

Huub Jm De Groot

List of Publications by Year in Descending Order

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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.

226
papers

7,726
citations

45
h-index

76
g-index

231
ext. papers

8,202
ext. citations

5.6
avg, IF

5.68
L-index

#	Paper	IF	Citations
226	Metabolic Profiling of Suprachiasmatic Nucleus Reveals Multifaceted Effects in an Alzheimer's Disease Mouse Model. <i>Journal of Alzheimer's Disease</i> , 2021 , 81, 797-808	4.3	2
225	Two-Channel Model for Electron Transfer in a Dye-Catalyst-Dye Supramolecular Complex for Photocatalytic Water Splitting. <i>ChemSusChem</i> , 2021 , 14, 3155-3162	8.3	2
224	Dipolar dephasing for structure determination in a paramagnetic environment. <i>Solid State Nuclear Magnetic Resonance</i> , 2021 , 113, 101728	3.1	
223	Tuning the Proton-Coupled Electron-Transfer Rate by Ligand Modification in Catalyst-Dye Supramolecular Complexes for Photocatalytic Water Splitting. <i>ChemSusChem</i> , 2021 , 14, 479-486	8.3	4
222	MRM Microcoil Performance Calibration and Usage Demonstrated on Medicago truncatula Roots at 22 T. <i>Journal of Visualized Experiments</i> , 2021 ,	1.6	1
221	HR-MAS NMR Applications in Plant Metabolomics. <i>Molecules</i> , 2021 , 26,	4.8	6
220	The Resting Oxidized State of Small Laccase Analyzed with Paramagnetic NMR Spectroscopy. <i>ChemPhysChem</i> , 2021 , 22, 733-740	3.2	1
219	Efficient workflow for the investigation of the catalytic cycle of water oxidation catalysts: Combining GFN-xTB and density functional theory. <i>Journal of Computational Chemistry</i> , 2021 , 42, 1885-1894	3.5	4
218	Photoinduced Electron Injection in a Fully Solvated Dye-Sensitized Photoanode: A Dynamical Semiempirical Study. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 27965-27976	3.8	5
217	Dynamic Disorder Drives Exciton Transfer in Tubular Chlorosomal Assemblies. <i>Journal of Physical Chemistry B</i> , 2020 , 124, 4026-4035	3.4	10
216	Assessing spatial resolution, acquisition time and signal-to-noise ratio for commercial microimaging systems at 14.1, 17.6 and 22.3 T. <i>Journal of Magnetic Resonance</i> , 2020 , 316, 106770	3	3
215	Chemical Exchange at the Trinuclear Copper Center of Small Laccase from <i>Streptomyces coelicolor</i> . <i>Biophysical Journal</i> , 2020 , 119, 9-14	2.9	4
214	Power generation by reverse electro dialysis in a single-layer nanoporous membrane made from core-rim polycyclic aromatic hydrocarbons. <i>Nature Nanotechnology</i> , 2020 , 15, 307-312	28.7	57
213	Magnetic Resonance Microscopy at Cellular Resolution and Localised Spectroscopy of <i>Medicago truncatula</i> at 22.3 Tesla. <i>Scientific Reports</i> , 2020 , 10, 971	4.9	6
212	Analysis of the electronic structure of the primary electron donor of photosystem II of <i>Spirodela oligorrhiza</i> by photochemically induced dynamic nuclear polarization (photo-CIDNP) solid-state nuclear magnetic resonance (NMR). <i>Magnetic Resonance in Chemistry</i> , 2020 , 58, 1127-1134	2.9	2
211	Membrane matters: The impact of a nanodisc-bilayer or a detergent microenvironment on the properties of two eubacterial rhodopsins. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2020 , 1862, 183113	3.8	9
210	Synthesis and antiproliferative activity of hindered, chiral 1,2-diaminodiamantane platinum(II) complexes. <i>Dalton Transactions</i> , 2020 , 49, 14009-14016	4.3	6

209	A robust circadian rhythm of metabolites in Arabidopsis thaliana mutants with enhanced growth characteristics. <i>PLoS ONE</i> , 2019 , 14, e0218219	3.7	7
208	Molecular Insight in the Optical Response of Tubular Chlorosomal Assemblies. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 16462-16478	3.8	9
207	A Semisynthetic Peptide-Metalloporphyrin Responsive Matrix for Artificial Photosynthesis. <i>ChemPhotoChem</i> , 2019 , 3, 630-635	3.3	2
206	Redshifted and Near-infrared Active Analog Pigments Based upon Archaeorhodopsin-3. <i>Photochemistry and Photobiology</i> , 2019 , 95, 959-968	3.6	8
205	Photocatalytic Water Splitting Cycle in a Dye-Catalyst Supramolecular Complex: Ab Initio Molecular Dynamics Simulations. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 21403-21414	3.8	13
204	Photoinduced Electron Transfer in Donor-Acceptor Complexes: Isotope Effect and Dynamic Symmetry Breaking. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 6504-6511	6.4	5
203	Proton Acceptor near the Active Site Lowers Dramatically the O-O Bond Formation Energy Barrier in Photocatalytic Water Splitting. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 7690-7697	6.4	9
202	A Molecular Level Approach To Elucidate the Supramolecular Packing of Light-Harvesting Antenna Systems. <i>Chemistry - A European Journal</i> , 2018 , 24, 14989-14993	4.8	0
201	Energetic Effects of a Closed System Approach Including Explicit Proton and Electron Acceptors as Demonstrated by a Mononuclear Ruthenium Water Oxidation Catalyst. <i>ChemCatChem</i> , 2018 , 10, 4594-4601	5.2	5
200	High-resolution magic angle spinning NMR studies for metabolic characterization of Arabidopsis thaliana mutants with enhanced growth characteristics. <i>PLoS ONE</i> , 2018 , 13, e0209695	3.7	5
199	Photochemically induced dynamic nuclear polarization NMR on photosystem II: donor cofactor observed in entire plant. <i>Scientific Reports</i> , 2018 , 8, 17853	4.9	10
198	Non-invasive magnetic resonance imaging of oils in Botryococcus braunii green algae: Chemical shift selective and diffusion-weighted imaging. <i>PLoS ONE</i> , 2018 , 13, e0203217	3.7	3
197	Contrasting Modes of Self-Assembly and Hydrogen-Bonding Heterogeneity in Chlorosomes of. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 14877-14888	3.8	15
196	Retinal-Based Proton Pumping in the Near Infrared. <i>Journal of the American Chemical Society</i> , 2017 , 139, 2338-2344	16.4	32
195	A Hybrid Solid-State NMR and Electron Microscopy Structure-Determination Protocol for Engineering Advanced para-Crystalline Optical Materials. <i>Chemistry - A European Journal</i> , 2017 , 23, 3280-3284	4.8	7
194	Determination of Controlled Self-Assembly of a Paracrystalline Material by Homology Modelling with Hybrid NMR and TEM. <i>Chemistry - A European Journal</i> , 2017 , 23, 9346-9351	4.8	2
193	Efficient electrochemical water oxidation in neutral and near-neutral systems with a nanoscale silver-oxide catalyst. <i>Nanoscale</i> , 2016 , 8, 15033-40	7.7	28
192	Controlled Surface-Assembly of Nanoscale Leaf-Type Cu-Oxide Electrocatalyst for High Activity Water Oxidation. <i>ACS Catalysis</i> , 2016 , 6, 1768-1771	13.1	76

