

Olivier Ouari

List of Publications by Year in descending order

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papers

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citing authors

#	ARTICLE	IF	CITATIONS
1	Mitochondria-Targeted Triphenylphosphonium-Based Compounds: Syntheses, Mechanisms of Action, and Therapeutic and Diagnostic Applications. <i>Chemical Reviews</i> , 2017, 117, 10043-10120.	47.7	1,051
2	Highly Efficient, Water-Soluble Polarizing Agents for Dynamic Nuclear Polarization at High Frequency. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 10858-10861.	13.8	401
3	Large Molecular Weight Nitroxide Biradicals Providing Efficient Dynamic Nuclear Polarization at Temperatures up to 200 K. <i>Journal of the American Chemical Society</i> , 2013, 135, 12790-12797.	13.7	355
4	Dynamic Nuclear Polarization with a Rigid Biradical. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 4996-5000.	13.8	248
5	A Slowly Relaxing Rigid Biradical for Efficient Dynamic Nuclear Polarization Surface-Enhanced NMR Spectroscopy: Expedient Characterization of Functional Group Manipulation in Hybrid Materials. <i>Journal of the American Chemical Society</i> , 2012, 134, 2284-2291.	13.7	182
6	A review of the basics of mitochondrial bioenergetics, metabolism, and related signaling pathways in cancer cells: Therapeutic targeting of tumor mitochondria with lipophilic cationic compounds. <i>Redox Biology</i> , 2018, 14, 316-327.	9.0	166
7	Dynamic Nuclear Polarization Enhanced Solid-State NMR Spectroscopy of Functionalized Metal-Organic Frameworks. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 123-127.	13.8	161
8	Mitochondria-Targeted Analogues of Metformin Exhibit Enhanced Antiproliferative and Radiosensitizing Effects in Pancreatic Cancer Cells. <i>Cancer Research</i> , 2016, 76, 3904-3915.	0.9	159
9	Non-aqueous solvents for DNP surface enhanced NMR spectroscopy. <i>Chemical Communications</i> , 2012, 48, 654-656.	4.1	155
10	Teaching the basics of reactive oxygen species and their relevance to cancer biology: Mitochondrial reactive oxygen species detection, redox signaling, and targeted therapies. <i>Redox Biology</i> , 2018, 15, 347-362.	9.0	155
11	Global Profiling of Reactive Oxygen and Nitrogen Species in Biological Systems. <i>Journal of Biological Chemistry</i> , 2012, 287, 2984-2995.	3.4	153
12	Targeting lonidamine to mitochondria mitigates lung tumorigenesis and brain metastasis. <i>Nature Communications</i> , 2019, 10, 2205.	12.8	146
13	Rational design of dinitroxide biradicals for efficient cross-effect dynamic nuclear polarization. <i>Chemical Science</i> , 2016, 7, 550-558.	7.4	141
14	Synthesis and Properties of Water-Soluble Gold Colloids Covalently Derivatized with Neutral Polymer Monolayers. <i>Journal of the American Chemical Society</i> , 2002, 124, 5811-5821.	13.7	132
15	Amplifying Dynamic Nuclear Polarization of Frozen Solutions by Incorporating Dielectric Particles. <i>Journal of the American Chemical Society</i> , 2014, 136, 15711-15718.	13.7	103
16	BDPA-Nitroxide Biradicals Tailored for Efficient Dynamic Nuclear Polarization Enhanced Solid-State NMR at Magnetic Fields up to 21.1 T. <i>Journal of the American Chemical Society</i> , 2018, 140, 13340-13349.	13.7	99
17	Cytochrome c-mediated oxidation of hydroethidine and mito-hydroethidine in mitochondria: Identification of homo- and heterodimers. <i>Free Radical Biology and Medicine</i> , 2008, 44, 835-846.	2.9	98
18	Comprehensive Synthesis of Monohydroxy-Cucurbiturils ($n = 5, 6, 7, 8$): High Purity and High Conversions. <i>Journal of the American Chemical Society</i> , 2015, 137, 10238-10245.	13.7	95

