

# Charles V Rice

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7862804/publications.pdf>

Version: 2024-02-01

33

papers

670

citations

516681

16

h-index

580810

25

g-index

33

all docs

33

docs citations

33

times ranked

863

citing authors

#	ARTICLE	IF	CITATIONS
1	Revised model of calcium and magnesium binding to the bacterial cell wall. <i>BioMetals</i> , 2014, 27, 1361-1370.	4.1	89
2	Salt Effects on Poly( <i>&lt; i&gt;N&lt;/i&gt;-isopropylacrylamide</i> ) Phase Transition Thermodynamics from NMR Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2008, 112, 10399-10404.	2.6	68
3	The role of extracellular DNA in the formation, architecture, stability, and treatment of bacterial biofilms. <i>Biotechnology and Bioengineering</i> , 2021, 118, 2129-2141.	3.3	58
4	Phase-Transition Thermodynamics of N-Isopropylacrylamide Hydrogels. <i>Biomacromolecules</i> , 2006, 7, 2923-2925.	5.4	45
5	Efficacy of ampicillin against methicillin-resistant <i>Staphylococcus aureus</i> restored through synergy with branched poly(ethylenimine). <i>Journal of Antibiotics</i> , 2016, 69, 871-878.	2.0	39
6	Characterization of free, restricted, and entrapped water environments in poly( <i>&lt; sc&gt;i&gt;N&lt;/i&gt;&lt;/sc&gt;</i> -isopropyl acrylamide) hydrogels via <i>&lt; sup&gt;1&lt;/sup&gt;&lt; sc&gt;H</i> HRMAS PFG NMR <i>&lt; /sc&gt;</i> spectroscopy. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2014, 52, 1521-1527.	2.1	29
7	Targeting Wall Teichoic Acid <i>&lt; i&gt;in Situ&lt;/i&gt;</i> with Branched Polyethylenimine Potentiates $\beta$ -Lactam Efficacy against MRSA. <i>ACS Medicinal Chemistry Letters</i> , 2017, 8, 1083-1088.	2.8	28
8	Equilibrium binding behavior of magnesium to wall teichoic acid. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2015, 1848, 1981-1987.	2.6	27
9	Revisiting Magnesium Chelation by Teichoic Acid with Phosphorus Solid-State NMR and Theoretical Calculations. <i>Journal of Physical Chemistry B</i> , 2009, 113, 2177-2183.	2.6	26
10	Mapping the locations of estradiol and potent neuroprotective analogues in phospholipid bilayers by REDOR. <i>Drug Development Research</i> , 2005, 66, 93-102.	2.9	22
11	Cationic Branched Polyethylenimine (BPEI) Disables Antibiotic Resistance in Methicillin-Resistant <i>&lt; i&gt;Staphylococcus epidermidis&lt;/i&gt;</i> (MRSE). <i>ChemMedChem</i> , 2018, 13, 2240-2248.	3.2	20
12	Overcoming Multidrug Resistance and Biofilms of <i>&lt; i&gt;Pseudomonas aeruginosa&lt;/i&gt;</i> with a Single Dual-Function Potentiator of $\beta$ -Lactams. <i>ACS Infectious Diseases</i> , 2020, 6, 1085-1097.	3.8	18
13	Conformation of the Phosphate <i>&lt; sc&gt;d&lt;/sc&gt;</i> -Alanine Zwitterion in Bacterial Teichoic Acid from Nuclear Magnetic Resonance Spectroscopy. <i>Biochemistry</i> , 2009, 48, 9242-9249.	2.5	17
14	Anion effects on the phase transition of <i>&lt; i&gt;N&lt;/i&gt;-isopropylacrylamide</i> hydrogels. <i>Journal of Polymer Science Part A</i> , 2012, 50, 1374-1382.	2.3	17
15	BPEI-Induced Delocalization of PBP4 Potentiates $\beta$ -Lactams against MRSA. <i>Biochemistry</i> , 2019, 58, 3813-3822.	2.5	17
16	Antibiofilm Synergy of $\beta$ -Lactams and Branched Polyethylenimine against Methicillin-Resistant <i>&lt; i&gt;Staphylococcus epidermidis&lt;/i&gt;</i> . <i>Biomacromolecules</i> , 2019, 20, 3778-3785.	5.4	17
17	Low-Molecular-Weight Branched Polyethylenimine Potentiates Ampicillin against MRSA Biofilms. <i>ACS Medicinal Chemistry Letters</i> , 2020, 11, 473-478.	2.8	16
18	Quantum Dots in a Polymer Composite: A Convenient Particle-in-a-Box Laboratory Experiment. <i>Journal of Chemical Education</i> , 2008, 85, 842.	2.3	14