191	A Dynamic View of Proton-Coupled Electron Transfer in Photocatalytic Water Splitting. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 23074-23082	3.8	19
190	Solar Water Splitting Combining a BiVO ₄ Light Absorber with a Ru-Based Molecular Cocatalyst. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 7275-7281	3.8	65
189	Modulation of spectral properties and pump activity of proteorhodopsins by retinal analogues. <i>Biochemical Journal</i> , 2015 , 467, 333-43	3.8	24
188	Analysis of electron donors in photosystems in oxygenic photosynthesis by photo-CIDNP MAS NMR. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2015 , 152, 261-71	6.7	11
187	Crucial Role of Nuclear Dynamics for Electron Injection in a Dye-Semiconductor Complex. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 2393-8	6.4	42
186	In Vivo Longitudinal Monitoring of Changes in the Corpus Callosum Integrity During Disease Progression in a Mouse Model of Alzheimer's Disease. <i>Current Alzheimer Research</i> , 2015 , 12, 941-50	3	13
185	Zebrafish brain lipid characterization and quantification by ¹ H nuclear magnetic resonance spectroscopy and MALDI-TOF mass spectrometry. <i>Zebrafish</i> , 2014 , 11, 240-7	2	11
184	Surface Generation of a Cobalt-Derived Water Oxidation Electrocatalyst Developed in a Neutral HCO ₃ ⁻ /CO ₂ System. <i>Advanced Energy Materials</i> , 2014 , 4, 1400252	21.8	52
183	In-Silico Design of a Donor-Antenna-Acceptor Supramolecular Complex for Photoinduced Charge Separation. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 15600-15609	3.8	19
182	Ni-Based Electrocatalyst for Water Oxidation Developed In-Situ in a HCO ₃ ⁻ /CO ₂ System at Near-Neutral pH. <i>Advanced Energy Materials</i> , 2014 , 4, 1301929	21.8	65
181	Electrocatalysts: Surface Generation of a Cobalt-Derived Water Oxidation Electrocatalyst Developed in a Neutral HCO ₃ ⁻ /CO ₂ System (Adv. Energy Mater. 16/2014). <i>Advanced Energy Materials</i> , 2014 , 4, n/a-n/a	21.8	5
180	wPMLG-5 Spectroscopy of Self-Aggregated BChl e in Natural Chlorosomes of Chlorobaculum Limnaeum. <i>Israel Journal of Chemistry</i> , 2014 , 54, 147-153	3.4	1
179	Water Oxidation Electrocatalysts: Ni-Based Electrocatalyst for Water Oxidation Developed In-Situ in a HCO ₃ ⁻ /CO ₂ System at Near-Neutral pH (Adv. Energy Mater. 9/2014). <i>Advanced Energy Materials</i> , 2014 , 4,	21.8	3
178	Artificial leaf goes simpler and more efficient for solar fuel generation. <i>ChemSusChem</i> , 2014 , 7, 73-6	8.3	33
177	An NMR comparison of the light-harvesting complex II (LHCII) in active and photoprotective states reveals subtle changes in the chlorophyll a ground-state electronic structures. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2013 , 1827, 738-44	4.6	22
176	Electrochemical in situ surface enhanced Raman spectroscopic characterization of a trinuclear ruthenium complex, Ru-red. <i>Journal of Raman Spectroscopy</i> , 2013 , 44, 1195-1199	2.3	27
175	Molecular Catalytic Assemblies for Electrodriven Water Splitting. <i>ChemPlusChem</i> , 2013 , 78, 35-47	2.8	45
174	Artificial Photosynthesis for Solar Fuels In An Evolving Research Field within AMPEA, a Joint Programme of the European Energy Research Alliance. <i>Green</i> , 2013 , 3,		56

