# Markus W Germann

List of Publications by Year
in descending order



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|---|---|---|---|
| 92 papers | 2,317 citations | 172457 29 h-index | 243625 44 g-index |
| 95 all docs | 95 docs citations | 95 times ranked | 2776 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Reactions of salicylaldehydes with alkyl cyanoacetates on the surface of solid catalysts: syntheses of 4H-chromene derivatives. Tetrahedron Letters, 2000, 41, 6993-6996. | 1.4 | 139 |
| 2 | Cloning, characterization and expression of escapin, a broadly antimicrobial FAD-containing l-amino acid oxidase from ink of the sea hare Aplysia californica. Journal of Experimental Biology, 2005, 208, 3609-3622. | 1.7 | 103 |
| 3 | Synthesis and Structural Determination of Multidentate 2,3-Dithiol-Stabilized Au Clusters. Journal of the American Chemical Society, 2010, 132, 3367-3374. | 13.7 | 96 |
| 4 | Design of Peptides with High Affinities for Heparin and Endothelial Cell Proteoglycans. Journal of Biological Chemistry, 2000, 275, 7701-7707. | 3.4 | 92 |
| 5 | Performance of cryogenic probes as a function of ionic strength and sample tube geometry. Journal of Magnetic Resonance, 2006, 183, 102-109. | 2.1 | 82 |
| 6 | Bioactive Peptide Design Based on Protein Surface Epitopes. Journal of Biological Chemistry, 1997, 272, 12175-12180. | 3.4 | 65 |
| 7 | Sequence context effect for hMSH2-hMSH6 mismatch-dependent activation. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 4177-4182. | 7.1 | 59 |
| 8 | Nonâ€enzymatic glycation of type I collagen diminishes collagenâ€“proteoglycan binding and weakens cell adhesion. Journal of Cellular Biochemistry, 2008, 104, 1684-1698. | 2.6 | 57 |
| 9 | Relative stability of parallel- and anti-parallel-stranded duplex DNA. Biochemistry, 1988, 27, 8302-8306. | 2.5 | 56 |
| 10 | Conformational analysis of the hydrophobic peptide Î±s1-casein(136â€“196). BBA - Proteins and Proteomics, 1999, 1431, 410-420. | 2.1 | 54 |
| 11 | Solution conformation of purine-pyrimidine DNA octamers using nuclear magnetic resonance, restrained molecular dynamics and NOE-based refinement. Journal of Molecular Biology, 1990, 215, 411-428. | 4.2 | 51 |
| 12 | RNA intrusions change DNA elastic properties and structure. Nanoscale, 2014, 6, 10009-10017. | 5.6 | 49 |
| 13 | Right- and left-handed (Z) helical conformations of the hairpin d(C-G)5T4(C-G)5 monomer and dimer. Biochemistry, 1985, 24, 5698-5702. | 2.5 | 47 |
| 14 | Translational Diffusion Constants of the Amino Acids:â€‰ Measurement by NMR and Their Use in Modeling the Transport of Peptides. Journal of Physical Chemistry A, 2007, 111, 1452-1455. | 2.5 | 47 |
| 15 | Mechanistic Studies of Choline Oxidase with Betaine Aldehyde and Its Isosteric Analogue 3,3-Dimethylbutyraldehydeâ€. Biochemistry, 2006, 45, 1979-1986. | 2.5 | 44 |
| 16 | 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 |
| 17 | Solution structures of casein peptides: NMR, FTIR, CD, and molecular modeling studies of alphas1-casein, 1-23. The Protein Journal, 2001, 20, 391-404. | 1.1 | 42 |
| 18 | Effect of methylation on the side-chain pK<sub>a</sub>value of arginine. Protein Science, 2016, 25, 479-486. | 7.6 | 42 |

