Jayanta Haldar

List of Publications by Year
in descending order

89 papers	4,897 citations	81839 39 h-index	98753 67 g-index
93 all docs	93 docs citations	93 times ranked	5473 citing authors

#	Article	IF	Citations
1	Alternatives to Conventional Antibiotics in the Era of Antimicrobial Resistance. Trends in Microbiology, 2019, 27, 323-338.	3.5	438
2	Polymeric coatings that inactivate both influenza virus and pathogenic bacteria. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 17667-17671.	3.3	263
3	Recent Progress in Polymer Research to Tackle Infections and Antimicrobial Resistance. Biomacromolecules, 2018, 19, 1888-1917.	2.6	211
4	Small Molecular Antibacterial Peptoid Mimics: The Simpler the Better!. Journal of Medicinal Chemistry, 2014, 57, 1428-1436.	2.9	170
5	Cleavable Cationic Antibacterial Amphiphiles: Synthesis, Mechanism of Action, and Cytotoxicities. Langmuir, 2012, 28, 12225-12234.	1.6	152
6	Membrane Active Vancomycin Analogues: A Strategy to Combat Bacterial Resistance. Journal of Medicinal Chemistry, 2014, 57, 4558-4568.	2.9	141
7	Biocompatible Injectable Hydrogel with Potent Wound Healing and Antibacterial Properties. Molecular Pharmaceutics, 2017, 14, 1218-1230.	2.3	136
8	Broad Spectrum Antibacterial and Antifungal Polymeric Paint Materials: Synthesis, Structureâ€“Activity Relationship, and Membrane-Active Mode of Action. ACS Applied Materials & Interfaces, 2015, 7, 1804-1815.	4.0	134
9	Membraneâ€Active Small Molecules: Designs Inspired by Antimicrobial Peptides. ChemMedChem, 2015, 10, 1606-1624.	1.6	128
10	A review on cell wall synthesis inhibitors with an emphasis on glycopeptide antibiotics. MedChemComm, 2017, 8, 516-533.	3.5	118
11	Dual Function Injectable Hydrogel for Controlled Release of Antibiotic and Local Antibacterial Therapy. Biomacromolecules, 2018, 19, 267-278.	2.6	110
12	Membrane Active Phenylalanine Conjugated Lipophilic Norspermidine Derivatives with Selective Antibacterial Activity. Journal of Medicinal Chemistry, 2014, 57, 9409-9423.	2.9	109
13	Preparation, application and testing of permanent antibacterial and antiviral coatings. Nature Protocols, 2007, 2, 2412-2417.	5.5	108
14	Polymers with tunable side-chain amphiphilicity as non-hemolytic antibacterial agents. Chemical Communications, 2013, 49, 9389.	2.2	108
15	Antibacterial and Antibiofilm Activity of Cationic Small Molecules with Spatial Positioning of Hydrophobicity: An in Vitro and in Vivo Evaluation. Journal of Medicinal Chemistry, 2016, 59, 10750-10762.	2.9	92
16	A Vancomycin Derivative with a Pyrophosphateâ€Binding Group: A Strategy to Combat Vancomycinâ€Resistant Bacteria. Angewandte Chemie - International Edition, 2016, 55, 7836-7840.	7.2	84
17	Membrane Active Small Molecules Show Selective Broad Spectrum Antibacterial Activity with No Detectable Resistance and Eradicate Biofilms. Journal of Medicinal Chemistry, 2015, 58, 5486-5500.	2.9	81
18	Battle against Vancomycin-Resistant Bacteria: Recent Developments in Chemical Strategies. Journal of Medicinal Chemistry, 2019, 62, 3184-3205.	2.9	79

