Claus Jacob

List of Publications by Year in Descending Order

125 papers	3,356 citations	28 h-index	54 g-index
141 ext. papers	3,883 ext. citations	4.4 avg, IF	5.53 L-index

#	Paper	IF	Citations
125	Synthesis, Structural Characterization, and Biological Activities of Organically Templated Cobalt Phosphite (H2DAB)[Co(H2PO3)4]□2H2O. *Sci*, **2022**, 4, 5	0.7	0
124	Selenium and tellurium in the development of novel small molecules and nanoparticles as cancer multidrug resistance reversal agents.. *Drug Resistance Updates*, **2022**, 63, 100844	23.2	5
123	A Whiff of Sulfur: One Wind a Day Keeps the Doctor Away. *Antioxidants*, **2022**, 11, 1036	7.1	0
122	The Pioneering Role of Sci in Post Publication Public Peer Review (P4R). *Publications*, **2021**, 9, 13	1.7	3
121	Selenomethionine: A Pink Trojan Redox Horse with Implications in Aging and Various Age-Related Diseases. *Antioxidants*, **2021**, 10,	7.1	5
120	The Enigmatic Metallothioneins: A Case of Upward-Looking Research. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	2
119	Bioactive Compounds from Medicinal Plants and their Possible Effect as Therapeutic Agents against COVID-19: A Review. *Current Nutrition and Food Science*, **2021**, 17, 621-633	0.7	7
118	It takes two to tango: synthesis of cytotoxic quinones containing two redox active centers with potential antitumor activity. *RSC Medicinal Chemistry*, **2021**, 12, 1709-1721	3.5	3
117	Antioxidant Properties of the Native Khechechuri Pear from Western Georgia. *Sci*, **2021**, 3, 10	0.7	2
116	Nanosizing Nigella: A Cool Alternative to Liberate Biological Activity. *Current Nutraceuticals*, **2021**, 2, 37-46	0.7	2
115	Upcycling Culinary Organic Waste: Production of Plant Particles from Potato and Carrot Peels to Improve Antioxidative Capacity. *Current Nutraceuticals*, **2021**, 2, 62-70	0.7	3
114	Unleashing the Biological Potential of via Dry and Wet Milling. *Antioxidants*, **2021**, 10,	7.1	1
113	Molecular Insights into an Antibiotic Enhancer Action of New Morpholine-Containing 5-Arylideneimidazolones in the Fight against MDR Bacteria. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	2
112	EPR Study of KO as a Source of Superoxide and BMPO-OH/OOH Radical That Cleaves Plasmid DNA and Detects Radical Interaction with HS and Se-Derivatives. *Antioxidants*, **2021**, 10,	7.1	2
111	Bioavailability of Tannins and Other Oligomeric Polyphenols: a Still to Be Studied Phenomenon. *Current Pharmacology Reports*, **2020**, 6, 131-136	5.5	8
110	Discovery of phenylselenoether-hydantoin hybrids as ABCB1 efflux pump modulating agents with cytotoxic and antiproliferative actions in resistant T-lymphoma. *European Journal of Medicinal Chemistry*, **2020**, 200, 112435	6.8	13
109	Antioxidant Properties of Western Georgia Native Khechechuri Pear. *Sci*, **2020**, 2, 31	0.7	0

108	Disambiguating "Mechanisms" in Pharmacy: Lessons from Mechanist Philosophy of Science. *International Journal of Environmental Research and Public Health*, **2020**, 17,	4.6	2
107	Electrochemical Selenation/Cyclization of Quinones: A Rapid, Green and Efficient Access to Functionalized Trypanocidal and Antitumor Compounds. *European Journal of Organic Chemistry*, **2020**, 2020, 4474-4486	3.2	11
106	Ruthenium(II)-Catalyzed Double Annulation of Quinones: Step-Economical Access to Valuable Bioactive Compounds. *Chemistry - A European Journal*, **2020**, 26, 10981-10986	4.8	9