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| 19 | Perturbation of DNA hairpins containing the EcoRI recognition site by hairpin loops of varying size and composition: physical (NMR and UV) and enzymatic (EcoRI) studies. Nucleic Acids Research, 1990, 18, 1489-1498. | 14.5 | 40 |
| 20 | A general method for the purification of synthetic oligodeoxyribonucleotides containing strong secondary structure by reversed-phase high-performance liquid chromatography on PRP-1 resin. Analytical Biochemistry, 1987, 165, 399-405. | 2.4 | 38 |
| 21 | Mycosporine-like amino acids are multifunctional molecules in sea hares and their marine community. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 11494-11499. | 7.1 | 37 |
| 22 | Comparison of the B- and Z-form hairpin loop structures formed by d(CG)5T4(CG)5. Biochemistry, 1988, 27, 6960-6967. | 2.5 | 36 |
| 23 | Molecular Features of an Alcohol Binding Site in a Neuronal Potassium Channelâ€. Biochemistry, 2003, 42, 11243-11252. | 2.5 | 36 |
| 24 | Field-dependent aluminum-27 NMR studies of the transferrins: an approach for the study of metal ion binding sites in larger proteins. Journal of the American Chemical Society, 1993, 115, 9750-9753. | 13.7 | 35 |
| 25 | Quadrupolar metal ion NMR study of ovotransferrin at 17.6 T. Journal of the American Chemical Society, 1994, 116, 6971-6972. | 13.7 | 35 |
| 26 | Characterization of a parallel stranded DNA hairpin. Biochemistry, 1989, 28, 6220-6228. | 2.5 | 34 |
| 27 | Recognition of Damaged DNA: Structure and Dynamic Markers. Medicinal Research Reviews, 2012, 32, 659-683. | 10.5 | 34 |
| 28 | Solution Structure of a DNA Duplex Containing an Î±-Anomeric Adenosine: Insights into Substrate Recognition by Endonuclease IV. Journal of Molecular Biology, 2004, 338, 77-91. | 4.2 | 33 |
| 29 | RNA facilitates RecA-mediated DNA pairing and strand transfer between molecules bearing limited regions of homology. Molecular Genetics and Genomics, 1996, 250, 626-634. | 2.4 | 31 |
| 30 | The smell of moulting:N-acetylglucosamino-1,5-lactone is a premoult biomarker and candidate component of the courtship pheromone in the urine of the blue crab,Callinectes sapidus. Journal of Experimental Biology, 2014, 217, 1286-96. | 1.7 | 30 |
| 31 | Solution structure of the parallel-stranded hairpin d(T8.ltbbrac..rtbbrac.C4A8) as determined by two-dimensional NMR. Biochemistry, 1993, 32, 646-656. | 2.5 | 29 |
| 32 | Following Plant Metabolismin Vivoand in Extracts with Heteronuclear Two-Dimensional Nuclear Magnetic Resonance Spectroscopy. Analytical Biochemistry, 1996, 243, 110-118. | 2.4 | 29 |
| 33 | Identification of cis -Acting Nucleotides and a Structural Feature in West Nile Virus 3â€²-Terminus RNA That Facilitate Viral Minus Strand RNA Synthesis. Journal of Virology, 2013, 87, 7622-7636. | 3.4 | 29 |
| 34 | Structure of a DNA Duplex That Contains Î±-Anomeric Nucleotides and 3â€˜â†'3â€˜ and 5â€˜â†'5â€˜ Phosphodiester Linkages:Â Coexistence of Parallel and Antiparallel DNAâ€. Biochemistry, 1996, 35, 9355-9365. | 2.5 | 27 |
| 35 | Selective G-Quadruplex DNA Recognition by a New Class of Designed Cyanines. Molecules, 2013, 18, 13588-13607. | 3.8 | 27 |
| 36 | Isolation and Structural Elucidation of Novel Mycosporineâ€Like Amino Acids as Alarm Cues in the Defensive Ink Secretion of the Sea Hare Aplysia californica. Helvetica Chimica Acta, 2011, 94, 1012-1018. | 1.6 | 25 |

