# Nicholas V Hud

List of Publications by Year
in descending order



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|---|---|---|---|
| 144 papers | 9,371 citations | 31976 53 h-index | 42399 92 g-index |
| 164 all docs | 164 docs citations | 164 times ranked | 8051 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | DNA-Templated Ag Nanocluster Formation. Journal of the American Chemical Society, 2004, 126, 5207-5212. | 13.7 | 1,008 |
| 2 | The Selectivity for K+versus Na+in DNA Quadruplexes Is Dominated by Relative Free Energies of Hydration:Â A Thermodynamic Analysis by1H NMRâ€. Biochemistry, 1996, 35, 15383-15390. | 2.5 | 315 |
| 3 | Cryoelectron microscopy of Â phage DNA condensates in vitreous ice: The fine structure of DNA toroids. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 14925-14930. | 7.1 | 258 |
| 4 | Esterâ€Mediated Amide Bond Formation Driven by Wetâ€“Dry Cycles: A Possible Path to Polypeptides on the Prebiotic Earth. Angewandte Chemie - International Edition, 2015, 54, 9871-9875. | 13.8 | 246 |
| 5 | History of the ribosome and the origin of translation. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15396-15401. | 7.1 | 224 |
| 6 | The effect of sodium, potassium and ammonium ions on the conformation of the dimeric quadruplex formed by the Oxytricha nova telomere repeat oligonucleotide d(G4T4G4). Nucleic Acids Research, 1999, 27, 3018-3028. | 14.5 | 213 |
| 7 | Localization of ammonium ions in the minor groove of DNA duplexes in solution and the origin of DNA A-tract bending 1 1Edited by I. Tinoco. Journal of Molecular Biology, 1999, 286, 651-660. | 4.2 | 205 |
| 8 | Controlling the size of nanoscale toroidal DNA condensates with static curvature and ionic strength. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 9296-9301. | 7.1 | 201 |
| 9 | Toroidal DNA Condensates: Unraveling the Fine Structure and the Role of Nucleation in Determining Size. Annual Review of Biophysics and Biomolecular Structure, 2005, 34, 295-318. | 18.3 | 197 |
| 10 | DNAâ€“cation interactions: the major and minor grooves are flexible ionophores. Current Opinion in Structural Biology, 2001, 11, 293-301. | 5.7 | 193 |
| 11 | DNA and RNA in Anhydrous Media: Duplex, Triplex, and Gâ€Quadruplex Secondary Structures in a Deep Eutectic Solvent. Angewandte Chemie - International Edition, 2010, 49, 6310-6314. | 13.8 | 190 |
| 12 | Guanine, Adenine, and Hypoxanthine Production in UVâ€Irradiated Formamide Solutions: Relaxation of the Requirements for Prebiotic Purine Nucleobase Formation. ChemBioChem, 2010, 11, 1240-1243. | 2.6 | 178 |
| 13 | Cations in charge: magnesium ions in RNA folding and catalysis. Current Opinion in Structural Biology, 2012, 22, 262-272. | 5.7 | 176 |
| 14 | The Origin of RNA and â€œMy Grandfatherâ€™s Axeâ€. Chemistry and Biology, 2013, 20, 466-474. | 6.0 | 172 |
| 15 | Evolution of the ribosome at atomic resolution. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 10251-10256. | 7.1 | 172 |
| 16 | Binding sites and dynamics of ammonium ions in a telomere repeat DNA quadruplex 1 1Edited by I. Tinoco. Journal of Molecular Biology, 1999, 285, 233-243. | 4.2 | 156 |
| 17 | Efficient Self-Assembly in Water of Long Noncovalent Polymers by Nucleobase Analogues. Journal of the American Chemical Society, 2013, 135, 2447-2450. | 13.7 | 143 |
| 18 | A unified model for the origin of DNA sequence-directed curvature. Biopolymers, 2003, 69, 144-158. | 2.4 | 138 |

