	A secretion biosensor for monitoring Sec-dependent protein export in <i>Corynebacterium glutamicum</i> . <i>Microbial Cell Factories</i> , 2020, 19, 11.	1.9	16
4	Combinatorial impact of Sec signal peptides from <i>Bacillus subtilis</i> and bioprocess conditions on heterologous cutinase secretion by <i>Corynebacterium glutamicum</i> . <i>Biotechnology and Bioengineering</i> , 2019, 116, 644-655.	1.7	22
5	The early mature part of bacterial twin-arginine translocation (Tat) precursor proteins contributes to TatBC receptor binding. <i>Journal of Biological Chemistry</i> , 2018, 293, 7281-7299.	1.6	6
6	Signal peptides for recombinant protein secretion in bacterial expression systems. <i>Microbial Cell Factories</i> , 2018, 17, 52.	1.9	180
7	Beyond amino acids: Use of the <i>Corynebacterium glutamicum</i> cell factory for the secretion of heterologous proteins. <i>Journal of Biotechnology</i> , 2017, 258, 101-109.	1.9	56
8	The three-component system EsrISR regulates a cell envelope stress response in <i>Corynebacterium glutamicum</i> . <i>Molecular Microbiology</i> , 2017, 106, 719-741.	1.2	15
9	How to achieve Tat transport with alien TatA. <i>Scientific Reports</i> , 2017, 7, 8808.	1.6	8
10	The h-region of twin-arginine signal peptides supports productive binding of bacterial Tat precursor proteins to the TatBC receptor complex. <i>Journal of Biological Chemistry</i> , 2017, 292, 10865-10882.	1.6	15
11	Use of a Sec signal peptide library from <i>Bacillus subtilis</i> for the optimization of cutinase secretion in <i>Corynebacterium glutamicum</i> . <i>Microbial Cell Factories</i> , 2016, 15, 208.	1.9	49
12	A TatABC-Type Tat Translocase Is Required for Unimpaired Aerobic Growth of <i>Corynebacterium glutamicum</i> ATCC13032. <i>PLoS ONE</i> , 2015, 10, e0123413.	1.1	12
13	<i>Corynebacterium glutamicum</i> as a Platform Organism for the Secretory Production of Heterologous Proteins. , 2015, , 161-178.		0
14	Leaving home ain't easy: protein export systems in Gram-positive bacteria. <i>Research in Microbiology</i> , 2013, 164, 664-674.	1.0	41
15	Secretory production of an <i>FAD</i> cofactor-containing cytosolic enzyme (sorbitol xylitol Tj ETQq1 1 0.784314 rgBT /Ove ( <i>Tat</i> ) pathway of <i>Corynebacterium glutamicum</i> . <i>Microbial Biotechnology</i> , 2013, 6, 202-206.	2.0	25
16	Transmembrane insertion of twin-arginine signal peptides is driven by TatC and regulated by TatB. <i>Nature Communications</i> , 2012, 3, 1311.	5.8	65
17	Functional Implementation of the Posttranslational SecB-SecA Protein-Targeting Pathway in <i>Bacillus subtilis</i> . <i>Applied and Environmental Microbiology</i> , 2012, 78, 651-659.	1.4	25
18	An automated workflow for enhancing microbial bioprocess optimization on a novel microbioreactor platform. <i>Microbial Cell Factories</i> , 2012, 11, 144.	1.9	96

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19	A tetracycline inducible expression vector for <i>Corynebacterium glutamicum</i> allowing tightly regulable gene expression. <i>Plasmid</i> , 2012, 68, 142-147.	0.4	29
20	Genetic Evidence for a Tight Cooperation of TatB and TatC during Productive Recognition of Twin-Arginine (Tat) Signal Peptides in <i>Escherichia coli</i> . <i>PLoS ONE</i> , 2012, 7, e39867.	1.1	38
