Petra Dersch

List of Publications by Year
in descending order

122 papers	5,498 citations	76326 40 h-index	106344 65 g-index
132 all docs	132 docs citations	132 times ranked	6695 citing authors

#	Article	IF	Citations
1	The invasin D protein from Yersinia pseudotuberculosis selectively binds the Fab region of host antibodies and affects colonization of the intestine. Journal of Biological Chemistry, 2018, 293, 8672-8690.	3.4	573
2	Synthesis of the <i>Escherichia coli</i> Kâ€12 nucleoidâ€associated DNAâ€binding protein Hâ€NS is subjected to growthâ€phase control and autoregulation. Molecular Microbiology, 1993, 8, 875-889.	2.5	181
3	Tissue dual RNA-seq allows fast discovery of infection-specific functions and riboregulators shaping hostâ€“pathogen transcriptomes. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E791-E800.	7.1	154
4	Expression and export: recombinant protein production systems for Aspergillus. Applied Microbiology and Biotechnology, 2010, 87, 1255-1270.	3.6	144
5	Concerted Actions of a Thermo-labile Regulator and a Unique Intergenic RNA Thermosensor Control Yersinia Virulence. PLoS Pathogens, 2012, 8, e1002518.	4.7	144
6	Anti-virulence Strategies to Target Bacterial Infections. Current Topics in Microbiology and Immunology, 2015, 398, 147-183.	1.1	141
7	Identification of a domain in Yersinia virulence factor YadA that is crucial for extracellular matrix-specific cell adhesion and uptake. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 3375-3380.	7.1	137
8	The osmZ (bglY) gene encodes the DNA-binding protein H-NS (H1a), a component of the Escherichia coli K12 nucleoid. Molecular Genetics and Genomics, 1990, 224, 81-90.	2.4	122
9	RovA is autoregulated and antagonizes H-NS-mediated silencing of invasin and rovA expression in Yersinia pseudotuberculosis. Molecular Microbiology, 2004, 53, 871-888.	2.5	121
10	RovM, a novel LysR-type regulator of the virulence activator gene rovA, controls cell invasion, virulence and motility of Yersinia pseudotuberculosis. Molecular Microbiology, 2006, 62, 1469-1483.	2.5	121
11	Roles of Regulatory RNAs for Antibiotic Resistance in Bacteria and Their Potential Value as Novel Drug Targets. Frontiers in Microbiology, 2017, 8, 803.	3.5	114
12	The YadA Protein of Yersinia pseudotuberculosis Mediates High-Efficiency Uptake into Human Cells under Environmental Conditions in Which Invasin Is Repressed. Infection and Immunity, 2002, 70, 4880-4891.	2.2	110
13	Recombinant Soluble Human Î±3Î²1Integrin:Â Purification, Processing, Regulation, and Specific Binding to Laminin-5 and Invasin in a Mutually Exclusive Mannerâ€. Biochemistry, 1998, 37, 10945-10955.	2.5	109
14	Signaling and invasin-promoted uptake via integrin receptors. Microbes and Infection, 2000, 2, 793-801.	1.9	108
15	A Csrâ€type regulatory system, including small nonâ€coding RNAs, regulates the global virulence regulator RovA of <i>Yersinia pseudotuberculosis</i> through RovM. Molecular Microbiology, 2008, 68, 1179-1195.	2.5	108
16	Environmental control of invasin expression in <i>Yersinia pseudotuberculosis</i> is mediated by regulation of RovA, a transcriptional activator of the SlyA/Hor family. Molecular Microbiology, 2001, 41, 1249-1269.	2.5	103
17	The nucleoid-associated DNA-binding protein H-NS is required for the efficient adaptation of Escherichia coli K-12 to a cold environment. Molecular Genetics and Genomics, 1994, 245, 255-259.	2.4	99