173	Artificial photosynthesis as a frontier technology for energy sustainability. <i>Energy and Environmental Science</i> , 2013 , 6, 1074	35.4	251
172	Bacteriopheophytin a in the active branch of the reaction center of rhodobacter sphaeroides is not disturbed by the protein matrix as shown by ¹³ C photo-CIDNP MAS NMR. <i>Journal of Physical Chemistry B</i> , 2013 , 117, 3287-97	3.4	7
171	Solid-state NMR of nanomachines involved in photosynthetic energy conversion. <i>Annual Review of Biophysics</i> , 2013 , 42, 675-99	21.1	9
170	Symmetry break of special pair: photochemically induced dynamic nuclear polarization NMR confirms control by nonaromatic substituents. <i>Journal of the American Chemical Society</i> , 2013 , 135, 10382-7	16.4	13
169	Proton displacements coupled to primary electron transfer in the Rhodobacter sphaeroides reaction center. <i>Journal of Physical Chemistry B</i> , 2013 , 117, 11162-8	3.4	23
168	Structure determination of a bio-inspired self-assembled light-harvesting antenna by solid-state NMR and molecular modeling. <i>Journal of Physical Chemistry B</i> , 2013 , 117, 11292-8	3.4	23
167	Insights into the photoprotective switch of the major light-harvesting complex II (LHCII): a preserved core of arginine-glutamate interlocked helices complemented by adjustable loops. <i>Journal of Biological Chemistry</i> , 2013 , 288, 19796-804	5.4	12
166	In vivo measurement of transverse relaxation time in the mouse brain at 17.6 T. <i>Magnetic Resonance in Medicine</i> , 2013 , 70, 985-93	4.4	8
165	Ab initio molecular dynamics study of water oxidation reaction pathways in mono-Ru catalysts. <i>ChemPhysChem</i> , 2012 , 13, 140-6	3.2	45
164	Solid-state NMR applied to photosynthetic light-harvesting complexes. <i>Photosynthesis Research</i> , 2012 , 111, 219-26	3.7	19
163	Structural rearrangements and reaction intermediates in a di-Mn water oxidation catalyst. <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 15502-8	3.6	7
162	On the morphology of a discotic liquid crystalline charge transfer complex. <i>Journal of Physical Chemistry B</i> , 2012 , 116, 13098-105	3.4	22
161	Surface-Immobilized Single-Site Iridium Complexes for Electrocatalytic Water Splitting. <i>Angewandte Chemie</i> , 2012 , 124, 9739-9743	3.6	34
160	Rücktitelbild: Surface-Immobilized Single-Site Iridium Complexes for Electrocatalytic Water Splitting (Angew. Chem. 38/2012). <i>Angewandte Chemie</i> , 2012 , 124, 9838-9838	3.6	
159	Surface-immobilized single-site iridium complexes for electrocatalytic water splitting. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 9601-5	16.4	113
158	Structural variability in wild-type and bchQ bchR mutant chlorosomes of the green sulfur bacterium <i>Chlorobaculum tepidum</i> . <i>Biochemistry</i> , 2012 , 51, 4488-98	3.2	43
157	Monitoring blood flow alterations in the Tg2576 mouse model of Alzheimer's disease by in vivo magnetic resonance angiography at 17.6 T. <i>NeuroImage</i> , 2012 , 60, 958-66	7.9	31
156	Biomimetic molecular water splitting catalysts for hydrogen generation. <i>International Journal of Hydrogen Energy</i> , 2012 , 37, 8787-8799	6.7	31

155	Mechanism and Reaction Coordinate of Directional Charge Separation in Bacterial Reaction Centers. <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 694-7	6.4	39
154	Prospects of Magnetic Resonance Spectroscopy in Mouse Models of Alzheimers Disease. <i>Current Medical Imaging</i> , 2011 , 7, 80-87	1.2	4
153	First solid-state NMR analysis of uniformly ¹³ C-enriched major light-harvesting complexes from <i>Chlamydomonas reinhardtii</i> and identification of protein and cofactor spin clusters. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2011 , 1807, 437-43	4.6	15
152	Acetyl group orientation modulates the electronic ground-state asymmetry of the special pair in purple bacterial reaction centers. <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 10270-9	3.6	13
151	In vivo magnetic resonance imaging to detect malignant melanoma in adult zebrafish. <i>Zebrafish</i> , 2010 , 7, 143-8	2	13
150	Selective chemical shift assignment of bacteriochlorophyll a in uniformly [¹³ C- ¹⁵ N]-labeled light-harvesting 1 complexes by solid-state NMR in ultrahigh magnetic field. <i>Journal of Physical Chemistry B</i> , 2010 , 114, 6207-15	3.4	12
149	Nuclear magnetic resonance secondary shifts of a light-harvesting 2 complex reveal local backbone perturbations induced by its higher-order interactions. <i>Biochemistry</i> , 2010 , 49, 478-86	3.2	16
148	A solid-state NMR study of changes in lipid phase induced by membrane-fusogenic LV-peptides. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2010 , 1798, 202-9	3.8	8
147	Integration of Catalysis with Storage for the Design of Multi-Electron Photochemistry Devices for Solar Fuel. <i>Applied Magnetic Resonance</i> , 2010 , 37, 497-503	0.8	12
146	Observation of the solid-state photo-CIDNP effect in entire cells of cyanobacteria <i>Synechocystis</i> . <i>Photosynthesis Research</i> , 2010 , 104, 275-82	3.7	34
145	Zinc chlorins for artificial light-harvesting self-assemble into antiparallel stacks forming a microcrystalline solid-state material. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 11472-7	11.5	61
144	Alternating syn-anti bacteriochlorophylls form concentric helical nanotubes in chlorosomes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 8525-30	11.5	253
143	Prospects for early detection of Alzheimer's disease from serial MR images in transgenic mice. <i>Current Alzheimer Research</i> , 2009 , 6, 503-18	3	15
142	In vivo metabolite profile of adult zebrafish brain obtained by high-resolution localized magnetic resonance spectroscopy. <i>Journal of Magnetic Resonance Imaging</i> , 2009 , 29, 275-81	5.6	25
141	Magic Angle Spinning (MAS) NMR: a new tool to study the spatial and electronic structure of photosynthetic complexes. <i>Photosynthesis Research</i> , 2009 , 102, 415-25	3.7	17
140	Differential charge polarization of axial histidines in bacterial reaction centers balances the asymmetry of the special pair. <i>Journal of the American Chemical Society</i> , 2009 , 131, 9626-7	16.4	18
139	Structural Assessment of the Bacteriochlorophyll d Stacking in Chlorosomes from a <i>C. tepidum</i> Mutant with MAS NMR Spectroscopy 2008 , 247-251		
138	A view on phosphate ester photochemistry by time-resolved solid state NMR. Intramolecular redox reaction of caged ATP. <i>Physical Chemistry Chemical Physics</i> , 2008 , 10, 6820-8	3.6	5