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19	NMR-based structural biology enhanced by dynamic nuclear polarization at high magnetic field. <i>Journal of Biomolecular NMR</i> , 2014, 60, 157-168.	2.8	90
20	Scavenging Free Radicals To Preserve Enhancement and Extend Relaxation Times in NMR using Dynamic Nuclear Polarization. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 6182-6185.	13.8	89
21	Solid-State Dynamic Nuclear Polarization at 9.4 and 18.8 T from 100 K to Room Temperature. <i>Journal of the American Chemical Society</i> , 2015, 137, 14558-14561.	13.7	87
22	Solid-State NMR Spectroscopy of Oriented Membrane Polypeptides at 100 K with Signal Enhancement by Dynamic Nuclear Polarization. <i>Journal of the American Chemical Society</i> , 2010, 132, 5940-5941.	13.7	84
23	The Antioxidant Additive Approach for Alzheimer's Disease Therapy: New Ferulic (Lipoic) Acid Plus Melatonin Modified Tacrines as Cholinesterases Inhibitors, Direct Antioxidants, and Nuclear Factor (Erythroid-Derived 2)-Like 2 Activators. <i>Journal of Medicinal Chemistry</i> , 2016, 59, 9967-9973.	6.4	83
24	Detection of mitochondria-generated reactive oxygen species in cells using multiple probes and methods: Potentials, pitfalls, and the future. <i>Journal of Biological Chemistry</i> , 2018, 293, 10363-10380.	3.4	80
25	Rigid Orthogonal Bis-TEMPO Biradicals with Improved Solubility for Dynamic Nuclear Polarization. <i>Journal of Organic Chemistry</i> , 2012, 77, 1789-1797.	3.2	75
26	Detection of superoxide production in stimulated and unstimulated living cells using new cyclic nitron spin traps. <i>Free Radical Biology and Medicine</i> , 2014, 71, 281-290.	2.9	75
27	TinyPols: a family of water-soluble binitroxides tailored for dynamic nuclear polarization enhanced NMR spectroscopy at 18.8 and 21.1 T. <i>Chemical Science</i> , 2020, 11, 2810-2818.	7.4	72
28	Detection and Characterization of Reactive Oxygen and Nitrogen Species in Biological Systems by Monitoring Species-Specific Products. <i>Antioxidants and Redox Signaling</i> , 2018, 28, 1416-1432.	5.4	70
29	Polymeric PARACEST Agents for Enhancing MRI Contrast Sensitivity. <i>Journal of the American Chemical Society</i> , 2008, 130, 13854-13855.	13.7	69
30	Tailoring of Polarizing Agents in the bTurea Series for Cross-Effect Dynamic Nuclear Polarization in Aqueous Media. <i>Chemistry - A European Journal</i> , 2016, 22, 5598-5606.	3.3	69
31	Visualizing Specific Cross-Protomer Interactions in the Homo-Oligomeric Membrane Protein Proteorhodopsin by Dynamic-Nuclear-Polarization-Enhanced Solid-State NMR. <i>Journal of the American Chemical Society</i> , 2015, 137, 9032-9043.	13.7	67
32	Probing Cucurbituril Assemblies in Water with TEMPO-like Nitroxides: A Trinitroxide Supraradical with Spin-Spin Interactions. <i>Journal of the American Chemical Society</i> , 2009, 131, 5402-5404.	13.7	66
33	Dynamic Nuclear Polarization Enhancement of 200 at 21.15 T Enabled by 65 kHz Magic Angle Spinning. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 8386-8391.	4.6	66
34	Synthesis of a Hemicyanine Dye Bearing Two Carboxylic Groups and Its Use as a Photosensitizer in Dye-Sensitized Photoelectrochemical Cells. <i>Chemistry of Materials</i> , 2001, 13, 3888-3892.	6.7	65
35	Antiproliferative effects of mitochondria-targeted cationic antioxidants and analogs: Role of mitochondrial bioenergetics and energy-sensing mechanism. <i>Cancer Letters</i> , 2015, 365, 96-106.	7.2	64
36	Properties of dinitroxides for use in dynamic nuclear polarization (DNP). <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 5841.	2.8	62