18	The Csr/Rsm system of Yersinia and related pathogens. RNA Biology, 2012, 9, 379-391.	3.1	87

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19	Intrinsic Thermal Sensing Controls Proteolysis of Yersinia Virulence Regulator RovA. PLoS Pathogens, 2009, 5, e1000435.	4.7	82
20	Characterization of Enterocoliticin, a Phage Tail-Like Bacteriocin, and Its Effect on Pathogenic Yersinia enterocolitica Strains. Applied and Environmental Microbiology, 2001, 67, 5634-5642.	3.1	81
21	Transcriptomic Profiling of Yersinia pseudotuberculosis Reveals Reprogramming of the Crp Regulon by Temperature and Uncovers Crp as a Master Regulator of Small RNAs. PLoS Genetics, 2015, 11, e1005087.	3.5	79
22	ClpV, a unique Hsp100/Clp member of pathogenic proteobacteria. Biological Chemistry, 2005, 386, 1115-27.	2.5	78
23	Temperature-responsive in vitro RNA structurome of <i>Yersinia pseudotuberculosis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 7237-7242.	7.1	78
24	Neonatally imprinted stromal cell subsets induce tolerogenic dendritic cells in mesenteric lymph nodes. Nature Communications, 2018, 9, 3903.	12.8	69
25	Crp Induces Switching of the CsrB and CsrC RNAs in Yersinia pseudotuberculosis and Links Nutritional Status to Virulence. Frontiers in Cellular and Infection Microbiology, 2012, 2, 158.	3.9	67
26	The Cytotoxic Necrotizing Factor of Yersinia pseudotuberculosis (CNFY) Enhances Inflammation and Yop Delivery during Infection by Activation of Rho GTPases. PLoS Pathogens, 2013, 9, e1003746.	4.7	66
27	Variations in microbiota composition of laboratory mice influence Citrobacter rodentium infection via variable short-chain fatty acid production. PLoS Pathogens, 2020, 16, e1008448.	4.7	66
28	Reprogramming of Yersinia from Virulent to Persistent Mode Revealed by Complex In Vivo RNA-seq Analysis. PLoS Pathogens, 2015, 11, e1004600.	4.7	65
29	Increased plasmid copy number is essential for <i>Yersinia</i> T3SS function and virulence. Science, 2016, 353, 492-495.	12.6	64
30	Unique Cell Adhesion and Invasion Properties of Yersinia enterocolitica O:3, the Most Frequent Cause of Human Yersiniosis. PLoS Pathogens, 2011, 7, e1002117.	4.7	57
31	Coregulation of host-adapted metabolism and virulence by pathogenic yersiniae. Frontiers in Cellular and Infection Microbiology, 2014, 4, 146.	3.9	55
32	An Immunoglobulin Superfamily-Like Domain Unique to the Yersinia pseudotuberculosis Invasin Protein Is Required for Stimulation of Bacterial Uptake via Integrin Receptors. Infection and Immunity, 2000, 68, 2930-2938.	2.2	54
33	Treatment Strategies for Infections With Shiga Toxin-Producing Escherichia coli. Frontiers in Cellular and Infection Microbiology, 2020, 10, 169.	3.9	54
34	Optimized bioprocess for production of fructofuranosidase by recombinant Aspergillus niger. Applied Microbiology and Biotechnology, 2010, 87, 2011-2024.	3.6	53
35	The Pyruvate-Tricarboxylic Acid Cycle Node. Journal of Biological Chemistry, 2014, 289, 30114-30132.	3.4	53
36	The alarmones (p)ppGpp are part of the heat shock response of Bacillus subtilis. PLoS Genetics, 2020, 16, e1008275.	3.5	52

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37	Common and divergent features in transcriptional control of the homologous small RNAs GlmY and GlmZ in Enterobacteriaceae. Nucleic Acids Research, 2011, 39, 1294-1309.	14.5	51
