

Tom Brown

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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.

383 papers	15,319 citations	62 h-index	105 g-index
425 ext. papers	16,493 ext. citations	9.6 avg, IF	6.57 L-index

#	Paper	IF	Citations
383	Click chemistry with DNA. <i>Chemical Society Reviews</i> , 2010 , 39, 1388-405	58.5	601
382	Detection of PCR products using self-probing amplicons and fluorescence. <i>Nature Biotechnology</i> , 1999 , 17, 804-7	44.5	596
381	The structural basis of specific base-excision repair by uracil-DNA glycosylase. <i>Nature</i> , 1995 , 373, 487-93	50.4	377
380	Intrauterine parvovirus infection associated with hydrops fetalis. <i>Lancet, The</i> , 1984 , 2, 1033-4	40	334
379	Structure of an adenine-cytosine base pair in DNA and its implications for mismatch repair. <i>Nature</i> , 1986 , 320, 552-5	50.4	279
378	Mode of action and application of Scorpion primers to mutation detection. <i>Nucleic Acids Research</i> , 2000 , 28, 3752-61	20.1	242
377	Template-directed oligonucleotide strand ligation, covalent intramolecular DNA circularization and catenation using click chemistry. <i>Journal of the American Chemical Society</i> , 2007 , 129, 6859-64	16.4	231
376	Crystal structure of a G:T/U mismatch-specific DNA glycosylase: mismatch recognition by complementary-strand interactions. <i>Cell</i> , 1998 , 92, 117-29	56.2	222
375	Fluorescence based strategies for genetic analysis. <i>Chemical Communications</i> , 2005 , 5487-502	5.8	221
374	Molecular structure of the G.A base pair in DNA and its implications for the mechanism of transversion mutations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1986 , 83, 2402-6	11.5	220
373	Crystal structure of a DNA duplex containing 8-hydroxydeoxyguanine-adenine base pairs. <i>Biochemistry</i> , 1994 , 33, 10266-70	3.2	210
372	Quenching of CdSe quantum dot emission, a new approach for biosensing. <i>Chemical Communications</i> , 2005 , 3201-3	5.8	179
371	Click nucleic acid ligation: applications in biology and nanotechnology. <i>Accounts of Chemical Research</i> , 2012 , 45, 1258-67	24.3	155
370	SERS-melting: a new method for discriminating mutations in DNA sequences. <i>Journal of the American Chemical Society</i> , 2008 , 130, 15589-601	16.4	151
369	Nucleic acid base analog FRET-pair facilitating detailed structural measurements in nucleic acid containing systems. <i>Journal of the American Chemical Society</i> , 2009 , 131, 4288-93	16.4	145
368	Characterization and use of an unprecedentedly bright and structurally non-perturbing fluorescent DNA base analogue. <i>Nucleic Acids Research</i> , 2008 , 36, 157-67	20.1	144
367	Highly Sensitive DNA Sensor Based on Upconversion Nanoparticles and Graphene Oxide. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 12422-9	9.5	143

366	High throughput measurement of duplex, triplex and quadruplex melting curves using molecular beacons and a LightCycler. <i>Nucleic Acids Research</i> , 2002 , 30, e39	20.1	136
365	The contribution of cytosine protonation to the stability of parallel DNA triple helices. <i>Journal of Molecular Biology</i> , 1998 , 275, 811-22	6.5	135
364	Intramolecular DNA quadruplexes with different arrangements of short and long loops. <i>Nucleic Acids Research</i> , 2007 , 35, 4214-22	20.1	132
363	High-resolution structure of a DNA helix containing mismatched base pairs. <i>Nature</i> , 1985 , 315, 604-6	50.4	132
362	Four base recognition by triplex-forming oligonucleotides at physiological pH. <i>Nucleic Acids Research</i> , 2005 , 33, 3025-32	20.1	127
361	The structure of guanosine-thymidine mismatches in B-DNA at 2.5-A resolution.. <i>Journal of Biological Chemistry</i> , 1987 , 262, 9962-9970	5.4	127
360	Chiral phosphorothioate analogues of B-DNA. The crystal structure of Rp-d[Gp(S)CpGp(S)CpGp(S)C]. <i>Journal of Molecular Biology</i> , 1986 , 192, 891-905	6.5	122
359	Synthesis and physical properties of anti-HIV antisense oligonucleotides bearing terminal lipophilic groups. <i>Nucleic Acids Research</i> , 1992 , 20, 3411-7	20.1	121
358	The structure of guanosine-thymidine mismatches in B-DNA at 2.5-A resolution. <i>Journal of Biological Chemistry</i> , 1987 , 262, 9962-70	5.4	121
357	Biocompatible artificial DNA linker that is read through by DNA polymerases and is functional in Escherichia coli. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 11338-43	11.5	119
356	Crystal structure and stability of a DNA duplex containing A(anti).G(syn) base-pairs. <i>Journal of Molecular Biology</i> , 1989 , 207, 455-7	6.5	115
355	New strategy for the synthesis of chemically modified RNA constructs exemplified by hairpin and hammerhead ribozymes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 15329-34	11.5	110
354	Sequence effects of single base loops in intramolecular quadruplex DNA. <i>FEBS Letters</i> , 2007 , 581, 1657-60	5.0	109
353	Duplex Scorpion primers in SNP analysis and FRET applications. <i>Nucleic Acids Research</i> , 2001 , 29, E96	20.1	109
352	Crystal structure of an octameric RuvA-Holliday junction complex. <i>Molecular Cell</i> , 1998 , 2, 361-72	17.6	108
351	Crystal structure of a thwarted mismatch glycosylase DNA repair complex. <i>EMBO Journal</i> , 1999 , 18, 6599-609	15.0	108
350	Interaction of berenil with the EcoRI dodecamer d(CGCGAATTCGCG) ₂ in solution studied by NMR. <i>Biochemistry</i> , 1991 , 30, 1372-85	3.2	108
349	Effect of G-tract length on the topology and stability of intramolecular DNA quadruplexes. <i>Biochemistry</i> , 2007 , 46, 3036-44	3.2	105

348	Influence of pH on the conformation and stability of mismatch base-pairs in DNA. <i>Journal of Molecular Biology</i> , 1990 , 212, 437-40	6.5	105
347	Fluorescent properties of DNA base analogue tC upon incorporation into DNA--negligible influence of neighbouring bases on fluorescence quantum yield. <i>Nucleic Acids Research</i> , 2005 , 33, 5019-25	20.1	104
346	Comparison of the thermodynamic stabilities and solution conformations of DNA.RNA hybrids containing purine-rich and pyrimidine-rich strands with DNA and RNA duplexes. <i>Biochemistry</i> , 1996 , 35, 12538-48	3.2	103
345	An autonomous molecular assembler for programmable chemical synthesis. <i>Nature Chemistry</i> , 2016 , 8, 542-8	17.6	103
344	Solution structures of DNA.RNA hybrids with purine-rich and pyrimidine-rich strands: comparison with the homologous DNA and RNA duplexes. <i>Biochemistry</i> , 1998 , 37, 73-80	3.2	101
343	G . T base-pairs in a DNA helix: the crystal structure of d(G-G-G-G-T-C-C-C). <i>Journal of Molecular Biology</i> , 1985 , 186, 805-14	6.5	100
342	Synthesis and polymerase chain reaction amplification of DNA strands containing an unnatural triazole linkage. <i>Journal of the American Chemical Society</i> , 2009 , 131, 3958-64	16.4	95
341	Structural and thermodynamic studies on the adenine.guanine mismatch in B-DNA. <i>Nucleic Acids Research</i> , 1990 , 18, 5617-23	20.1	95
340	High-resolution structure of a mutagenic lesion in DNA. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1990 , 87, 9573-6	11.5	90
339	Fast copper-free click DNA ligation by the ring-strain promoted alkyne-azide cycloaddition reaction. <i>Chemical Communications</i> , 2011 , 47, 6257-9	5.8	88
338	A label-free, electrochemical SERS-based assay for detection of DNA hybridization and discrimination of mutations. <i>Journal of the American Chemical Society</i> , 2012 , 134, 14099-107	16.4	86
337	Crystal structure of a berenil-dodecanucleotide complex: the role of water in sequence-specific ligand binding.. <i>EMBO Journal</i> , 1990 , 9, 1329-1334	13	86
336	Graphene Oxide-Upconversion Nanoparticle Based Optical Sensors for Targeted Detection of mRNA Biomarkers Present in Alzheimer's Disease and Prostate Cancer. <i>ACS Sensors</i> , 2017 , 2, 52-56	9.2	85
335	HyBeacon probes: a new tool for DNA sequence detection and allele discrimination. <i>Molecular and Cellular Probes</i> , 2001 , 15, 363-74	3.3	85
334	Rapid and efficient DNA strand cross-linking by click chemistry. <i>ChemBioChem</i> , 2008 , 9, 1280-5	3.8	75
333	Tension induces a base-paired overstretched DNA conformation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 15179-84	11.5	74
332	Multiplexed mRNA Sensing and Combinatorial-Targeted Drug Delivery Using DNA-Gold Nanoparticle Dimers. <i>ACS Nano</i> , 2018 , 12, 3333-3340	16.7	73
331	DNA adopts normal B-form upon incorporation of highly fluorescent DNA base analogue tC: NMR structure and UV-Vis spectroscopy characterization. <i>Nucleic Acids Research</i> , 2004 , 32, 5087-95	20.1	73