21	Improvement of Sec-dependent secretion of a heterologous model protein in <i>Bacillus subtilis</i> by saturation mutagenesis of the N-domain of the AmyE signal peptide. <i>Applied Microbiology and Biotechnology</i> , 2010, 86, 1877-1885.	1.7	69
22	Contributions of the Pre- and Pro-Regions of a <i>Staphylococcus hyicus</i> Lipase to Secretion of a Heterologous Protein by <i>Bacillus subtilis</i> . <i>Applied and Environmental Microbiology</i> , 2010, 76, 659-669.	1.4	9
23	Cotranslocation of Methyl Parathion Hydrolase to the Periplasm and of Organophosphorus Hydrolase to the Cell Surface of <i>Escherichia coli</i> by the Tat Pathway and Ice Nucleation Protein Display System. <i>Applied and Environmental Microbiology</i> , 2010, 76, 434-440.	1.4	34
24	Twin-Arginine Translocation of Methyl Parathion Hydrolase in <i>Bacillus subtilis</i> . <i>Environmental Science &amp; Technology</i> , 2010, 44, 7607-7612.	4.6	17
25	A periplasmic, pyridoxal-5-phosphate-dependent amino acid racemase in <i>Pseudomonas taetrolens</i> . <i>Applied Microbiology and Biotechnology</i> , 2009, 83, 1045-1054.	1.7	40
26	Export of Methyl Parathion Hydrolase to the Periplasm by the Twin-Arginine Translocation Pathway in <i>Escherichia coli</i> . <i>Journal of Agricultural and Food Chemistry</i> , 2009, 57, 8901-8905.	2.4	16
27	<i>Corynebacterium glutamicum</i> possesses two <i>secA</i> homologous genes that are essential for viability. <i>Archives of Microbiology</i> , 2008, 189, 605-610.	1.0	35
28	Modulation of Thiol-Disulfide Oxidoreductases for Increased Production of Disulfide-Bond-Containing Proteins in <i>Bacillus subtilis</i> . <i>Applied and Environmental Microbiology</i> , 2008, 74, 7536-7545.	1.4	22
29	Twin Arginine Translocation (Tat)-dependent Export in the Apparent Absence of TatABC or TatA Complexes Using Modified <i>Escherichia coli</i> TatA Subunits That Substitute for TatB. <i>Journal of Biological Chemistry</i> , 2007, 282, 36206-36213.	1.6	20
30	<i>Escherichia coli</i> Twin Arginine (Tat) Mutant Translocases Possessing Relaxed Signal Peptide Recognition Specificities. <i>Journal of Biological Chemistry</i> , 2007, 282, 7903-7911.	1.6	65
31	Comparative analysis of twin-arginine (Tat)-dependent protein secretion of a heterologous model protein (GFP) in three different Gram-positive bacteria. <i>Applied Microbiology and Biotechnology</i> , 2007, 76, 633-642.	1.7	71
32	Systematic Screening of All Signal Peptides from <i>Bacillus subtilis</i> : A Powerful Strategy in Optimizing Heterologous Protein Secretion in Gram-positive Bacteria. <i>Journal of Molecular Biology</i> , 2006, 362, 393-402.	2.0	228
33	Heterologous expression and characterization of a novel branching enzyme from the thermoalkaliphilic anaerobic bacterium <i>Anaerobranca gottschalkii</i> . <i>Applied Microbiology and Biotechnology</i> , 2006, 72, 60-71.	1.7	36
34	A Disulfide Bond-Containing Alkaline Phosphatase Triggers a BdbC-Dependent Secretion Stress Response in <i>Bacillus subtilis</i> . <i>Applied and Environmental Microbiology</i> , 2006, 72, 6876-6885.	1.4	28
35	Isolation and Characterization of Bifunctional <i>Escherichia coli</i> TatA Mutant Proteins That Allow Efficient Tat-dependent Protein Translocation in the Absence of TatB. <i>Journal of Biological Chemistry</i> , 2005, 280, 3426-3432.	1.6	81
36	<i>Staphylococcus carnosus</i> and other Gram-Positive Bacteria. , 2005, , 67-87.		2