137	Protein-induced geometric constraints and charge transfer in bacteriochlorophyll-histidine complexes in LH2. <i>Physical Chemistry Chemical Physics</i> , 2008 , 10, 6971-8	3.6	18
136	The associative nature of adenylyl transfer catalyzed by T4 DNA ligase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 8563-8	11.5	20
135	Reply to Hengge: On the 31P chemical shifts of the phosphorane compounds : Fig. 1.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, E85-E85	11.5	2
134	Characterisation of uniformly 13C, 15N labelled bacteriochlorophyll a and bacteriopheophytin a in solution and in solid state: complete assignment of the 13C, 1H and 15N chemical shifts. <i>Magnetic Resonance in Chemistry</i> , 2008 , 46, 1074-83	2.1	17
133	High resolution localized two-dimensional MR spectroscopy in mouse brain in vivo. <i>Magnetic Resonance in Medicine</i> , 2008 , 60, 449-56	4.4	18
132	13C Photo-CIDNP MAS NMR Studies on Oriented Reaction Centers 2008 , 97-100		
131	Magic Angle Spinning (MAS) NMR for Structure Determination in Photosynthesis. <i>Advances in Photosynthesis and Respiration</i> , 2008 , 361-383	1.7	2
130	Probing secondary, tertiary, and quaternary structure along with protein-cofactor interactions for a helical transmembrane protein complex through 1H spin diffusion with MAS NMR spectroscopy. <i>Journal of the American Chemical Society</i> , 2007 , 129, 1504-5	16.4	13
129	13C chemical shift map of the active cofactors in photosynthetic reaction centers of Rhodobacter sphaeroides revealed by photo-CIDNP MAS NMR. <i>Biochemistry</i> , 2007 , 46, 8953-60	3.2	31
128	Photochemically induced dynamic nuclear polarization in the reaction center of the green sulphur bacterium Chlorobium tepidum observed by 13C MAS NMR. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2007 , 1767, 610-5	4.6	24
127	Solid-state NMR evidence for a protonation switch in the binding pocket of the H1 receptor upon binding of the agonist histamine. <i>Journal of the American Chemical Society</i> , 2007 , 129, 867-72	16.4	36
126	Imaging of Heart Development in Embryos with Magnetic Resonance Microscopy 2007 , 163-165		
125	Solid state NMR investigation of the interaction between biomimetic lipid bilayers and de novo designed fusogenic peptides. <i>ChemBioChem</i> , 2007 , 8, 493-6	3.8	11
124	T(1) relaxation in in vivo mouse brain at ultra-high field. <i>Magnetic Resonance in Medicine</i> , 2007 , 58, 390-5	4.4	28
123	Solid-phase synthesis and purification of a set of uniformly 13C, 15N labelled de novo designed membrane fusogenic peptides. <i>Journal of Peptide Science</i> , 2007 , 13, 75-80	2.1	2
122	13C-1H heteronuclear dipolar correlation studies of the hydrogen bonding of the quinones in Rhodobacter sphaeroides R26 reaction centers. <i>Applied Magnetic Resonance</i> , 2007 , 31, 145-158	0.8	2
121	Magnetic field dependence of 13C photo-CIDNP MAS NMR in plant photosystems I and II. <i>Applied Magnetic Resonance</i> , 2007 , 31, 193-204	0.8	11
120	15N photochemically induced dynamic nuclear polarization magic-angle spinning NMR analysis of the electron donor of photosystem II. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 12767-71	11.5	56

119	13C and 15N NMR evidence for peripheral intercalation of uniformly labeled fusogenic peptides incorporated in a biomimetic membrane. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2007 , 1768, 3020-8	3.8	3
118	Longitudinal assessment of Alzheimer's beta-amyloid plaque development in transgenic mice monitored by in vivo magnetic resonance microimaging. <i>Journal of Magnetic Resonance Imaging</i> , 2006 , 24, 530-6	5.6	71
117	Accurate measurements of 13C-13C J-couplings in the rhodopsin chromophore by double-quantum solid-state NMR spectroscopy. <i>Journal of the American Chemical Society</i> , 2006 , 128, 3878-9	16.4	38
116	Magnetic resonance microscopy of the adult zebrafish. <i>Zebrafish</i> , 2006 , 3, 431-9	2	44
115	Photo-CIDNP MAS NMR in intact cells of Rhodobacter sphaeroides R26: molecular and atomic resolution at nanomolar concentration. <i>Journal of the American Chemical Society</i> , 2006 , 128, 12794-9	16.4	52
114	15N MAS NMR studies of cph1 phytochrome: Chromophore dynamics and intramolecular signal transduction. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 20580-5	3.4	49
113	Methyl substituents at the 11 or 12 position of retinal profoundly and differentially affect photochemistry and signalling activity of rhodopsin. <i>Journal of Molecular Biology</i> , 2006 , 363, 98-113	6.5	17
112	Magic Angle Spinning Nuclear Magnetic Resonance of the Chlorosomes 2006 , 297-307		
111	Selective chemical shift assignment of B800 and B850 bacteriochlorophylls in uniformly [13C,15N]-labeled light-harvesting complexes by solid-state NMR spectroscopy at ultra-high magnetic field. <i>Journal of the American Chemical Society</i> , 2005 , 127, 3213-9	16.4	25
110	Magnetic field dependence of photo-CIDNP MAS NMR on photosynthetic reaction centers of Rhodobacter sphaeroides WT. <i>Journal of the American Chemical Society</i> , 2005 , 127, 14290-8	16.4	65
109	Selective interface detection: mapping binding site contacts in membrane proteins by NMR spectroscopy. <i>Journal of the American Chemical Society</i> , 2005 , 127, 5734-5	16.4	24
108	Spectroscopy and quantum chemical modeling reveal a predominant contribution of excitonic interactions to the bathochromic shift in alpha-crustacyanin, the blue carotenoprotein in the carapace of the lobster Homarus gammarus. <i>Journal of the American Chemical Society</i> , 2005 , 127, 1438-45	16.4	44
107	Accurate CSA measurements from uniformly isotopically labeled biomolecules at high magnetic field. <i>Journal of Magnetic Resonance</i> , 2005 , 172, 1-8	3	7
106	Residual backbone and side-chain 13C and 15N resonance assignments of the intrinsic transmembrane light-harvesting 2 protein complex by solid-state Magic Angle Spinning NMR spectroscopy. <i>Journal of Biomolecular NMR</i> , 2005 , 31, 279-93	3	45
105	Photo-CIDNP solid-state NMR on photosystems I and II: what makes P680 special?. <i>Photosynthesis Research</i> , 2005 , 84, 303-8	3.7	31
104	De novo design of conformationally flexible transmembrane peptides driving membrane fusion. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004 , 101, 14776-81	11.5	74
103	Large-scale overproduction, functional purification and ligand affinities of the His-tagged human histamine H1 receptor. <i>FEBS Journal</i> , 2004 , 271, 2636-46		43
102	Heteronuclear 2D (1H-13C) MAS NMR resolves the electronic structure of coordinated histidines in light-harvesting complex II: assessment of charge transfer and electronic delocalization effect. <i>Journal of Biomolecular NMR</i> , 2004 , 28, 157-64	3	14