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| 19 | Secondary Structures of rRNAs from All Three Domains of Life. PLoS ONE, 2014, 9, e88222. | 2.5 | 122 |
| 20 | Localization of Divalent Metal Ions in the Minor Groove of DNA A-Tracts. Journal of the American Chemical Society, 1997, 119, 5756-5757. | 13.7 | 121 |
| 21 | Spontaneous formation and base pairing of plausible prebiotic nucleotides in water. Nature Communications, 2016, 7, 11328. | 12.8 | 112 |
| 22 | Complete disproportionation of duplex poly(dT)middle dotpoly(dA) into triplex poly(dT)middle dotpoly(dA)middle dotpoly(dT) and poly(dA) by coralyne. Nucleic Acids Research, 2002, 30, 983-992. | 14.5 | 108 |
| 23 | Darwin's Warm Little Pond: A Oneâ€Pot Reaction for Prebiotic Phosphorylation and the Mobilization of Phosphate from Minerals in a Ureaâ€Based Solvent. Angewandte Chemie - International Edition, 2016, 55, 13249-13253. | 13.8 | 105 |
| 24 | Assembly of an Antiparallel Homo-Adenine DNA Duplex by Small-Molecule Binding. Journal of the American Chemical Society, 2004, 126, 8644-8645. | 13.7 | 103 |
| 25 | Controlling nucleic acid secondary structure by intercalation: effects of DNA strand length on coralyne-driven duplex disproportionation. Nucleic Acids Research, 2003, 31, 4608-4615. | 14.5 | 101 |
| 26 | Tip-radius-induced artifacts in AFM images of protamine-complexed DNA fibers. Ultramicroscopy, 1992, 42-44, 1095-1100. | 1.9 | 100 |
| 27 | Ester Formation and Hydrolysis during Wetâ€"Dry Cycles: Generation of Far-from-Equilibrium Polymers in a Model Prebiotic Reaction. Macromolecules, 2014, 47, 1334-1343. | 4.8 | 94 |
| 28 | Ammonium Ion as an NMR Probe for Monovalent Cation Coordination Sites of DNA Quadruplexes. Journal of the American Chemical Society, 1998, 120, 6403-6404. | 13.7 | 93 |
| 29 | Formation of Native-like Mammalian Sperm Cell Chromatin with Folded Bull Protamine. Journal of Biological Chemistry, 2004, 279, 20088-20095. | 3.4 | 92 |
| 30 | Collision cross section calibrants for negative ion mode traveling wave ion mobility-mass spectrometry. Analyst, The, 2015, 140, 6853-6861. | 3.5 | 86 |
| 31 | Molecular recognition of poly(A) by small ligands: an alternative method of analysis reveals nanomolar, cooperative and shape-selective binding. Nucleic Acids Research, 2009, 37, 611-621. | 14.5 | 83 |
| 32 | Spontaneous Prebiotic Formation of a Î²-Ribofuranoside That Self-Assembles with a Complementary Heterocycle. Journal of the American Chemical Society, 2014, 136, 5640-5646. | 13.7 | 82 |
| 33 | Primitive Genetic Polymers. Cold Spring Harbor Perspectives in Biology, 2010, 2, a002196-a002196. | 5.5 | 81 |
| 34 | Selective incorporation of proteinaceous over nonproteinaceous cationic amino acids in model prebiotic oligomerization reactions. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 16338-16346. | 7.1 | 81 |
| 35 | Quantum-Mechanical Analysis of the Energetic Contributions to Ï€ Stacking in Nucleic Acids versus Rise, Twist, and Slide. Journal of the American Chemical Society, 2013, 135, 1306-1316. | 13.7 | 80 |
| 36 | Abiotic synthesis of RNA in water: a common goal of prebiotic chemistry and bottom-up synthetic biology. Current Opinion in Chemical Biology, 2014, 22, 146-157. | 6.1 | 80 |

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| 37 | Human Telomere Sequence DNA in Water-Free and High-Viscosity Solvents: G-Quadruplex Folding Governed by Kramers Rate Theory. Journal of the American Chemical Society, 2012, 134, 15324-15330. | 13.7 | 79 |
| 38 | RNA Folding and Catalysis Mediated by Iron (II). PLoS ONE, 2012, 7, e38024. | 2.5 | 79 |
