

Silja Wessler

List of Publications by Year in descending order

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91
papers

5,121
citations

94381

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88593

70
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94
all docs

94
docs citations

94
times ranked

4872
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Helicobacter exploits integrin for type IV secretion and kinase activation. Nature, 2007, 449, 862-866. | 13.7 | 571 |
| 2 | A Constituent of Green Tea, Epigallocatechin-3-gallate, Activates Endothelial Nitric Oxide Synthase by a Phosphatidylinositol-3-OH-kinase-, cAMP-dependent Protein Kinase-, and Akt-dependent Pathway and Leads to Endothelial-dependent Vasorelaxation. Journal of Biological Chemistry, 2004, 279, 6190-6195. | 1.6 | 296 |
| 3 | <i>Helicobacter pylori</i> HtrA is a new secreted virulence factor that cleaves E-cadherin to disrupt intercellular adhesion. EMBO Reports, 2010, 11, 798-804. | 2.0 | 264 |
| 4 | Role of the <i>cag</i> pathogenicity island encoded type IV secretion system in <i>Helicobacter pylori</i> pathogenesis. FEBS Journal, 2011, 278, 1190-1202. | 2.2 | 211 |
| 5 | c-Src and c-Abl kinases control hierarchic phosphorylation and function of the CagA effector protein in Western and East Asian <i>Helicobacter pylori</i> strains. Journal of Clinical Investigation, 2012, 122, 1553-1566. | 3.9 | 200 |
| 6 | Phosphorylation of <i>Helicobacter pylori</i> CagA by c-Abl leads to cell motility. Oncogene, 2007, 26, 3462-3472. | 2.6 | 163 |
| 7 | Activation of Activator Protein 1 and Stress Response Kinases in Epithelial Cells Colonized by <i>Helicobacter pylori</i> Encoding the <i>cag</i> Pathogenicity Island. Journal of Biological Chemistry, 1999, 274, 31655-31662. | 1.6 | 158 |
| 8 | Distinct Roles of Secreted HtrA Proteases from Gram-negative Pathogens in Cleaving the Junctional Protein and Tumor Suppressor E-cadherin. Journal of Biological Chemistry, 2012, 287, 10115-10120. | 1.6 | 150 |
| 9 | The functional interplay of <i>Helicobacter pylori</i> factors with gastric epithelial cells induces a multi-step process in pathogenesis. Cell Communication and Signaling, 2013, 11, 77. | 2.7 | 150 |
| 10 | <i>Neisseria gonorrhoeae</i> Epithelial Cell Interaction Leads to the Activation of the Transcription Factors Nuclear Factor κ B and Activator Protein 1 and the Induction of Inflammatory Cytokines. Journal of Experimental Medicine, 1997, 186, 247-258. | 4.2 | 143 |
| 11 | Rapid paracellular transmigration of <i>Campylobacter jejuni</i> across polarized epithelial cells without affecting TER: role of proteolytic-active HtrA cleaving E-cadherin but not fibronectin. Gut Pathogens, 2012, 4, 3. | 1.6 | 130 |
| 12 | <i>Helicobacter pylori</i> Employs a Unique Basolateral Type IV Secretion Mechanism for CagA Delivery. Cell Host and Microbe, 2017, 22, 552-560.e5. | 5.1 | 125 |
| 13 | <i>Helicobacter pylori</i> CagL dependent induction of gastrin expression via a novel β -integrin-linked kinase signalling complex. Gut, 2012, 61, 986-996. | 6.1 | 104 |
| 14 | Molecular mechanisms of epithelial-barrier disruption by <i>Helicobacter pylori</i> . Trends in Microbiology, 2008, 16, 397-405. | 3.5 | 103 |
| 15 | Transmigration route of <i>Campylobacter jejuni</i> across polarized intestinal epithelial cells: paracellular, transcellular or both?. Cell Communication and Signaling, 2013, 11, 72. | 2.7 | 100 |
| 16 | Extracellular HtrA serine proteases: An emerging new strategy in bacterial pathogenesis. Cellular Microbiology, 2018, 20, e12845. | 1.1 | 97 |
| 17 | <i>Helicobacter pylori</i> stimulates host cyclooxygenase-2 gene transcription: critical importance of MEK/ERK-dependent activation of USF1/2 and CREB transcription factors. Cellular Microbiology, 2003, 5, 821-834. | 1.1 | 87 |
| 18 | Identification of E-cadherin signature motifs functioning as cleavage sites for <i>Helicobacter pylori</i> HtrA. Scientific Reports, 2016, 6, 23264. | 1.6 | 77 |

