Yu-Hong Cheng

List of Publications by Year
in descending order

79 papers	2,526 citations	201385 27 h-index	223531 46 g-index
100 all docs	100 docs citations	100 times ranked	3095 citing authors

#	Article	IF	Citations
1	Bismuth antimicrobial drugs serve as broad-spectrum metallo-Î²-lactamase inhibitors. Nature Communications, 2018, 9, 439.	5.8	169
2	Clofazimine broadly inhibits coronaviruses including SARS-CoV-2. Nature, 2021, 593, 418-423.	13.7	151
3	Metallodrug ranitidine bismuth citrate suppresses SARS-CoV-2 replication and relieves virus-associated pneumonia in Syrian hamsters. Nature Microbiology, 2020, 5, 1439-1448.	5.9	140
4	Medicinal chemistry and biomedical applications of bismuth-based compounds and nanoparticles. Chemical Society Reviews, 2021, 50, 12037-12069.	18.7	92
5	Interaction of antimony tartrate with the tripeptide glutathione. FEBS Journal, 2000, 267, 5450-5457.	0.2	86
6	Multi-target mode of action of silver against Staphylococcus aureus endows it with capability to combat antibiotic resistance. Nature Communications, 2021, 12, 3331.	5.8	80
7	Binding of bismuth to serum proteins: implication for targets of Bi(III) in blood plasma. Journal of Inorganic Biochemistry, 2003, 94, 114-120.	1.5	76
8	Systems Approaches for Unveiling the Mechanism of Action of Bismuth Drugs: New Medicinal Applications beyond Helicobacter Pylori Infection. Accounts of Chemical Research, 2019, 52, 216-227.	7.6	76
9	Identification and characterization of metallodrug binding proteins by (metallo)proteomics. Metallomics, 2009, 1, 25-31.	1.0	74
10	Controlled synthesis of high crystalline bismuth sulfide nanorods: using bismuth citrate as a precursor. Journal of Materials Chemistry, 2005, 15, 4540.	6.7	72
11	Facile Microwave Synthesis of 3D Flowerlike BiOBr Nanostructures and Their Excellent Cr^{VI} Removal Capacity. European Journal of Inorganic Chemistry, 2012, 2012, 2508-2513.	1.0	70
12	Resensitizing carbapenem- and colistin-resistant bacteria to antibiotics using auranofin. Nature Communications, 2020, 11, 5263.	5.8	70
13	Integrative approach for the analysis of the proteome-wide response to bismuth drugs in Helicobacter pylori. Chemical Science, 2017, 8, 4626-4633.	3.7	66
14	Deciphering molecular mechanism of silver by integrated omic approaches enables enhancing its antimicrobial efficacy in E. coli. PLoS Biology, 2019, 17, e3000292.	2.6	66
15	Synthetic Peptides outside the Spike Protein Heptad Repeat Regions as Potent Inhibitors of Sars-Associated Coronavirus. Antiviral Therapy, 2005, 10, 393-403.	0.6	63
16	Zinc excess increases cellular demand for iron and decreases tolerance to copper in Escherichia coli. Journal of Biological Chemistry, 2019, 294, 16978-16991.	1.6	58
17	UreE-UreG Complex Facilitates Nickel Transfer and Preactivates GTPase of UreG in Helicobacter pylori. Journal of Biological Chemistry, 2015, 290, 12474-12485.	1.6	56
18	Combination of gallium(<scp>iii</scp>) with acetate for combating antibiotic resistant Pseudomonas aeruginosa. Chemical Science, 2019, 10, 6099-6106.	3.7	52