#	ARTICLE	IF	CITATIONS
19	Sterilization of hydrogen peroxide resistant bacterial spores with stabilized chlorine dioxide. <i>AMB Express</i> , 2015, 5, 24.	3.0	14
20	Solid-state NMR studies of bacterial lipoteichoic acid adsorption on different surfaces. <i>Solid State Nuclear Magnetic Resonance</i> , 2008, 34, 154-161.	2.3	12
21	Cation Effects on the Phase Transition of <i>&lt; i&gt;N&lt;/i&gt;-isopropylacrylamide</i> Hydrogels. <i>Macromolecular Chemistry and Physics</i> , 2015, 216, 1024-1032.	2.2	12
22	Heterogeneous Binding of Lipoteichoic Acid to the Surface of Titanium Dioxide as Determined with <sup>31</sup> P Solid-State NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2005, 127, 856-857.	13.7	11
23	Expanding the Spectrum of Antibiotics Capable of Killing Multidrug-Resistant <i>&lt; i&gt;Staphylococcus aureus&lt;/i&gt;</i> and <i>&lt; i&gt;Pseudomonas aeruginosa&lt;/i&gt;</i> . <i>ChemMedChem</i> , 2020, 15, 1421-1428.	3.2	11
24	PEGylation of Polyethylenimine Lowers Acute Toxicity while Retaining Anti-Biofilm and $\beta$ -Lactam Potentiation Properties against Antibiotic-Resistant Pathogens. <i>ACS Omega</i> , 2020, 5, 26262-26270.	3.5	10
25	Cadmium Chelation by Bacterial Teichoic Acid from Solid-State Nuclear Magnetic Resonance Spectroscopy. <i>Biomacromolecules</i> , 2010, 11, 333-340.	5.4	8
26	Sterilization Resistance of Bacterial Spores Explained with Water Chemistry. <i>Journal of Physical Chemistry B</i> , 2015, 119, 14033-14044.	2.6	7
27	Dual-Function Potentiation by PEG-BPEI Restores Activity of Carbapenems and Penicillins against Carbapenem-Resistant <i>&lt; i&gt;Enterobacteriaceae&lt;/i&gt;</i> . <i>ACS Infectious Diseases</i> , 2021, 7, 1657-1665.	3.8	6
28	Bacterial lipoteichoic acid enhances cryosurvival. <i>Extremophiles</i> , 2015, 19, 297-305.	2.3	5
29	Temperature-Dependent, High-Resolution Magic-Angle-Spinning (HRMAS) NMR Studies of Poly( <i>&lt; i&gt;N&lt;/i&gt;-isopropylacrylamide-&lt; i&gt;co&lt;/i&gt;-acrylic Acid</i> ). <i>Molecular Crystals and Liquid Crystals</i> , 2012, 555, 280-294.	0.9	3
30	Magnetic resonance tells microbiology where to go; bacterial teichoic acid protects liquid water at sub-zero temperatures. , 2008, , .		2
31	Dimerization of 600 Da branched polyethylenimine improves $\beta$ -lactam antibiotic potentiation against antibiotic-resistant <i>&lt; i&gt;Staphylococcus epidermidis&lt;/i&gt;</i> and <i>&lt; i&gt;Pseudomonas aeruginosa&lt;/i&gt;</i> . <i>Chemical Biology and Drug Design</i> , 2023, 101, 489-499.	3.2	2
32	RNA World meets Snowball Earth. <i>Proceedings of SPIE</i> , 2010, , .	0.8	0
33	Review of Paul Lauterbur and the Invention of MRI Paul Lauterbur and the Invention of MRI by M. Joan Dawson. The MIT Press: Cambridge, MA, 2013. 296 pp. ISBN: 978-0262019217 (hardcover). \$27.95.. <i>Journal of Chemical Education</i> , 2014, 91, 626-627.	2.3	0