

Thomas Carell

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

355
papers

18,076
citations

68
h-index

122
g-index

407
ext. papers

19,930
ext. citations

9.9
avg, IF

6.67
L-index

#	Paper	IF	Citations
355	Dynamic readers for 5-(hydroxy)methylcytosine and its oxidized derivatives. <i>Cell</i> , 2013 , 152, 1146-59	56.2	748
354	Tissue distribution of 5-hydroxymethylcytosine and search for active demethylation intermediates. <i>PLoS ONE</i> , 2010 , 5, e15367	3.7	644
353	DNA–metal base pairs. <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 6226-36	16.4	542
352	Thymine dimerization in DNA is an ultrafast photoreaction. <i>Science</i> , 2007 , 315, 625-9	33.3	425
351	Click chemistry as a reliable method for the high-density postsynthetic functionalization of alkyne-modified DNA. <i>Organic Letters</i> , 2006 , 8, 3639-42	6.2	417
350	The discovery of 5-formylcytosine in embryonic stem cell DNA. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 7008-12	16.4	407
349	Postsynthetic DNA modification through the copper-catalyzed azide-alkyne cycloaddition reaction. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 8350-8	16.4	363
348	Tumour hypoxia causes DNA hypermethylation by reducing TET activity. <i>Nature</i> , 2016 , 537, 63-68	50.4	354
347	Quantification of the sixth DNA base hydroxymethylcytosine in the brain. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 5375-7	16.4	319
346	Crystal structure of a photolyase bound to a CPD-like DNA lesion after in situ repair. <i>Science</i> , 2004 , 306, 1789-93	33.3	319
345	Programmable self-assembly of metal ions inside artificial DNA duplexes. <i>Nature Nanotechnology</i> , 2006 , 1, 190-4	28.7	287
344	Directed DNA metallization. <i>Journal of the American Chemical Society</i> , 2006 , 128, 1398-9	16.4	262
343	N-methyladenosine (mA) recruits and repels proteins to regulate mRNA homeostasis. <i>Nature Structural and Molecular Biology</i> , 2017 , 24, 870-878	17.6	261
342	Error-prone replication of oxidatively damaged DNA by a high-fidelity DNA polymerase. <i>Nature</i> , 2004 , 431, 217-21	50.4	249
341	Two-polymerase mechanisms dictate error-free and error-prone translesion DNA synthesis in mammals. <i>EMBO Journal</i> , 2009 , 28, 383-93	13	226
340	Tet oxidizes thymine to 5-hydroxymethyluracil in mouse embryonic stem cell DNA. <i>Nature Chemical Biology</i> , 2014 , 10, 574-81	11.7	215
339	Click-click-click: single to triple modification of DNA. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 3442-4	16.4	204

338	5-Hydroxymethylcytosine, the sixth base of the genome. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 6460-8	16.4	191
337	A programmable DNA-based molecular valve for colloidal mesoporous silica. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 4734-7	16.4	189
336	CPD damage recognition by transcribing RNA polymerase II. <i>Science</i> , 2007 , 315, 859-62	33.3	186
335	Bypass of DNA lesions generated during anticancer treatment with cisplatin by DNA polymerase eta. <i>Science</i> , 2007 , 318, 967-70	33.3	175
334	Crystal structure and mechanism of a DNA (6-4) photolyase. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 10076-80	16.4	160
333	Active DNA demethylation at enhancers during the vertebrate phyletic period. <i>Nature Genetics</i> , 2016 , 48, 417-26	36.3	157
332	DNMT1 but not its interaction with the replication machinery is required for maintenance of DNA methylation in human cells. <i>Journal of Cell Biology</i> , 2007 , 176, 565-71	7.3	154
331	DNA-Metall-Basenpaare. <i>Angewandte Chemie</i> , 2007 , 119, 6340-6350	3.6	153
330	The mechanism of action of DNA photolyases. <i>Current Opinion in Chemical Biology</i> , 2001 , 5, 491-8	9.7	150
329	A high-yielding, strictly regioselective prebiotic purine nucleoside formation pathway. <i>Science</i> , 2016 , 352, 833-6	33.3	146
328	A highly DNA-duplex-stabilizing metal-salen base pair. <i>Angewandte Chemie - International Edition</i> , 2005 , 44, 7204-8	16.4	141
327	Reversible bond formation enables the replication and amplification of a crosslinking salen complex as an orthogonal base pair. <i>Nature Chemistry</i> , 2011 , 3, 794-800	17.6	137
326	A genetically encoded norbornene amino acid for the mild and selective modification of proteins in a copper-free click reaction. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 4466-9	16.4	135
325	Recognition and repair of UV lesions in loop structures of duplex DNA by DASH-type cryptochrome. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 21023-7	11.5	132
324	Mechanism of transcriptional stalling at cisplatin-damaged DNA. <i>Nature Structural and Molecular Biology</i> , 2007 , 14, 1127-33	17.6	130
323	Structure and function of noncanonical nucleobases. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 7110-31	16.4	129
322	Copper-free "click" modification of DNA via nitrile oxide-norbornene 1,3-dipolar cycloaddition. <i>Organic Letters</i> , 2009 , 11, 2405-8	6.2	128
321	Controlled stacking of 10 transition-metal ions inside a DNA duplex. <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 250-3	16.4	127