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|----|--|------|-----------|
| 19 | Prediction of Extracellular Proteases of the Human Pathogen <i>Helicobacter pylori</i> Reveals Proteolytic Activity of the Hp1018/19 Protein HtrA. <i>PLoS ONE</i> , 2008, 3, e3510. | 1.1 | 75 |
| 20 | Serine Phosphorylation of Cortactin Controls Focal Adhesion Kinase Activity and Cell Scattering Induced by <i>Helicobacter pylori</i> . <i>Cell Host and Microbe</i> , 2011, 9, 520-531. | 5.1 | 74 |
| 21 | Characterisation of worldwide <i>Helicobacter pylori</i> strains reveals genetic conservation and essentiality of serine protease HtrA. <i>Molecular Microbiology</i> , 2016, 99, 925-944. | 1.2 | 70 |
| 22 | p120 and Kaiso Regulate <i>Helicobacter pylori</i> -induced Expression of Matrix Metalloproteinase-7. <i>Molecular Biology of the Cell</i> , 2008, 19, 4110-4121. | 0.9 | 68 |
| 23 | From inflammation to gastric cancer – the importance of Hedgehog/GLI signaling in <i>Helicobacter pylori</i> -induced chronic inflammatory and neoplastic diseases. <i>Cell Communication and Signaling</i> , 2017, 15, 15. | 2.7 | 67 |
| 24 | <i>Helicobacter pylori</i> Activates the Histidine Decarboxylase Promoter through a Mitogen-activated Protein Kinase Pathway Independent of Pathogenicity Island-encoded Virulence Factors. <i>Journal of Biological Chemistry</i> , 2000, 275, 3629-3636. | 1.6 | 66 |
| 25 | CagA-independent disruption of adherence junction complexes involves E-cadherin shedding and implies multiple steps in <i>Helicobacter pylori</i> pathogenicity. <i>Experimental Cell Research</i> , 2007, 313, 3459-3471. | 1.2 | 64 |
| 26 | Emerging roles of Abl family tyrosine kinases in microbial pathogenesis. <i>Trends in Biochemical Sciences</i> , 2008, 33, 80-90. | 3.7 | 64 |
| 27 | <i>Helicobacter pylori</i> stimulates host vascular endothelial growth factor (VEGF) gene expression via MEK/ERK-dependent activation of Sp1 and Sp3. <i>FASEB Journal</i> , 2004, 18, 218-220. | 0.2 | 63 |
| 28 | Context-Based Identification of Protein-Protein Interfaces and ‘Hot-Spot’ Residues. <i>Chemistry and Biology</i> , 2011, 18, 344-353. | 6.2 | 63 |
| 29 | Expression of estrogen receptor alpha increases leptin-induced STAT3 activity in breast cancer cells. <i>International Journal of Cancer</i> , 2010, 127, 55-66. | 2.3 | 54 |
| 30 | Inhibitors of <i>Helicobacter pylori</i> Protease HtrA Found by ‘Virtual Ligand’ Screening Combat Bacterial Invasion of Epithelia. <i>PLoS ONE</i> , 2011, 6, e17986. | 1.1 | 52 |
| 31 | The anti-inflammatory compound curcumin inhibits <i>Neisseria gonorrhoeae</i> -induced NF- κ B signaling, release of pro-inflammatory cytokines/chemokines and attenuates adhesion in late infection. <i>Biological Chemistry</i> , 2005, 386, 481-490. | 1.2 | 47 |
| 32 | Nanoparticle binding attenuates the pathobiology of gastric cancer-associated <i>Helicobacter pylori</i> . <i>Nanoscale</i> , 2018, 10, 1453-1463. | 2.8 | 45 |
| 33 | Nanomaterial ‘microbe cross-talk: physicochemical principles and (patho)biological consequences. <i>Chemical Society Reviews</i> , 2018, 47, 5312-5337. | 18.7 | 44 |
| 34 | B-Raf/Rap1 signaling, but not c-Raf/Ras, induces the histidine decarboxylase promoter in <i>Helicobacter pylori</i> infection. <i>FASEB Journal</i> , 2002, 16, 417-419. | 0.2 | 41 |
| 35 | Targeting focal adhesions: <i>Helicobacter pylori</i> -host communication in cell migration. <i>Cell Communication and Signaling</i> , 2008, 6, 2. | 2.7 | 39 |
| 36 | Hybrid Network Model for ‘Deep Learning’ of Chemical Data: Application to Antimicrobial Peptides. <i>Molecular Informatics</i> , 2017, 36, 1600011. | 1.4 | 39 |