330	Crystal and molecular structure of r(CGCGAAUUAGCG): an RNA duplex containing two G(anti).A(anti) base pairs. <i>Structure</i> , 1994 , 2, 483-94	5.2	70
329	Structural features and hydration of d(C-G-C-G-A-A-T-T-A-G-C-G); a double helix containing two G.A mispairs. <i>Journal of Biomolecular Structure and Dynamics</i> , 1986 , 4, 173-91	3.6	70
328	Affinity of mismatch-binding protein MutS for heteroduplexes containing different mismatches. <i>Biochemical Journal</i> , 2001 , 354, 627-633	3.8	69
327	5-(1-propargylamino)-2Pdeoxyuridine (UP): a novel thymidine analogue for generating DNA triplexes with increased stability. <i>Nucleic Acids Research</i> , 1999 , 27, 1802-9	20.1	68
326	Do C-H...O hydrogen bonds contribute to the stability of nucleic acid base pairs?. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 1995 , 51, 136-9		66
325	Self-association of a DNA loop creates a quadruplex: crystal structure of d(GCATGCT) at 1.8 Å resolution. <i>Structure</i> , 1995 , 3, 335-40	5.2	66
324	Inosine.adenine base pairs in a B-DNA duplex. <i>Nucleic Acids Research</i> , 1987 , 15, 7935-49	20.1	65
323	Structural features and hydration of a dodecamer duplex containing two C.A mispairs. <i>Nucleic Acids Research</i> , 1987 , 15, 6589-606	20.1	65
322	Refined crystal structure of an octanucleotide duplex with G . T mismatched base-pairs. <i>Journal of Molecular Biology</i> , 1986 , 190, 605-18	6.5	65
321	Hydroxylation of methylated CpG dinucleotides reverses stabilisation of DNA duplexes by cytosine 5-methylation. <i>Chemical Communications</i> , 2011 , 47, 5325-7	5.8	60
320	Transcription of click-linked DNA in human cells. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 2362-5	16.4	59
319	Coralyn has a preference for intercalation between TA.T triples in intramolecular DNA triple helices. <i>Nucleic Acids Research</i> , 1997 , 25, 1890-6	20.1	58
318	Very stable mismatch duplexes: structural and thermodynamic studies on tandem G.A mismatches in DNA. <i>Biochemistry</i> , 1992 , 31, 12083-6	3.2	57
317	A very stable cyclic DNA miniduplex with just two base pairs. <i>ChemBioChem</i> , 2008 , 9, 50-2	3.8	56
316	Solution conformation of a parallel DNA triple helix with 5P and 3P triplex-duplex junctions. <i>Structure</i> , 1999 , 7, 1-11	5.2	56
315	Non-covalent single transcription factor encapsulation inside a DNA cage. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 2284-8	16.4	55
314	DNA duplexes stabilized by modified monomer residues: synthesis and stability. <i>Journal of the Chemical Society Perkin Transactions 1</i> , 1998 , 1131-1138		55
313	Fast and efficient DNA crosslinking and multiple orthogonal labelling by copper-free click chemistry. <i>Chemical Communications</i> , 2012 , 48, 11184-6	5.8	54

312	Triplex addressability as a basis for functional DNA nanostructures. <i>Nano Letters</i> , 2007 , 7, 3832-9	11.5	54
311	Thermodynamic and kinetic stability of intermolecular triple helices containing different proportions of C+*GC and T*AT triplets. <i>Nucleic Acids Research</i> , 2003 , 31, 5598-606	20.1	54
310	Genomic sequence correction by single-stranded DNA oligonucleotides: role of DNA synthesis and chemical modifications of the oligonucleotide ends. <i>Journal of Gene Medicine</i> , 2005 , 7, 1534-44	3.5	54
309	Phospholipid membranes decorated by cholesterol-based oligonucleotides as soft hybrid nanostructures. <i>Journal of Physical Chemistry B</i> , 2008 , 112, 10942-52	3.4	53
308	Ultrasensitive fluorescence-based methods for nucleic acid detection: towards amplification-free genetic analysis. <i>Chemical Communications</i> , 2011 , 47, 3717-35	5.8	52
307	Comparison of the electrophoretic and hydrodynamic properties of DNA and RNA oligonucleotide duplexes. <i>Biophysical Journal</i> , 1997 , 73, 1532-8	2.9	52
306	Barnase has subsites that give rise to large rate enhancements. <i>Biochemistry</i> , 1992 , 31, 6390-5	3.2	52
305	Structural characterisation of the bromouracil.guanine base pair mismatch in a Z-DNA fragment. <i>Nucleic Acids Research</i> , 1986 , 14, 1801-9	20.1	52
304	Structural insights into how 5-hydroxymethylation influences transcription factor binding. <i>Chemical Communications</i> , 2014 , 50, 1794-6	5.8	51
303	Functionalizing designer DNA crystals with a triple-helical veneer. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 3979-82	16.4	51
302	Naphthalenyl- and anthracenyl-ethynyl dT analogues as base discriminating fluorescent nucleosides and intramolecular energy transfer donors in oligonucleotide probes. <i>Tetrahedron</i> , 2007 , 63, 3483-3490	2.4	51
301	Addressable high-information-density DNA nanostructures. <i>Chemical Physics Letters</i> , 2007 , 440, 125-129	2.5	51
300	Structural and mechanistic basis of penicillin-binding protein inhibition by lactivicins. <i>Nature Chemical Biology</i> , 2007 , 3, 565-9	11.7	51
299	N.m.r. determination of the solution conformation and dynamics of the A.G mismatch in the d(CGCAAATTGGCG)2 dodecamer. <i>Biochemical Journal</i> , 1991 , 279 (Pt 1), 269-81	3.8	51
298	Solution conformation of a deoxynucleotide containing tandem G.A mismatched base pairs and 3' overhanging ends in d(GTGAACCTT)2. <i>Biochemistry</i> , 1992 , 31, 12087-95	3.2	51
297	Conformational properties of the G.G mismatch in d(CGCGAATTGGCG)2 determined by NMR. <i>Biochemistry</i> , 1992 , 31, 5411-22	3.2	51
296	Conformation of guanine-8-oxoadenine base pairs in the crystal structure of d(CGCGAATT(O8A)GCG). <i>Biochemistry</i> , 1992 , 31, 8415-20	3.2	51
295	Gold nanoparticles and fluorescently-labelled DNA as a platform for biological sensing. <i>Nanoscale</i> , 2013 , 5, 9503-10	7.7	50

- 294 A new base-stable linker for solid-phase oligonucleotide synthesis. *Journal of the Chemical Society Chemical Communications*, **1989**, 891 50
- 293 Graphene Oxide-Upconversion Nanoparticle Based Portable Sensors for Assessing Nutritional Deficiencies in Crops. *ACS Nano*, **2018**, 12, 6273-6279 16.7 49
- 292 Conformational and Thermodynamic Properties of Parallel Intramolecular Triple Helices Containing a DNA, RNA, or 2EDMeDNA Third Strand. *Journal of the American Chemical Society*, **1999**, 121, 11063-11070 16.4 49
- 291 NMR assignments and solution conformation of the DNA.RNA hybrid duplex d(GTGAAGCTT).r(AAGUUCAC). *FEBS Journal*, **1993**, 215, 297-306 49
- 290 Refined crystal structure of an octanucleotide duplex with I.T. mismatched base pairs. *Nucleic Acids Research*, **1989**, 17, 55-72 20.1 49
- 289 Copper-free click chemistry as an emerging tool for the programmed ligation of DNA-functionalised gold nanoparticles. *Nanoscale*, **2013**, 5, 7209-12 7.7 48
- 288 Assembly of a biocompatible triazole-linked gene by one-pot click-DNA ligation. *Nature Chemistry*, **2017**, 9, 1089-1098 17.6 47
- 287 Efficient RNA synthesis by in vitro transcription of a triazole-modified DNA template. *Chemical Communications*, **2011**, 47, 12057-8 5.8 47
- 286 Formation of stable DNA triplexes. *Biochemical Society Transactions*, **2011**, 39, 629-34 5.1 47
- 285 The crystal structure of the RNA/DNA hybrid r(GAAGAGAAGC). d(GCTTCTCTTC) shows significant differences to that found in solution. *Nucleic Acids Research*, **1999**, 27, 555-61 20.1 47
- 284 Replication Fork Reversal during DNA Interstrand Crosslink Repair Requires CMG Unloading. *Cell Reports*, **2018**, 23, 3419-3428 10.6 46
- 283 Affinity of mismatch-binding protein MutS for heteroduplexes containing different mismatches. *Biochemical Journal*, **2001**, 354, 627-33 3.8 46
- 282 An extra dimension in nucleic acid sequence recognition. *Quarterly Reviews of Biophysics*, **2005**, 38, 311-20 45
- 281 Stable DNA triple helix formation using oligonucleotides containing 2Paminoethoxy,5-propargylamino-U. *Biochemistry*, **2002**, 41, 7224-31 3.2 45
- 280 Redox Capacitive Assaying of C-Reactive Protein at a Peptide Supported Aptamer Interface. *Analytical Chemistry*, **2018**, 90, 3005-3008 7.8 44
- 279 Assessing the biocompatibility of click-linked DNA in Escherichia coli. *Nucleic Acids Research*, **2012**, 40, 10567-75 20.1 44
- 278 Membrane-anchored DNA assembly for energy and electron transfer. *Journal of the American Chemical Society*, **2009**, 131, 2831-9 16.4 44
- 277 Functionalized nanostructures: redox-active porphyrin anchors for supramolecular DNA assemblies. *ACS Nano*, **2010**, 4, 5037-46 16.7 43