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19	Predicting disease-associated mutation of metal-binding sites in proteins using a deep learning approach. Nature Machine Intelligence, 2019, 1, 561-567.	8.3	48
20	Metalloproteomics in conjunction with other omics for uncovering the mechanism of action of metallodrugs: Mechanism-driven new therapy development. Current Opinion in Chemical Biology, 2020, 55, 171-179.	2.8	43
21	Antimicrobial silver targets glyceraldehyde-3-phosphate dehydrogenase in glycolysis of E. coli. Chemical Science, 2019, 10, 7193-7199.	3.7	42
22	Enhancement of Image Contrast, Stability, and SALDI-MS Detection Sensitivity for Latent Fingerprint Analysis by Tuning the Composition of Silverâ€“Gold Nanoalloys. ACS Applied Materials & Interfaces, 2016, 8, 29668-29675.	4.0	40
23	Cytotoxicity of arsenic trioxide in single leukemia cells by time-resolved ICP-MS together with lanthanide tags. Chemical Communications, 2017, 53, 2970-2973.	2.2	37
24	Metallomics: An integrated science for metals in biology and medicine. Annual Reports on the Progress of Chemistry Section A, 2010, 106, 20.	0.8	34
25	Metallochaperone UreG serves as a new target for design of urease inhibitor: A novel strategy for development of antimicrobials. PLoS Biology, 2018, 16, e2003887.	2.6	34
26	Metalloproteomics for Unveiling the Mechanism of Action of Metallodrugs. Inorganic Chemistry, 2019, 58, 13673-13685.	1.9	32
27	Bio-coordination of bismuth in Helicobacter pylori revealed by immobilized metal affinity chromatography. Chemical Communications, 2015, 51, 16479-16482.	2.2	31
28	Hyperthermia Selectively Destabilizes Oncogenic Fusion Proteins. Blood Cancer Discovery, 2021, 2, 388-401.	2.6	26
29	Cell Cycle-Dependent Uptake and Cytotoxicity of Arsenic-Based Drugs in Single Leukemia Cells. Analytical Chemistry, 2018, 90, 10465-10471.	3.2	25
30	Bismuth drugs tackle Porphyromonas gingivalis and attune cytokine response in human cells. Metallomics, 2019, 11, 1207-1218.	1.0	22
31	Arsenic trioxide targets Hsp60, triggering degradation of p53 and survivin. Chemical Science, 2021, 12, 10893-10900.	3.7	22
32	Integration of fluorescence imaging with proteomics enables visualization and identification of metallo-proteomes in living cells. Metallomics, 2017, 9, 38-47.	1.0	21
33	Plasmonic metal nanoparticles as efficient mass tags for ion signal amplification and ultrasensitive detection of protein markers. Analytica Chimica Acta, 2019, 1055, 1-6.	2.6	21
34	Bismuth in medicine. Metal Ions in Biological Systems, 2004, 41, 333-78.	0.4	21
35	Folic acid conjugated mPEG-PEI600 as an efficient non-viral vector for targeted nucleic acid delivery. International Journal of Pharmaceutics, 2012, 426, 182-192.	2.6	20
36	Bismuthâ€”The Magic Element. Inorganic Chemistry, 2020, 59, 3341-3343.	1.9	20

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37	Orally administered bismuth drug together with N-acetyl cysteine as a broad-spectrum anti-coronavirus cocktail therapy. Chemical Science, 2022, 13, 2238-2248.	3.7	19
38	Metallomics: An integrated biometal science. Science in China Series B: Chemistry, 2009, 52, 2055-2070.	0.8	18
39	Structural Insight into the Substrate Gating Mechanism by Staphylococcus aureus Aldehyde Dehydrogenase. CCS Chemistry, 2020, 2, 946-954.	4.6	18
40	Activation of carboplatin and nedaplatin by the N-terminus of human copper transporter 1 (hCTR1). Chemical Science, 2012, 3, 3206.	3.7	17
41	Functional disruption of peroxiredoxin by bismuth antiulcer drugs attenuates Helicobacter pylori survival. Journal of Biological Inorganic Chemistry, 2017, 22, 673-683.	1.1	17
42	Plasmonic gold nanoparticles as multifaceted probe for tissue imaging. Chemical Communications, 2019, 55, 2761-2764.	2.2	17
43	S-Dimethylarsino-glutathione (darinaparsinÂ®) targets histone H3.3, leading to TRAIL-induced apoptosis in leukemia cells. Chemical Communications, 2019, 55, 13120-13123.	2.2	17
44	Metallomics in environmental and health related research: Current status and perspectives. Science Bulletin, 2013, 58, 169-176.	1.7	16
45	The unique trimeric assembly of the virulence factor HtrA from Helicobacter pylori occurs via N-terminal domain swapping. Journal of Biological Chemistry, 2019, 294, 7990-8000.	1.6	16
46	Metalloproteomics for Biomedical Research: Methodology and Applications. Annual Review of Biochemistry, 2022, 91, 449-473.	5.0	16
47	Re-sensitization of mcr carrying multidrug resistant bacteria to colistin by silver. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2119417119.	3.3	15
48	Silverâ€“gold alloy nanoparticles as tunable substrates for systematic control of ion-desorption efficiency and heat transfer in surface-assisted laser desorption/ionization. Physical Chemistry Chemical Physics, 2017, 19, 20795-20807.	1.3	14
49	The Hidden Heroes: Holes in Charge-Driven Desorption Mass Spectrometry. Analytical Chemistry, 2020, 92, 5645-5649.	3.2	14
50	Metal-based strategies for the fight against COVID-19. Chemical Communications, 2022, 58, 7466-7482.	2.2	14
51	Metalloproteomic Approaches for Matching Metals to Proteins: The Power of Inductively Coupled Plasma Mass Spectrometry (ICP-MS). Chemistry Letters, 2020, 49, 697-704.	0.7	13
52	A Novel Synthetic Compound, Bismuth Zinc Citrate, Could Potentially Reduce Cisplatin-Induced Toxicity Without Compromising the Anticancer Effect Through Enhanced Expression of Antioxidant Protein. Translational Oncology, 2019, 12, 788-799.	1.7	12
53	The role of citrate, lactate and transferrin in determining titanium release from surgical devices into human serum. Journal of Biological Inorganic Chemistry, 2018, 23, 471-480.	1.1	11
54	Green Fluorescent Probe for Imaging His₆-Tagged Proteins Inside Living Cells. ACS Sensors, 2019, 4, 1190-1196.	4.0	11