38	Filamentous fungi in good shape: Microparticles for tailor-made fungal morphology and enhanced enzyme production. Bioengineered Bugs, 2011, 2, 100-104.	1.7	51
39	Monitoring of Gene Expression in Bacteria during Infections Using an Adaptable Set of Bioluminescent, Fluorescent and Colorigenic Fusion Vectors. PLoS ONE, 2011, 6, e20425.	2.5	50
40	Iron Regulation in Clostridioides difficile. Frontiers in Microbiology, 2018, 9, 3183.	3.5	49
41	Cell invasion and IL-8 production pathways initiated by YadA of Yersinia pseudotuberculosis require common signalling molecules (FAK, c-Src, Ras) and distinct cell factors. Cellular Microbiology, 2004, 7, 63-77.	2.1	48
42	Regulatory principles governing Salmonella and Yersinia virulence. Frontiers in Microbiology, 2015, 6, 949.	3.5	48
43	Analysis of RovA, a Transcriptional Regulator of Yersinia pseudotuberculosis Virulence That Acts through Antirepression and Direct Transcriptional Activation*. Journal of Biological Chemistry, 2005, 280, 42423-42432.	3.4	47
44	Yersinia Type III Secretion System Master Regulator LcrF. Journal of Bacteriology, 2016, 198, 604-614.	2.2	44
45	Structural Basis for Intrinsic Thermosensing by the Master Virulence Regulator RovA of Yersinia. Journal of Biological Chemistry, 2012, 287, 35796-35803.	3.4	41
46	RNA-based mechanisms of virulence control in <i>Enterobacteriaceae</i>. RNA Biology, 2017, 14, 471-487.	3.1	41
47	Tailorâ€Made Fructooligosaccharides by a Combination of Substrate and Genetic Engineering. ChemBioChem, 2008, 9, 143-149.	2.6	40
48	Phenotypic heterogeneity: a bacterial virulence strategy. Microbes and Infection, 2018, 20, 570-577.	1.9	37
49	Phenotypic Diversification of Microbial Pathogensâ€"Cooperating and Preparing for the Future. Journal of Molecular Biology, 2019, 431, 4645-4655.	4.2	36
50	Thermosensing to adjust bacterial virulence in a fluctuating environment. Future Microbiology, 2013, 8, 85-105.	2.0	33
51	Discovery of the first small-molecule CsrAâ€"RNA interaction inhibitors using biophysical screening technologies. Future Medicinal Chemistry, 2016, 8, 931-947.	2.3	33
52	Low-copy-number T7 vectors for selective gene expression and efficient protein overproduction inEscherichia coli. FEMS Microbiology Letters, 1994, 123, 19-26.	1.8	32
53	Regulation of hostâ€"pathogen interactions via the post-transcriptional Csr/Rsm system. Current Opinion in Microbiology, 2018, 41, 58-67.	5.1	29
54	Metabolome and transcriptome-wide effects of the carbon storage regulator A in enteropathogenic Escherichia coli. Scientific Reports, 2019, 9, 138.	3.3	28

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55	Studies of the Efficacy of Enterocoliticin, a Phage-Tail Like Bacteriocin, as Antimicrobial Agent Against Yersinia enterocolitica Serotype O3 in a Cell Culture System and in Mice. Zoonoses and Public Health, 2005, 52, 171-179.	1.4	27
56	A novel expression system for intracellular production and purification of recombinant affinity-tagged proteins in Aspergillus niger. Applied Microbiology and Biotechnology, 2010, 86, 659-670.	3.6	27
57	Unique virulence properties of Yersinia enterocolitica O:3 â€“ An emerging zoonotic pathogen using pigs as preferred reservoir host. International Journal of Medical Microbiology, 2014, 304, 824-834.	3.6	27
58	Differential Effects of Integrin Î± Chain Mutations on Invasin and Natural Ligand Interaction. Journal of Biological Chemistry, 1998, 273, 31837-31843.	3.4	26