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| 37 | Spectral and Hydrodynamic Analysis of West Nile Virus RNAâ€“Protein Interactions by Multiwavelength Sedimentation Velocity in the Analytical Ultracentrifuge. Analytical Chemistry, 2017, 89, 862-870. | 6.5 | 24 |
| 38 | Molecular Basis for Sequenceâ€Dependent Induced DNA Bending. ChemBioChem, 2013, 14, 323-331. | 2.6 | 23 |
| 39 | Spectroscopic and Thermodynamic Studies of DNA Duplexes Containing Î±-Anomeric C, A, and G Nucleotides and Polarity Reversals:Â Coexistence of Localized Parallel and Antiparallel DNAâ€. Biochemistry, 1997, 36, 9715-9725. | 2.5 | 22 |
| 40 | The Concerted Contribution of the S4-S5 Linker and the S6 Segment to the Modulation of a Kv Channel by 1-Alkanols. Molecular Pharmacology, 2006, 70, 1542-1554. | 2.3 | 22 |
| 41 | DNA Sequence Context Conceals Î±-Anomeric Lesions. Journal of Molecular Biology, 2012, 416, 425-437. | 4.2 | 22 |
| 42 | Conformational analysis and complete assignment of the proton and carbon NMR spectra of ouabain and ouabagenin. Canadian Journal of Chemistry, 1990, 68, 1263-1270. | 1.1 | 20 |
| 43 | Impact of modified ribose sugars on nucleic acid conformation and function. Heterocyclic Communications, 2017, 23, 155-165. | 1.2 | 20 |
| 44 | Structural Basis of the RNase H1 Activity on Stereo Regular Borano Phosphonate DNA/RNA Hybrids. Biochemistry, 2011, 50, 3903-3912. | 2.5 | 19 |
| 45 | Length dependent formation of parallel-stranded DNA in alternating AT segments. Biochemistry, 1990, 29, 9426-9432. | 2.5 | 18 |
| 46 | Synthesis of a 2â€˜-Se-uridine Phosphoramidite and Its Incorporation into Oligonucleotides for Structural Study. Organic Letters, 2005, 7, 5645-5648. | 4.6 | 18 |
| 47 | Solution Structure and Thermodynamics of 2â€²,5â€² RNA Intercalation. Journal of the American Chemical Society, 2009, 131, 5831-5838. | 13.7 | 18 |
| 48 | Identification of the Catalytic Base for Alcohol Activation in Choline Oxidase. Biochemistry, 2015, 54, 413-421. | 2.5 | 18 |
| 49 | Intrinsic disorder controls two functionally distinct dimers of the master transcription factor PU.1. Science Advances, 2020, 6, eaay3178. | 10.3 | 18 |
| 50 | Characterization of the cellular immune response in hepatitis C virus infection. Medicinal Research Reviews, 2009, 29, 843-866. | 10.5 | 17 |
| 51 | Non-Invasive Imaging of Neuroanatomical Structures and Neural Activation with High-Resolution MRI. Frontiers in Behavioral Neuroscience, 2011, 5, 16. | 2.0 | 17 |
| 52 | Imino proton NMR guides the reprogramming of Aâ€¢T specific minor groove binders for mixed base pair recognition. Nucleic Acids Research, 2016, 44, 4519-4527. | 14.5 | 17 |
| 53 | Microwave-assisted synthesis and antibacterial propensity of Nâ€²-s-benzylidene-2-propylquinoline-4-carbohydrazide and Nâ€²-((s-1H-pyrrol-2-yl)methylene)-2-propylquinoline-4-carbohydrazide motifs. Arabian Journal of Chemistry, 2020, 13, 1809-1820. | 4.9 | 17 |
| 54 | Structural Impact of Single Ribonucleotide Residues in DNA. ChemBioChem, 2016, 17, 1968-1977. | 2.6 | 15 |