276	Direct measurement of the substrate preference of uracil-DNA glycosylase. <i>Journal of Biological Chemistry</i> , 1998 , 273, 45-50	5.4	43
275	Synthesis and properties of DNA-PNA chimeric oligomers. <i>Nucleic Acids Research</i> , 1996 , 24, 3357-63	20.1	43
274	Azide and trans-cyclooctene dUTPs: incorporation into DNA probes and fluorescent click-labelling. <i>Analyst, The</i> , 2015 , 140, 2671-8	5	41
273	Characterization of photophysical and base-mimicking properties of a novel fluorescent adenine analogue in DNA. <i>Nucleic Acids Research</i> , 2011 , 39, 4513-24	20.1	41
272	Attachment of vitamin E derivatives to oligonucleotides during solid-phase synthesis. <i>Tetrahedron Letters</i> , 1992 , 33, 2729-2732	2	40
271	A Hitchhiker's Guide to Click-Chemistry with Nucleic Acids. <i>Chemical Reviews</i> , 2021 , 121, 7122-7154	68.1	40
270	Toward Complete Sequence Flexibility of Nucleic Acid Base Analogue FRET. <i>Journal of the American Chemical Society</i> , 2017 , 139, 9271-9280	16.4	39
269	RPA activates the XPF-ERCC1 endonuclease to initiate processing of DNA interstrand crosslinks. <i>EMBO Journal</i> , 2017 , 36, 2047-2060	13	39
268	Dynamics of the 4D genome during in vivo lineage specification and differentiation. <i>Nature Communications</i> , 2020 , 11, 2722	17.4	39
267	Structure and dynamics of triazole-linked DNA: biocompatibility explained. <i>Chemistry - A European Journal</i> , 2011 , 17, 14714-7	4.8	39
266	Stable recognition of TA interruptions by triplex forming oligonucleotides containing a novel nucleoside. <i>Biochemistry</i> , 2005 , 44, 5884-92	3.2	39
265	Guanine-1,N6-ethenoadenine base pairs in the crystal structure of d(CGCGAATT(epsilon dA)GCG). <i>Biochemistry</i> , 1994 , 33, 4755-61	3.2	39
264	Solution conformation of an intramolecular DNA triplex containing a nonnucleotide linker: comparison with the DNA duplex. <i>Biochemistry</i> , 1997 , 36, 14502-11	3.2	38
263	Recognition of CG inversions in DNA triple helices by methylated 3H-pyrrolo[2,3-d]pyrimidin-2(7H)-one nucleoside analogues. <i>Chemical Communications</i> , 2005 , 2555-7	5.8	38
262	Hydration of the RNA duplex r(CGCAAAUUUGCG) ₂ determined by NMR. <i>Nucleic Acids Research</i> , 1996 , 24, 3693-9	20.1	37
261	The conformational variability of an adenosine.inosine base-pair in a synthetic DNA dodecamer. <i>Nucleic Acids Research</i> , 1992 , 20, 4753-9	20.1	37
260	5-Formylcytosine does not change the global structure of DNA. <i>Nature Structural and Molecular Biology</i> , 2017 , 24, 544-552	17.6	35
259	Self-assembled DNA-based fluorescence waveguide with selectable output. <i>Small</i> , 2011 , 7, 3178-85	11	35

258	Cholesteryl-conjugated phosphorothioate oligodeoxynucleotides modulate CYP2B1 expression in vivo. <i>Journal of Drug Targeting</i> , 1995 , 2, 477-85	5.4	35
257	Efficient reverse click labeling of azide oligonucleotides with multiple alkynyl Cy-Dyes applied to the synthesis of HyBeacon probes for genetic analysis. <i>Tetrahedron</i> , 2012 , 68, 857-864	2.4	34
256	Simplified sample preparation for the analysis of oligonucleotides by matrix-assisted laser desorption/ionisation time-of-flight mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 1999 , 13, 1717-23	2.2	34
255	Quadracyclic adenine: a non-perturbing fluorescent adenine analogue. <i>Chemistry - A European Journal</i> , 2012 , 18, 5987-97	4.8	33
254	Modulation of density and orientation of amphiphilic DNA anchored to phospholipid membranes. I. Supported lipid bilayers. <i>Journal of Physical Chemistry B</i> , 2010 , 114, 7338-47	3.4	33
253	Selectivity and affinity of triplex-forming oligonucleotides containing 2Paminoethoxy-5-(3-aminoprop-1-ynyl)uridine for recognizing AT base pairs in duplex DNA. <i>Nucleic Acids Research</i> , 2004 , 32, 4439-47	20.1	33
252	First synthesis of 1-deazacytidine, the C-nucleoside analogue of cytidine. <i>Tetrahedron Letters</i> , 2002 , 43, 3121-3123	2	33
251	Novel method for detection, typing, and quantification of human papillomaviruses in clinical samples. <i>Journal of Clinical Microbiology</i> , 2001 , 39, 3204-12	9.7	33
250	A new modular approach to nanoassembly: stable and addressable DNA nanoconstructs via orthogonal click chemistries. <i>ACS Nano</i> , 2012 , 6, 9221-8	16.7	32
249	Synthesis and oligonucleotide incorporation of fluorescent cytosine analogue tC: a promising nucleic acid probe. <i>Nature Protocols</i> , 2007 , 2, 615-23	18.8	32
248	A New Platinum Anticancer Drug Forms a Highly Stereoselective Adduct with Duplex DNA. <i>Angewandte Chemie - International Edition</i> , 1999 , 38, 2060-2063	16.4	32
247	An artificial triazole backbone linkage provides a split-and-click strategy to bioactive chemically modified CRISPR sgRNA. <i>Nature Communications</i> , 2019 , 10, 1610	17.4	31
246	Solid phase click ligation for the synthesis of very long oligonucleotides. <i>Chemical Communications</i> , 2013 , 49, 6959-61	5.8	31
245	Stabilisation of self-assembled DNA crystals by triplex-directed photo-cross-linking. <i>Chemical Communications</i> , 2016 , 52, 8014-7	5.8	30
244	Denaturation of dsDNA immobilised at a negatively charged gold electrode is not caused by electrostatic repulsion. <i>Chemical Science</i> , 2013 , 4, 1625	9.4	30
243	Triplex-directed recognition of a DNA nanostructure assembled by crossover strand exchange. <i>ACS Nano</i> , 2012 , 6, 3604-13	16.7	30
242	Synthesis of fluorophore and quencher monomers for use in scorpion primers and nucleic acid structural probes. <i>Organic and Biomolecular Chemistry</i> , 2003 , 1, 2267-75	3.9	30
241	The molecular structure of a 4Pepiadriamycin complex with d(TGATCA) at 1.7Å resolution: comparison with the structure of 4Pepiadriamycin d(TGTACA) and d(CGATCG) complexes. <i>Nucleic Acids Research</i> , 1992 , 20, 3561-6	20.1	30