320	Mechanism and stem-cell activity of 5-carboxycytosine decarboxylation determined by isotope tracing. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 6516-20	16.4	122
319	Low values of 5-hydroxymethylcytosine (5hmC), the "sixth base," are associated with anaplasia in human brain tumors. <i>International Journal of Cancer</i> , 2012 , 131, 1577-90	7.5	118
318	Electrontransfer through DNA and metal-containing DNA. <i>Organic and Biomolecular Chemistry</i> , 2003 , 1, 2221-8	3.9	118
317	Synthesis of highly modified DNA by a combination of PCR with alkyne-bearing triphosphates and click chemistry. <i>Chemistry - A European Journal</i> , 2007 , 13, 9486-94	4.8	111
316	Chain-like assembly of gold nanoparticles on artificial DNA templates via 'click chemistry'. <i>Chemical Communications</i> , 2008 , 169-71	5.8	110
315	New promise in combinatorial chemistry: synthesis, characterization, and screening of small-molecule libraries in solution. <i>Chemistry and Biology</i> , 1995 , 2, 171-83		108
314	Controlled nucleation of DNA metallization. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 219-23	16.4	106
313	A Novel Procedure for the Synthesis of Libraries Containing Small Organic Molecules. <i>Angewandte Chemie International Edition in English</i> , 1994 , 33, 2059-2061		106
312	Structural biology of DNA photolyases and cryptochromes. <i>Current Opinion in Structural Biology</i> , 2009 , 19, 277-85	8.1	105
311	PCNA ubiquitination is important, but not essential for translesion DNA synthesis in mammalian cells. <i>PLoS Genetics</i> , 2011 , 7, e1002262	6	103
310	Formation of bimetallic Ag-Au nanowires by metallization of artificial DNA duplexes. <i>Small</i> , 2007 , 3, 1049-55		103
309	Postsynthetische DNA-Modifizierung mithilfe der kupferkatalysierten Azid-Alkin-Cycloaddition. <i>Angewandte Chemie</i> , 2008 , 120, 8478-8487	3.6	102
308	Metal-salen-base-pair complexes inside DNA: complexation overrides sequence information. <i>Chemistry - A European Journal</i> , 2006 , 12, 8708-18	4.8	99
307	DNA hydroxymethylation controls cardiomyocyte gene expression in development and hypertrophy. <i>Nature Communications</i> , 2016 , 7, 12418	17.4	97
306	Transfer printing of DNA by "click" chemistry. <i>ChemBioChem</i> , 2007 , 8, 1997-2002	3.8	96
305	Structural basis for the recognition of the FapydG lesion (2,6-diamino-4-hydroxy-5-formamidopyrimidine) by formamidopyrimidine-DNA glycosylase. <i>Journal of Biological Chemistry</i> , 2004 , 279, 44074-83	5.4	96
304	Mechanism of translesion transcription by RNA polymerase II and its role in cellular resistance to DNA damage. <i>Molecular Cell</i> , 2012 , 46, 18-29	17.6	94
303	Age-dependent levels of 5-methyl-, 5-hydroxymethyl-, and 5-formylcytosine in human and mouse brain tissues. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 12511-4	16.4	93