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19	Molecular Modulation of Surfactant Aggregation in Water: Effect of the Incorporation of Multiple Headgroups on Micellar Properties. Angewandte Chemie - International Edition, 2001, 40, 1228-1232.	7.2	76
20	Amide side chain amphiphilic polymers disrupt surface established bacterial bio-films and protect mice from chronic Acinetobacter baumannii infection. Biomaterials, 2016, 74, 131-143.	5.7	76
21	Direct Synthesis of Dextran-Based Antibacterial Hydrogels for Extended Release of Biocides and Eradication of Topical Biofilms. ACS Applied Materials & Interfaces, 2017, 9, 15975-15985.	4.0	74
22	Chitosan Derivatives Active against Multidrug-Resistant Bacteria and Pathogenic Fungi: <i>In Vivo</i> Evaluation as Topical Antimicrobials. Molecular Pharmaceutics, 2016, 13, 3578-3589.	2.3	71
23	Glycopeptide Antibiotic To Overcome the Intrinsic Resistance of Gram-Negative Bacteria. ACS Infectious Diseases, 2016, 2, 132-139.	1.8	70
24	Lysine-Based Small Molecules That Disrupt Biofilms and Kill both Actively Growing Planktonic and Nondividing Stationary Phase Bacteria. ACS Infectious Diseases, 2015, 1, 469-478.	1.8	69
25	Side Chain Degradable Cationicâ€“Amphiphilic Polymers with Tunable Hydrophobicity Show <i>in Vivo</i> Activity. Biomacromolecules, 2016, 17, 3094-3102.	2.6	69
26	Selective and broad spectrum amphiphilic small molecules to combat bacterial resistance and eradicate biofilms. Chemical Communications, 2015, 51, 13670-13673.	2.2	64
27	Membrane Disruption and Enhanced Inhibition of Cellâ€Wall Biosynthesis: A Synergistic Approach to Tackle Vancomycinâ€Resistant Bacteria. Angewandte Chemie - International Edition, 2015, 54, 13644-13649.	7.2	63
28	Isosteric substitution in cationic-amphiphilic polymers reveals an important role for hydrogen bonding in bacterial membrane interactions. Chemical Science, 2016, 7, 4613-4623.	3.7	57
29	Amino Acid Conjugated Polymers: Antibacterial Agents Effective against Drug-Resistant <i>Acinetobacter baumannii</i> with No Detectable Resistance. ACS Applied Materials & Interfaces, 2019, 11, 33559-33572.	4.0	56
30	A Biodegradable Polycationic Paint that Kills Bacteria <i>in Vitro</i> and <i>in Vivo</i>. ACS Applied Materials & Interfaces, 2016, 8, 29298-29309.	4.0	55
31	Tackling vancomycin-resistant bacteria with â€˜lipophilicâ€“vancomycinâ€“carbohydrate conjugatesâ€™. Journal of Antibiotics, 2015, 68, 302-312.	1.0	54
32	Charge-Switchable Polymeric Coating Kills Bacteria and Prevents Biofilm Formation in Vivo. ACS Applied Materials & Interfaces, 2019, 11, 39150-39162.	4.0	52
33	Hydrophobic polycationic coatings inactivate wild-type and zanamivir- and/or oseltamivir-resistant human and avian influenza viruses. Biotechnology Letters, 2008, 30, 475-479.	1.1	50
34	Lipopolysaccharide Neutralization by Cationic-Amphiphilic Polymers through Pseudoaggregate Formation. Biomacromolecules, 2016, 17, 862-873.	2.6	50
35	Fatty Acid Comprising Lysine Conjugates: Anti-MRSA Agents That Display In Vivo Efficacy by Disrupting Biofilms with No Resistance Development. Bioconjugate Chemistry, 2017, 28, 1194-1204.	1.8	50
36	Aggregation Properties of Amide Bearing Cleavable Gemini Surfactants by Small Angle Neutron Scattering and Conductivity Studies. Journal of Physical Chemistry B, 2012, 116, 9718-9726.	1.2	46