105	Antimalarial Drugs in Ghana: A Case Study on Personal Preferences. *Sci*, **2020**, 2, 45	0.7	1
104	Antimalarial Drugs in Ghana: A Case Study on Personal Preferences. *Sci*, **2020**, 2, 49	0.7	1
103	Chemical Impurities: An Epistemological Riddle with Serious Side Effects. *International Journal of Environmental Research and Public Health*, **2020**, 17,	4.6	3
102	Turning Apparent Waste into New Value: Up-Cycling Strategies Exemplified by Brewer's Spent Grains (BSG). *Current Nutraceuticals*, **2020**, 1, 6-13	0.7	2
101	Antimalarial Drugs in Ghana: A Case Study on Personal Preferences. *Sci*, **2020**, 2, 28	0.7	2
100	Efficacy of Allicin against Plant Pathogenic Fungi and Unveiling the Underlying Mode of Action Employing Yeast Based Chemogenetic Profiling Approach. *Applied Sciences (Switzerland)*, **2020**, 10, 2563	2.6	8
99	Biological Activity of Hydrophilic Extract of Grown on Post-Fermentation Leachate from a Biogas Plant Supplied with Stillage and Maize Silage. *Molecules*, **2020**, 25,	4.8	18
98	Origanum vulgare L. extract-mediated synthesis of silver nanoparticles, their characterization and antibacterial activities. *AMB Express*, **2020**, 10, 162	4.1	8
97	Incredible edible selenium nanoparticles produced by food-grade microorganisms. *Current Nutraceuticals*, **2020**, 01,	0.7	2
96	PlantCrystals-Nanosized Plant Material for Improved Bioefficacy of Medical Plants. *Materials*, **2020**, 13,	3.5	7
95	Antimicrobial, Anticancer and Multidrug-Resistant Reversing Activity of Novel Oxygen-, Sulfur- and Selenoflavones and Bioisosteric Analogues. *Pharmaceuticals*, **2020**, 13,	5.2	5
94	The Caucasian flora: a still-to-be-discovered rich source of antioxidants. *Free Radical Research*, **2019**, 53, 1153-1162	4	5
93	Synthesis of quinones with highlighted biological applications: A critical update on the strategies towards bioactive compounds with emphasis on lapachones. *European Journal of Medicinal Chemistry*, **2019**, 179, 863-915	6.8	27
92	Inorganic Polysulfides and Related Reactive Sulfur–Selenium Species from the Perspective of Chemistry. *Molecules*, **2019**, 24,	4.8	22
91	Selenoneine: a Unique Reactive Selenium Species From the Blood of Tuna With Implications for Human Diseases. *Current Pharmacology Reports*, **2019**, 5, 163-173	5.5	6

90	Microbial transformation of Se oxyanions in cultures of Delftia lacustris grown under aerobic conditions. *Journal of Microbiology*, **2019**, 57, 362-371	3	5
89	Synthesis, Structural Characterization, and Biological Activities of Organically Templated Cobalt Phosphite (C4N2H14)Co(H2PO3)4□2H2O. *Sci*, **2019**, 1, 13	0.7	2
88	Pronounced activity of aromatic selenocyanates against multidrug resistant ESKAPE bacteria. *New Journal of Chemistry*, **2019**, 43, 6021-6031	3.6	14
87	Electrochemical Potential-Biological Activity Relationships of Cyclic Sulfur-Containing Molecules Against Steinernema feltiae, Botrytis cinerea, and Neuro 2a Cell Line. *Current Pharmacology Reports* , **2019**, 5, 174-187	5.5	
86	Synthesis, Structural Characterization, and Biological Activities of Organically Templated Cobalt Phosphite (C4N2H14)[Co(H2PO3)4]□2H2O. *Sci*, **2019**, 1, 41	0.7	1