302	TET3 is recruited by REST for context-specific hydroxymethylation and induction of gene expression. <i>Cell Reports</i> , 2015 , 11, 283-94	10.6	92
301	Unified prebiotically plausible synthesis of pyrimidine and purine RNA ribonucleotides. <i>Science</i> , 2019 , 366, 76-82	33.3	91
300	Charge separation and charge delocalization identified in long-living states of photoexcited DNA. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 4369-74	11.5	86
299	DNA damage bypass operates in the S and G2 phases of the cell cycle and exhibits differential mutagenicity. <i>Nucleic Acids Research</i> , 2012 , 40, 170-80	20.1	81
298	The RIG-I ATPase domain structure reveals insights into ATP-dependent antiviral signalling. <i>EMBO Reports</i> , 2011 , 12, 1127-34	6.5	76
297	Antiferromagnetic coupling of stacked Cu(II)-salen complexes in DNA. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 4927-9	16.4	76
296	Quantitative LC-MS Provides No Evidence for m dA or m dC in the Genome of Mouse Embryonic Stem Cells and Tissues. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 11268-11271	16.4	75
295	Weak distance dependence of excess electron transfer in DNA. <i>Angewandte Chemie - International Edition</i> , 2002 , 41, 1763-6	16.4	75
294	High-density DNA functionalization by a combination of Cu-catalyzed and cu-free click chemistry. <i>Chemistry - A European Journal</i> , 2010 , 16, 6877-83	4.8	74
293	Deamination, oxidation, and C-C bond cleavage reactivity of 5-hydroxymethylcytosine, 5-formylcytosine, and 5-carboxycytosine. <i>Journal of the American Chemical Society</i> , 2013 , 135, 14593-9	16.4	73
292	Improved synthesis and mutagenicity of oligonucleotides containing 5-hydroxymethylcytosine, 5-formylcytosine and 5-carboxylcytosine. <i>Chemistry - A European Journal</i> , 2011 , 17, 13782-8	4.8	71
291	Investigation of Flavin-Containing DNA-Repair Model Compounds. <i>Journal of the American Chemical Society</i> , 1997 , 119, 7440-7451	16.4	71
290	The Discovery of 5-Formylcytosine in Embryonic Stem Cell DNA. <i>Angewandte Chemie</i> , 2011 , 123, 7146-7150	70	
289	A Solution-Phase Screening Procedure for the Isolation of Active Compounds from a Library of Molecules. <i>Angewandte Chemie International Edition in English</i> , 1994 , 33, 2061-2064		69
288	Crystal structures of an archaeal class II DNA photolyase and its complex with UV-damaged duplex DNA. <i>EMBO Journal</i> , 2011 , 30, 4437-49	13	68
287	Wet-dry cycles enable the parallel origin of canonical and non-canonical nucleosides by continuous synthesis. <i>Nature Communications</i> , 2018 , 9, 163	17.4	67
286	Synthesis of α -N-propionyl-, α -N-butyryl-, and α -N-crotonyl-lysine containing histone H3 using the pyrrolysine system. <i>Chemical Communications</i> , 2013 , 49, 379-81	5.8	66
285	Characterization of acute myeloid leukemia based on levels of global hydroxymethylation. <i>Blood</i> , 2014 , 124, 1110-8	2.2	66