| 39 | Secondary structure and domain architecture of the 23S and 5S rRNAs. Nucleic Acids Research, 2013, 41, 7522-7535. | 14.5 | 78 |
| 40 | Nucleation of DNA Condensation by Static Loops:Â Formation of DNA Toroids with Reduced Dimensions. Journal of the American Chemical Society, 2000, 122, 4833-4834. | 13.7 | 76 |
| 41 | Formation of a Î²-Pyrimidine Nucleoside by a Free Pyrimidine Base and Ribose in a Plausible Prebiotic Reaction. Journal of the American Chemical Society, 2007, 129, 9556-9557. | 13.7 | 73 |
| 42 | The Ribosome Challenge to the RNA World. Journal of Molecular Evolution, 2015, 80, 143-161. | 1.8 | 73 |
| 43 | Time Study of DNA Condensate Morphology:Â Implications Regarding the Nucleation, Growth, and Equilibrium Populations of Toroids and Rodsâ€. Biochemistry, 2006, 45, 8174-8183. | 2.5 | 71 |
| 44 | Glyoxylate as a Backbone Linkage for a Prebiotic Ancestor of RNA. Origins of Life and Evolution of Biospheres, 2006, 36, 39-63. | 1.9 | 69 |
| 45 | RNA with iron(II) as a cofactor catalyses electron transfer. Nature Chemistry, 2013, 5, 525-528. | 13.6 | 68 |
| 46 | A viscous solvent enables information transfer from gene-length nucleic acids in a model prebiotic replication cycle. Nature Chemistry, 2017, 9, 318-324. | 13.6 | 68 |
| 47 | Folding and Imaging of DNA Nanostructures in Anhydrous and Hydrated Deepâ€Eutectic Solvents. Angewandte Chemie - International Edition, 2015, 54, 6765-6769. | 13.8 | 65 |
| 48 | The Solution Structure of d(G4T4G3)2: a Bimolecular G-quadruplex with a Novel Fold. Journal of Molecular Biology, 2002, 320, 911-924. | 4.2 | 62 |
| 49 | Spontaneous Symmetry Breaking in the Formation of Supramolecular Polymers: Implications for the Origin of Biological Homochirality. Angewandte Chemie - International Edition, 2019, 58, 1453-1457. | 13.8 | 62 |
| 50 | Localization of23Na+in a DNA Quadruplex by High-Field Solid-State NMR. Journal of the American Chemical Society, 2000, 122, 11423-11429. | 13.7 | 61 |
| 51 | Mutually stabilizing interactions between proto-peptides and RNA. Nature Communications, 2020, 11, 3137. | 12.8 | 61 |
| 52 | Evidence That Both Kinetic and Thermodynamic Factors Govern DNA Toroid Dimensions:Â Effects of Magnesium(II) on DNA Condensation by Hexammine Cobalt(III)â€. Biochemistry, 2004, 43, 5380-5387. | 2.5 | 56 |
| 53 | Universal Sequence Replication, Reversible Polymerization and Early Functional Biopolymers: A Model for the Initiation of Prebiotic Sequence Evolution. PLoS ONE, 2012, 7, e34166. | 2.5 | 56 |
| 54 | Intercalation-Mediated Synthesis and Replication: A New Approach to the Origin of Life. Journal of Theoretical Biology, 2000, 205, 543-562. | 1.7 | 55 |

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| 55 | Intercalation as a means to suppress cyclization and promote polymerization of base-pairing oligonucleotides in a prebiotic world. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 5288-5293. | 7.1 | 55 |
| 56 | B-DNA structure is intrinsically polymorphic: even at the level of base pair positions. Nucleic Acids Research, 2012, 40, 3714-3722. | 14.5 | 53 |
| 57 | Surveying the sequence diversity of model prebiotic peptides by mass spectrometry. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E7652-E7659. | 7.1 | 51 |
| 58 | Characterization of Divalent Cation Localization in the Minor Groove of the AnTnand TnAnDNA Sequence Elements by1H NMR Spectroscopy and Manganese(II)â€. Biochemistry, 2002, 41, 9900-9910. | 2.5 | 49 |