85	Release of reactive selenium species from phthalic selenoanhydride in the presence of hydrogen sulfide and glutathione with implications for cancer research. *New Journal of Chemistry*, **2019**, 43, 11771-11783	3.6	11
84	Antioxidant Properties of Western Georgia Native Khechechuri Pear. *Sci*, **2019**, 1, 44	0.7	
83	Reviewing the Mechanistic Evidence Assessors E-Synthesis and EBM+: A Case Study of Amoxicillin and Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS). *Current Pharmaceutical Design*, **2019**, 25, 1866-1880	3.3	8
82	Chemical Aspects of Biological Activity of Isothiocyanates and Indoles, the Products of Glucosinolate Decomposition. *Current Pharmaceutical Design*, **2019**, 25, 1717-1728	3.3	5
81	Selenium Donors at the Junction of Inflammatory Diseases. *Current Pharmaceutical Design*, **2019**, 25, 1707-1716	3.3	10
80	Dimethyl fumarate, a two-edged drug: Current status and future directions. *Medicinal Research Reviews*, **2019**, 39, 1923-1952	14.4	53
79	Yeast Chemogenetic Screening as a Tool to Unravel the Antifungal Mode of Action of Two Selected Selenocyanates. *Applied Sciences (Switzerland)*, **2019**, 9, 3728	2.6	2
78	Ruthenium(II)-Catalyzed C□H Alkenylation of Quinones: Diversity-Oriented Strategy for Trypanocidal Compounds. *European Journal of Organic Chemistry*, **2019**, 2019, 2344-2353	3.2	16
77	No time to waste organic waste: Nanosizing converts remains of food processing into refined materials. *Journal of Environmental Management*, **2018**, 210, 114-121	7.9	27
76	A Comparison of the Antibacterial and Antifungal Activities of Thiosulfinate Analogues of Allicin. *Scientific Reports*, **2018**, 8, 6763	4.9	75
75	Resuspendable Powders of Lyophilized Chalcogen Particles with Activity against Microorganisms. *Antioxidants*, **2018**, 7,	7.1	16
74	Small Molecule Catalysts with Therapeutic Potential. *Molecules*, **2018**, 23,	4.8	3
73	Milling the Mistletoe: Nanotechnological Conversion of African Mistletoe () Intoantimicrobial Materials. *Antioxidants*, **2018**, 7,	7.1	9

72	Antibacterial activity and cytotoxicity of Pterocarpus erinaceus Poir extracts, fractions and isolated compounds. *Journal of Ethnopharmacology*, **2018**, 212, 200-207	5	19
71	Flush with a flash: natural three-component antimicrobial combinations based on -nitrosothiols, controlled superoxide formation and "domino" reactions leading to peroxynitrite. *MedChemComm*, **2018**, 9, 1994-1999	5	
70	Ruthenium-catalyzed C-H oxygenation of quinones by weak O-coordination for potent trypanocidal agents. *Chemical Communications*, **2018**, 54, 12840-12843	5.8	30
69	Computer-Aided Studies for Novel Arylhydantoin 1,3,5-Triazine Derivatives as 5-HT Serotonin Receptor Ligands with Antidepressive-Like, Anxiolytic and Antiobesity Action In Vivo. *Molecules*, **2018**, 23,	4.8	14
68	The Small Matter of a Red Ox, a Particularly Sensitive Pink Cat, and the Quest for the Yellow Stone of Wisdom. *Current Pharmacology Reports*, **2018**, 4, 380-396	5.5	1
67	Cytoprotective and antioxidant properties of organic selenides for the myelin-forming cells, oligodendrocytes. *Bioorganic Chemistry*, **2018**, 80, 43-56	5.1	25
66	Natural selenium particles from Staphylococcus carnosus: Hazards or particles with particular promise?. *Journal of Hazardous Materials*, **2017**, 324, 22-30	12.8	40
