

John Blanchard

List of Publications by Year in descending order

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47
papers

1,629
citations

257450

24
h-index

302126

39
g-index

48
all docs

48
docs citations

48
times ranked

1135
citing authors

#	ARTICLE	IF	CITATIONS
1	Hyperpolarized Solution-State NMR Spectroscopy with Optically Polarized Crystals. <i>Journal of the American Chemical Society</i> , 2022, 144, 2511-2519.	13.7	25
2	Lower than low: Perspectives on zero- to ultralow-field nuclear magnetic resonance. <i>Journal of Magnetic Resonance</i> , 2021, 323, 106886.	2.1	26
3	Rapid hyperpolarization and purification of the metabolite fumarate in aqueous solution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	54
4	Correlation of high-field and zero- to ultralow-field NMR properties using 2D spectroscopy. <i>Journal of Chemical Physics</i> , 2021, 154, 144201.	3.0	3
5	Search for Axionlike Dark Matter Using Solid-State Nuclear Magnetic Resonance. <i>Physical Review Letters</i> , 2021, 126, 141802.	7.8	51
6	Towards large-scale steady-state enhanced nuclear magnetization with in situ detection. <i>Magnetic Resonance in Chemistry</i> , 2021, 59, 1208-1215.	1.9	8
7	Photochemically Induced Dynamic Nuclear Polarization of Heteronuclear Singlet Order. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 4686-4691.	4.6	12
8	Quantum sensitivity limits of nuclear magnetic resonance experiments searching for new fundamental physics. <i>Quantum Science and Technology</i> , 2021, 6, 034007.	5.8	10
9	Stochastic fluctuations of bosonic dark matter. <i>Nature Communications</i> , 2021, 12, 7321.	12.8	59
10	Two-dimensional single- and multiple-quantum correlation spectroscopy in zero-field nuclear magnetic resonance. <i>Journal of Magnetic Resonance</i> , 2020, 318, 106781.	2.1	9
11	Rapid Online Solid-State Battery Diagnostics with Optically Pumped Magnetometers. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 7864.	2.5	9
12	Sensitive magnetometry reveals inhomogeneities in charge storage and weak transient internal currents in Li-ion cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 10667-10672.	7.1	43
13	Chemical Reaction Monitoring using Zero-Field Nuclear Magnetic Resonance Enables Study of Heterogeneous Samples in Metal Containers. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 17026-17032.	13.8	26
14	Chemical Reaction Monitoring using Zero-Field Nuclear Magnetic Resonance Enables Study of Heterogeneous Samples in Metal Containers. <i>Angewandte Chemie</i> , 2020, 132, 17174-17180.	2.0	0
15	Zero- to ultralow-field nuclear magnetic resonance J-spectroscopy with commercial atomic magnetometers. <i>Journal of Magnetic Resonance</i> , 2020, 314, 106723.	2.1	36
16	Overview of the Cosmic Axion Spin Precession Experiment (CASPER). <i>Springer Proceedings in Physics</i> , 2020, , 105-121.	0.2	31
17	Molecular parity nonconservation in nuclear spin couplings. <i>Physical Review Research</i> , 2020, 2, .	3.6	11
18	Zero-field nuclear magnetic resonance of chemically exchanging systems. <i>Nature Communications</i> , 2019, 10, 3002.	12.8	36