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|----|--|-----|-----------|
| 37 | Bacterial serine protease HtrA as a promising new target for antimicrobial therapy?. Cell Communication and Signaling, 2017, 15, 4. | 2.7 | 39 |
| 38 | Identification of estrogen receptor ligands leading to activation of non-genomic signaling pathways while exhibiting only weak transcriptional activity. Journal of Steroid Biochemistry and Molecular Biology, 2006, 98, 25-35. | 1.2 | 37 |
| 39 | Fragment-Based De Novo Design Reveals a Small Molecule Inhibitor of <i>Helicobacter Pylori</i> HtrA. Angewandte Chemie - International Edition, 2015, 54, 10244-10248. | 7.2 | 37 |
| 40 | Nanosized food additives impact beneficial and pathogenic bacteria in the human gut: a simulated gastrointestinal study. Npj Science of Food, 2018, 2, 22. | 2.5 | 37 |
| 41 | <i>Helicobacter pylori</i> -Derived Outer Membrane Vesicles (OMVs): Role in Bacterial Pathogenesis?. Microorganisms, 2020, 8, 1328. | 1.6 | 36 |
| 42 | HtrA-mediated E-cadherin cleavage is limited to DegP and DegQ homologs expressed by gram-negative pathogens. Cell Communication and Signaling, 2016, 14, 30. | 2.7 | 35 |
| 43 | Analysis of the type IV secretion system-dependent cell motility of <i>Helicobacter pylori</i> -infected epithelial cells. Biochemical and Biophysical Research Communications, 2004, 322, 860-866. | 1.0 | 34 |
| 44 | Complex Cellular Responses of <i>Helicobacter pylori</i> -Colonized Gastric Adenocarcinoma Cells. Infection and Immunity, 2011, 79, 2362-2371. | 1.0 | 34 |
| 45 | Extracellular secretion of protease HtrA from <i>Campylobacter jejuni</i> is highly efficient and independent of its protease activity and flagellum. European Journal of Microbiology and Immunology, 2013, 3, 163-173. | 1.5 | 32 |
| 46 | Exploiting the Gastric Epithelial Barrier: <i>Helicobacter pylori</i> 's Attack on Tight and Adherens Junctions. Current Topics in Microbiology and Immunology, 2017, 400, 195-226. | 0.7 | 32 |
| 47 | CagA Phosphorylation in <i>Helicobacter pylori</i> -Infected B Cells Is Mediated by the Nonreceptor Tyrosine Kinases of the Src and Abl Families. Infection and Immunity, 2016, 84, 2671-2680. | 1.0 | 30 |
| 48 | Inhibiting <i>Helicobacter pylori</i> HtrA protease by addressing a computationally predicted allosteric ligand binding site. Chemical Science, 2014, 5, 3583. | 3.7 | 29 |
| 49 | Calcium binding protects E-cadherin from cleavage by <i>Helicobacter pylori</i> HtrA. Gut Pathogens, 2016, 8, 29. | 1.6 | 29 |
| 50 | The stability and activity of recombinant <i>Helicobacter pylori</i> HtrA under stress conditions. Journal of Basic Microbiology, 2013, 53, 402-409. | 1.8 | 28 |
| 51 | Proteolysis in <i>Helicobacter pylori</i> -Induced Gastric Cancer. Toxins, 2017, 9, 134. | 1.5 | 27 |
| 52 | TLR2, TLR4 and TLR10 Shape the Cytokine and Chemokine Release of <i>H. pylori</i> -Infected Human DCs. International Journal of Molecular Sciences, 2020, 21, 3897. | 1.8 | 25 |
| 53 | Rational Design of Membrane-Pore-Forming Peptides. Small, 2017, 13, 1701316. | 5.2 | 24 |
| 54 | Activity and Functional Importance of <i>Helicobacter pylori</i> Virulence Factors. Advances in Experimental Medicine and Biology, 2019, 1149, 35-56. | 0.8 | 23 |