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37	Automated transfer and injection of hyperpolarized molecules with polarization measurement prior to <i>in vivo</i> NMR. NMR in Biomedicine, 2013, 26, 1582-1588.	2.8	62
38	Biomolecular DNP-Supported NMR Spectroscopy using Site-Directed Spin Labeling. Chemistry - A European Journal, 2015, 21, 12971-12977.	3.3	62
39	A Well-Defined Pd Hybrid Material for the <i>Z</i> -Selective Semihydrogenation of Alkynes Characterized at the Molecular Level by DNP SENS. Chemistry - A European Journal, 2013, 19, 12234-12238.	3.3	61
40	Mitigation of NADPH Oxidase 2 Activity as a Strategy to Inhibit Peroxynitrite Formation. Journal of Biological Chemistry, 2016, 291, 7029-7044.	3.4	58
41	Solid-Phase Polarization Matrixes for Dynamic Nuclear Polarization from Homogeneously Distributed Radicals in Mesostructured Hybrid Silica Materials. Journal of the American Chemical Society, 2013, 135, 15459-15466.	13.7	56
42	Dynamic Nuclear Polarization-Enhanced Biomolecular NMR Spectroscopy at High Magnetic Field with Fast Magic-Angle Spinning. Angewandte Chemie - International Edition, 2018, 57, 7458-7462.	13.8	56
43	Toward selective detection of reactive oxygen and nitrogen species with the use of fluorogenic probes – Limitations, progress, and perspectives. Pharmacological Reports, 2015, 67, 756-764.	3.3	54
44	Improved Structural Elucidation of Synthetic Polymers by Dynamic Nuclear Polarization Solid-State NMR Spectroscopy. ACS Macro Letters, 2013, 2, 715-719.	4.8	53
45	Dynamic Nuclear Polarization Efficiency Increased by Very Fast Magic Angle Spinning. Journal of the American Chemical Society, 2017, 139, 10609-10612.	13.7	52
46	Mito-DEPMPO synthesized from a novel NH ₂ -reactive DEPMPO spin trap: a new and improved trap for the detection of superoxide. Chemical Communications, 2007, , 1083.	4.1	47
47	Optimizing Sample Preparation Methods for Dynamic Nuclear Polarization Solid-state NMR of Synthetic Polymers. Macromolecules, 2014, 47, 3909-3916.	4.8	46
48	Open and Closed Radicals: Local Geometry around Unpaired Electrons Governs Magic-Angle Spinning Dynamic Nuclear Polarization Performance. Journal of the American Chemical Society, 2020, 142, 16587-16599.	13.7	42
49	Silica-surface reorganization during organotin grafting evidenced by ¹¹⁹ Sn DNP SENS: a tandem reaction of gem-silanol and strained siloxane bridges. Physical Chemistry Chemical Physics, 2014, 16, 17822-17827.	2.8	40
50	Improving the Trapping of Superoxide Radical with a ² -Cyclodextrin-5- <i>O</i> -Diethoxyphosphoryl-5-methyl-1-pyrroline- <i>N</i> -Oxide (DEPMPO) Conjugate. Chemistry - A European Journal, 2009, 15, 11114-11118.	3.3	37
51	Dinitroxides for Solid State Dynamic Nuclear Polarization. Applied Magnetic Resonance, 2012, 43, 251-261.	1.2	36
52	Membrane topologies of the PGLa antimicrobial peptide and a transmembrane anchor sequence by Dynamic Nuclear Polarization/solid-state NMR spectroscopy. Scientific Reports, 2016, 6, 20895.	3.3	36
53	Host-Guest Complexes as Water-Soluble High-Performance DNP Polarizing Agents. Journal of the American Chemical Society, 2013, 135, 19275-19281.	13.7	35
54	Dendritic polarizing agents for DNP SENS. Chemical Science, 2017, 8, 416-422.	7.4	35