101	Synthetic analogues of the histidine-chlorophyll complex: a NMR study to mimic structural features of the photosynthetic reaction center and the light-harvesting complex. <i>Journal of Biological Inorganic Chemistry</i> , 2004 , 9, 109-17	3.7	13
100	Biosynthetic site-specific (¹³ C) labeling of the light-harvesting 2 protein complex: a model for solid state NMR structure determination of transmembrane proteins. <i>Journal of Biomolecular NMR</i> , 2004 , 30, 267-74	3	28
99	DFT calculations of the ¹ H chemical shifts and ¹³ C chemical shift tensors of retinal isomers. <i>Computational and Theoretical Chemistry</i> , 2004 , 711, 141-147		8
98	Ab Initio Modeling of the Spatial, Electronic, and Vibrational Structure of Schiff Base Models for Visual Photoreceptors. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 13560-13572	3.4	20
97	Solid-state NMR analysis of ligand-receptor interactions reveals an induced misfit in the binding site of isorhodopsin. <i>Biochemistry</i> , 2004 , 43, 16011-8	3.2	18
96	Protein-induced bonding perturbation of the rhodopsin chromophore detected by double-quantum solid-state NMR. <i>Journal of the American Chemical Society</i> , 2004 , 126, 3948-53	16.4	52
95	Magic-Angle Spinning Nuclear Magnetic Resonance under Ultrahigh Field Reveals Two Forms of Intermolecular Interaction within CH ₂ Cl ₂ -Treated (31R)-Type Bacteriochlorophyll c Solid Aggregate. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 2726-2734	3.4	22
94	Photochemically induced dynamic nuclear polarization in photosystem I of plants observed by ¹³ C magic-angle spinning NMR. <i>Journal of the American Chemical Society</i> , 2004 , 126, 12819-26	16.4	52
93	MAS NMR Structures of Aggregated Cadmium Chlorins Reveal Molecular Control of Self-Assembly of Chlorosomal Bacteriochlorophylls. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 16556-16566	3.4	28
92	Assignment of amide proton signals by combined evaluation of HN, NN and HNCA MAS-NMR correlation spectra. <i>Journal of Biomolecular NMR</i> , 2003 , 25, 217-23	3	41
91	Analysis of histamine and modeling of ligand-receptor interactions in the histamine H(1) receptor for Magic Angle Spinning NMR studies. <i>Inflammation Research</i> , 2003 , 52, 417-23	7.2	4
90	Determination of Polyisoprene-block-poly(methyl methacrylate) Domain Sizes Using ¹ H Spin Diffusion. <i>Macromolecular Chemistry and Physics</i> , 2003 , 204, 46-51	2.6	12
89	Photochemically induced dynamic nuclear polarisation in entire bacterial photosynthetic units observed by ¹³ C magic-angle spinning NMR. <i>Journal of Molecular Structure</i> , 2003 , 661-662, 625-633	3.4	9
88	Probing the electronic structure of tyrosine radical YD in photosystem II by EPR spectroscopy using site specific isotope labelling in <i>Spirodela oligorrhiza</i> . <i>Chemical Physics</i> , 2003 , 294, 459-469	2.3	12
87	MAS NMR structure of a microcrystalline Cd-bacteriochlorophyll d analogue. <i>Journal of the American Chemical Society</i> , 2003 , 125, 13374-5	16.4	33
86	Multiple-spin effects in fast magic angle spinning Lee-Goldburg cross-polarization experiments in uniformly labeled compounds. <i>Journal of Chemical Physics</i> , 2003 , 118, 5547-5557	3.9	28
85	A 3-D structural model of solid self-assembled chlorophyll a/H ₂ O from multispin labeling and MAS NMR 2-D dipolar correlation spectroscopy in high magnetic field. <i>Journal of Magnetic Resonance</i> , 2002 , 155, 1-14	3	39
84	2D(¹³ C)-(¹³ C) MAS NMR correlation spectroscopy with mixing by true (¹ H) spin diffusion reveals long-range intermolecular distance restraints in ultra high magnetic field. <i>Journal of Magnetic Resonance</i> , 2002 , 157, 286-91	3	31