65	Novel coumarin- and quinolinone-based polycycles as cell division cycle 25-A and -C phosphatases inhibitors induce proliferation arrest and apoptosis in cancer cells. *European Journal of Medicinal Chemistry*, **2017**, 134, 316-333	6.8	13
64	Synthesis of Quinone-Based N-Sulfonyl-1,2,3-triazoles: Chemical Reactivity of Rh(II) Azavinyl Carbenes and Antitumor Activity. *ChemistrySelect*, **2017**, 2, 4301-4308	1.8	14
63	Capture plants with interesting biological activities: a case to go. *Open Chemistry*, **2017**, 15, 208-218	1.6	4
62	Tubulin-binding anticancer polysulfides induce cell death via mitotic arrest and autophagic interference in colorectal cancer. *Cancer Letters*, **2017**, 410, 139-157	9.9	15
61	Inorganic Reactive Sulfur-Nitrogen Species: Intricate Release Mechanisms or Cacophony in Yellow, Blue and Red?. *Antioxidants*, **2017**, 6,	7.1	9
60	Natural Nanoparticles: A Particular Matter Inspired by Nature. *Antioxidants*, **2017**, 7,	7.1	96
59	Synthesis of Selenium-Quinone Hybrid Compounds with Potential Antitumor Activity via Rh-Catalyzed C-H Bond Activation and Click Reactions. *Molecules*, **2017**, 23,	4.8	29
58	An Optimized Facile Procedure to Synthesize and Purify Allicin. *Molecules*, **2017**, 22,	4.8	20
57	Nanosizing Cynomorium: Thumbs up for Potential Antifungal Applications. *Inventions*, **2017**, 2, 24	2.9	13
56	Selenazolinium Salts as "Small Molecule Catalysts" with High Potency against ESKAPE Bacterial Pathogens. *Molecules*, **2017**, 22,	4.8	19
55	The Reactive Sulfur Species Concept: 15 Years On. *Antioxidants*, **2017**, 6,	7.1	48

54	One-Pot Synthesis of Benzopyran-4-ones with Cancer Preventive and Therapeutic Potential. *European Journal of Organic Chemistry*, **2016**, 2016, 965-975	3.2	24
53	Nematicidal and antimicrobial activities of methanol extracts of 17 plants, of importance in ethnopharmacology, obtained from the Arabian Peninsula. *Journal of Intercultural Ethnopharmacology*, **2016**, 5, 114-21		7
52	Turning Waste into Value: Nanosized Natural Plant Materials of Solanum incanum L. and Pterocarpus erinaceus Poir with Promising Antimicrobial Activities. *Pharmaceutics*, **2016**, 8,	6.4	22
51	Identification of selenocompounds with promising properties to reverse cancer multidrug resistance. *Bioorganic and Medicinal Chemistry Letters*, **2016**, 26, 2821-2824	2.9	43
50	Aspects of a Distinct Cytotoxicity of Selenium Salts and Organic Selenides in Living Cells with Possible Implications for Drug Design. *Molecules*, **2015**, 20, 13894-912	4.8	22
49	Inspired by Nature: The use of Plant-derived Substrate/Enzyme Combinations to Generate Antimicrobial Activity in situ. *Natural Product Communications*, **2015**, 10, 1934578X1501001	0.9	7
48	A scent of therapy: Synthetic polysulfanes with improved physico-chemical properties induce apoptosis in human cancer cells. *International Journal of Oncology*, **2015**, 47, 991-1000	4.4	12
47	Inspired by Nature: The Use of Plant-derived Substrate/Enzyme Combinations to Generate Antimicrobial Activity in situ. *Natural Product Communications*, **2015**, 10, 1733-8	0.9	16
46	Synthetic polysulfane derivatives induce cell cycle arrest and apoptotic cell death in human hematopoietic cancer cells. *Food and Chemical Toxicology*, **2014**, 64, 249-57	4.7	21
45	Bis(4-hydroxy-2H-chromen-2-one): synthesis and effects on leukemic cell lines proliferation and NF-B regulation. *Bioorganic and Medicinal Chemistry*, **2014**, 22, 3008-15	3.4	17