59	A direct link between the global regulator PhoP and the Csr regulon inY. pseudotuberculosisthrough the small regulatory RNA CsrC. RNA Biology, 2014, 11, 580-593.	3.1	26
60	Regulatory Elements Implicated in the Environmental Control of Invasin Expression in Enteropathogenic Yersinia. Advances in Experimental Medicine and Biology, 2007, 603, 156-166.	1.6	26
61	<i>Yersinia enterocolitica</i>-mediated degradation of neutrophil extracellular traps (NETs). FEMS Microbiology Letters, 2015, 362, fnv192.	1.8	25
62	Grad-seq identifies KhpB as a global RNA-binding protein in<i>Clostridioides difficile</i>that regulates toxin production. MicroLife, 2021, 2, .	2.1	25
63	A Precise Temperature-Responsive Bistable Switch Controlling Yersinia Virulence. PLoS Pathogens, 2016, 12, e1006091.	4.7	24
64	A bacterial secreted translocator hijacks riboregulators to control type III secretion in response to host cell contact. PLoS Pathogens, 2019, 15, e1007813.	4.7	24
65	Lead-seq: transcriptome-wide structure probing in vivo using lead(II) ions. Nucleic Acids Research, 2020, 48, e71-e71.	14.5	24
66	An RNA thermometer dictates production of a secreted bacterial toxin. PLoS Pathogens, 2020, 16, e1008184.	4.7	24
67	Bacteriomimetic invasin-functionalized nanocarriers for intracellular delivery. Journal of Controlled Release, 2015, 220, 414-424.	9.9	23
68	Loss of CNFY toxin-induced inflammation drives Yersinia pseudotuberculosis into persistency. PLoS Pathogens, 2018, 14, e1006858.	4.7	23
69	Cell invasion ofYersinia pseudotuberculosisby invasin and YadA requires protein kinase C, phospholipase C-Î³1 and Akt kinase. Cellular Microbiology, 2009, 11, 1782-1801.	2.1	22
70	Bioorthogonal metabolic glycoengineering of human larynx carcinoma (HEp-2) cells targeting sialic acid. Beilstein Journal of Organic Chemistry, 2010, 6, 24.	2.2	22
71	<i>In Vivo</i> -Induced InvA-Like Autotransporters Ifp and InvC of Yersinia pseudotuberculosis Promote Interactions with Intestinal Epithelial Cells and Contribute to Virulence. Infection and Immunity, 2012, 80, 1050-1064.	2.2	22
72	Novel type of pilus associated with a Shiga-toxigenic <i>E. coli</i> hybrid pathovar conveys aggregative adherence and bacterial virulence. Emerging Microbes and Infections, 2018, 7, 1-16.	6.5	21

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73	Tracking gene expression and oxidative damage of O2-stressed Clostridioides difficile by a multi-omics approach. Anaerobe, 2018, 53, 94-107.	2.1	21
74	Bacterial invasion factors: Tools for crossing biological barriers and drug delivery?. European Journal of Pharmaceutics and Biopharmaceutics, 2013, 84, 242-250.	4.3	20
75	Contribution of the Cpx envelope stress system to metabolism and virulence regulation in Salmonella enterica serovar Typhimurium. PLoS ONE, 2019, 14, e0211584.	2.5	19
76	Identification of Antibiotics That Diminish Disease in a Murine Model of Enterohemorrhagic Escherichia coli Infection. Antimicrobial Agents and Chemotherapy, 2020, 64, .	3.2	19
77	Metabolic flux analysis using stoichiometric models for Aspergillus niger: Comparison under glucoamylase-producing and non-producing conditions. Journal of Biotechnology, 2007, 132, 405-417.	3.8	17
78	Yersinia outer protein YopE affects the actin cytoskeleton in Dictyostelium discoideumthrough targeting of multiple Rho family GTPases. BMC Microbiology, 2009, 9, 138.	3.3	17