83	(1)H and (13)C MAS NMR evidence for pronounced ligand-protein interactions involving the ionone ring of the retinylidene chromophore in rhodopsin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002 , 99, 9101-6	11.5	109
82	Solid-State 13C NMR Study of Accelerated-Sulfur-Vulcanized 13C-Labeled ENBEPDM. <i>Macromolecules</i> , 2002 , 35, 1958-1966	5.5	22
81	(13)C MAS NMR and photo-CIDNP reveal a pronounced asymmetry in the electronic ground state of the special pair of Rhodobacter sphaeroides reaction centers. <i>Biochemistry</i> , 2002 , 41, 8708-17	3.2	54
80	Magnetic resonance microscopy at 17.6-Tesla on chicken embryos in vitro. <i>Journal of Magnetic Resonance Imaging</i> , 2001 , 14, 83-6	5.6	32
79	Backbone and side-chain 13C and 15N signal assignments of the alpha-spectrin SH3 domain by magic angle spinning solid-state NMR at 17.6 Tesla. <i>ChemBioChem</i> , 2001 , 2, 272-81	3.8	279
78	Heteronuclear 2D-correlations in a uniformly [13C, 15N] labeled membrane-protein complex at ultra-high magnetic fields. <i>Journal of Biomolecular NMR</i> , 2001 , 19, 243-53	3	83
77	Secondary chemical shifts in immobilized peptides and proteins: a qualitative basis for structure refinement under magic angle spinning. <i>Journal of Biomolecular NMR</i> , 2001 , 20, 325-31	3	132
76	Solid state 13C NMR spectroscopy on EPDM/PP/oil based thermoplastic vulcanizates in the melt. <i>Polymer</i> , 2001 , 42, 9745-9752	3.9	34
75	Photo-CIDNP 13C magic angle spinning NMR on bacterial reaction centres: exploring the electronic structure of the special pair and its surroundings. <i>Biological Chemistry</i> , 2001 , 382, 1271-6	4.5	20
74	A refined model of the chlorosomal antennae of the green bacterium Chlorobium tepidum from proton chemical shift constraints obtained with high-field 2-D and 3-D MAS NMR dipolar correlation spectroscopy. <i>Biochemistry</i> , 2001 , 40, 1587-95	3.2	139
73	Ultra-high-field MAS NMR assay of a multispin labeled ligand bound to its G-protein receptor target in the natural membrane environment: electronic structure of the retinylidene chromophore in rhodopsin. <i>Biochemistry</i> , 2001 , 40, 3282-8	3.2	43
72	Ultrahigh field MAS NMR dipolar correlation spectroscopy of the histidine residues in light-harvesting complex II from photosynthetic bacteria reveals partial internal charge transfer in the B850/His complex. <i>Journal of the American Chemical Society</i> , 2001 , 123, 4803-9	16.4	51
71	An ab-initio molecular dynamics modeling of the primary photochemical event in vision. <i>Focus on Structural Biology</i> , 2001 , 111-122		1
70	Photochemically induced dynamic nuclear polarization in bacterial photosynthetic reaction centres observed by 13C solid-state NMR. <i>Focus on Structural Biology</i> , 2001 , 215-225		6
69	Magnetic resonance microscopy of mouse embryos in utero. <i>The Anatomical Record</i> , 2000 , 260, 373-7		41
68	Sample optimization and identification of signal patterns of amino acid side chains in 2D RFDR spectra of the alpha-spectrin SH3 domain. <i>Journal of Magnetic Resonance</i> , 2000 , 143, 411-6	3	152
67	Bacteriochlorophyll/imidazole and chlorophyll/imidazole complexes are negatively charged in an apolar environment. <i>Chemical Physics Letters</i> , 2000 , 330, 325-330	2.5	10
66	Solid-state NMR spectroscopy applied to membrane proteins. <i>Current Opinion in Structural Biology</i> , 2000 , 10, 593-600	8.1	73

65	Determination of a molecular torsional angle in the metarhodopsin-I photointermediate of rhodopsin by double-quantum solid-state NMR. <i>Journal of Biomolecular NMR</i> , 2000 , 16, 1-8	3	63
64	Photochemically induced nuclear spin polarization in reaction centers of photosystem II observed by ¹³ C-solid-state NMR reveals a strongly asymmetric electronic structure of the P680(+) primary donor chlorophyll. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000 , 97, 9865-70	11.5	67
63	Cross-Linking Induced Phase Separation in SAN/SMA Semi-interpenetrating Polymer Networks Observed by Solid State NMR and Site Specific Isotope Enrichment. <i>Macromolecules</i> , 2000 , 33, 5544-5548	5.5	11
62	Pronounced Poly(methyl methacrylate) Dynamics Induced by Blending Morphology. <i>Macromolecules</i> , 2000 , 33, 457-460	5.5	11
61	Exploring the calcium-binding site in photosystem II membranes by solid-state (¹¹³ Cd) NMR. <i>Biochemistry</i> , 2000 , 39, 6751-5	3.2	38
60	Rotational resonance NMR of ¹³ C ₂ -labelled retinal: quantitative internuclear distance determination. <i>Solid State Nuclear Magnetic Resonance</i> , 1999 , 14, 81-90	3.1	18
59	Efficient conditions for the photoaccumulation of HA in the photosynthetic reaction centre of Rhodospirillum rubrum with uniformly labelled bacteriochlorophyll monitored by Fourier transform infrared difference spectroscopy. <i>Vibrational Spectroscopy</i> , 1999 , 19, 347-352	2.1	7
58	Anomalous rotational resonance spectra in magic-angle spinning NMR. <i>Journal of Magnetic Resonance</i> , 1999 , 140, 379-403	3	38
57	Resonance Raman spectroscopy and quantum chemical modeling studies of protein-astaxanthin interactions in alpha-carotene (major blue carotenoprotein complex in carapace of lobster, Homarus gammarus). <i>Biospectroscopy</i> , 1999 , 5, 358-70		15
56	Solid state ¹⁵ N NMR evidence for a complex Schiff base counterion in the visual G-protein-coupled receptor rhodopsin. <i>Biochemistry</i> , 1999 , 38, 7195-9	3.2	66
55	Retinylidene ligand structure in bovine rhodopsin, metarhodopsin-I, and 10-methylrhodopsin from internuclear distance measurements using ¹³ C-labeling and 1-D rotational resonance MAS NMR. <i>Biochemistry</i> , 1999 , 38, 11316-24	3.2	94
54	Characterization of photosynthetic reaction centers with specific isotope labels. <i>Photosynthesis Research</i> , 1998 , 55, 241-245	3.7	8
53	The transition state in the isomerization of rhodopsin. <i>Chemical Physics Letters</i> , 1998 , 294, 447-453	2.5	34
52	Multidimensional CP-MAS ¹³ C NMR of uniformly enriched chlorophyll. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 1998 , 54, 1167-1176	4.4	45
51	Solid-State NMR Study of Miscibility and Phase Separation in Blends and Semi-Interpenetrating Networks of ¹³ C-Labeled Poly(styrene-co-acrylonitrile) and Poly(styrene-co-maleic anhydride). <i>Macromolecules</i> , 1998 , 31, 7404-7412	5.5	13
50	¹³ C NMR Study of the grafting of ¹³ C labeled maleic anhydride onto PE, PP and EPM. <i>Macromolecular Symposia</i> , 1998 , 129, 119-125	0.8	14
49	A physical interpretation of the Floquet description of magic angle spinning nuclear magnetic resonance spectroscopy. <i>Molecular Physics</i> , 1998 , 95, 921-934	1.7	41
48	The mechanism of the colour shift of astaxanthin in beta-carotene as investigated by ¹³ C MAS NMR and specific isotope enrichment. <i>Pure and Applied Chemistry</i> , 1997 , 69, 2085-2090	2.1	18