44	Synthesis of amphiphilic seleninic acid derivatives with considerable activity against cellular membranes and certain pathogenic microbes. *Journal of Hazardous Materials*, **2014**, 269, 74-82	12.8	16
43	Synthesis of amphiphilic, chalcogen-based redox modulators with in vitro cytotoxic activity against cancer cells, macrophages and microbes. *MedChemComm*, **2014**, 5, 25-31	5	25
42	Synthesis and antiproliferative activity of novel selenoester derivatives. *European Journal of Medicinal Chemistry*, **2014**, 73, 153-66	6.8	63
41	Sulfur, selenium and tellurium pseudopeptides: synthesis and biological evaluation. *Bioorganic and Medicinal Chemistry*, **2014**, 22, 3610-9	3.4	47
40	1,4-naphthoquinones: from oxidative damage to cellular and inter-cellular signaling. *Molecules*, **2014**, 19, 14902-18	4.8	136
39	Intracellular diagnostics: hunting for the mode of action of redox-modulating selenium compounds in selected model systems. *Molecules*, **2014**, 19, 12258-79	4.8	27
38	A new tellurium-containing amphiphilic molecule induces apoptosis in HCT116 colon cancer cells. *Biochimica Et Biophysica Acta - General Subjects*, **2014**, 1840, 1808-16	4	15
37	Tetrasulfanes as Selective Modulators of the Cellular Thiolstat. *Phosphorus, Sulfur and Silicon and the Related Elements*, **2013**, 188, 446-453	1	16

36	Reactivity of 4-Vinyl-2H-1-benzopyran-2-ones in Diels–Alder Cycloaddition Reactions: Access to Coumarin-Based Polycycles with Cdc25 Phosphatase-Inhibiting Activity. *European Journal of Organic Chemistry*, **2013**, 2013, 2869-2877	3.2	9
35	Synthesis of chromenoindole derivatives from Robinia pseudoacacia. *MedChemComm*, **2013**, 4, 1580	5	16
34	The natural organosulfur compound dipropyltetrasulfide prevents HOCl-induced systemic sclerosis in the mouse. *Arthritis Research and Therapy*, **2013**, 15, R167	5.7	11
33	Antifungal Activity of Tetrasulfanes against Botrytis cinerea. *Natural Product Communications*, **2013**, 8, 1934578X1300801	0.9	2
32	Antifungal activity of tetrasulfanes against Botrytis cinerea. *Natural Product Communications*, **2013**, 8, 1599-603	0.9	5
31	Novel peptidomimetic compounds containing redox active chalcogens and quinones as potential anticancer agents. *European Journal of Medicinal Chemistry*, **2012**, 58, 192-205	6.8	46
30	Control of oxidative posttranslational cysteine modifications: from intricate chemistry to widespread biological and medical applications. *Chemical Research in Toxicology*, **2012**, 25, 588-604	4	82
29	Deciphering intracellular targets of organochalcogen based redox catalysts. *MedChemComm*, **2012**, 3, 784	5	15
28	Revisit to 25R/25S Stereochemical Analysis of Spirostane-type Steroidal Sapogenins and Steroidal Saponins via 1H NMR Chemical Shift Data. *Natural Product Communications*, **2012**, 7, 1934578X1200700	0.9	
27	Proanthocyanidins: Oligomeric Structures with Unique Biochemical Properties and Great Therapeutic Promise. *Natural Product Communications*, **2012**, 7, 1934578X1200700	0.9	5
26	Natural Flavonoids Interact with Dinitrobenzene System in Aprotic Media: An Electrochemical Probing. *Natural Product Communications*, **2012**, 7, 1934578X1200700	0.9	1
25	Role of Cysteine **2011**, 361-394		
24	Facile Synthesis of Chrysin-derivatives with Promising Activities as Aromatase Inhibitors *Natural Product Communications*, **2011**, 6, 1934578X1100600	0.9	8