79	Hypoxia Decreases Invasin-Mediated Yersinia enterocolitica Internalization into Caco-2 Cells. PLoS ONE, 2016, 11, e0146103.	2.5	17
80	Essential Role of Invasin for Colonization and Persistence of Yersinia enterocolitica in Its Natural Reservoir Host, the Pig. Infection and Immunity, 2014, 82, 960-969.	2.2	16
81	Mononuclear phagocytes contribute to intestinal invasion and dissemination of Yersinia enterocolitica. International Journal of Medical Microbiology, 2016, 306, 357-366.	3.6	16
82	Targeted siRNA nanocarrier: a platform technology for cancer treatment. Oncogene, 2022, 41, 2210-2224.	5.9	16
83	Intimin from Shiga toxin-producing Escherichia coli and its isolated C-terminal domain exhibit different binding properties for Tir and a eukaryotic surface receptor. International Journal of Medical Microbiology, 2001, 290, 683-691.	3.6	15
84	Influence of PhoP and Intra-Species Variations on Virulence of Yersinia pseudotuberculosis during the Natural Oral Infection Route. PLoS ONE, 2014, 9, e103541.	2.5	15
85	Aspherical and Spherical InvA497-Functionalized Nanocarriers for Intracellular Delivery of Anti-Infective Agents. Pharmaceutical Research, 2019, 36, 22.	3.5	15
86	Human and Animal Isolates of Yersinia enterocolitica Show Significant Serotype-Specific Colonization and Host-Specific Immune Defense Properties. Infection and Immunity, 2013, 81, 4013-4025.	2.2	14
87	Crystal structure of bacterial cytotoxic necrotizing factor CNF_Y reveals molecular building blocks for intoxication. EMBO Journal, 2021, 40, e105202.	7.8	14
88	Analysis of Enterocoliticin, a Phage Tail-like Bacteriocin. , 2003, 529, 249-252.		13
89	Structure of the effector-binding domain of the LysR-type transcription factor RovM from<i>Yersinia pseudotuberculosis</i>. Acta Crystallographica Section D: Biological Crystallography, 2011, 67, 81-90.	2.5	13
90	Yersinia pseudotuberculosis supports Th17 differentiation and limits de novo regulatory T cell induction by directly interfering with T cell receptor signaling. Cellular and Molecular Life Sciences, 2017, 74, 2839-2850.	5.4	13

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91	Invasin-functionalized liposome nanocarriers improve the intracellular delivery of anti-infective drugs. RSC Advances, 2016, 6, 41622-41629.	3.6	12
92	Transcriptomic and Phenotypic Analysis Reveals New Functions for the Tat Pathway in Yersinia pseudotuberculosis. Journal of Bacteriology, 2016, 198, 2876-2886.	2.2	12
93	RNA Regulators: Formidable Modulators of Yersinia Virulence. Trends in Microbiology, 2017, 25, 19-34.	7.7	12
94	Function and Regulation of the Transcriptional Activator RovA of Yersinia pseudotuberculosis. Advances in Experimental Medicine and Biology, 2004, 529, 285-287.	1.6	11
95	Natural Killer Cells Mediate Protection against Yersinia pseudotuberculosis in the Mesenteric Lymph Nodes. PLoS ONE, 2015, 10, e0136290.	2.5	10
96	Molecular and Cellular Mechanisms of Bacterial Entry into Host Cells. , 2002, 10, 183-209.		9
97	The Superior Adherence Phenotype of E. coli O104:H4 is Directly Mediated by the Aggregative Adherence Fimbriae Type I. Virulence, 2021, 12, 346-359.	4.4	9
98	Comparative Transcriptomic Profiling of Yersinia enterocolitica O:3 and O:8 Reveals Major Expression Differences of Fitness- and Virulence-Relevant Genes Indicating Ecological Separation. MSystems, 2019, 4, .	3.8	8