284	The chemistries and consequences of DNA and RNA methylation and demethylation. <i>RNA Biology</i> , 2017 , 14, 1099-1107	4.8	65
283	Chaperoning epigenetics: FKBP51 decreases the activity of DNMT1 and mediates epigenetic effects of the antidepressant paroxetine. <i>Science Signaling</i> , 2015 , 8, ra119	8.8	65
282	Crystal structure of the T(6-4)C lesion in complex with a (6-4) DNA photolyase and repair of UV-induced (6-4) and Dewar photolesions. <i>Chemistry - A European Journal</i> , 2009 , 15, 10387-96	4.8	65
281	Structural insights into recognition and repair of UV-DNA damage by Spore Photoproduct Lyase, a radical SAM enzyme. <i>Nucleic Acids Research</i> , 2012 , 40, 9308-18	20.1	65
280	Klick-Klick-Klick: Ein- bis Dreifachmodifizierung von DNA. <i>Angewandte Chemie</i> , 2008 , 120, 3491-3493	3.6	65
279	Synthesis of modified DNA by PCR with alkyne-bearing purines followed by a click reaction. <i>Organic Letters</i> , 2008 , 10, 249-51	6.2	61
278	Characterization of the complexity of small-molecule libraries of electrospray ionization mass spectrometry. <i>Analytical Chemistry</i> , 1995 , 67, 2906-15	7.8	61
277	8-Oxo-7,8-dihydroguanine in DNA does not constitute a barrier to transcription, but is converted into transcription-blocking damage by OGG1. <i>Nucleic Acids Research</i> , 2011 , 39, 5926-34	20.1	60
276	Mechanism of UV-induced formation of Dewar lesions in DNA. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 408-11	16.4	59
275	Click-modified anandamide siRNA enables delivery and gene silencing in neuronal and immune cells. <i>Journal of the American Chemical Society</i> , 2012 , 134, 12330-3	16.4	59
274	Excess electron transport through DNA: a single electron repairs more than one UV-induced lesion. <i>Angewandte Chemie - International Edition</i> , 2004 , 43, 1848-51	16.4	59
273	Excess electron-transfer-based repair of a Cis-Syn thymine dimer in DNA is not sequence dependent. <i>Journal of the American Chemical Society</i> , 2004 , 126, 1302-3	16.4	59
272	Regulation of nucleotide excision repair by UV-DDB: prioritization of damage recognition to internucleosomal DNA. <i>PLoS Biology</i> , 2011 , 9, e1001183	9.7	58
271	Synthesis of the transfer-RNA nucleoside queuosine by using a chiral allyl azide intermediate. <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 2325-7	16.4	57
270	Non-canonical Bases in the Genome: The Regulatory Information Layer in DNA. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 4296-4312	16.4	56
269	Complex sequence dependence by excess-electron transfer through DNA with different strength electron acceptors. <i>Angewandte Chemie - International Edition</i> , 2005 , 45, 318-21	16.4	56
268	Selective detection of 5-methylcytosine sites in DNA. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 181-4	16.4	55
267	5-Formylcytosine to cytosine conversion by C-C bond cleavage in vivo. <i>Nature Chemical Biology</i> , 2018 , 14, 72-78	11.7	55

266	Watson-Crick base pairing controls excited-state decay in natural DNA. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 11366-9	16.4	54
265	Application of capillary electrophoresis-electrospray ionization mass spectrometry in the determination of molecular diversity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1996 , 93, 6152-7	11.5	54
264	RNA is more UV resistant than DNA: the formation of UV-induced DNA lesions is strongly sequence and conformation dependent. <i>Chemistry - A European Journal</i> , 2004 , 10, 5697-705	4.8	53
263	Sunlight-Damaged DNA Repaired with Sunlight. <i>Angewandte Chemie International Edition in English</i> , 1995 , 34, 2491-2494	53	
262	Regioselective metalations of pyrimidines and pyrazines by using frustrated Lewis pairs of BF ₃ -DET2 and hindered magnesium- and zinc-amide bases. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 6776-80	16.4	52
261	5-Formylcytosine Could Be a Semipermanent Base in Specific Genome Sites. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 11797-800	16.4	51
260	UV-Induced Charge Transfer States in DNA Promote Sequence Selective Self-Repair. <i>Journal of the American Chemical Society</i> , 2016 , 138, 186-90	16.4	51
259	Ein hochgradig DNA-Duplex-stabilisierendes Metall-Salen-Basenpaar. <i>Angewandte Chemie</i> , 2005 , 117, 7370-7374	3.6	51
258	Synthesis of threefold glycosylated proteins using click chemistry and genetically encoded unnatural amino acids. <i>ChemBioChem</i> , 2009 , 10, 2858-61	3.8	50
257	The CDK5 repressor CDK5RAP1 is a methylthiotransferase acting on nuclear and mitochondrial RNA. <i>Nucleic Acids Research</i> , 2012 , 40, 6235-40	20.1	50
256	Formation and Direct Repair of UV-induced Dimeric DNA Pyrimidine Lesions. <i>Photochemistry and Photobiology</i> , 2014 , 90, 1-14	3.6	49
255	The archaeal cofactor F0 is a light-harvesting antenna chromophore in eukaryotes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 11540-5	11.5	49
254	Synthesis, stability, and conformation of the formamidopyrimidine G DNA lesion. <i>Chemistry - A European Journal</i> , 2002 , 8, 293-301	4.8	49
253	A (6-4) photolyase model: repair of DNA (6-4) lesions requires a reduced and deprotonated flavin. <i>Angewandte Chemie - International Edition</i> , 2002 , 41, 767-70	16.4	49
252	Norbornenes in inverse electron-demand Diels-Alder reactions. <i>Chemistry - A European Journal</i> , 2013 , 19, 13309-12	4.8	48
251	Systems-based analysis of modified tRNA bases. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 9739-42	16.4	46
250	DNA photography: an ultrasensitive DNA-detection method based on photographic techniques. <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 4184-7	16.4	46
249	Base pairing and replicative processing of the formamidopyrimidine-dG DNA lesion. <i>Journal of the American Chemical Society</i> , 2005 , 127, 18143-9	16.4	46