47	Energy Storage in the Primary Photoproduct of Vision. <i>Journal of Physical Chemistry B</i> , 1997 , 101, 2954-2958	3.4	53
46	Internuclear Distance Measurements up to 0.44 nm for Retinals in the Solid State with 1-D Rotational Resonance ^{13}C MAS NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 1997 , 119, 169-174	16.4	33
45	^{13}C Magic angle spinning NMR analysis and quantum chemical modeling of the bathochromic shift of astaxanthin in alpha-crustacyanin, the blue carotenoprotein complex in the carapace of the lobster <i>Homarus gammarus</i> . <i>Biochemistry</i> , 1997 , 36, 7288-96	3.2	25
44	Characterization of pheophytin ground states in <i>Rhodobacter sphaeroides</i> R26 photosynthetic reaction centers from multispin pheophytin enrichment and 2-D ^{13}C MAS NMR dipolar correlation spectroscopy. <i>Biochemistry</i> , 1997 , 36, 7513-9	3.2	38
43	^{13}C NMR Study of the Grafting of Maleic Anhydride onto Polyethylene, Polypropene, and Ethene-Propene Copolymers. <i>Macromolecules</i> , 1996 , 29, 1151-1157	5.5	186
42	Distribution of Cations in Mixed Zn-Mn-AlO ₃ Containing Spinel, Model Catalysts for the Reduction of Nitrobenzene to Nitrosobenzene. <i>Journal of Catalysis</i> , 1996 , 160, 148-154	7.3	9
41	^2H NMR evidence for dynamic disorder in human skin induced by the penetration enhancer azone. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 1996 , 52, 785-791	4.4	5
40	Ab initio molecular dynamics of retinals. <i>Chemical Physics Letters</i> , 1996 , 248, 165-172	2.5	46
39	Charge Localization and Dynamics in Rhodopsin. <i>Physical Review Letters</i> , 1996 , 77, 4474-4477	7.4	44
38	Magic Angle Spinning Nuclear Magnetic Resonance of Photosynthetic Components. <i>Advances in Photosynthesis and Respiration</i> , 1996 , 299-313	1.7	3
37	^{13}C MAS NMR evidence for a homogeneously ordered environment of tyrosine M210 in reaction centres of <i>Rhodobacter sphaeroides</i> . <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 1995 , 51, 135-144	4.4	22
36	^{13}C magic angle spinning NMR characterization of the functionally asymmetric QA binding in <i>Rhodobacter sphaeroides</i> R26 photosynthetic reaction centers using site-specific ^{13}C -labeled ubiquinone-10. <i>Biochemistry</i> , 1995 , 34, 10229-36	3.2	41
35	CP-MAS ^{13}C -NMR dipolar correlation spectroscopy of ^{13}C -enriched chlorosomes and isolated bacteriochlorophyll c aggregates of <i>Chlorobium tepidum</i> : the self-organization of pigments is the main structural feature of chlorosomes. <i>Biochemistry</i> , 1995 , 34, 15259-66	3.2	136
34	Protein-chromophore interactions in alpha-crustacyanin, the major blue carotenoprotein from the carapace of the lobster, <i>Homarus gammarus</i> . A study by ^{13}C magic angle spinning NMR. <i>FEBS Letters</i> , 1995 , 362, 34-8	3.8	31
33	FTIR spectroscopy shows weak symmetric hydrogen bonding of the QB carbonyl groups in <i>Rhodobacter sphaeroides</i> R26 reaction centres. <i>FEBS Letters</i> , 1995 , 370, 88-92	3.8	58
32	Asymmetric binding of the 1- and 4-C=O groups of QA in <i>Rhodobacter sphaeroides</i> R26 reaction centres monitored by Fourier transform infra-red spectroscopy using site-specific isotopically labelled ubiquinone-10.. <i>EMBO Journal</i> , 1994 , 13, 5523-5530	13	100
31	^{13}C magic angle spinning NMR evidence for a 15,15'-cis configuration of the spheroidene in the <i>Rhodobacter sphaeroides</i> photosynthetic reaction center. <i>Biochemistry</i> , 1992 , 31, 12446-50	3.2	43
30	^{13}C magic angle spinning NMR study of the light-induced and temperature-dependent changes in <i>Rhodobacter sphaeroides</i> R26 reaction centers enriched in [4'- ^{13}C]tyrosine. <i>Biochemistry</i> , 1992 , 31, 11038-49	3.2	71