| 59 | NMR evaluation of ammonium ion movement within a unimolecular G-quadruplex in solution. Nucleic Acids Research, 2007, 35, 2554-2563. | 14.5 | 49 |
| 60 | Was a Pyrimidineâ€Pyrimidine Base Pair the Ancestor of Watsonâ€Crick Base Pairs? Insights from a Systematic Approach to the Origin of RNA. Israel Journal of Chemistry, 2015, 55, 891-905. | 2.3 | 49 |
| 61 | Multiple prebiotic metals mediate translation. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 12164-12169. | 7.1 | 48 |
| 62 | Prebiotic Syntheses of Noncanonical Nucleosides and Nucleotides. Chemical Reviews, 2020, 120, 4806-4830. | 47.7 | 47 |
| 63 | Enzymatic Behavior by Intercalating Molecules in a Template-Directed Ligation Reaction. Angewandte Chemie - International Edition, 2004, 43, 2004-2008. | 13.8 | 45 |
| 64 | Molecular paleontology: a biochemical model of the ancestral ribosome. Nucleic Acids Research, 2013, 41, 3373-3385. | 14.5 | 45 |
| 65 | Ethidium and Proflavine Binding to a 2â€˜,5â€˜-Linked RNA Duplex. Journal of the American Chemical Society, 2006, 128, 15380-15381. | 13.7 | 44 |
| 66 | MD and NMR Analyses of Choline and TMA Binding to Duplex DNA: On the Origins of Aberrant Sequence-Dependent Stability by Alkyl Cations in Aqueous and Water-Free Solvents. Journal of the American Chemical Society, 2014, 136, 3075-3086. | 13.7 | 44 |
| 67 | Folding, Assembly, and Persistence: The Essential Nature and Origins of Biopolymers. Journal of Molecular Evolution, 2018, 86, 598-610. | 1.8 | 44 |
| 68 | Harnessing DNA intercalation. Trends in Biotechnology, 2007, 25, 433-436. | 9.3 | 43 |
| 69 | RNAâ€“DNA Chimeras in the Context of an RNA World Transition to an RNA/DNA World. Angewandte Chemie - International Edition, 2016, 55, 13204-13209. | 13.8 | 43 |
| 70 | RNAâ€“Magnesiumâ€“Protein Interactions in Large Ribosomal Subunit. Journal of Physical Chemistry B, 2012, 116, 8113-8120. | 2.6 | 42 |
| 71 | Addressing the Problems of Base Pairing and Strand Cyclization in Template-Directed Synthesis. Chemistry and Biodiversity, 2007, 4, 768-783. | 2.1 | 41 |
| 72 | Ultra-sensitive pH control of supramolecular polymers and hydrogels: pK<sub>a</sub> matching of biomimetic monomers. Chemical Science, 2014, 5, 4681-4686. | 7.4 | 41 |

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| 73 | Conformational Variants of Duplex DNA Correlated with Cytosine-rich Chromosomal Fragile Sites. Journal of Biological Chemistry, 2009, 284, 7157-7164. | 3.4 | 40 |
| 74 | Solution Nuclear Magnetic Resonance Probing of Cation Binding Sites on Nucleic Acids. Methods in Enzymology, 2002, 338, 400-420. | 1.0 | 35 |
| 75 | Formation of supramolecular assemblies and liquid crystals by purine nucleobases and cyanuric acid in water: implications for the possible origins of RNA. Physical Chemistry Chemical Physics, 2016, 18, 20091-20096. | 2.8 | 33 |
| 76 | Searching for lost nucleotides of the pre-RNA World with a self-refining model of early Earth. Nature Communications, 2018, 9, 5171. | 12.8 | 33 |
| 77 | Comprehensive Investigation of the Energetics of Pyrimidine Nucleoside Formation in a Model Prebiotic Reaction. Journal of the American Chemical Society, 2009, 131, 16088-16095. | 13.7 | 32 |
| 78 | A blueprint for academic laboratories to produce SARS-CoV-2 quantitative RT-PCR test kits. Journal of Biological Chemistry, 2020, 295, 15438-15453. | 3.4 | 31 |
| 79 | Bacterial protein HU dictates the morphology of DNA condensates produced by crowding agents and polyamines. Nucleic Acids Research, 2007, 35, 951-961. | 14.5 | 29 |