248	TLR8 Is a Sensor of RNase T2 Degradation Products. <i>Cell</i> , 2019 , 179, 1264-1275.e13	56.2	46
247	Novel diazirine-containing DNA photoaffinity probes for the investigation of DNA-protein-interactions. <i>ChemBioChem</i> , 2009 , 10, 109-18	3.8	45
246	Self-Repairing DNA Based on a Reductive Electron Transfer through the Base Stack. <i>Angewandte Chemie - International Edition</i> , 2000 , 39, 3918-3920	16.4	44
245	Synthesis of Flavin-Containing Model Compounds for DNA Photolyase Mediated DNA Repair. <i>Angewandte Chemie International Edition in English</i> , 1996 , 35, 620-623		44
244	Genetische Kodierung einer Norbornen-Aminosäure zur milden und selektiven Modifikation von Proteinen mit einer kupferfreien Klick-Reaktion. <i>Angewandte Chemie</i> , 2012 , 124, 4542-4545	3.6	43
243	Parallel isotope-based quantification of modified tRNA nucleosides. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 7932-4	16.4	43
242	Efficient synthesis of 5-hydroxymethylcytosine containing DNA. <i>Organic Letters</i> , 2010 , 12, 5671-3	6.2	41
241	Repair of UV Light Induced DNA Lesions: A Comparative Study with Model Compounds. <i>European Journal of Organic Chemistry</i> , 1998 , 1998, 1245-1258	3.2	41
240	Natural and non-natural antenna chromophores in the DNA photolyase from <i>Thermus thermophilus</i> . <i>ChemBioChem</i> , 2006 , 7, 1798-806	3.8	41
239	Chemical investigation of light induced DNA bipyrimidine damage and repair. <i>Chemical Society Reviews</i> , 2011 , 40, 4271-8	58.5	40
238	Development of donor-acceptor modified DNA hairpins for the investigation of charge hopping kinetics in DNA. <i>Chemical Communications</i> , 2003 , 2120-2121	5.8	40
237	Structural insights into the recognition of cisplatin and AAF-dG lesion by Rad14 (XPA). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 8272-7	11.5	38
236	5-Formyl- and 5-Carboxydeoxycytidines Do Not Cause Accumulation of Harmful Repair Intermediates in Stem Cells. <i>Journal of the American Chemical Society</i> , 2017 , 139, 10359-10364	16.4	38
235	Identification of novel DNA-damage tolerance genes reveals regulation of translesion DNA synthesis by nucleophosmin. <i>Nature Communications</i> , 2014 , 5, 5437	17.4	38
234	Kontrolliertes Stapeln von zehn Übergangsmetallionen im Innern eines DNA-Doppelstrangs. <i>Angewandte Chemie</i> , 2007 , 119, 254-257	3.6	38
233	The spore photoproduct lyase repairs the 5S- and not the 5R-configured spore photoproduct DNA lesion. <i>Chemical Communications</i> , 2006 , 445-7	5.8	38
232	Efficient interstrand excess electron transfer in PNA:DNA hybrids. <i>Journal of the American Chemical Society</i> , 2002 , 124, 13984-5	16.4	38
231	Quantitative Bestimmung der sechsten DNA-Base Hydroxymethylcytosin im Gehirn. <i>Angewandte Chemie</i> , 2010 , 122, 5503-5505	3.6	37