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55	Surface optimization of gold nanoparticle mass tags for the sensitive detection of protein biomarkers via immuno-capture LI-MS. Analyst, The, 2020, 145, 6237-6242.	1.7	11
56	MetaMarker: a pipeline for de novo discovery of novel metagenomic biomarkers. Bioinformatics, 2019, 35, 3812-3814.	1.8	10
57	Polymeric architectures of bismuth citrate based on dimeric building blocks. Science China Chemistry, 2010, 53, 2152-2158.	4.2	9
58	Loss of APD1 in Yeast Confers Hydroxyurea Sensitivity Suppressed by Yap1p Transcription Factor. Scientific Reports, 2015, 5, 7897.	1.6	9
59	Selective interaction of Hpn-like protein with nickel, zinc and bismuth in vitro and in cells by FRET. Journal of Inorganic Biochemistry, 2015, 142, 8-14.	1.5	7
60	Bismuth Porphyrin Antagonizes Cisplatin-Induced Nephrotoxicity via Unexpected Metallothionein-Independent Mechanisms. IScience, 2020, 23, 101054.	1.9	7
61	Harvesting More Energetic Photoexcited Electrons from Closely Packed Gold Nanoparticles. Journal of the American Society for Mass Spectrometry, 2021, 32, 815-824.	1.2	7
62	Eradication of Porphyromonas gingivalis Persisters Through Colloidal Bismuth Subcitrate Synergistically Combined With Metronidazole. Frontiers in Microbiology, 2021, 12, 748121.	1.5	7
63	A hydroxide lock for metallo-Î²-lactamases. Nature Chemistry, 2022, 14, 6-8.	6.6	7
64	Recognition of Proteins by Metal Chelation-Based Fluorescent Probes in Cells. Frontiers in Chemistry, 2019, 7, 560.	1.8	6
65	Dopamine-assisted immobilization of peptide arginineâ€“glycineâ€“aspartic acid to enhance the cellular performances of MC3T3-E1 cells of carbonâ€“carbon composites. Journal of Biomaterials Applications, 2019, 34, 284-296.	1.2	6
66	Inactivation of NikR from Helicobacter pylori by a bismuth drug. Journal of Inorganic Biochemistry, 2019, 196, 110685.	1.5	6
67	51Sb Antimony in Medicine. , 2005, , 441-461.		5
68	Multiplex metal-detection based assay (MMDA) for COVID-19 diagnosis and identification of disease severity biomarkers. Chemical Science, 2022, 13, 3216-3226.	3.7	5
69	Chemical Printing of Biological Tissue by Gold Nanoparticle-Assisted Laser Ablation. ACS Omega, 2017, 2, 6031-6038.	1.6	3
70	Sensitive Detection of Separated Charges in Nanohybrids by Laser Excitation Mass Spectrometry with Tetrabutylammonium Cationic Probe. Analytical Chemistry, 2020, 92, 10262-10267.	3.2	3
71	Novel Neural Network Approach to Predict Drug-Target Interactions Based on Drug Side Effects and Genome-Wide Association Studies. Human Heredity, 2018, 83, 79-91.	0.4	2
72	Multiplex Singleâ€Cell Analysis of Cancer Cells Enables Unbiased Uncovering Subsets Associated with Cancer Relapse: Heterogeneity of Multidrug Resistance in Precursor Bâ€ALL. ChemMedChem, 2021, , .	1.6	2

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73	Combining MALDI-MS with machine learning for metabolomic characterization of lung cancer patient sera. Analytical Methods, 2022, 14, 499-507.	1.3	2
74	Regulation of DNA-binding activity of the Staphylococcus aureus catabolite control protein A by copper (II)-mediated oxidation. Journal of Biological Chemistry, 2022, 298, 101587.	1.6	2
75	Bismuth Complexes Inhibit the SARS Coronavirus. Angewandte Chemie, 2007, 119, 6584-6588.	1.6	1
76	Dynamic and Temporal Transcriptomic Analysis Reveals Ferroptosis-Mediated Antileukemia Activity of S-Dimethylarsino-Glutathione: Insights into Novel Therapeutic Strategy. CCS Chemistry, 2022, 4, 963-974.	4.6	1
77	Dynamic and Kinetic Aspects of Metallodrugs by NMR. , 2005, , 163-217.		0
78	Urease inactivation by an unusual GroES chaperonin. Science China Chemistry, 2014, 57, 842-848.	4.2	0
79	A. Sigel, E. Freisinger & R. K. O. Sigel (Eds.), M. E. Sosa Torres & P. M. H. Kroneck (volume Eds.): Transition Metals and Sulfur â€“ A Strong Relationship for Life. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2021, 76, 257-259.	0.6	0