

# Peter J Niedbalski

## List of Publications by Year in descending order

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28  
papers

272  
citations

933447  
10  
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996975  
15  
g-index

28  
all docs

28  
docs citations

28  
times ranked

239  
citing authors

#	ARTICLE	IF	CITATIONS
1	Protocols for multi-site trials using hyperpolarized $^{129}\text{Xe}$ MRI for imaging of ventilation, alveolar-airspace size, and gas exchange: A position paper from the $^{129}\text{Xe}$ MRI clinical trials consortium. <i>Magnetic Resonance in Medicine</i> , 2021, 86, 2966-2986.	3.0	35
2	Improved pulmonary $^{129}\text{Xe}$ ventilation imaging via 3D spiral UTE MRI. <i>Magnetic Resonance in Medicine</i> , 2020, 84, 312-320.	3.0	23
3	The effect of glassing solvent deuteration and $\text{Gd}^{3+}$ -doping on $^{13}\text{C}$ DNP at 5 T. <i>RSC Advances</i> , 2016, 6, 38855-38860.	3.6	19
4	Impact of $\text{Ho}^{3+}$ -doping on $^{13}\text{C}$ dynamic nuclear polarization using trityl OX063 free radical. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 21351-21359.	2.8	16
5	$^{13}\text{C}$ dynamic nuclear polarization using isotopically enriched 4-oxo-TEMPO free radicals. <i>Magnetic Resonance in Chemistry</i> , 2016, 54, 962-967.	1.9	15
6	Influence of $\text{Dy}^{3+}$ and $\text{Tb}^{3+}$ doping on $^{13}\text{C}$ dynamic nuclear polarization. <i>Journal of Chemical Physics</i> , 2017, 146, 014303.	3.0	14
7	Assembly and performance of a 6.4 T cryogen-free dynamic nuclear polarization system. <i>Magnetic Resonance in Chemistry</i> , 2017, 55, 846-852.	1.9	14
8	Mapping cardiopulmonary dynamics within the microvasculature of the lungs using dissolved $^{129}\text{Xe}$ MRI. <i>Journal of Applied Physiology</i> , 2020, 129, 218-229.	2.5	13
9	Transition Metal Doping Reveals Link between Electron $\text{iT}_{\text{i}}\text{S}_{\text{i}}$ Reduction and $^{13}\text{C}$ Dynamic Nuclear Polarization Efficiency. <i>Journal of Physical Chemistry A</i> , 2017, 121, 9221-9228.	2.5	12
10	$^{13}\text{C}$ Dynamic Nuclear Polarization Using a Trimeric $\text{Gd}^{3+}$ Complex as an Additive. <i>Journal of Physical Chemistry A</i> , 2017, 121, 5127-5135.	2.5	12
11	Mapping and correcting hyperpolarized magnetization decay with radial keyhole imaging. <i>Magnetic Resonance in Medicine</i> , 2019, 82, 367-376.	3.0	11
12	Construction and $^{13}\text{C}$ hyperpolarization efficiency of a 180 GHz dissolution dynamic nuclear polarization system. <i>Magnetic Resonance in Chemistry</i> , 2017, 55, 828-836.	1.9	10
13	Influence of $^{13}\text{C}$ Isotopic Labeling Location on Dynamic Nuclear Polarization of Acetate. <i>Journal of Physical Chemistry A</i> , 2017, 121, 3227-3233.	2.5	10
14	Pediatric $\text{Xe}$ Gas Transfer MRI Feasibility and Applicability. <i>Journal of Magnetic Resonance Imaging</i> , 2022, 56, 1207-1219.	3.4	9
15	NMR Spectroscopy Unchained: Attaining the Highest Signal Enhancements in Dissolution Dynamic Nuclear Polarization. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 5481-5489.	4.6	8
16	Utilizing flip angle/TR equivalence to reduce breath hold duration in hyperpolarized $^{129}\text{Xe}$ 1-point Dixon gas exchange imaging. <i>Magnetic Resonance in Medicine</i> , 2022, 87, 1490-1499.	3.0	8
17	Magnetic-Field-Dependent Lifetimes of Hyperpolarized $^{13}\text{C}$ Spins at Cryogenic Temperature. <i>Journal of Physical Chemistry B</i> , 2018, 122, 1898-1904.	2.6	7
18	Preclinical hyperpolarized $^{129}\text{Xe}$ MRI: ventilation and $T_2^*$ mapping in mouse lungs at 7 T using multi-echo flyback UTE. <i>NMR in Biomedicine</i> , 2020, 33, e4302.	2.8	7

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19	Improving hyperpolarized $^{129}\text{Xe}$ ADC mapping in pediatric and adult lungs with uncertainty propagation. <i>NMR in Biomedicine</i> , 2022, 35, e4639.	2.8	6
20	Enhanced Efficiency of $^{13}\text{C}$ Dynamic Nuclear Polarization by Superparamagnetic Iron Oxide Nanoparticle Doping. <i>Journal of Physical Chemistry C</i> , 2017, 121, 19505-19511.	3.1	5
21	$^{13}\text{C}$ Dynamic Nuclear Polarization Using Derivatives of TEMPO Free Radical. <i>Applied Magnetic Resonance</i> , 2017, 48, 933-942.	1.2	4
22	Validating in vivo hyperpolarized $^{129}\text{Xe}$ diffusion MRI and diffusion morphometry in the mouse lung. <i>Magnetic Resonance in Medicine</i> , 2021, 85, 2160-2173.	3.0	4
23	Hyperpolarized $^{89}\text{Y}$ -EDTMP complex as a chemical shift-based NMR sensor for pH at the physiological range. <i>Journal of Magnetic Resonance</i> , 2020, 320, 106837.	2.1	3
24	Preclinical MRI to quantify pulmonary disease severity and trajectories in poorly characterized mouse models: A pedagogical example using data from novel transgenic models of lung fibrosis. <i>Journal of Magnetic Resonance Open</i> , 2021, 6-7, 100013.	1.1	2
25	Improved preclinical hyperpolarized $^{129}\text{Xe}$ ventilation imaging with constant flip angle 3D radial golden means acquisition and keyhole reconstruction. <i>NMR in Biomedicine</i> , 2021, 34, e4464.	2.8	2
26	Dynamic nuclear polarization of carbonyl and methyl $^{13}\text{C}$ spins of acetate using 4-oxo-TEMPO free radical. <i>Journal of Chemical Physics</i> , 2018, 149, 054302.	3.0	1
27	Effects of glassing matrix deuteration on the relaxation properties of hyperpolarized $^{13}\text{C}$ spins and free radical electrons at cryogenic temperatures. <i>Journal of Chemical Physics</i> , 2019, 150, 234307.	3.0	1
28	Imaging in Asthma Management. <i>Seminars in Respiratory and Critical Care Medicine</i> , 2022, , .	2.1	1