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55	Efficient Hyperpolarization of ^{13}C -Glucose Using Narrow-Line UV-Generated Labile Free Radicals. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 1334-1339.	13.8	35
56	Synthesis and Preliminary Biological Evaluations of Ionic and Nonionic Amphiphilic β -Phenyl-N-tert-butyl nitron Derivatives. <i>Journal of Medicinal Chemistry</i> , 2003, 46, 5230-5237.	6.4	34
57	Synthesis of a Glycolipidic Amphiphilic Nitron as a New Spin Trap. <i>Journal of Organic Chemistry</i> , 1999, 64, 3554-3556.	3.2	31
58	Metal Actuated Ring Translocation Switches in Water. <i>Organic Letters</i> , 2018, 20, 3187-3191.	4.6	31
59	EPR Characterization of a Rigid Bis-TEMPO-Bis-Ketal for Dynamic Nuclear Polarization. <i>Applied Magnetic Resonance</i> , 2010, 37, 505-514.	1.2	30
60	Mitochondria-Targeted Spin Traps: Synthesis, Superoxide Spin Trapping, and Mitochondrial Uptake. <i>Chemical Research in Toxicology</i> , 2014, 27, 1155-1165.	3.3	30
61	Metabolic stability of superoxide adducts derived from newly developed cyclic nitron spin traps. <i>Free Radical Biology and Medicine</i> , 2014, 67, 150-158.	2.9	30
62	Synthesis and Spin-Trapping Behavior of 5-ChEMPO, a Cholesteryl Ester Analogue of the Spin Trap DEPMPO. <i>Journal of Organic Chemistry</i> , 2005, 70, 10426-10433.	3.2	26
63	Spin Exchange Monitoring of the Strong Positive Homotropic Allosteric Binding of a Tetra radical by a Synthetic Receptor in Water. <i>Journal of the American Chemical Society</i> , 2014, 136, 17570-17577.	13.7	26
64	The ABC exporter MsbA probed by solid state NMR – challenges and opportunities. <i>Biological Chemistry</i> , 2015, 396, 1135-1149.	2.5	26
65	Mitochondria-targeted metformins: anti-tumour and redox signalling mechanisms. <i>Interface Focus</i> , 2017, 7, 20160109.	3.0	26
66	Frozen Acrylamide Gels as Dynamic Nuclear Polarization Matrices. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 8726-8730.	13.8	26
67	Dynamic Nuclear Polarization/Solid-State NMR Spectroscopy of Membrane Polypeptides: Free Radical Optimization for Matrix-Free Lipid Bilayer Samples. <i>ChemPhysChem</i> , 2017, 18, 2103-2113.	2.1	25
68	Effects of cucurbit[<i>n</i>]uril (<i>n</i> = 7, 8, 10) hosts on the formation and stabilization of a naphthalenediimide (NDI) radical anion. <i>Organic and Biomolecular Chemistry</i> , 2018, 16, 3809-3815.	2.8	25
69	Recent Developments in the Probes and Assays for Measurement of the Activity of NADPH Oxidases. <i>Cell Biochemistry and Biophysics</i> , 2017, 75, 335-349.	1.8	24
70	^1H detection and dynamic nuclear polarization-enhanced NMR of $\text{A}\beta_{1-42}$ fibrils. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	7.1	24
71	Synthesis and spin-trapping behaviour of glycosylated nitrons. <i>Journal of the Chemical Society Perkin Transactions II</i> , 1998, , 2299-2308.	0.9	23
72	Hydrophobic radicals embedded in neutral surfactants for dynamic nuclear polarization of aqueous environments at 9.4 Tesla. <i>Chemical Communications</i> , 2014, 50, 10198-10201.	4.1	23