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|----|---|-----|-----------|
| 55 | Regulation of the actin cytoskeleton in <i>Helicobacter pylori</i> -induced migration and invasive growth of gastric epithelial cells. <i>Cell Communication and Signaling</i> , 2011, 9, 27. | 2.7 | 22 |
| 56 | Abl Family of Tyrosine Kinases and Microbial Pathogenesis. <i>International Review of Cell and Molecular Biology</i> , 2011, 286, 271-300. | 1.6 | 22 |
| 57 | <i>Helicobacter pylori</i> activates protein kinase C delta to control Raf in MAP kinase signalling: Role in AGS epithelial cell scattering and elongation. <i>Cytoskeleton</i> , 2009, 66, 874-892. | 4.4 | 20 |
| 58 | Oxidative Phosphorylation System in Gastric Carcinomas and Gastritis. <i>Oxidative Medicine and Cellular Longevity</i> , 2017, 2017, 1-14. | 1.9 | 20 |
| 59 | <i>Carnobacterium divergens</i> - a dominating bacterium of pork meat juice. <i>FEMS Microbiology Letters</i> , 2012, 332, 122-130. | 0.7 | 19 |
| 60 | A novel FRET peptide assay reveals efficient <i>Helicobacter pylori</i> HtrA inhibition through zinc and copper binding. <i>Scientific Reports</i> , 2020, 10, 10563. | 1.6 | 19 |
| 61 | Multi-Approach Analysis for the Identification of Proteases within Birch Pollen. <i>International Journal of Molecular Sciences</i> , 2017, 18, 1433. | 1.8 | 18 |
| 62 | Cloning, Purification and Characterization of the Collagenase ColA Expressed by <i>Bacillus cereus</i> ATCC 14579. <i>PLoS ONE</i> , 2016, 11, e0162433. | 1.1 | 17 |
| 63 | <i>Helicobacter pylori</i> -controlled c-Abl localization promotes cell migration and limits apoptosis. <i>Cell Communication and Signaling</i> , 2019, 17, 10. | 2.7 | 17 |
| 64 | Sparse Neural Network Models of Antimicrobial Peptide-Activity Relationships. <i>Molecular Informatics</i> , 2016, 35, 606-614. | 1.4 | 15 |
| 65 | Autoregulation of human relaxin-2 gene expression critically involves relaxin and glucocorticoid receptor binding to glucocorticoid response half-sites in the relaxin-2 promoter. <i>Regulatory Peptides</i> , 2009, 155, 163-173. | 1.9 | 14 |
| 66 | <i>H. pylori</i> modulates DC functions via T4SS/TNF α /p38-dependent SOCS3 expression. <i>Cell Communication and Signaling</i> , 2020, 18, 160. | 2.7 | 14 |
| 67 | Tyrosine Kinases in <i>Helicobacter pylori</i> Infections and Gastric Cancer. <i>Toxins</i> , 2019, 11, 591. | 1.5 | 13 |
| 68 | Differential phosphoproteome profiling reveals a functional role for VASP in <i>Helicobacter pylori</i> -induced cytoskeleton turnover in gastric epithelial cells. <i>Cellular Microbiology</i> , 2008, 10, 2285-2296. | 1.1 | 12 |
| 69 | From Virtual Screening to Bioactive Compounds by Visualizing and Clustering of Chemical Space. <i>Molecular Informatics</i> , 2012, 31, 21-26. | 1.4 | 12 |
| 70 | Peptide-Membrane Interaction between Targeting and Lysis. <i>ACS Chemical Biology</i> , 2017, 12, 2254-2259. | 1.6 | 12 |
| 71 | A novel basolateral type IV secretion model for the CagA oncoprotein of <i>Helicobacter pylori</i> . <i>Microbial Cell</i> , 2018, 5, 60-62. | 1.4 | 12 |
| 72 | Peptidase PepP is a novel virulence factor of <i>Campylobacter jejuni</i> contributing to murine campylobacteriosis. <i>Gut Microbes</i> , 2020, 12, 1770017. | 4.3 | 9 |