#	ARTICLE	IF	CITATIONS
19	Wu etÂal. Reply:. Physical Review Letters, 2019, 123, 169002.	7.8	2
20	Constraints on bosonic dark matter from ultralow-field nuclear magnetic resonance. Science Advances, 2019, 5, eaax4539.	10.3	75
21	Magnetic Gradiometer for the Detection of Zero- to Ultralow-Field Nuclear Magnetic Resonance. Physical Review Applied, 2019, 11, .	3.8	22
22	Search for Axionlike Dark Matter with a Liquid-State Nuclear Spin Comagnetometer. Physical Review Letters, 2019, 122, 191302.	7.8	79
23	Polarization transfer via field sweeping in parahydrogen-enhanced nuclear magnetic resonance. Journal of Chemical Physics, 2019, 150, 174202.	3.0	46
24	Nondestructive in-line sub-picomolar detection of magnetic nanoparticles in flowing complex fluids. Scientific Reports, 2018, 8, 3491.	3.3	25
25	The cosmic axion spin precession experiment (CASPER): a dark-matter search with nuclear magnetic resonance. Quantum Science and Technology, 2018, 3, 014008.	5.8	48
26	Nuclear-Spin Comagnetometer Based on a Liquid of Identical Molecules. Physical Review Letters, 2018, 121, 023202.	7.8	30
27	Experimental benchmarking of quantum control in zero-field nuclear magnetic resonance. Science Advances, 2018, 4, eaar6327.	10.3	36
28	Application of spin-exchange relaxation-free magnetometry to the Cosmic Axion Spin Precession Experiment. Physics of the Dark Universe, 2018, 19, 27-35.	4.9	50
29	Antisymmetric Couplings Enable Direct Observation of Chirality in Nuclear Magnetic Resonance Spectroscopy. Journal of Physical Chemistry Letters, 2017, 8, 710-714.	4.6	19
30	Measuring molecular parity nonconservation using nuclear-magnetic-resonance spectroscopy. Physical Review A, 2017, 96, .	2.5	16
31	Invited Review Article: Instrumentation for nuclear magnetic resonance in zero and ultralow magnetic field. Review of Scientific Instruments, 2017, 88, 091101.	1.3	83
32	A method for measurement of spin-spin couplings with sub-mHz precision using zero- to ultralow-field nuclear magnetic resonance. Journal of Magnetic Resonance, 2017, 284, 66-72.	2.1	19
33	Universal quantum control in zero-field nuclear magnetic resonance. Physical Review A, 2017, 95, .	2.5	14
34	Eddy current imaging with an atomic radio-frequency magnetometer. Applied Physics Letters, 2016, 108, .	3.3	51
35	Raman and nuclear magnetic resonance investigation of alkali metal vapor interaction with alkene-based anti-relaxation coating. Journal of Chemical Physics, 2016, 144, 094707.	3.0	7
36	Measurement of untruncated nuclear spin interactions via zero- to ultralow-field nuclear magnetic resonance. Physical Review B, 2015, 92, .	3.2	38

#	ARTICLE	IF	CITATIONS
37	Zero-field nuclear magnetic resonance spectroscopy of viscous liquids. Journal of Magnetic Resonance, 2015, 250, 1-6.	2.1	5
38	Long-Lived Heteronuclear Spin-Singlet States in Liquids at a Zero Magnetic field. Physical Review Letters, 2014, 112, 077601.	7.8	52
39	Parahydrogen-induced polarization at zero magnetic field. Journal of Chemical Physics, 2013, 138, 234201.	3.0	19
40	Chemical analysis using J-coupling multiplets in zero-field NMR. Chemical Physics Letters, 2013, 580, 160-165.	2.6	37
41	High-Resolution Zero-Field NMR <i>J</i> -Spectroscopy of Aromatic Compounds. Journal of the American Chemical Society, 2013, 135, 3607-3612.	13.7	54
42	Multiplets at zero magnetic field: The geometry of zero-field NMR. Journal of Chemical Physics, 2013, 138, 184202.	3.0	23
43	Investigating Hydrogen-Bonded Phosphonic Acids with Proton Ultrafast MAS NMR and DFT Calculations. Journal of Physical Chemistry C, 2012, 116, 18824-18830.	3.1	16
44	Zero-Field NMR Enhanced by Parahydrogen in Reversible Exchange. Journal of the American Chemical Society, 2012, 134, 3987-3990.	13.7	83
45	Liquid-State Nuclear Spin Comagnetometers. Physical Review Letters, 2012, 108, 243001.	7.8	31
46	NMR Determination of the Diffusion Mechanisms in Triethylamine-Based Protic Ionic Liquids. Journal of Physical Chemistry Letters, 2011, 2, 1077-1081.	4.6	43
47	Near-Zero-Field Nuclear Magnetic Resonance. Physical Review Letters, 2011, 107, 107601.	7.8	92