| 80 | Glycosylation of a model proto-RNA nucleobase with non-ribose sugars: implications for the prebiotic synthesis of nucleosides. Organic and Biomolecular Chemistry, 2018, 16, 1263-1271. | 2.8 | 29 |
| 81 | Water and Life: The Medium is the Message. Journal of Molecular Evolution, 2021, 89, 2-11. | 1.8 | 29 |
| 82 | Molecular dynamics simulations and coupled nucleotide substitution experiments indicate the nature of AÂ·A base pairing and a putative structure of the coralyne-induced homo-adenine duplex. Nucleic Acids Research, 2009, 37, 7715-7727. | 14.5 | 28 |
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| 84 | Elongation of Model Prebiotic Proto-Peptides by Continuous Monomer Feeding. Macromolecules, 2017, 50, 9286-9294. | 4.8 | 27 |
| 85 | Condensation of oligonucleotides assembled into nicked and gapped duplexes: potential structures for oligonucleotide delivery. Nucleic Acids Research, 2005, 33, 143-151. | 14.5 | 26 |
| 86 | A Stark Contrast to Modern Earth: Phosphate Mineral Transformation and Nucleoside Phosphorylation in an Ironâ€•and Cyanideâ€Rich Early Earth Scenario. Angewandte Chemie - International Edition, 2019, 58, 16981-16987. | 13.8 | 26 |
| 87 | Gene packaging with lipids, peptides and viruses inhibits transfection by electroporation in vitro. Journal of Controlled Release, 2003, 86, 361-370. | 9.9 | 25 |
| 88 | Iron mediates catalysis of nucleic acid processing enzymes: support for Fe(II) as a cofactor before the great oxidation event. Nucleic Acids Research, 2017, 45, 3634-3642. | 14.5 | 25 |
| 89 | Silicate-Promoted Phosphorylation of Glycerol in Non-Aqueous Solvents: A Prebiotically Plausible Route to Organophosphates. Life, 2017, 7, 29. | 2.4 | 25 |
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| 91 | Water-Soluble Supramolecular Polymers of Paired and Stacked Heterocycles: Assembly, Structure, Properties, and a Possible Path to Pre-RNA. Journal of the American Chemical Society, 2021, 143, 9279-9296. | 13.7 | 24 |
| 92 | Thioesters provide a plausible prebiotic path to proto-peptides. Nature Communications, 2022, 13, 2569. | 12.8 | 24 |
| 93 | In Vitro Secondary Structure of the Genomic RNA of Satellite Tobacco Mosaic Virus. PLoS ONE, 2013, 8, e54384. | 2.5 | 23 |
| 94 | Prebiotic Origin of Preâ€RNA Building Blocks in a Urea â€œWarm Little Pondâ€•Scenario. ChemBioChem, 2020, 21, 3504-3510. | 2.6 | 23 |
| 95 | Introduction: Chemical Evolution and the Origins of Life. Chemical Reviews, 2020, 120, 4613-4615. | 47.7 | 23 |
| 96 | Solvent viscosity facilitates replication and ribozyme catalysis from an RNA duplex in a model prebiotic process. Nucleic Acids Research, 2019, 47, 6569-6577. | 14.5 | 22 |
| 97 | Domain III of the T. thermophilus 23S rRNA folds independently to a near-native state. Rna, 2012, 18, 752-758. | 3.5 | 21 |
| 98 | Ribosomal small subunit domains radiate from a central core. Scientific Reports, 2016, 6, 20885. | 3.3 | 21 |
| 99 | Evidence of strong hydrogen bonding by 8-aminoguanine. Chemical Communications, 2009, , 647-649. | 4.1 | 20 |
| 100 | SalivaSTAT: Direct-PCR and Pooling of Saliva Samples Collected in Healthcare and Community Setting for SARS-CoV-2 Mass Surveillance. Diagnostics, 2021, 11, 904. | 2.6 | 19 |
| 101 | Solution Structure and Thermodynamics of 2â€²,5â€² RNA Intercalation. Journal of the American Chemical Society, 2009, 131, 5831-5838. | 13.7 | 18 |
| 102 | Reversible Transformation of a Supramolecular Hydrogel by Redox Switching of Methylene Blueâ€"A Noncovalent Chain Stopper. ACS Omega, 2020, 5, 344-349. | 3.5 | 18 |