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| 55 | First Structure of a Designed Minor Groove Binding Heterocyclic Cation that Specifically Recognizes Mixed DNA Base Pair Sequences. Chemistry - A European Journal, 2017, 23, 17612-17620. | 3.3 | 15 |
| 56 | Solution Structure of a DNAÂ·RNA Hybrid Containing an Î±-Anomeric Thymidine and Polarity Reversals:Â d(ATGG-3â€˜-3â€˜-Î±T-5â€˜-5â€˜-GCTC)Â·r(gagcaccau)â€‚â€¡. Biochemistry, 1999, 38, 15448-15458. | 2.5 | 14 |
| 57 | Conformational dynamics in mixed alpha/beta-oligonucleotides containing polarity reversals: a molecular dynamics study using time-averaged restraints. Journal of Biomolecular NMR, 2000, 18, 287-302. | 2.8 | 14 |
| 58 | Translational Diffusion Constants of Short Peptides: Measurement by NMR and Their Use in Structural Studies of Peptides. Journal of Physical Chemistry B, 2009, 113, 9326-9329. | 2.6 | 12 |
| 59 | Microscopic Rearrangement of Bound Minor Groove Binders Detected by NMR. Journal of Physical Chemistry B, 2012, 116, 5620-5627. | 2.6 | 12 |
| 60 | Thermodynamic Profiling of HIV RREIIB RNAâ€“Zinc Finger Interactions. Journal of Molecular Biology, 2009, 393, 369-382. | 4.2 | 11 |
| 61 | Structure of d(GT)nÂ·d(GA)nSequences:Â Formation of Parallel Stranded Duplex DNAâ€‚. Biochemistry, 1998, 37, 12962-12970. | 2.5 | 9 |
| 62 | Characterization of secondary amide peptide bond isomerization: Thermodynamics and kinetics from 2D NMR spectroscopy. Biopolymers, 2011, 95, 755-762. | 2.4 | 9 |
| 63 | Multiple DNA-binding modes for the ETS family transcription factor PU.1. Journal of Biological Chemistry, 2017, 292, 16044-16054. | 3.4 | 8 |
| 64 | Nonproteolytic Roles of 19S ATPases in Transcription of CIITApIV Genes. PLoS ONE, 2014, 9, e91200. | 2.5 | 8 |
| 65 | Soft-Pulsed Aluminum-27 Quadrupolar Central Transition NMR Studies of Ovotransferrin. Journal of Magnetic Resonance, 1997, 129, 111-114. | 2.1 | 7 |
| 66 | NMR studies of DNA duplexes containing alpha-anomeric nucleotides and polarity reversals. Biochemistry and Cell Biology, 1998, 76, 403-410. | 2.0 | 7 |
| 67 | Purification and Characterization of Recombinant Forms of TCL-1 and MTCP-1 Proteins. Protein Expression and Purification, 1998, 12, 215-225. | 1.3 | 7 |
| 68 | Using NMR and molecular dynamics to link structure and dynamics effects of the universal base 8-aza, 7-deaza, N8 linked adenosine analog. Nucleic Acids Research, 2016, 44, 8576-8587. | 14.5 | 7 |
| 69 | NMR Structure Determination for Oligonucleotides. Current Protocols in Nucleic Acid Chemistry, 2018, 72, 7.28.1-7.28.39. | 0.5 | 7 |
| 70 | Second Generation G-Quadruplex Stabilizing Trimethine Cyanines. Bioconjugate Chemistry, 2019, 30, 2647-2663. | 3.6 | 7 |
| 71 | A Single-Point Mutation in <scp>d</scp>-Arginine Dehydrogenase Unlocks a Transient Conformational State Resulting in Altered Cofactor Reactivity. Biochemistry, 2021, 60, 711-724. | 2.5 | 7 |
| 72 | Insight into the modulation of Shaw2 Kv channels by general anesthetics: Structural and functional studies of S4â€“S5 linker and S6 C-terminal peptides in micelles by NMR. Biochimica Et Biophysica Acta - Biomembranes, 2013, 1828, 595-601. | 2.6 | 6 |

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| 73 | The importance of fitting in: conformational preference of selenium 2â€² modifications in nucleosides and helical structures. Journal of Biomolecular Structure and Dynamics, 2015, 33, 289-297. | 3.5 | 6 |