99	The gatekeeper of Yersinia type III secretion is under RNA thermometer control. PLoS Pathogens, 2021, 17, e1009650.	4.7	8
100	Two different open reading frames named slyA in the E. coli sequence databases. Trends in Microbiology, 2002, 10, 267-268.	7.7	7
101	The Small Protein YmoA Controls the Csr System and Adjusts Expression of Virulence-Relevant Traits of Yersinia pseudotuberculosis. Frontiers in Microbiology, 2021, 12, 706934.	3.5	7
102	RNA Thermometer-coordinated Assembly of the Yersinia Injectisome. Journal of Molecular Biology, 2022, 434, 167667.	4.2	7
103	Discovering Yersiniaâ€"Host Interactions by Tissue Dual RNA-Seq. Methods in Molecular Biology, 2019, 2010, 99-116.	0.9	6
104	The <i>Yersinia pseudotuberculosis</i> Cpx envelope stress system contributes to transcriptional activation of <i>rovM</i>. Virulence, 2019, 10, 37-57.	4.4	6
105	RovC - a novel type of hexameric transcriptional activator promoting type VI secretion gene expression. PLoS Pathogens, 2020, 16, e1008552.	4.7	6
106	Identification of Translocation Inhibitors Targeting the Type III Secretion System of Enteropathogenic Escherichia coli. Antimicrobial Agents and Chemotherapy, 2021, 65, e0095821.	3.2	6
107	Regulation of Virulence Gene Expression by Regulatory RNA Elements in Yersinia pseudotuberculosis. Advances in Experimental Medicine and Biology, 2012, 954, 315-323.	1.6	6
108	Unique Virulence Properties of Yersinia enterocolitica O:3. Advances in Experimental Medicine and Biology, 2012, 954, 281-287.	1.6	5

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109	Impact of CCR7 on T-Cell Response and Susceptibility to Yersinia pseudotuberculosis Infection. Journal of Infectious Diseases, 2017, 216, 752-760.	4.0	5
110	Transcriptional and Post-transcriptional Regulatory Mechanisms Controlling Type III Secretion. Current Topics in Microbiology and Immunology, 2019, 427, 11-33.	1.1	5
111	Virulence Factor Cargo and Host Cell Interactions of Shiga Toxin-Producing Escherichia coli Outer Membrane Vesicles. Methods in Molecular Biology, 2021, 2291, 177-205.	0.9	5
112	Yersinia pseudotuberculosis modulates regulatory T cell stability via injection of yersinia outer proteins in a type III secretion system-dependent manner. European Journal of Microbiology and Immunology, 2018, 8, 101-106.	2.8	4
113	Bread Feeding Is a Robust and More Physiological Enteropathogen Administration Method Compared to Oral Gavage. Infection and Immunity, 2020, 88, .	2.2	4
114	Tumorâ€Cellâ€Specific Targeting of Ibrutinib: Introducing Electrostatic Antibodyâ€Inhibitor Conjugates (AiCs). Angewandte Chemie - International Edition, 2021, , .	13.8	4
115	Discovering RNA-Based Regulatory Systems for Yersinia Virulence. Frontiers in Cellular and Infection Microbiology, 2018, 8, 378.	3.9	3
116	The Cytotoxic Necrotizing Factors (CNFs)â€"A Family of Rho GTPase-Activating Bacterial Exotoxins. Toxins, 2021, 13, 901.	3.4	3
117	Editorial overview: Cell regulation: New insights into the versatile regulatory processes governing bacterial life. Current Opinion in Microbiology, 2017, 36, v-viii.	5.1	2
118	Survival of environmental and host-associated stress. , 2003, , 37-74.		1
119	Title is missing!. , 2020, 16, e1008448.		0
120	Title is missing!. , 2020, 16, e1008448.		0
121	Title is missing!. , 2020, 16, e1008448.		0
122	Title is missing!. , 2020, 16, e1008448.		0