230	Excess electron transfer driven DNA repair does not depend on the transfer direction. <i>Angewandte Chemie - International Edition</i> , 2004 , 43, 1842-4	16.4	37
229	DNA based multi-copper ions assembly using combined pyrazole and salen ligandosides. <i>Chemical Science</i> , 2015 , 6, 632-638	9.4	36
228	Strand-specific recognition of DNA damages by XPD provides insights into nucleotide excision repair substrate versatility. <i>Journal of Biological Chemistry</i> , 2014 , 289, 3613-24	5.4	36
227	DNA (6-4) photolyases reduce Dewar isomers for isomerization into (6-4) lesions. <i>Journal of the American Chemical Society</i> , 2010 , 132, 3254-5	16.4	36
226	Cell-penetrating and neurotargeting dendritic siRNA nanostructures. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 1946-9	16.4	35
225	Excess electron transfer in flavin-capped, thymine dimer-containing DNA hairpins. <i>Chemical Communications</i> , 2003 , 1632-3	5.8	35
224	Ribose-protonated DNA base excision repair: a combined theoretical and experimental study. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 10044-8	16.4	34
223	Mechanism of replication blocking and bypass of Y-family polymerase {eta} by bulky acetylaminofluorene DNA adducts. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 20720-5	11.5	34
222	Gesteuerte Keimbildung bei der DNA-Metallisierung. <i>Angewandte Chemie</i> , 2009 , 121, 225-229	3.6	34
221	Crystal structure of a cisplatin-(1,3-GTG) cross-link within DNA polymerase eta. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 3077-80	16.4	34
220	Independent generation of C5'-nucleosidyl radicals in thymidine and 2'-deoxyguanosine. <i>Journal of Organic Chemistry</i> , 2007 , 72, 3659-66	4.2	34
219	Characterization of a new thermophilic spore photoproduct lyase from <i>Geobacillus stearothermophilus</i> (SplG) with defined lesion containing DNA substrates. <i>Journal of Biological Chemistry</i> , 2006 , 281, 36317-26	5.4	34
218	Class II DNA photolyase from <i>Arabidopsis thaliana</i> contains FAD as a cofactor. <i>FEBS Journal</i> , 1999 , 264, 161-7		34
217	Isotope-based analysis of modified tRNA nucleosides correlates modification density with translational efficiency. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 11162-5	16.4	33
216	Antiferromagnetic Coupling of Stacked CullBalen Complexes in DNA. <i>Angewandte Chemie</i> , 2010 , 122, 5047-5049	3.6	33
215	Synthesis, Crystal Structure, and Enzymatic Evaluation of a DNA-Photolesion Isostere. <i>Chemistry - A European Journal</i> , 1998 , 4, 642-654	4.8	33
214	Synthesis of a DNA promoter segment containing all four epigenetic nucleosides: 5-methyl-, 5-hydroxymethyl-, 5-formyl-, and 5-carboxy-2'-deoxycytidine. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 315-8	16.4	32
213	Excess Electron Transport Through DNA: A Single Electron Repairs More than One UV-Induced Lesion. <i>Angewandte Chemie</i> , 2004 , 116, 1884-1887	3.6	32

212	Photoinduced Electron Transfer in Porphyrin-Quinone Cyclophanes, 8 Conformational Mobility and Crystal Structures of Porphyrin-Quinone Cyclophanes. <i>Chemische Berichte</i> , 1993 , 126, 811-821	32
211	When Did Life Likely Emerge on Earth in an RNA-First Process?. <i>ChemSystemsChem</i> , 2020 , 2, e1900035	3.1 32
210	Chemical discrimination between dC and 5MedC via their hydroxylamine adducts. <i>Nucleic Acids Research</i> , 2010 , 38, e192	20.1 31
209	Synthesis of DNA Lesions and DNA-Lesion-Containing Oligonucleotides for DNA-Repair Studies. <i>Synthesis</i> , 1999 , 1999, 1085-1105	2.9 31
208	DNA methylation and differential gene regulation in photoreceptor cell death. <i>Cell Death and Disease</i> , 2014 , 5, e1558	9.8 30
207	Structural insights into incorporation of norbornene amino acids for click modification of proteins. <i>ChemBioChem</i> , 2013 , 14, 2114-8	3.8 30
206	Toward catalytically active oligonucleotides: synthesis of a flavin nucleotide and its incorporation into DNA. <i>Organic Letters</i> , 2000 , 2, 1415-8	6.2 30
205	5-Hydroxymethylcytosine, die sechste Base des Genoms. <i>Angewandte Chemie</i> , 2011 , 123, 6588-6596	3.6 29
204	Ein programmierbares, DNA-basiertes molekulares Ventil für kolloidales, mesoporöses Siliciumoxid. <i>Angewandte Chemie</i> , 2010 , 122, 4842-4845	3.6 29
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