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|----|--|-----|-----------|
| 73 | Identification of Desmoglein-2 as a novel target of <i>Helicobacter pylori</i> HtrA in epithelial cells. <i>Cell Communication and Signaling</i> , 2021, 19, 108. | 2.7 | 9 |
| 74 | Piloting the Membranolytic Activities of Peptides with a Self-Organizing Map. <i>ChemBioChem</i> , 2014, 15, 2225-2231. | 1.3 | 8 |
| 75 | The sound of tumor cell-microenvironment communication “composed by the Cancer Cluster Salzburg research network. <i>Cell Communication and Signaling</i> , 2017, 15, 20. | 2.7 | 8 |
| 76 | The proteolytic activity of <i>Listeria monocytogenes</i> HtrA. <i>BMC Microbiology</i> , 2019, 19, 255. | 1.3 | 8 |
| 77 | Quantitative phosphoproteomic analysis of prion-infected neuronal cells. <i>Cell Communication and Signaling</i> , 2010, 8, 28. | 2.7 | 7 |
| 78 | Peroxiredoxin 6 promotes upregulation of the prion protein (PrP) in neuronal cells of prion-infected mice. <i>Cell Communication and Signaling</i> , 2012, 10, 38. | 2.7 | 7 |
| 79 | Differential gene expression in ER \pm -positive and ER \pm -negative breast cancer cells upon leptin stimulation. <i>Endocrine</i> , 2013, 44, 496-503. | 1.1 | 7 |
| 80 | Proteolytic Activities Expressed by Gastrointestinal Pathogens <i>Bacillus cereus</i> , <i>Listeria monocytogenes</i> and <i>Enterococcus faecium</i> in Different Growth Phases. <i>British Microbiology Research Journal</i> , 2015, 7, 62-70. | 0.2 | 7 |
| 81 | Special Issue “ <i>H. pylori</i> Virulence Factors in the Induction of Gastric Cancer”. <i>Toxins</i> , 2018, 10, 176. | 1.5 | 6 |
| 82 | Dissecting the <i>Helicobacter pylori</i> -regulated transcriptome of B cells. <i>Pathogens and Disease</i> , 2020, 78, . | 0.8 | 6 |
| 83 | Proteolytic Landscapes in Gastric Pathology and Cancerogenesis. <i>International Journal of Molecular Sciences</i> , 2022, 23, 2419. | 1.8 | 5 |
| 84 | Morphing of Amphipathic Helices to Explore the Activity and Selectivity of Membranolytic Antimicrobial Peptides. <i>Biochemistry</i> , 2020, 59, 3772-3781. | 1.2 | 4 |
| 85 | Inhibition of Collagenase Q1 of <i>Bacillus cereus</i> as a Novel Antivirulence Strategy for the Treatment of Skin Wound Infections. <i>Advanced Therapeutics</i> , 2022, 5, 2100222. | 1.6 | 4 |
| 86 | OUP accepted manuscript. <i>FEMS Microbiology Letters</i> , 2021, 368, . | 0.7 | 3 |
| 87 | Emerging Novel Virulence Factors of <i>Helicobacter pylori</i> . , 2016, , 165-188. | | 2 |
| 88 | Many ways of communication: from <i>Helicobacter pylori</i> adherence to death, disruption, migration and escape. <i>Cell Communication and Signaling</i> , 2011, 9, 24. | 2.7 | 1 |
| 89 | <i>Helicobacter pylori</i> CagA EPIYA Motif Variations Affect Metabolic Activity in B Cells. <i>Toxins</i> , 2021, 13, 592. | 1.5 | 1 |
| 90 | E-Cadherin Orthologues as Substrates for the Serine Protease High Temperature Requirement A (HtrA). <i>Biomolecules</i> , 2022, 12, 356. | 1.8 | 1 |

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|----|---|-----|-----------|
| 91 | Peptide lineup against Gram-negative bacterial infection – first-in-class peptide inhibitor of H. pylori HtrA. Journal of Cheminformatics, 2014, 6, . | 2.8 | 0 |