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37	Production of a human calcitonin precursor with <i>Staphylococcus carnosus</i> : secretory expression and single-step recovery by expanded bed adsorption. <i>Process Biochemistry</i> , 2003, 38, 1351-1363.	1.8	10
38	Genetic Analysis of Pathway Specificity during Posttranslational Protein Translocation across the <i>Escherichia coli</i> Plasma Membrane. <i>Journal of Bacteriology</i> , 2003, 185, 2811-2819.	1.0	70
39	Evaluation of parallel operated small-scale bubble columns for microbial process development using <i>Staphylococcus carnosus</i> . <i>Journal of Biotechnology</i> , 2001, 88, 77-84.	1.9	17
40	Translocation of proteins across the cell envelope of Gram-positive bacteria. <i>FEMS Microbiology Reviews</i> , 2001, 25, 437-454.	3.9	145
41	Translocation of proteins across the cell envelope of Gram-positive bacteria. <i>FEMS Microbiology Reviews</i> , 2001, 25, 437-454.	3.9	106
42	Specificity of Signal Peptide Recognition in Tat-Dependent Bacterial Protein Translocation. <i>Journal of Bacteriology</i> , 2001, 183, 604-610.	1.0	61
43	Fed-batch production of recombinant human calcitonin precursor fusion protein using <i>Staphylococcus carnosus</i> as an expression-secretion system. <i>Applied Microbiology and Biotechnology</i> , 2000, 54, 361-369.	1.7	21
44	The carboxyl terminus of the <i>Bacillus subtilis</i> SecA is dispensable for protein secretion and viability. <i>Microbiology (United Kingdom)</i> , 2000, 146, 2573-2581.	0.7	19
45	Signal Peptide Peptidase- and ClpP-like Proteins of <i>Bacillus subtilis</i> Required for Efficient Translocation and Processing of Secretory Proteins. <i>Journal of Biological Chemistry</i> , 1999, 274, 24585-24592.	1.6	68
46	The efficient export of NADP-containing glucose-fructose oxidoreductase to the periplasm of <i>Zymomonas mobilis</i> depends both on an intact twin-arginine motif in the signal peptide and on the generation of a structural export signal induced by cofactor binding. <i>FEBS Journal</i> , 1999, 263, 543-551.	0.2	95
47	Bacterial proteins carrying twin-R signal peptides are specifically targeted by the $\hat{\Gamma}$ pH-dependent transport machinery of the thylakoid membrane system. <i>FEBS Letters</i> , 1999, 447, 95-98.	1.3	40
48	Temporal Expression of the <i>Bacillus subtilis</i> secA Gene, Encoding a Central Component of the Preprotein Translocase. <i>Journal of Bacteriology</i> , 1999, 181, 493-500.	1.0	40
49	Differential Dependence of Levansucrase and $\hat{\Gamma}$ -Amylase Secretion on SecA (Div) during the Exponential Phase of Growth of <i>Bacillus subtilis</i> . <i>Journal of Bacteriology</i> , 1999, 181, 1820-1826.	1.0	32
50	Cloning, nucleotide sequence, and functional expression of the <i>Escherichia coli</i> eno gene in a temperature-sensitive mutant strain. <i>DNA Sequence</i> , 1996, 6, 351-355.	0.7	6
51	Identification of the Magnesium-binding Domain of the High-affinity ATP-binding Site of the <i>Bacillus subtilis</i> and <i>Escherichia coli</i> SecA Protein. <i>Journal of Biological Chemistry</i> , 1995, 270, 18975-18982.	1.6	43
52	Functional characterization of the <i>Staphylococcus carnosus</i> SecA protein in <i>Escherichia coli</i> and <i>Bacillus subtilis</i> secA mutant strains. <i>FEMS Microbiology Letters</i> , 1995, 131, 271-277.	0.7	15
53	Functional characterization of the <i>Staphylococcus carnosus</i> SecA protein in <i>Escherichia coli</i> and <i>Bacillus subtilis</i> secA mutant strains. <i>FEMS Microbiology Letters</i> , 1995, 131, 271-277.	0.7	11