240	Di-copper metallodrugs promote NCI-60 chemotherapy via singlet oxygen and superoxide production with tandem TA/TA and AT/AT oligonucleotide discrimination. <i>Nucleic Acids Research</i> , 2018 , 46, 2733-2750	20.1	29
239	The structure of FemX(Wv) in complex with a peptidyl-RNA conjugate: mechanism of aminoacyl transfer from Ala-tRNA(Ala) to peptidoglycan precursors. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 7278-81	16.4	29
238	Rapid chemical ligation of oligonucleotides by the Diels-Alder reaction. <i>Organic and Biomolecular Chemistry</i> , 2011 , 9, 232-5	3.9	29
237	Use of inter-proton nuclear Overhauser effects to assign the nuclear magnetic resonance spectra of oligodeoxynucleotide and hybrid duplexes in aqueous solution. <i>FEBS Journal</i> , 1983 , 135, 307-14		29
236	Pentacyclic adenine: a versatile and exceptionally bright fluorescent DNA base analogue. <i>Chemical Science</i> , 2018 , 9, 3494-3502	9.4	28
235	Efficient enzymatic synthesis and dual-colour fluorescent labelling of DNA probes using long chain azido-dUTP and BCN dyes. <i>Nucleic Acids Research</i> , 2016 , 44, e79	20.1	28
234	Enzymatic incorporation and fluorescent labelling of cyclooctyne-modified deoxyuridine triphosphates in DNA. <i>Bioorganic and Medicinal Chemistry</i> , 2014 , 22, 4384-90	3.4	28
233	A new fixation strategy for addressable nano-network building blocks. <i>Chemical Communications</i> , 2010 , 46, 3714-6	5.8	28
232	Flexible acoustic particle manipulation device with integrated optical waveguide for enhanced microbead assays. <i>Analytical Sciences</i> , 2009 , 25, 285-91	1.7	28
231	DNA polymorphism as an origin of adenine-thymine tract length-dependent threading intercalation rate. <i>Journal of the American Chemical Society</i> , 2008 , 130, 14651-8	16.4	28
230	Anthracycline binding to DNA. High-resolution structure of d(TGTACA) complexed with 4Pepiadriamycin. <i>FEBS Journal</i> , 1992 , 204, 69-74		28
229	Reversible Ligation of Programmed DNA-Gold Nanoparticle Assemblies. <i>Journal of the American Chemical Society</i> , 2015 , 137, 9242-5	16.4	27
228	Closed nanoconstructs assembled by step-by-step ss-DNA coupling assisted by phospholipid membranes. <i>Soft Matter</i> , 2009 , 5, 1639	3.6	27
227	Triplex staples: DNA double-strand cross-linking at internal and terminal sites using psoralen-containing triplex-forming oligonucleotides. <i>Bioconjugate Chemistry</i> , 2006 , 17, 1561-7	6.3	27
226	Submicron patterning of DNA oligonucleotides on silicon. <i>Nucleic Acids Research</i> , 2004 , 32, e118	20.1	27
225	The solution structure of a DNA*RNA duplex containing 5-propynyl U and C; comparison with 5-Me modifications. <i>Nucleic Acids Research</i> , 2003 , 31, 2683-93	20.1	27
224	Combined nucleobase and backbone modifications enhance DNA duplex stability and preserve biocompatibility. <i>Chemical Science</i> , 2014 , 5, 253-259	9.4	26
223	Using surface-enhanced Raman spectroscopy and electrochemically driven melting to discriminate <i>Yersinia pestis</i> from <i>Y. pseudotuberculosis</i> based on single nucleotide polymorphisms within unpurified polymerase chain reaction amplicons. <i>Analytical Chemistry</i> , 2015 , 87, 1605-12	7.8	26

222	Interrogation of short tandem repeats using fluorescent probes and melting curve analysis: a step towards rapid DNA identity screening. <i>Forensic Science International: Genetics</i> , 2008 , 2, 333-9	4.3	26
221	A Raman probe for selective wrapping of single-walled carbon nanotubes by DNA. <i>Nanotechnology</i> , 2007 , 18, 405706	3.4	26
220	Synthesis of HyBeacons and dual-labelled probes containing 2Pfluorescent groups for use in genetic analysis. <i>Chemical Communications</i> , 2003 , 1234-5	5.8	26
219	Anthracycline-DNA interactions at unfavourable base-pair triplet-binding sites: structures of d(CGGCCG)/daunomycin and d(TGGCCA)/adriamycin complexes. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 1993 , 49, 458-67		26
218	Specifically horizontally tethered DNA probes on Au surfaces allow labelled and label-free DNA detection using SERS and electrochemically driven melting. <i>Chemical Science</i> , 2016 , 7, 386-393	9.4	25
217	Molecular Requirements of High-Fidelity Replication-Competent DNA Backbones for Orthogonal Chemical Ligation. <i>Journal of the American Chemical Society</i> , 2017 , 139, 1575-1583	16.4	25
216	Six-colour HyBeacon probes for multiplex genetic analysis. <i>ChemBioChem</i> , 2010 , 11, 2530-3	3.8	25
215	Sequence-selective metalation of double-helical oligodeoxyribonucleotides with PtII, MnII, and ZnII ions. <i>Chemistry - A European Journal</i> , 2003 , 9, 1620-30	4.8	25
214	Thermodynamic stability and solution conformation of tandem G.A mismatches in RNA and RNA-DNA hybrid duplexes. <i>FEBS Journal</i> , 1994 , 220, 703-15		25
213	Purification of synthetic DNA. <i>Methods in Enzymology</i> , 1992 , 211, 20-35	1.7	25
212	2PAkynynucleotides: A Sequence- and Spin Label-Flexible Strategy for EPR Spectroscopy in DNA. <i>Journal of the American Chemical Society</i> , 2016 , 138, 9069-72	16.4	24
211	Potent triple helix stabilization by 5P3Pmodified triplex-forming oligonucleotides. <i>ChemBioChem</i> , 2009 , 10, 1839-51	3.8	24
210	A highly fluorescent DNA toolkit: synthesis and properties of oligonucleotides containing new Cy3, Cy5 and Cy3B monomers. <i>Nucleic Acids Research</i> , 2012 , 40, e108	20.1	24
209	Chemical modification and micropatterning of Si(1 0 0) with oligonucleotides. <i>Microelectronic Engineering</i> , 2004 , 73-74, 830-836	2.5	24
208	DNA triple helix formation at target sites containing several pyrimidine interruptions: stabilization by protonated cytosine or 5-(1-propargylamino)dU. <i>Biochemistry</i> , 1999 , 38, 13747-58	3.2	24
207	Initial DNA interactions of the binuclear threading intercalator [Ru(bidppz(bipy)4Ru2]4+: an NMR study with [d(CGCGAATTCGCG)]2. <i>Chemistry - A European Journal</i> , 2013 , 19, 5401-10	4.8	23
206	Measurement of a reaction-diffusion crossover in exciton-exciton recombination inside carbon nanotubes using femtosecond optical absorption. <i>Physical Review Letters</i> , 2013 , 111, 197401	7.4	23
205	CG base pair recognition within DNA triple helices by modified N-methylpyrrolo-dC nucleosides. <i>Organic and Biomolecular Chemistry</i> , 2010 , 8, 5087-96	3.9	23

204	Improved synthesis of 5-hydroxymethyl-2Pdeoxycytidine phosphoramidite using a 2Pdeoxyuridine to 2Pdeoxycytidine conversion without temporary protecting groups. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2011 , 21, 1181-4	2.9	23
203	The dependence of DNase I activity on the conformation of oligodeoxynucleotides. <i>Biochemical Journal</i> , 1997 , 321 (Pt 2), 481-6	3.8	23
202	Non-Watson-Crick base associations in DNA and RNA revealed by single crystal x-ray diffraction methods: Mismatches, modified bases, and nonduplex DNA. <i>Biopolymers</i> , 1997 , 44, 91-103	2.2	23
201	Comparison of the solution structures of intramolecular DNA triple helices containing adjacent and non-adjacent CG.C+ triplets. <i>Nucleic Acids Research</i> , 1998 , 26, 3677-86	20.1	23
200	Modulation of density and orientation of amphiphilic DNA on phospholipid membranes. II. Vesicles. <i>Journal of Physical Chemistry B</i> , 2010 , 114, 7348-58	3.4	22
199	Molecular beacons attached to glass beads fluoresce upon hybridisation to target DNA. <i>Chemical Communications</i> , 2000 , 621-622	5.8	22
198	A trigonal form of the idarubicin:d(CGATCG) complex; crystal and molecular structure at 2.0 Å resolution. <i>Nucleic Acids Research</i> , 1995 , 23, 1710-6	20.1	22
197	INSIGHT: A population-scale COVID-19 testing strategy combining point-of-care diagnosis with centralized high-throughput sequencing. <i>Science Advances</i> , 2021 , 7,	14.3	22
196	Simultaneous MLPA-based multiplex point mutation and deletion analysis of the dystrophin gene. <i>Molecular Biotechnology</i> , 2007 , 35, 135-40	3	21
195	NMR analyses on N-hydroxymethylated nucleobases - implications for formaldehyde toxicity and nucleic acid demethylases. <i>Organic and Biomolecular Chemistry</i> , 2018 , 16, 4021-4032	3.9	21
194	Exceptionally slow kinetics of the intramolecular quadruplex formed by the Oxytricha telomeric repeat. <i>Organic and Biomolecular Chemistry</i> , 2005 , 3, 4153-7	3.9	20
193	Linear fluorescent oligonucleotide probes with an acridine quencher generate a signal upon hybridisation. <i>Chemical Communications</i> , 2001 , 1480-1481	5.8	20
192	Properties of multiple G.A mismatches in stable oligonucleotide duplexes. <i>FEBS Journal</i> , 1994 , 220, 717-27		20
191	CRISPRi is not strand-specific at all loci and redefines the transcriptional landscape. <i>ELife</i> , 2017 , 6,	8.9	19
190	Sensing of Vimentin mRNA in 2D and 3D Models of Wounded Skin Using DNA-Coated Gold Nanoparticles. <i>Small</i> , 2018 , 14, e1703489	11	19
189	Locked nucleic acid (LNA) enhances binding affinity of triazole-linked DNA towards RNA. <i>Chemical Communications</i> , 2017 , 53, 8910-8913	5.8	19
188	Reversible energy-transfer switching on a DNA scaffold. <i>Journal of the American Chemical Society</i> , 2015 , 137, 2444-7	16.4	19
187	Nanofabrication yields. Hybridization and click-fixation of polycyclic DNA nanoassemblies. <i>ACS Nano</i> , 2011 , 5, 7565-75	16.7	19