29	Magic angle spinning NMR studies on the metarhodopsin II intermediate of bovine rhodopsin: evidence for an unprotonated Schiff base. <i>Photochemistry and Photobiology</i> , 1992 , 56, 1035-9	3.6	57
28	Apparatus for low-temperature magic-angle spinning NMR. <i>Journal of Magnetic Resonance</i> , 1991 , 92, 614-617		4
27	Iterative fitting of magic-angle-spinning NMR spectra. <i>Journal of Magnetic Resonance</i> , 1991 , 91, 30-38		4
26	¹³ C magic-angle spinning NMR studies of bathorhodopsin, the primary photoproduct of rhodopsin. <i>Biochemistry</i> , 1991 , 30, 7409-15	3.2	173
25	¹³ C Magic angle spinning NMR evidence for a 15,15E configuration of the spheroidene chromophore in the Rhodobacter sphaeroides reaction center; synthesis of ¹³ C- and ² H-labelled spheroidenes. <i>Pure and Applied Chemistry</i> , 1991 , 63, 115-122	2.1	24
24	Magic-angle-spinning ¹³ C NMR with atomic resolution of a photosynthetic reaction center enriched in [⁴ - ¹³ C]tyrosine. <i>Chemical Physics Letters</i> , 1990 , 169, 307-310	2.5	20
23	Solid-state ¹³ C and ¹⁵ N NMR study of the low pH forms of bacteriorhodopsin. <i>Biochemistry</i> , 1990 , 29, 6873-83	3.2	127
22	Solid-state NMR studies of the mechanism of the opsin shift in the visual pigment rhodopsin. <i>Biochemistry</i> , 1990 , 29, 8158-64	3.2	74
21	Non-linear excitations in Ising-type magnetic chain systems I. <i>Physica B: Condensed Matter</i> , 1989 , 154, 237-253	2.8	8
20	Two-dimensional switched-speed spinning NMR. <i>Journal of Magnetic Resonance</i> , 1989 , 85, 60-68		5
19	Nuclear magnetic resonance study of the Schiff base in bacteriorhodopsin: counterion effects on the ¹⁵ N shift anisotropy. <i>Biochemistry</i> , 1989 , 28, 3346-53	3.2	174
18	Structure and protein environment of the retinal chromophore in light- and dark-adapted bacteriorhodopsin studied by solid-state NMR. <i>Biochemistry</i> , 1989 , 28, 8897-904	3.2	68
17	Magic-angle-sample-spinning NMR difference spectroscopy. <i>Journal of Magnetic Resonance</i> , 1988 , 77, 251-257		6
16	Random-Field Effects on Field-Induced Transitions in Ising-Type Antiferromagnets. <i>Physica Scripta</i> , 1986 , T13, 219-225	2.6	5
15	Phase diagrams of weakly anisotropic Heisenberg antiferromagnets, nonlinear excitations (solitons) and random-field effects. <i>Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics</i> , 1986 , 141, 1-36		31
14	Crystal structure and magnetic properties of some new hexagonal ferrites (Ba ₂ Sn ₂ MeFe ₁₀ GaxO ₂₂) with the QS-structure. <i>Journal of Magnetism and Magnetic Materials</i> , 1986 , 62, 367-380	2.8	12
13	Field-induced transitions in low-dimensional antiferromagnets and in a spin-peierls system. <i>Journal of Magnetism and Magnetic Materials</i> , 1986 , 54-57, 1447-1452	2.8	12
12	Mössbauer relaxation studies of non-linear dynamical excitations in low-dimensional magnets. <i>Hyperfine Interactions</i> , 1986 , 27, 93-110	0.8	23

11	Mössbauer relaxation and thermodynamic properties of spin cluster-triad in EuMg ₅ . <i>Hyperfine Interactions</i> , 1986 , 28, 667-671	0.8	4
10	Phase diagrams of weakly anisotropic Heisenberg antiferromagnets: I. Quasi 1-dimensional systems. <i>Solid State Communications</i> , 1985 , 53, 731-735	1.6	17
9	Phase diagrams of weakly anisotropic Heisenberg antiferromagnets: II. Quasi 2-dimensional systems. <i>Solid State Communications</i> , 1985 , 53, 737-741	1.6	16
8	Phase diagrams of weakly anisotropic Heisenberg antiferromagnets: III. Nonlinear excitations and random fields in quasi 2-dimensional systems. <i>Solid State Communications</i> , 1985 , 56, 7-11	1.6	9
7	Field-dependent Mössbauer relaxation study of domain walls in the quasi 1-d antiferromagnet RbFeCl ₃ ·2H ₂ O. <i>Solid State Communications</i> , 1985 , 53, 573-577	1.6	13
6	Mössbauer relaxation study of nonlinear excitations in pure and impure Ising-type ferromagnetic quantum chains. <i>Physical Review B</i> , 1984 , 30, 4041-4044	3.3	21
5	Use of Kapton film as a cryogenic construction material. <i>Cryogenics</i> , 1984 , 24, 702-704	1.8	7
4	High-field (40 T) magnetization studies of linear Heisenberg chains with alternating exchange. <i>Journal of Applied Physics</i> , 1982 , 53, 8038-8039	2.5	36
3	Spin-Peierls transition in a Cu ²⁺ linear chain. <i>Journal of Applied Physics</i> , 1982 , 53, 8027-8028	2.5	5
2	Magnetic properties of PrCo ₂ and its ternary hydride PrCo ₂ H ₄ . <i>Journal of Magnetism and Magnetic Materials</i> , 1981 , 25, 207-214	2.8	26
1	Engineering natural photosynthesis		2