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37	Effect of amide bonds on the self-assembly of gemini surfactants. Physical Chemistry Chemical Physics, 2014, 16, 11279-11288.	1.3	46
38	Hydrophobic polycationic coatings disinfect poliovirus and rotavirus solutions. Biotechnology and Bioengineering, 2011, 108, 720-723.	1.7	44
39	One-Step Curable, Covalently Immobilized Coating for Clinically Relevant Surfaces That Can Kill Bacteria, Fungi, and Influenza Virus. ACS Applied Materials & Interfaces, 2020, 12, 27853-27865.	4.0	44
40	Aggregation Properties of Novel Cationic Surfactants with Multiple Pyridinium Headgroups. Small-Angle Neutron Scattering and Conductivity Studies. Journal of Physical Chemistry B, 2004, 108, 11406-11411.	1.2	39
41	Structureâ€"Activity Relationship of Amino Acid Tunable Lipidated Norspermidine Conjugates: Disrupting Biofilms with Potent Activity against Bacterial Persisters. Bioconjugate Chemistry, 2015, 26, 2442-2453.	1.8	38
42	Aryl-Alkyl-Lysines: Agents That Kill Planktonic Cells, Persister Cells, Biofilms of MRSA and Protect Mice from Skin-Infection. PLoS ONE, 2015, 10, e0144094.	1.1	37
43	Antiviral Screening of Multiple Compounds against Ebola Virus. Viruses, 2016, 8, 277.	1.5	37
44	Vancomycin Analogue Restores Meropenem Activity against NDM-1 Gram-Negative Pathogens. ACS Infectious Diseases, 2018, 4, 1093-1101.	1.8	36
45	Membrane-Active Macromolecules Resensitize NDM-1 Gram-Negative Clinical Isolates to Tetracycline Antibiotics. PLoS ONE, 2015, 10, e0119422.	1.1	33
46	Lipophilic vancomycin aglycon dimer with high activity against vancomycin-resistant bacteria. Bioorganic and Medicinal Chemistry Letters, 2015, 25, 5477-5480.	1.0	32
47	Membrane-active macromolecules kill antibiotic-tolerant bacteria and potentiate antibiotics towards Gram-negative bacteria. PLoS ONE, 2017, 12, e0183263.	1.1	32
48	Bifunctional Polymeric Inhibitors of Human Influenza A Viruses. Pharmaceutical Research, 2010, 27, 259-263.	1.7	31
49	Surviving sepsis in the era of antibiotic resistance: Are there any alternative approaches to antibiotic therapy?. Microbial Pathogenesis, 2015, 80, 7-13.	1.3	31
50	Lysine-Based Small Molecule Sensitizes Rifampicin and Tetracycline against Multidrug-Resistant <i>Acinetobacter baumannii</i> and <i>Pseudomonas aeruginosa</i>. ACS Infectious Diseases, 2020, 6, 91-99.	1.8	30
51	Aryl-alkyl-lysines: Membrane-Active Small Molecules Active against Murine Model of Burn Infection. ACS Infectious Diseases, 2016, 2, 111-122.	1.8	28
52	<scp>l</scp>-Lysine based lipidated biphenyls as agents with anti-biofilm and anti-inflammatory properties that also inhibit intracellular bacteria. Chemical Communications, 2017, 53, 8427-8430.	2.2	27
53	Selectively targeting bacteria by tuning the molecular design of membrane-active peptidomimetic amphiphiles. Chemical Communications, 2018, 54, 4943-4946.	2.2	27
54	Advancements in releaseâ€active antimicrobial biomaterials: A journey from release to relief. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2022, 14, e1745.	3.3	27

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55	Dual-Function Polymerâ€“Silver Nanocomposites for Rapid Killing of Microbes and Inhibiting Biofilms. ACS Biomaterials Science and Engineering, 2019, 5, 81-91.	2.6	26
56	Polymeric Biomaterials for Prevention and Therapeutic Intervention of Microbial Infections. Biomacromolecules, 2022, 23, 592-608.	2.6	26
57	Aryl-alkyl-lysines: Membrane-Active Fungicides That Act against Biofilms of <i>Candida albicans</i>. ACS Infectious Diseases, 2017, 3, 293-301.	1.8	25
58	Expedient Synthesis of Indolo[2,3-b]quinolines, Chromeno[2,3-b]indoles, and 3-Alkenyl-oxindoles from 3,3â€²-Diindolylmethanes and Evaluation of Their Antibiotic Activity against Methicillin-Resistant Staphylococcus aureus. ACS Omega, 2017, 2, 5187-5195.	1.6	25
59	In vivo efficacy and pharmacological properties of a novel glycopeptide (YV4465) against vancomycin-intermediate Staphylococcus aureus. International Journal of Antimicrobial Agents, 2015, 46, 446-450.	1.1	24
60	Vancomycin Derivative Inactivates Carbapenem-Resistant <i>Acinetobacter baumannii</i> and Induces Autophagy. ACS Chemical Biology, 2020, 15, 884-889.	1.6	24
61	In vivo antibacterial activity and pharmacological properties of the membrane-active glycopeptide antibiotic YV11455. International Journal of Antimicrobial Agents, 2015, 45, 627-634.	1.1	23
62	Small antibacterial molecules highly active against drug-resistant <i>Staphylococcus aureus</i>. MedChemComm, 2019, 10, 1907-1915.	3.5	23
63	Amphiphilic Cationic Macromolecules Highly Effective Against Multi-Drug Resistant Gram-Positive Bacteria and Fungi With No Detectable Resistance. Frontiers in Bioengineering and Biotechnology, 2020, 8, 55.	2.0	23
64	Emerging Roles of Glycopeptide Antibiotics: Moving beyond Gram-Positive Bacteria. ACS Infectious Diseases, 2022, 8, 1-28.	1.8	21
65	Designing Simple Lipidated Lysines: Bifurcation Imparts Selective Antibacterial Activity. ChemMedChem, 2016, 11, 2367-2371.	1.6	19
66	Design and Solutionâ€Phase Synthesis of Membraneâ€Targeting Lipopeptides with Selective Antibacterial Activity. Chemistry - A European Journal, 2017, 23, 12853-12860.	1.7	19
67	Intracellular activity of a membrane-active glycopeptide antibiotic against meticillin-resistant Staphylococcus aureus infection. Journal of Global Antimicrobial Resistance, 2016, 5, 71-74.	0.9	18
68	Hydrophobicity-Modulated Small Antibacterial Molecule Eradicates Biofilm with Potent Efficacy against Skin Infections. ACS Infectious Diseases, 2020, 6, 703-714.	1.8	18
69	Amino-Acid-Conjugated Polymer-Rifampicin Combination: Effective at Tackling Drug-Resistant Gram-Negative Clinical Isolates. ACS Applied Bio Materials, 2019, 2, 5404-5414.	2.3	17
70	Pursuit of next-generation glycopeptides: a journey with vancomycin. Chemical Communications, 2022, 58, 1881-1897.	2.2	14
71	A Vancomycin Derivative with a Pyrophosphateâ€Binding Group: A Strategy to Combat Vancomycinâ€Resistant Bacteria. Angewandte Chemie, 2016, 128, 7967-7971.	1.6	12
72	Aryl-Alkyl-Lysines Interact with Anionic Lipid Components of Bacterial Cell Envelope Eliciting Anti-Inflammatory and Antibiofilm Properties. ACS Omega, 2018, 3, 9182-9190.	1.6	12