- 186 DNA triplex formation with 5-dimethylaminopropargyl deoxyuridine. *Nucleic Acids Research*, **2009**, 37, 1288-96 20.1 19
- 185 DNA closed nanostructures: a structural and Monte Carlo simulation study. *Journal of Physical Chemistry B*, **2008**, 112, 15283-94 3.4 19
- 184 Crystal structure of the Escherichia coli dcm very-short-patch DNA repair endonuclease bound to its reaction product-site in a DNA superhelix. *Nucleic Acids Research*, **2003**, 31, 1633-9 20.1 19
- 183 DNA sequence recognition by an isopropyl substituted thiazole polyamide. *Nucleic Acids Research*, **2004**, 32, 3410-7 20.1 19
- 182 DNA sequence specificity of triplex-binding ligands. *FEBS Journal*, **2003**, 270, 4982-92 19
- 181 Light-Induced Reversible DNA Ligation of Gold Nanoparticle Superlattices. *ACS Nano*, **2019**, 13, 5771-5777 16.7 18
- 180 Preparation and characterization of manganese, cobalt and zinc DNA nanoflowers with tuneable morphology, DNA content and size. *Nucleic Acids Research*, **2018**, 46, 7495-7505 20.1 18
- 179 The Sedimentation of Colloidal Nanoparticles in Solution and Its Study Using Quantitative Digital Photography. *Particle and Particle Systems Characterization*, **2017**, 34, 1700095 3.1 18
- 178 Force-induced melting of DNA--evidence for peeling and internal melting from force spectra on short synthetic duplex sequences. *Nucleic Acids Research*, **2014**, 42, 8083-91 20.1 18
- 177 Gauging the flexibility of fluorescent markers for the interpretation of fluorescence resonance energy transfer. *Journal of the American Chemical Society*, **2011**, 133, 279-85 16.4 18
- 176 The Use of an Electroactive Marker as a SERS Label in an E-melting Mutation Discrimination Assay. *Electroanalysis*, **2009**, 21, 2190-2197 3 18
- 175 Platform for controlled supramolecular nanoassembly. *Nano Letters*, **2009**, 9, 2482-6 11.5 18
- 174 Analysis of short tandem repeats by using SERS monitoring and electrochemical melting. *Angewandte Chemie - International Edition*, **2010**, 49, 5917-20 16.4 18
- 173 Rapid typing of STRs in the human genome by HyBeacon melting. *Organic and Biomolecular Chemistry*, **2008**, 6, 4553-9 3.9 18
- 172 Controlled release of chol-TEG-DNA from Nano- and micropatterned SU-8 surfaces by a spreading lipid film. *Nano Letters*, **2008**, 8, 227-31 11.5 18
- 171 Recognition of GT mismatches by Vsr mismatch endonuclease. *Nucleic Acids Research*, **2000**, 28, 2535-40 20.1 18
- 170 Enzyme-free synthesis of cyclic single-stranded DNA constructs containing a single triazole, amide or phosphoramidate backbone linkage and their use as templates for rolling circle amplification and nanoflower formation. *Chemical Science*, **2018**, 9, 8110-8120 9.4 17
- 169 Enhanced H-bonding and π -stacking in DNA: a potent duplex-stabilizing and mismatch sensing nucleobase analogue. *Chemical Science*, **2014**, 5, 3836-3844 9.4 17

- 168 The effect of base-pair sequence on electrochemically driven denaturation. *Bioelectrochemistry*, **2012**, 85, 7-13 5.6 17
- 167 Single tube gene synthesis by phosphoramidate chemical ligation. *Chemical Communications*, **2017**, 53, 10700-10702 5.8 17
- 166 Kinetic studies on the formation of DNA triplexes containing the nucleoside analogue 2PO-(2-aminoethyl)-5-(3-amino-1-propynyl)uridine. *Organic and Biomolecular Chemistry*, **2008**, 6, 122-9 3.9 17
- 165 Combining nucleoside analogues to achieve recognition of oligopurine tracts by triplex-forming oligonucleotides at physiological pH. *FEBS Letters*, **2005**, 579, 6616-20 3.8 17
- 164 A synthetic holliday junction is sandwiched between two tetrameric Mycobacterium leprae RuvA structures in solution: new insights from neutron scattering contrast variation and modelling. *Journal of Molecular Biology*, **1998**, 284, 385-400 6.5 17
- 163 Epigenetic Modifications of Cytosine: Biophysical Properties, Regulation, and Function in Mammalian DNA. *BioEssays*, **2018**, 40, 1700199 4.1 16
- 162 Fluorogenic thiazole orange TOTFO probes stabilise parallel DNA triplexes at pH 7 and above. *Chemical Science*, **2018**, 9, 7681-7687 9.4 16
- 161 Investigating d-lysine stereochemistry for epigenetic methylation, demethylation and recognition. *Chemical Communications*, **2017**, 53, 13264-13267 5.8 16
- 160 Triplex-directed covalent cross-linking of a DNA nanostructure. *Chemical Communications*, **2012**, 48, 9593-4 3.4 16
- 159 Real-time surface-enhanced Raman spectroscopy monitoring of surface pH during electrochemical melting of double-stranded DNA. *Langmuir*, **2012**, 28, 5464-70 4 16
- 158 Structural basis for the interaction of lactivins with serine beta-lactamases. *Journal of Medicinal Chemistry*, **2010**, 53, 5890-4 8.3 16
- 157 Synthesis and evaluation of a new non-fluorescent quencher in fluorogenic oligonucleotide probes for real-time PCR. *Organic and Biomolecular Chemistry*, **2005**, 3, 2534-42 3.9 16
- 156 Functionalizing Designer DNA Crystals with a Triple-Helical Veneer. *Angewandte Chemie*, **2014**, 126, 4060-4063 15
- 155 2PAminoethoxy-2-amino-3-methylpyridine in triplex-forming oligonucleotides: high affinity, selectivity and resistance to enzymatic degradation. *Chemistry - A European Journal*, **2011**, 17, 14851-6 4.8 15
- 154 A stretched conformation of DNA with a biological role?. *Quarterly Reviews of Biophysics*, **2017**, 50, e11 7 15
- 153 DNA-Coated Gold Nanoparticles for the Detection of mRNA in Live Hydra Vulgaris Animals. *ACS Applied Materials & Interfaces*, **2019**, 11, 13905-13911 9.5 15
- 152 Design of thiazole orange oligonucleotide probes for detection of DNA and RNA by fluorescence and duplex melting. *Organic and Biomolecular Chemistry*, **2019**, 17, 5943-5950 3.9 14
- 151 Programming the assembly of gold nanoparticles on graphene oxide sheets using DNA. *Journal of Materials Chemistry C*, **2015**, 3, 9379-9384 7.1 14