54	The <i>Staphylococcus carnosus</i> secE gene: Cloning, nucleotide sequence, and functional characterization in <i>Escherichia coli</i> secE mutant strains. <i>FEMS Microbiology Letters</i> , 1994, 117, 113-119.	0.7	12

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55	Isolation and characterization of a <i>Bacillus subtilis</i> secA mutant allele conferring resistance to sodium azide. <i>FEMS Microbiology Letters</i> , 1994, 124, 393-397.	0.7	22
56	An outer membrane protein (OmpA) of <i>Escherichia coli</i> can be translocated across the cytoplasmic membrane of <i>Bacillus subtilis</i> . <i>Molecular Microbiology</i> , 1993, 9, 847-855.	1.2	43
57	Protein secretion in Gram-positive bacteria. <i>Journal of Biotechnology</i> , 1992, 23, 231-240.	1.9	32
58	Cloning and molecular characterization of the secY genes from <i>Bacillus licheniformis</i> and <i>Staphylococcus carnosus</i> : comparative analysis of nine members of the SecY family. <i>Molecular Genetics and Genomics</i> , 1992, 235, 147-152.	2.4	27
59	Suppression of an <i>Escherichia coli</i> secA mutant by a gene cloned from <i>Staphylococcus carnosus</i> . <i>FEMS Microbiology Letters</i> , 1991, 84, 143-149.	0.7	6
60	Identification of a gene fragment which codes for the 364 amino-terminal amino acid residues of a SecA homologue from <i>Bacillus subtilis</i> : further evidence for the conservation of the protein export apparatus in gram-positive and gram-negative bacteria. <i>Molecular Genetics and Genomics</i> , 1991, 228, 417-423.	2.4	60
61	Export and sorting of the <i>Escherichia coli</i> outer membrane protein OmpA. <i>Journal of Bioenergetics and Biomembranes</i> , 1990, 22, 441-449.	1.0	27
62	Insertion of peptides into cell-surface-exposed areas of the <i>Escherichia coli</i> OmpA protein does not interfere with export and membrane assembly. <i>Gene</i> , 1989, 82, 229-236.	1.0	59
63	A lower size limit exists for export of fragments of an outer membrane protein (OmpA) of <i>Escherichia coli</i> K-12. <i>Journal of Molecular Biology</i> , 1989, 205, 771-775.	2.0	24
64	On the role of the mature part of an <i>Escherichia coli</i> outer membrane protein (OmpA) in translocation across the plasma membrane. <i>Journal of Molecular Biology</i> , 1988, 203, 517-519.	2.0	8
65	Evolution of the enterobacterial sulA gene: a component of the SOS system encoding an inhibitor of cell division. <i>Gene</i> , 1987, 52, 31-40.	1.0	29
66	The signal sequence suffices to direct export of outer membrane protein OmpA of <i>Escherichia coli</i> K-12. <i>Journal of Bacteriology</i> , 1987, 169, 66-71.	1.0	44
67	Cell surface exposure of the outer membrane protein OmpA of <i>Escherichia coli</i> K-12. <i>Journal of Molecular Biology</i> , 1986, 188, 491-494.	2.0	137
68	Lethal mutations in the structural gene of an outer membrane protein (OmpA) of <i>Escherichia coli</i> K12. <i>Molecular Genetics and Genomics</i> , 1985, 201, 76-81.	2.4	45
69	The nature of information, required for export and sorting, present within the outer membrane protein OmpA of <i>Escherichia coli</i> K-12.. <i>EMBO Journal</i> , 1985, 4, 3593-3598.	3.5	112
70	Cloning and Molecular Characterization of the ompA Gene from <i>Salmonella typhimurium</i> . <i>FEBS Journal</i> , 1983, 134, 497-502.	0.2	70