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73	Observing Apparent Nonuniform Sensitivity Enhancements in Dynamic Nuclear Polarization Solid-State NMR Spectra of Polymers. ACS Macro Letters, 2014, 3, 922-925.	4.8	23
74	Triangular Regulation of Cucurbit[8]uril 1:1 Complexes. Journal of the American Chemical Society, 2019, 141, 5897-5907.	13.7	23
75	A single-crystal-to-single-crystal transformation affording photochromic 3D MORF crystals. Chemical Communications, 2019, 55, 13824-13827.	4.1	23
76	Solid-State NMR/Dynamic Nuclear Polarization of Polypeptides in Planar Supported Lipid Bilayers. Journal of Physical Chemistry B, 2015, 119, 14574-14583.	2.6	22
77	A Cucurbit[8]uril 2:2 Complex with a Negative p <i>K</i> _a Shift. Chemistry - A European Journal, 2019, 25, 12552-12559.	3.3	22
78	A pH-driven ring translocation switch against cancer cells. Chemical Communications, 2018, 54, 13825-13828.	4.1	21
79	Photogenerated Radical in Phenylglyoxylic Acid for in Vivo Hyperpolarized ¹³ C MR with Photosensitive Metabolic Substrates. Journal of the American Chemical Society, 2018, 140, 14455-14463.	13.7	21
80	Guest Exchange by a Partial Energy Ratchet in Water. Angewandte Chemie - International Edition, 2021, 60, 6617-6623.	13.8	21
81	Design of New Derivatives of Nitron DEPMPO Functionalized at C-4 for Further Specific Applications in Superoxide Radical Detection. Journal of Organic Chemistry, 2007, 72, 7886-7892.	3.2	19
82	Developing DNP/Solid-State NMR Spectroscopy of Oriented Membranes. Applied Magnetic Resonance, 2012, 43, 91-106.	1.2	19
83	Up to 100% Improvement in Dynamic Nuclear Polarization Solid-State NMR Sensitivity Enhancement of Polymers by Removing Oxygen. Macromolecular Rapid Communications, 2015, 36, 1416-1421.	3.9	19
84	Enhanced Intersystem Crossing and Transient Electron Spin Polarization in a Photoexcited Pentacene-“Trityl Radical. Journal of Physical Chemistry A, 2020, 124, 6068-6075.	2.5	19
85	Modified Metformin as a More Potent Anticancer Drug: Mitochondrial Inhibition, Redox Signaling, Antiproliferative Effects and Future EPR Studies. Cell Biochemistry and Biophysics, 2017, 75, 311-317.	1.8	18
86	Nitroxide Radicals with Cucurbit[<i>n</i>]urils and Other Cavitands. Israel Journal of Chemistry, 2018, 58, 343-356.	2.3	18
87	¹⁹ F Magic Angle Spinning Dynamic Nuclear Polarization Enhanced NMR Spectroscopy. Angewandte Chemie - International Edition, 2019, 58, 7249-7253.	13.8	18
88	Metabolic contrast agents produced from transported solid ¹³ C-glucose hyperpolarized via dynamic nuclear polarization. Communications Chemistry, 2021, 4, .	4.5	17
89	Synthesis of the cis diastereoisomer of 5-diethoxyphosphoryl-5-methyl-3-phenyl-1-pyrroline N-oxide (DEMPPOc) and ESR study of its superoxide spin adduct. Tetrahedron Letters, 2004, 45, 6385-6389.	1.4	16
90	Embedding cyclic nitron in mesoporous silica particles for EPR spin trapping of superoxide and other radicals. Analyst, The, 2019, 144, 4194-4203.	3.5	16