150	Synthesis of chemically modified DNA. <i>Biochemical Society Transactions</i> , 2016 , 44, 709-15	5.1	14
149	Loosening the DNA wrapping around single-walled carbon nanotubes by increasing the strand length. <i>Nanotechnology</i> , 2009 , 20, 195603	3.4	14
148	The stability of triplex DNA is affected by the stability of the underlying duplex. <i>Biophysical Chemistry</i> , 2009 , 145, 105-10	3.5	14
147	Synthesis and properties of triplex-forming oligonucleotides containing 2PO-(2-methoxyethyl)-5-(3-aminoprop-1-ynyl)-uridine. <i>Bioorganic and Medicinal Chemistry</i> , 2010 , 18, 6389-97	3.4	14
146	Structure of a DNA base-excision product resembling a cisplatin inter-strand adduct. <i>Nature Structural and Molecular Biology</i> , 1998 , 5, 697-701	17.6	14
145	Synthesis of a modified thymidine monomer for site-specific incorporation of reporter groups into oligonucleotides. <i>Tetrahedron Letters</i> , 2001 , 42, 2587-2591	2	14
144	Synthetic oligonucleotide cocktails as probes for detection of human parvovirus B19. <i>Journal of Virological Methods</i> , 1995 , 53, 91-102	2.6	14
143	Synthesis and antibody-mediated detection of oligonucleotides containing multiple 2,4-dinitrophenyl reporter groups. <i>Nucleic Acids Research</i> , 1993 , 21, 1705-12	20.1	14
142	New two dimensional liquid-phase colorimetric assay based on old iodine-starch complexation for the naked-eye quantitative detection of analytes. <i>Chemical Communications</i> , 2016 , 52, 7454-7	5.8	14
141	Interaction of oligonucleotide-conjugates with the dipeptide transporter system in Caco-2 cells. <i>Biochemical Pharmacology</i> , 1997 , 53, 1223-8	6	13
140	Synthesis, Serum Stability and Cell Uptake of Cyclic and Hairpin Decoy Oligonucleotides for TCF/LEF and GLI Transcription Factors. <i>International Journal of Peptide Research and Therapeutics</i> , 2008 , 14, 367-372	2.1	13
139	Determining the origin of the stabilization of DNA by 5-aminopropynylation of pyrimidines. <i>Biochemistry</i> , 2005 , 44, 4710-9	3.2	13
138	DNA sequence recognition by an imidazole-containing isopropyl-substituted thiazole polyamide (thiazotropsin B). <i>Bioorganic and Medicinal Chemistry Letters</i> , 2006 , 16, 3469-74	2.9	13
137	Cleavage of fragments containing DNA mismatches by enzymic and chemical probes. <i>Biochemical Journal</i> , 2003 , 371, 697-708	3.8	13
136	A new dark quencher for use in genetic analysis. <i>Chemical Communications</i> , 2003 , 970-1	5.8	13
135	Synthesis of a novel bis-amino-modified thymidinemonomer for use in DNA triplex stabilisation. <i>Chemical Communications</i> , 2000 , 2315-2316	5.8	13
134	Discrimination against the cytosine analog tC by Escherichia coli DNA polymerase IV DinB. <i>Journal of Molecular Biology</i> , 2011 , 409, 89-100	6.5	12
133	Thermodynamic Aspects of DNA Nanoconstruct Stability and Design. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 5941-5946	3.8	12

132	Crystallographic and mass spectrometric analyses of a tandem GNAT protein from the clavulanic acid biosynthesis pathway. <i>Proteins: Structure, Function and Bioinformatics</i> , 2010 , 78, 1398-407	4.2	12
131	Rapid mass spectrometric identification of human genomic polymorphisms using multiplexed photocleavable mass-tagged probes and solid phase capture. <i>Organic and Biomolecular Chemistry</i> , 2007 , 5, 1878-85	3.9	12
130	Purines, pyrimidines, and imidazoles. Part 53. Synthesis of some 5-halogeno-analogues of metiamide and cimetidine. <i>Journal of the Chemical Society Perkin Transactions 1</i> , 1980 , 2310		12
129	Melting temperature measurement and mesoscopic evaluation of single, double and triple DNA mismatches. <i>Chemical Science</i> , 2020 , 11, 8273-8287	9.4	12
128	Strain discrimination of using a SERS-based electrochemically driven melting curve analysis of variable number tandem repeat sequences. <i>Chemical Science</i> , 2015 , 6, 1846-1852	9.4	11
127	Selective killing of cells triggered by their mRNA signature in the presence of smart nanoparticles. <i>Nanoscale</i> , 2016 , 8, 16857-16861	7.7	11
126	Reverse transcription through a bulky triazole linkage in RNA: implications for RNA sequencing. <i>Chemical Communications</i> , 2014 , 50, 7597-600	5.8	11
125	Instrument-free quantitative gold nanoparticle-based liquid-phase colorimetric assays for use in resource-poor environments. <i>Chemical Communications</i> , 2017 , 53, 8407-8410	5.8	11
124	Rapid detection of diagnostic targets using isothermal amplification and HyBeacon probes--a homogenous system for sequence-specific detection. <i>Molecular and Cellular Probes</i> , 2015 , 29, 92-8	3.3	11
123	2?-Substituted 2-amino-3-methylpyridine ribonucleosides in triplex-forming oligonucleotides: triplex stability is determined by chemical environment. <i>MedChemComm</i> , 2011 , 2, 550	5	11
122	Binding of 14-3-3 proteins to a single stranded oligodeoxynucleotide aptamer. <i>Bioorganic Chemistry</i> , 2008 , 36, 215-9	5.1	11
121	CG base pair recognition within DNA triple helices using N-methyl-3H-pyrrolo[2,3-d]pyrimidin-2(7H)-one nucleoside analogues. <i>Nucleosides, Nucleotides and Nucleic Acids</i> , 2007 , 26, 1363-7	1.4	11
120	Synthesis and properties of oligonucleotides containing a cholesterol thymidine monomer. <i>Nucleosides, Nucleotides and Nucleic Acids</i> , 2007 , 26, 785-94	1.4	11
119	Electrospray ionisation-cleavable tandem nucleic acid mass tag-peptide nucleic acid conjugates: synthesis and applications to quantitative genomic analysis using electrospray ionisation-MS/MS. <i>Nucleic Acids Research</i> , 2007 , 35, e28	20.1	11
118	DNA triple-helix formation at target sites containing duplex mismatches. <i>Biophysical Chemistry</i> , 2006 , 123, 134-40	3.5	11
117	Getting DNA and RNA out of the dark with 2CNqA: a bright adenine analogue and interbase FRET donor. <i>Nucleic Acids Research</i> , 2020 , 48, 7640-7652	20.1	10
116	Combination probes with intercalating anchors and proximal fluorophores for DNA and RNA detection. <i>Nucleic Acids Research</i> , 2016 , 44, e138	20.1	10
115	New technologies for DNA analysis--a review of the READNA Project. <i>New Biotechnology</i> , 2016 , 33, 311-304	30.4	10

114	Membrane protrusion coarsening and nanotubulation within giant unilamellar vesicles. <i>Journal of the American Chemical Society</i> , 2011 , 133, 18046-9	16.4	10
113	Effects of a hairpin polyamide on DNA melting: comparison with distamycin and Hoechst 33258. <i>Biophysical Chemistry</i> , 2004 , 111, 205-12	3.5	10
112	. <i>Chemistry - A European Journal</i> , 2000 , 6, 3636-3644	4.8	10
111	Nanopore sequencing of single-cell transcriptomes with scCOLOR-seq. <i>Nature Biotechnology</i> , 2021 ,	44.5	10
110	Advances and challenges in epigenomic single-cell sequencing applications. <i>Current Opinion in Chemical Biology</i> , 2020 , 57, 17-26	9.7	10
109	Squaramide-Based 5PPosphate Replacements Bind to the DNA Repair Exonuclease SNM1A. <i>ChemistrySelect</i> , 2018 , 3, 12824-12829	1.8	10
108	Gene assembly via one-pot chemical ligation of DNA promoted by DNA nanostructures. <i>Chemical Communications</i> , 2018 , 54, 4529-4532	5.8	9
107	Triplex-mediated analysis of cytosine methylation at CpA sites in DNA. <i>Chemical Communications</i> , 2014 , 50, 551-3	5.8	9
106	Transcription of Click-Linked DNA in Human Cells. <i>Angewandte Chemie</i> , 2014 , 126, 2394-2397	3.6	9
105	A triazole linkage that mimics the DNA phosphodiester group in living systems. <i>Quarterly Reviews of Biophysics</i> , 2015 , 48, 429-36	7	9
104	Kinetics of diffusion-mediated DNA hybridization in lipid monolayer films determined by single-molecule fluorescence spectroscopy. <i>ACS Nano</i> , 2013 , 7, 308-15	16.7	9
103	Efficient self-assembly of DNA-functionalized fluorophores and gold nanoparticles with DNA functionalized silicon surfaces: the effect of oligomer spacers. <i>Nucleic Acids Research</i> , 2013 , 41, e80	20.1	9
102	An analogue of adenine that forms an "A:T" base pair of comparable stability to G:C. <i>Chemical Communications</i> , 2004 , 2208-9	5.8	9
101	DNA triple helix stabilisation by covalent attachment of a triplex-specific ligand. <i>Biochimica Et Biophysica Acta Gene Regulatory Mechanisms</i> , 1999 , 1447, 137-45		9
100	Electrophilic RNA for Peptidyl-RNA Synthesis and Site-Specific Cross-Linking with tRNA-Binding Enzymes. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 13553-13557	16.4	9
99	Synthesis, Affinity for Complementary RNA and DNA, and Enzymatic Stability of Triazole-Linked Locked Nucleic Acids (t-LNAs). <i>ACS Omega</i> , 2018 , 3, 6976-6987	3.9	9
98	The effect of temperature on electrochemically driven denaturation monitored by SERS. <i>Bioelectrochemistry</i> , 2015 , 106, 353-8	5.6	8
97	A hydroxamic-acid-containing nucleoside inhibits DNA repair nuclease SNM1A. <i>Organic and Biomolecular Chemistry</i> , 2019 , 17, 8094-8105	3.9	8