| 103 | Submicromolar, Selective Gâ€Quadruplex Ligands from One Pot: Thermodynamic and Structural Studies of Human Telomeric DNA Binding by Azacyanines. ChemBioChem, 2008, 9, 1889-1892. | 2.6 | 17 |
| 104 | Enhanced Nonenzymatic Ligation of Homopurine Miniduplexes: Support for Greater Base Stacking in a Preâ€RNA World. ChemBioChem, 2013, 14, 45-48. | 2.6 | 17 |
| 105 | Darwin's Warm Little Pond: A Oneâ€Pot Reaction for Prebiotic Phosphorylation and the Mobilization of Phosphate from Minerals in a Ureaâ€Based Solvent. Angewandte Chemie, 2016, 128, 13443-13447. | 2.0 | 17 |
| 106 | Towards Efficient Nonenzymatic DNA Ligation: Comparing Key Parameters for Maximizing Ligation Rates and Yields with Carbodiimide Activation**. ChemBioChem, 2020, 21, 3359-3370. | 2.6 | 17 |
| 107 | Transition metals enhance prebiotic depsipeptide oligomerization reactions involving histidine. RSC Advances, 2021, 11, 3534-3538. | 3.6 | 17 |
| 108 | Structure of polyglutamine. FEBS Letters, 2000, 472, 166-167. | 2.8 | 16 |

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| 109 | DFT Energy Surfaces for Aminopurine Homodimers and Their Conjugate Acid Ions. Journal of Physical Chemistry A, 2007, 111, 3369-3377. | 2.5 | 16 |
| 110 | Nonenzymatic Ligation of DNA with a Reversible Step and a Final Linkage that Can Be Used in PCR. ChemBioChem, 2012, 13, 1121-1124. | 2.6 | 15 |
| 111 | Characterization of nigerlysin Â©, hemolysin produced by Aspergillus niger, and effect on mouse neuronal cells in vitro. Toxicology, 2006, 219, 150-155. | 4.2 | 14 |
| 112 | A Possible Path to Prebiotic Peptides Involving Silica and Hydroxy Acidâ€Mediated Amide Bond Formation. ChemBioChem, 2018, 19, 1913-1917. | 2.6 | 14 |
| 113 | Chapter 4. Metal Ion Interactions with G-Quadruplex Structures. RSC Biomolecular Sciences, 2008, , 118-153. | 0.4 | 14 |
| 114 | Our Odyssey to Find a Plausible Prebiotic Path to RNA: The First Twenty Years. Synlett, 2016, 28, 36-55. | 1.8 | 13 |
| 115 | Exquisite regulation of supramolecular equilibrium polymers in water: chain stoppers control length, polydispersity and viscoelasticity. Polymer Chemistry, 2018, 9, 5268-5277. | 3.9 | 13 |
| 116 | X-ray Fiber Diffraction and Computational Analyses of Stacked Hexads in Supramolecular Polymers: Insight into Self-Assembly in Water by Prospective Prebiotic Nucleobases. Journal of the American Chemical Society, 2021, 143, 6079-6094. | 13.7 | 13 |
| 117 | Depsipeptide Nucleic Acids: Prebiotic Formation, Oligomerization, and Self-Assembly of a New Proto-Nucleic Acid Candidate. Journal of the American Chemical Society, 2021, 143, 13525-13537. | 13.7 | 13 |
| 118 | Molecular Recognition of Watsonâ€"Crickâ€Like Purineâ€"Purine Base Pairs. ChemBioChem, 2011, 12, 2155-2158. | 2.6 | 12 |
| 119 | The Prebiotic Provenance of Semi-Aqueous Solvents. Origins of Life and Evolution of Biospheres, 2020, 50, 1-14. | 1.9 | 11 |
| 120 | The Unexpected Baseâ€Pairing Behavior of Cyanuric Acid in RNA and Ribose versus Cyanuric Acid Induced Helicene Assembly of Nucleic Acids: Implications for the Preâ€RNA Paradigm. Chemistry - A European Journal, 2021, 27, 4033-4042. | 3.3 | 11 |
| 121 | Protein-free ribosomal RNA folds to a near-native state in the presence of Mg<sup>2+</sup>. RSC Advances, 2017, 7, 54674-54681. | 3.6 | 10 |
| 122 | The proto-Nucleic Acid Builder: a software tool for constructing nucleic acid analogs. Nucleic Acids Research, 2021, 49, 79-89. | 14.5 | 10 |
| 123 | MgCl2 Enhances Cluster Formation by Nanoscale Toroidal DNA Condensates. Journal of Cluster Science, 2003, 14, 115-122. | 3.3 | 8 |