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91	Chameleonic Dye Adapts to Various Environments Shining on Macrocycles or Peptide and Polysaccharide Aggregates. ACS Applied Materials & Interfaces, 2017, 9, 33220-33228.	8.0	15
92	Triple Stack of a Viologen Derivative in a CB[10] Pair. Organic Letters, 2021, 23, 5283-5287.	4.6	15
93	Oxidation of ethidium-based probes by biological radicals: mechanism, kinetics and implications for the detection of superoxide. Scientific Reports, 2020, 10, 18626.	3.3	14
94	Synergistic inhibition of tumor cell proliferation by metformin and mito-metformin in the presence of iron chelators. Oncotarget, 2019, 10, 3518-3532.	1.8	14
95	ESR study of spin-trapping with two glycosylated analogues of PBN able to target cell membrane lectins. Organic and Biomolecular Chemistry, 2004, 2, 927.	2.8	13
96	EPR Studies of the Binding Properties, Guest Dynamics, and Inner-Space Dimensions of a Water-Soluble Resorcinarene Capsule. Chemistry - A European Journal, 2015, 21, 16404-16410.	3.3	13
97	Synthesis and Spin-Trapping Properties of a Trifluoromethyl Analogue of DMPO: 5-Methyl-5-trifluoromethyl-1-pyrroline N-Oxide (5-TFDMPO). Chemistry - A European Journal, 2014, 20, 4064-4071.	3.1	12
98	Hosting Various Guests Including Fullerenes and Free Radicals in Versatile Organic Paramagnetic Open Frameworks. Crystal Growth and Design, 2014, 14, 467-476.	3.0	12
99	Recent developments and applications of the coupled EPR/Spin trapping technique (EPR/ST). Electron Paramagnetic Resonance, 0, , 1-40.	0.2	11
100	Structural Analysis of an Antigen Chemically Coupled on Virus-Like Particles in Vaccine Formulation. Angewandte Chemie - International Edition, 2021, 60, 12847-12851.	13.8	11
101	Perturbation induced formation of a 3D-network of microcrystals producing soft materials. RSC Advances, 2012, 2, 5605.	3.6	10
102	Organic multishell isostructural host-guest crystals: fullerenes C60 inside a nitroxide open framework. Chemical Communications, 2013, 49, 3519.	4.1	10
103	Efficient Dynamic Nuclear Polarization up to 230 K with Hybrid BDPA-Nitroxide Radicals at a High Magnetic Field. Journal of Physical Chemistry B, 2021, 125, 13329-13338.	2.6	9
104	Reactive hydrogels grafted on gold surfaces. Macromolecular Symposia, 2001, 164, 323-340.	0.7	8
105	Synthesis and properties of a series of β -cyclodextrin/nitrone spin traps for improved superoxide detection. Organic and Biomolecular Chemistry, 2017, 15, 6358-6366.	2.8	8
106	Dynamic Nuclear Polarization-Enhanced Biomolecular NMR Spectroscopy at High Magnetic Field with Fast Magic-Angle Spinning. Angewandte Chemie, 2018, 130, 7580-7584.	2.0	8
107	EPR Spectroscopy: A Powerful Tool to Analyze Supramolecular Host-Guest Complexes of Stable Radicals with Cucurbiturils. Molecules, 2020, 25, 776.	3.8	8
108	Dynamic Nuclear Polarization / solid-state NMR of membranes. Thermal effects and sample geometry. Solid State Nuclear Magnetic Resonance, 2019, 100, 70-76.	2.3	7

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109	Guest Exchange by a Partial Energy Ratchet in Water. Angewandte Chemie, 2021, 133, 6691-6697.	2.0	6
110	Trehalose matrices for high temperature dynamic nuclear polarization enhanced solid state NMR. Physical Chemistry Chemical Physics, 2022, 24, 12167-12175.	2.8	6
111	Efficient Hyperpolarization of U ¹³ C-Glucose Using Narrow-Line UV-Generated Labile Free Radicals. Angewandte Chemie, 2019, 131, 1348-1353.	2.0	4
112	Frozen Acrylamide Gels as Dynamic Nuclear Polarization Matrices. Angewandte Chemie, 2017, 129, 8852-8856.	2.0	2
113	19 F Magic Angle Spinning Dynamic Nuclear Polarization Enhanced NMR Spectroscopy. Angewandte Chemie, 2019, 131, 7327-7331.	2.0	2
114	A Convenient and Efficient Synthesis of the First (Nitroimidazolyl)succinic Esters and their Diacids. Synthesis, 2006, 2006, 3859-3864.	2.3	1
115	Dinitroxide biradical crystals with polar order. Canadian Journal of Chemistry, 2015, 93, 920-924.	1.1	1
116	Alkylperoxyl spin adducts of pyrroline-N-oxide spin traps: Experimental and theoretical CASSCF study of the unimolecular decomposition in organic solvent, potential applications in water. Journal of Physical Organic Chemistry, 2017, 30, e3677.	1.9	0
117	1.2.Nitroxides in Organic Synthesis. , 2021, , .		0
118	Struktur eines an virus-ähnliche Partikel gekoppelten Antigens: Analyse einer Impfstoff-Formulierung. Angewandte Chemie, 2021, 133, 12957-12961.	2.0	0