96	Radiolabeled Oligonucleotides Targeting the RNA Subunit of Telomerase Inhibit Telomerase and Induce DNA Damage in Telomerase-Positive Cancer Cells. <i>Cancer Research</i> , 2019 , 79, 4627-4637	10.1	8
95	Factors influencing hairpin oligonucleotide cyclization by the uncatalyzed alkyne-azide cycloaddition (AAC) reaction. <i>Pure and Applied Chemistry</i> , 2010 , 82, 1599-1607	2.1	8
94	Multi-modal particle manipulator to enhance bead-based bioassays. <i>Ultrasonics</i> , 2010 , 50, 235-9	3.5	8
93	Deuterated water as super solvent for short carbon nanotubes wrapped by DNA. <i>Carbon</i> , 2007 , 45, 2701-2703	10.1	8
92	The synthesis of oligonucleotides that contain 2,4-dinitrophenyl reporter groups. <i>Carbohydrate Research</i> , 1991 , 216, 315-22	2.9	8
91	The Incorporation of 2,6-Diaminopurine Into Oligodeoxyribonucleotides by the Phosphoramidite Method. <i>Nucleosides, Nucleotides and Nucleic Acids</i> , 1989 , 8, 1051-1051	1.4	8
90	Towards the Targeted Modulation of Gene Expression by Modified Triplex-Forming Oligonucleotides. <i>Current Chemical Biology</i> , 2008 , 2, 1-10	0.4	8
89	DNA Gold Nanoparticle Motors Demonstrate Processive Motion with Bursts of Speed Up to 50 nm Per Second. <i>ACS Nano</i> , 2021 , 15, 8427-8438	16.7	8
88	High-resolution targeted 3C interrogation of cis-regulatory element organization at genome-wide scale. <i>Nature Communications</i> , 2021 , 12, 531	17.4	8
87	Synthesis and biophysical properties of carbamate-locked nucleic acid (LNA) oligonucleotides with potential antisense applications. <i>Organic and Biomolecular Chemistry</i> , 2019 , 17, 5341-5348	3.9	7
86	Electrophilic RNA for Peptidyl-RNA Synthesis and Site-Specific Cross-Linking with tRNA-Binding Enzymes. <i>Angewandte Chemie</i> , 2016 , 128, 13751-13755	3.6	7
85	Non-covalent Single Transcription Factor Encapsulation Inside a DNA Cage. <i>Angewandte Chemie</i> , 2013 , 125, 2340-2344	3.6	7
84	Site-selective immobilization of functionalized DNA origami on nanopatterned Teflon AF. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 7637-7643	7.1	7
83	End-capped HyBeacon probes for the analysis of human genetic polymorphisms related to warfarin metabolism. <i>Organic and Biomolecular Chemistry</i> , 2010 , 8, 2728-34	3.9	7
82	A comparative study of digoxigenin, 2,4-dinitrophenyl, and alkaline phosphatase as deoxyoligonucleotide labels in non-radioisotopic in situ hybridisation. <i>Journal of Clinical Pathology</i> , 1997 , 50, 686-90	3.9	7
81	Synthesis of anthraquinone oligonucleotides for triplex stabilization. <i>Nucleosides, Nucleotides and Nucleic Acids</i> , 2007 , 26, 921-5	1.4	7
80	Novel photocleavable universal support for oligonucleotide synthesis. <i>Nucleosides, Nucleotides and Nucleic Acids</i> , 2003 , 22, 1403-6	1.4	7
79	Branched poly-labelled oligonucleotides: enhanced specificity of fork-shaped biotinylated oligoribonucleotides for antisense affinity selection. <i>Nucleic Acids Research</i> , 1993 , 21, 4651-2	20.1	7

78	Chapter 1:DNA Recognition by Parallel Triplex Formation. <i>Chemical Biology</i> , 2018 , 1-32	0.4	7
77	Oxidative DNA Cleavage with Clip-Phenanthroline Triplex-Forming Oligonucleotide Hybrids. <i>ChemBioChem</i> , 2020 , 21, 991-1000	3.8	7
76	Synthesis, oligonucleotide incorporation and fluorescence properties in DNA of a bicyclic thymine analogue. <i>Scientific Reports</i> , 2018 , 8, 13970	4.9	7
75	Squaramides and Ureas: A Flexible Approach to Polymerase-Compatible Nucleic Acid Assembly. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 11416-11422	16.4	6
74	Stable end-sealed DNA as robust nano-rulers for single-molecule fluorescence. <i>Chemical Science</i> , 2016 , 7, 4418-4422	9.4	6
73	The Structure of FemXWv in Complex with a Peptidyl-RNA Conjugate: Mechanism of Aminoacyl Transfer from Ala-tRNA ^{Ala} to Peptidoglycan Precursors. <i>Angewandte Chemie</i> , 2013 , 125, 7419-7422	3.6	6
72	Secondary binding sites for heavily modified triplex forming oligonucleotides. <i>Nucleic Acids Research</i> , 2012 , 40, 3753-62	20.1	6
71	Structural analysis of the DNA target site and its interaction with Mbp1. <i>Organic and Biomolecular Chemistry</i> , 2009 , 7, 4981-91	3.9	6
70	Towards the Targeted Modulation of Gene Expression by Modified Triplex-Forming Oligonucleotides. <i>Current Chemical Biology</i> , 2008 , 2, 1-10	0.4	6
69	HyBeacon probes for rapid DNA sequence detection and allele discrimination. <i>Methods in Molecular Biology</i> , 2008 , 429, 171-85	1.4	6
68	INSIGHT: a population scale COVID-19 testing strategy combining point-of-care diagnosis with centralised high-throughput sequencing		6
67	An In-labelled bis-ruthenium(ii) dipyridophenazine theranostic complex: mismatch DNA binding and selective radiotoxicity towards MMR-deficient cancer cells. <i>Chemical Science</i> , 2020 , 11, 8936-8944	9.4	6
66	Development of Gene-Targeted Polypyridyl Triplex-Forming Oligonucleotide Hybrids. <i>ChemBioChem</i> , 2020 , 21, 3563-3574	3.8	6
65	Using antibodies to control DNA-templated chemical reactions. <i>Nature Communications</i> , 2020 , 11, 6242	17.4	6
64	Consecutive 5P and 3Pamide linkages stabilise antisense oligonucleotides and elicit an efficient RNase H response. <i>Chemical Communications</i> , 2020 , 56, 5496-5499	5.8	6
63	Molecular flexibility of DNA as a key determinant of RAD51 recruitment. <i>EMBO Journal</i> , 2020 , 39, e103002	3	5
62	Self-reporting hybridisation assay for miRNA analysis. <i>Analyst, The</i> , 2014 , 139, 1088-92	5	5
61	Modulation of Mitochondriotropic Properties of Cyanine Dyes by in Organello Copper-Free Click Reaction. <i>ChemBioChem</i> , 2017 , 18, 1814-1818	3.8	5

60	2Po-dimethylaminoethoxyuridine and 5-dimethylaminopropargyl deoxyuridine for at base pair recognition in triple helices. <i>Nucleosides, Nucleotides and Nucleic Acids</i> , 2007 , 26, 1283-6	1.4	5
59	[1H, 15N] NMR Studies of the Platination of Phosphorothioate Nucleotides [Monofunctional Sulfur Adducts versus Macrochelation. <i>European Journal of Inorganic Chemistry</i> , 2001 , 2001, 2743	2.3	5
58	Synthesis and Antibody Mediated Detection of 2,4-Dinitrophenyl (DNP) Labelled Oligonucleotides. <i>Nucleosides, Nucleotides and Nucleic Acids</i> , 1995 , 14, 1049-1052	1.4	5
57	1H-NMR characterization of L-tryptophan binding to TRAP, the trp RNA-binding attenuation protein of <i>Bacillus subtilis</i> . <i>Biochemical Journal</i> , 1996 , 315 (Pt 3), 895-900	3.8	5
56	Searching for the ideal triazole: Investigating the 1,5-triazole as a charge neutral DNA backbone mimic. <i>Tetrahedron</i> , 2020 , 76, 130914	2.4	5
55	Spectroscopic and Hydrodynamic Characterisation of DNA-Linked Gold Nanoparticle Dimers in Solution using Two-Photon Photoluminescence. <i>ChemPhysChem</i> , 2018 , 19, 827-836	3.2	4
54	Analysis of Short Tandem Repeats by Using SERS Monitoring and Electrochemical Melting. <i>Angewandte Chemie</i> , 2010 , 122, 6053-6056	3.6	4
53	Photoinduced crosslinking of double-helical DNA by psoralen covalently linked to a triple helix-forming oligonucleotide under near-physiological conditions. <i>Nucleosides, Nucleotides and Nucleic Acids</i> , 2007 , 26, 1005-9	1.4	4
52	Intramolecular TaqMan probes for genetic analysis. <i>Chemical Communications</i> , 2002 , 2272-3	5.8	4
51	Dot-blot hybridisation assay for detection of parvovirus B19 infections using synthetic oligonucleotides. <i>Molecular and Cellular Probes</i> , 1995 , 9, 59-65	3.3	4
50	Dynamics of the 4D genome during lineage specification, differentiation and maturation in vivo		4
49	Strict conformational demands of RNA cleavage in bulge-loops created by peptidyl-oligonucleotide conjugates. <i>Nucleic Acids Research</i> , 2020 , 48, 10662-10679	20.1	4
48	Nucleic Acid Labeling, Ligation, and Modification 2017 , 335-362		3
47	Synthesis and use of universal sequence probes in fluorogenic multi-strand hybridisation complexes for economical nucleic acid testing. <i>Molecular and Cellular Probes</i> , 2015 , 29, 228-36	3.3	3
46	Direct Detection and Discrimination of Nucleotide Polymorphisms Using Anthraquinone Labeled DNA Probes. <i>Frontiers in Chemistry</i> , 2020 , 8, 381	5	3
45	2PAkynyl spin-labelling is a minimally perturbing tool for DNA structural analysis. <i>Nucleic Acids Research</i> , 2020 , 48, 2830-2840	20.1	3
44	DNA Structural Changes Induced by Intermolecular Triple Helix Formation. <i>ACS Omega</i> , 2020 , 5, 1679-1687	3.9	3
43	Lighting Up DNA with the Environment-Sensitive Bright Adenine Analogue qAN4. <i>ChemPlusChem</i> , 2020 , 85, 319-326	2.8	3