| 124 | Adenine Synthesis in a Model Prebiotic Reaction: Connecting Origin of Life Chemistry with Biology. Journal of Chemical Education, 2011, 88, 1698-1701. | 2.3 | 8 |
| 125 | Searching for Possible Ancestors of RNA: The Self-Assembly Hypothesis for the Origin of Proto-RNA. Nucleic Acids and Molecular Biology, 2018, , 143-174. | 0.2 | 8 |
| 126 | RNA nucleosides built in one prebiotic pot. Science, 2019, 366, 32-33. | 12.6 | 8 |

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| 127 | RNAâ€“DNA Chimeras in the Context of an RNA World Transition to an RNA/DNA World. Angewandte Chemie, 2016, 128, 13398-13403. | 2.0 | 7 |
| 128 | Mineral Surfaces: A Mixed Blessing for the RNA World?. Astrobiology, 2009, 9, 253-255. | 3.0 | 6 |
| 129 | Small molecule-mediated duplex formation of nucleic acids with â€˜incompatibleâ€™ backbones. Chemical Communications, 2016, 52, 5436-5439. | 4.1 | 6 |
| 130 | Sequence-specific DNAâ€“Metal Ion Interactions. RSC Biomolecular Sciences, 2008, , 75-117. | 0.4 | 6 |
| 131 | Water-Based Dynamic Depsipeptide Chemistry: Building Block Recycling and Oligomer Distribution Control Using Hydrationâ€“Dehydration Cycles. Jacs Au, 2022, 2, 1395-1404. | 7.9 | 6 |
| 132 | Spontaneous Symmetry Breaking in the Formation of Supramolecular Polymers: Implications for the Origin of Biological Homochirality. Angewandte Chemie, 2019, 131, 1467-1471. | 2.0 | 5 |
| 133 | A Shared Prebiotic Formation of Neopterins and Guanine Nucleosides from Pyrimidine Bases. Chemistry - A European Journal, 2022, 28, . | 3.3 | 5 |
| 134 | Step-Growth Control in Template-Directed Polymerization. Heterocycles, 2010, 82, 1477. | 0.7 | 4 |
| 135 | Differential Oligomerization of Alpha versus Beta Amino Acids and Hydroxy Acids in Abiotic Proto-Peptide Synthesis Reactions. Life, 2022, 12, 265. | 2.4 | 4 |
| 136 | A Stark Contrast to Modern Earth: Phosphate Mineral Transformation and Nucleoside Phosphorylation in an Ironâ€•and Cyanideâ€Rich Early Earth Scenario. Angewandte Chemie, 2019, 131, 17137-17143. | 2.0 | 3 |
| 137 | Supramolecular assembly-enabled homochiral polymerization of short (dA)<sub>n</sub> oligonucleotides. Chemical Communications, 2021, 57, 13602-13605. | 4.1 | 3 |
| 138 | Model systems. Current Opinion in Chemical Biology, 2004, 8, 627-628. | 6.1 | 1 |
| 139 | Self-Assembly and the Origin of the First RNA-Like Polymers. ACS Symposium Series, 2010, , 109-132. | 0.5 | 1 |
| 140 | Cover Picture: Enzymatic Behavior by Intercalating Molecules in a Template-Directed Ligation Reaction (Angew. Chem. Int. Ed. 15/2004). Angewandte Chemie - International Edition, 2004, 43, 1895-1895. | 13.8 | 0 |
| 141 | Titelbild: Folding and Imaging of DNA Nanostructures in Anhydrous and Hydrated Deep-Eutectic Solvents (Angew. Chem. 23/2015). Angewandte Chemie, 2015, 127, 6753-6753. | 2.0 | 0 |
| 142 | Titelbild: Darwin's Warm Little Pond: A Oneâ€Pot Reaction for Prebiotic Phosphorylation and the Mobilization of Phosphate from Minerals in a Ureaâ€Based Solvent (Angew. Chem. 42/2016). Angewandte Chemie, 2016, 128, 13107-13107. | 2.0 | 0 |
| 143 | Frontispiece: The Unexpected Baseâ€Pairing Behavior of Cyanuric Acid in RNA and Ribose versus Cyanuric Acid Induced Helicene Assembly of Nucleic Acids: Implications for the Preâ€RNA Paradigm. Chemistry - A European Journal, 2021, 27, . | 3.3 | 0 |
| 144 | Bacterial protein HU dictates the morphology of DNA condensates produced by crowding agents and polyamines. FASEB Journal, 2007, 21, A283. | 0.5 | 0 |