| 74 | Expeditious Synthesis and Spectroscopic Characterization of 2-Methyl-3-substituted-quinazolin-4(3H)-one Derivatives. Oriental Journal of Chemistry, 2017, 33, 562-574. | 0.3 | 5 |
| 75 | RNA facilitates RecA-mediated DNA pairing and strand transfer between molecules bearing limited regions of homology. Molecular Genetics and Genomics, 1996, 250, 626. | 2.4 | 5 |
| 76 | Solution structures and characterization of human immunodeficiency virus Rev responsive element IIB RNA targeting zinc finger proteins. Biopolymers, 2006, 83, 352-364. | 2.4 | 4 |
| 77 | NMR spectroscopic and enzymatic studies of DNA hairpins containing mismatches in the EcoRI recognition site. Biochemistry and Cell Biology, 1998, 76, 391-402. | 2.0 | 3 |
| 78 | Purification and Characterization of Recombinant Forms of Murine Tcl1 Proteins. Protein Expression and Purification, 2000, 18, 277-285. | 1.3 | 3 |
| 79 | Facilitated Assignment of Adenine H2 Resonances in Oligonucleotides Using Homonuclear Long-Range Couplings. Journal of the American Chemical Society, 2009, 131, 5380-5381. | 13.7 | 3 |
| 80 | Unusual DNA Structure and DNA Damage Recognition: Structure and Dynamic Markers. Chimia, 2009, 63, 731-736. | 0.6 | 3 |
| 81 | Supercooled aqueous nuclear magnetic resonance using agarose gels. Analytical Biochemistry, 2012, 427, 79-81. | 2.4 | 3 |
| 82 | NMR spectroscopic and enzymatic studies of DNA hairpins containing mismatches in the EcoRI recognition site. Biochemistry and Cell Biology, 1998, 76, 391-402. | 2.0 | 3 |
| 83 | Homooligomeric dAÂ·dU and dAÂ·dT Sequences in Parallel and Antiparallel Strand Orientation: Consequence of the 5-methyl Groups on Stability, Structure and Interaction with the Minor Groove Binding Drug HOECHST 33258. Journal of Biomolecular Structure and Dynamics, 1996, 13, 953-962. | 3.5 | 2 |
| 84 | Structure and Stability of DNA Containing Inverted Anomeric Centers and Polarity Reversals. ACS Symposium Series, 1997, , 92-105. | 0.5 | 2 |
| 85 | Antiparallel DNA duplex formation between alternating Î± d(GA)nand Î² d(GA)nsequences. FEBS Letters, 1998, 427, 301-304. | 2.8 | 2 |
| 86 | Substituting Inosine for Guanosine in DNA: Structural and Dynamic Consequences. Natural Product Communications, 2019, 14, 1934578X1985003. | 0.5 | 2 |
| 87 | Alcohol and anesthetic action at the gate of a voltage-dependent K+ channel. International Congress Series, 2005, 1283, 55-60. | 0.2 | 1 |
| 88 | Cyclic Enzymatic Solid Phase Synthesis of Isotopically Labeled DNA Oligonucleotides. Nucleosides, Nucleotides and Nucleic Acids, 2009, 28, 1030-1041. | 1.1 | 1 |
| 89 | Advances in the Analysis of Hepatitis C Virus Specific T Cell Responses. Mini-Reviews in Medicinal Chemistry, 2011, 11, 106-113. | 2.4 | 1 |
| 90 | Simplifying DNA NMR spectroscopy by silencing GH8 and AH8 resonances. Journal of Molecular Structure, 2018, 1166, 344-347. | 3.6 | 1 |

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| 91 | A cyclic heptapeptide mimics CD4 domain 1 CCâ€™ loop and inhibits CD4 biological function. , 2002, , 609-610. | | 0 |
| 92 | Self-Consistent Parameterization of DNA Residues for the Non-Polarizable AMBER Force Fields. Life, 2022, 12, 666. | 2.4 | 0 |