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73	Cationic polymerâ€"based antibacterial smart coatings. , 2020, , 557-582.		12
74	Quaternary Lipophilic Chitosan and Gelatin Cross-Linked Antibacterial Hydrogel Effectively Kills Multidrug-Resistant Bacteria with Minimal Toxicity toward Mammalian Cells. Biomacromolecules, 2021, 22, 557-571.	2.6	12
75	Alkyl-Aryl-Vancomycins: Multimodal Glycopeptides with Weak Dependence on the Bacterial Metabolic State. Journal of Medicinal Chemistry, 2021, 64, 10185-10202.	2.9	12
76	Macromolecular Nanotherapeutics and Antibiotic Adjuvants to Tackle Bacterial and Fungal Infections. Macromolecular Bioscience, 2021, 21, e2100182.	2.1	11
77	Cyclam-based antibacterial molecules eradicate Gram-negative superbugs with potent efficacy against human corneal infection. Chemical Communications, 2020, 56, 2147-2150.	2.2	10
78	An easy-to-use antimicrobial hydrogel effectively kills bacteria, fungi, and influenza virus. Biomaterials Science, 2022, 10, 2014-2028.	2.6	10
79	Small-Molecular Adjuvants with Weak Membrane Perturbation Potentiate Antibiotics against Gram-Negative Superbugs. ACS Infectious Diseases, 2022, 8, 1086-1097.	1.8	10
80	Photoâ€Crosslinked Antimicrobial Hydrogel Exhibiting Wound Healing Ability and Curing Infections In Vivo. Advanced Healthcare Materials, 2022, 11, .	3.9	10
81	Correction: Selective and broad spectrum amphiphilic small molecules to combat bacterial resistance and eradicate biofilms. Chemical Communications, 2016, 52, 10582-10582.	2.2	8
82	Polymeric paint coated common-touch surfaces that can kill bacteria, fungi and influenza virus. MRS Communications, 2021, 11, 1-9.	0.8	7
83	Multiâ€Functional Small Molecules with Temporal Chargeâ€Switchability Tackle Infection and Inflammation. Advanced Therapeutics, 0, , 2100234.	1.6	7
84	Aryl-alkyl-lysines: small molecular membrane-active antiplasmodial agents. MedChemComm, 2017, 8, 434-439.	3.5	6
85	Recent development of antibacterial agents to combat drug-resistant Gram-positive bacteria. , 2020, , 71-104.		6
86	Amphiphilic cationic macromolecule potentiates tetracycline against multi-drug resistant Gram-negative bacteria. Bulletin of Materials Science, 2020, 43, 1.	0.8	4
87	Aryl-alkyl-lysines: Novel agents for treatment of C. difficile infection. Scientific Reports, 2020, 10, 5624.	1.6	4
88	Biocompatible Hemostatic Sponge Exhibiting Broad-Spectrum Antibacterial Activity. ACS Biomaterials Science and Engineering, 2022, 8, 3596-3607.	2.6	4
89	Membrane Disruption and Enhanced Inhibition of Cell-Wall Biosynthesis: A Synergistic Approach to Tackle Vancomycin-Resistant Bacteria. , 2015, 54, 13644.		2