42	Synthesis of Lipid-Carbohydrate-Peptidyl-RNA Conjugates to Explore the Limits Imposed by the Substrate Specificity of Cell Wall Enzymes on the Acquisition of Drug Resistance. <i>Chemistry - A European Journal</i> , 2018 , 24, 14911-14915	4.8	3
41	A mutant of uracil DNA glycosylase that distinguishes between cytosine and 5-methylcytosine. <i>PLoS ONE</i> , 2014 , 9, e95394	3.7	3
40	Self reporting RNA probes as an alternative to cleavable small molecule mass tags. <i>Analyst, The</i> , 2012 , 137, 5817-22	5	3
39	Use of a large Stokes-shift fluorophore to increase the multiplexing capacity of a point-of-care DNA diagnostic device. <i>Analyst, The</i> , 2013 , 138, 3626-8	5	3
38	Peptide nucleic acid probes with charged photocleavable mass markers: Towards PNA-based MALDI-TOF MS genetic analysis. <i>Artificial DNA, PNA & XNA</i> , 2010 , 1, 27-35		3
37	Hydrogen-Bonding Patterns Observed in the Base Pairs of Duplex Oligonucleotides. <i>ACS Symposium Series</i> , 1997 , 77-90	0.4	3
36	Synthesis of alkyne- and azide-modified oligonucleotides and their cyclization by the CuAAC (click) reaction. <i>Current Protocols in Nucleic Acid Chemistry</i> , 2008 , Chapter 4, Unit 4.33	0.5	3
35	Synthesis of Base Modified Phosphorothioate Oligodeoxynucleotides as Inhibitors of HIV-1. <i>Nucleosides & Nucleotides</i> , 1991 , 10, 555-561		3
34	The structure of an idarubicin-d(TGATCA) complex at high resolution. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 1993 , 49, 311-7		3
33	Chemically modified nucleic acids and DNA intercalators as tools for nanoparticle assembly. <i>Chemical Society Reviews</i> , 2021 , 50, 13410-13440	58.5	3
32	Stability of the different arms of a DNA tetrahedron and its interaction with a minor groove ligand. <i>Biophysical Chemistry</i> , 2020 , 256, 106270	3.5	3
31	Enrichment of Skeletal Stem Cells from Human Bone Marrow Using Spherical Nucleic Acids. <i>ACS Nano</i> , 2021 , 15, 6909-6916	16.7	3
30	Artificial nucleic acid backbones and their applications in therapeutics, synthetic biology and biotechnology. <i>Emerging Topics in Life Sciences</i> , 2021 , 5, 691-697	3.5	3
29	A DNA sensor based on upconversion nanoparticles and two-dimensional dichalcogenide materials. <i>Frontiers of Chemical Science and Engineering</i> , 2021 , 15, 935-943	4.5	3
28	Optimised oligonucleotide substrates to assay XPF-ERCC1 nuclease activity for the discovery of DNA repair inhibitors. <i>Chemical Communications</i> , 2019 , 55, 11671-11674	5.8	2
27	CHAPTER 5: Click Chemistry as a Versatile Method for Nucleic Acid Labelling, Cyclisation and Ligation. <i>RSC Biomolecular Sciences</i> , 2012 , 119-139		2
26	HyBeacons: A novel DNA probe chemistry for rapid genetic analysis. <i>International Congress Series</i> , 2006 , 1288, 707-709		2
25	Photopatterning of DNA oligonucleotides on silicon surfaces with micron-scale dimensions 2004 ,		2

24	The mechanism of DNA repair by uracil-DNA glycosylase: studies using nucleotide analogues. <i>Nucleosides, Nucleotides and Nucleic Acids</i> , 2000 , 19, 1505-16	1.4	2
23	Ein neues Platin-Krebsmedikament bildet hochstereoselektiv ein Addukt mit Duplex-DNA. <i>Angewandte Chemie</i> , 1999 , 111, 2192-2196	3.6	2
22	Structure-Based Design of Selective Fat Mass and Obesity Associated Protein (FTO) Inhibitors. <i>Journal of Medicinal Chemistry</i> , 2021 , 64, 16609-16625	8.3	2
21	A Click Chemistry Approach to Targeted DNA Crosslinking with cis-Platinum(II)-Modified Triplex-Forming Oligonucleotides. <i>Angewandte Chemie - International Edition</i> , 2021 ,	16.4	2
20	Expanding the chemical functionality of DNA nanomaterials generated by rolling circle amplification. <i>Nucleic Acids Research</i> , 2021 , 49, 9042-9052	20.1	2
19	A New 1,5-Disubstituted Triazole DNA Backbone Mimic with Enhanced Polymerase Compatibility. <i>Journal of the American Chemical Society</i> , 2021 , 143, 16293-16301	16.4	2
18	Curtailing their negativity. <i>Nature Chemistry</i> , 2019 , 11, 501-503	17.6	1
17	Squaramides and Ureas: A Flexible Approach to Polymerase-Compatible Nucleic Acid Assembly. <i>Angewandte Chemie</i> , 2020 , 132, 11513-11519	3.6	1
16	Innenrücktitelbild: Transcription of Click-Linked DNA in Human Cells (Angew. Chem. 9/2014). <i>Angewandte Chemie</i> , 2014 , 126, 2543-2543	3.6	1
15	PNA HyBeacons for analysis of human mutations related to statin-induced myopathy. <i>Artificial DNA, PNA & XNA</i> , 2011 , 2, 79-89		1
14	Characterization and use of tricyclic fluorescent nucleic acid base analogues. <i>Nucleic Acids Symposium Series</i> , 2008 , 3-4		1
13	Chirality transmission in macromolecular domains.. <i>Nature Communications</i> , 2022 , 13, 76	17.4	1
12	Targeted high-resolution chromosome conformation capture at genome-wide scale		1
11	CRISPRi is not strand-specific and redefines the transcriptional landscape		1
10	DNA-Targeted Metallodrugs: An Untapped Source of Artificial Gene Editing Technology. <i>ChemBioChem</i> , 2021 , 22, 2184-2205	3.8	1
9	Detection of PCR products from Mycobacterium avium subspecies Paratuberculosis using oligonucleotides containing multiple 2,4-dinitrophenyl reporter groups. <i>Biomedical Peptides, Proteins & Nucleic Acids: Structure, Synthesis & Biological Activity</i> , 1994 , 1, 17-20		1
8	Mismatch detection in homologous strand exchange amplified by hydrophobic effects. <i>Biopolymers</i> , 2021 , 112, e23426	2.2	0
7	The effect of sequence context on the activity of cytosine DNA glycosylases. <i>Molecular BioSystems</i> , 2015 , 11, 3273-8		

6	The First All-Nucleobase Analog FRET Pair. <i>Biophysical Journal</i> , 2010 , 98, 582a	2.9
5	A membrane anchored DNA-based energy/electron transfer assembly. <i>Nucleic Acids Symposium Series</i> , 2008 , 691	
4	Studies of the structure and stability of base pair mismatches, base pairs involving modified bases, and DNA-drug complexes. <i>Journal of Chemical Crystallography</i> , 1994 , 24, 5-15	0.5
3	"Split-and-Click" sgRNA. <i>Methods in Molecular Biology</i> , 2021 , 2162, 61-78	1.4
2	Discrimination against the Fluorescent Cytosine Analog tC by Escherichia coli DNA Polymerase IV DinB. <i>FASEB Journal</i> , 2011 , 25, 880.11	0.9
1	Searching for avidity by chemical ligation of combinatorially self-assembled DNA-encoded ligand libraries. <i>Organic and Biomolecular Chemistry</i> , 2017 , 16, 48-52	3.9