23	Redox signalling via the cellular thiolstat. *Biochemical Society Transactions*, **2011**, 39, 1247-53	5.1	46
22	Interactions of polysulfanes with components of red blood cells. *MedChemComm*, **2011**, 2, 196	5	24
21	Open season for hunting and trapping post-translational cysteine modifications in proteins and enzymes. *ChemBioChem*, **2011**, 12, 841-4	3.8	13
20	Redox active secondary metabolites. *Current Opinion in Chemical Biology*, **2011**, 15, 149-55	9.7	51
19	Selective antimicrobial activity associated with sulfur nanoparticles. *Journal of Biomedical Nanotechnology*, **2011**, 7, 395-405	4	61

18	Synthesis and selective anticancer activity of organochalcogen based redox catalysts. *Journal of Medicinal Chemistry*, **2010**, 53, 6954-63	8.3	107
17	Allicin disrupts the cell's electrochemical potential and induces apoptosis in yeast. *Free Radical Biology and Medicine*, **2010**, 49, 1916-24	7.8	61
16	Multicomponent reactions for the synthesis of multifunctional agents with activity against cancer cells. *Chemical Communications*, **2009**, 4702-4	5.8	53
15	The chemistry behind redox regulation with a focus on sulphur redox systems. *Physiologia Plantarum*, **2008**, 133, 469-80	4.6	55
14	The Design of Multifunctional Antioxidants Against the Damaging Ingredients of Oxidative Stress. *Phosphorus, Sulfur and Silicon and the Related Elements*, **2008**, 183, 863-888	1	9
13	Perspective on recent developments on sulfur-containing agents and hydrogen sulfide signaling. *Planta Medica*, **2008**, 74, 1580-92	3.1	62
12	Naturally occurring reactive sulfur species, their activity against Caco-2 cells, and possible modes of biochemical action. *Journal of Sulfur Chemistry*, **2008**, 29, 251-268	2.3	21
11	The closure of the Department of Chemistry at the University of Exeter □An insider§ view. *Foundations of Chemistry*, **2007**, 9, 57-64	0.7	1
10	A scent of therapy: pharmacological implications of natural products containing redox-active sulfur atoms. *Natural Product Reports*, **2006**, 23, 851-63	15.1	253
9	Aspects of the biological redox chemistry of cysteine: from simple redox responses to sophisticated signalling pathways. *Biological Chemistry*, **2006**, 387, 1385-97	4.5	89
8	Use of a substrate/alliinase combination to generate antifungal activity in situ. *Journal of Agricultural and Food Chemistry*, **2005**, 53, 574-80	5.7	38
7	Schwefel und Selen: Bedeutung der Oxidationsstufe f□ Struktur und Funktion von Proteinen. *Angewandte Chemie*, **2003**, 115, 4890-4907	3.6	70
6	Sulfur and selenium: the role of oxidation state in protein structure and function. *Angewandte Chemie - International Edition*, **2003**, 42, 4742-58	16.4	606
5	Statement analysis in chemistry. *Annals of the New York Academy of Sciences*, **2003**, 988, 239-43	6.5	1
4	Philosophy and Biochemistry: Research at the Interface between Chemistry and Biology. *Foundations of Chemistry*, **2002**, 4, 97-125	0.7	4
3	Electrochemistry of chalcogen compounds: prediction of antioxidant activity. *Chemical Communications*, **2001**, 2490-1	5.8	33
2	Ebselen, a selenium-containing redox drug, releases zinc from metallothionein. *Biochemical and Biophysical Research Communications*, **1998**, 248, 569-73	3.4	77
1	Sulfides inAllium Vegetables663-684		0