

# Konstantin I Momot

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5121910/publications.pdf>

Version: 2024-02-01

58  
papers

986  
citations

516710

16  
h-index

477307

29  
g-index

61  
all docs

61  
docs citations

61  
times ranked

1069  
citing authors

#	ARTICLE	IF	CITATIONS
1	Anisotropy of collagen fibre alignment in bovine cartilage: comparison of polarised light microscopy and spatially resolved diffusion-tensor measurements. <i>Osteoarthritis and Cartilage</i> , 2008, 16, 689-697.	1.3	103
2	Quantification of the accuracy of MRI generated 3D models of long bones compared to CT generated 3D models. <i>Medical Engineering and Physics</i> , 2012, 34, 357-363.	1.7	101
3	NMR Study of the Association of Propofol with Nonionic Surfactants. <i>Langmuir</i> , 2003, 19, 2088-2095.	3.5	76
4	Pulsed field gradient nuclear magnetic resonance as a tool for studying drug delivery systems. <i>Concepts in Magnetic Resonance</i> , 2003, 19A, 51-64.	1.3	71
5	PFG NMR diffusion experiments for complex systems. <i>Concepts in Magnetic Resonance Part A: Bridging Education and Research</i> , 2006, 28A, 249-269.	0.5	59
6	Anisotropy of spin relaxation of water protons in cartilage and tendon. <i>NMR in Biomedicine</i> , 2010, 23, 313-324.	2.8	42
7	Convection-compensating PGSE experiment incorporating excitation-sculpting water suppression (CONVEX). <i>Journal of Magnetic Resonance</i> , 2004, 169, 92-101.	2.1	37
8	Effect of Partial H <sub>2</sub> O-D <sub>2</sub> O Replacement on the Anisotropy of Transverse Proton Spin Relaxation in Bovine Articular Cartilage. <i>PLoS ONE</i> , 2014, 9, e115288.	2.5	31
9	Investigations of Rotation of Axial Ligands in Six-Coordinate Low-Spin Iron(III) Tetraphenylporphyrinates: Measurement of Rate Constants from Saturation Transfer Experiments and Comparison to Molecular Mechanics Calculations. <i>Journal of Physical Chemistry A</i> , 1997, 101, 2787-2795.	2.5	29
10	Convection-compensating diffusion experiments with phase-sensitive double-quantum filtering. <i>Journal of Magnetic Resonance</i> , 2005, 174, 229-236.	2.1	26
11	$T_1$ -based sensing of mammographic density using single-sided portable NMR. <i>Magnetic Resonance in Medicine</i> , 2018, 80, 1243-1251.	3.0	25
12	Diffusion tensor of water in model articular cartilage. <i>European Biophysics Journal</i> , 2011, 40, 81-91.	2.2	22
13	Simultaneous Magnetic Resonance Imaging and Consolidation Measurement of Articular Cartilage. <i>Sensors</i> , 2014, 14, 7940-7958.	3.8	21
14	Transverse relaxation-based assessment of mammographic density and breast tissue composition by single-sided portable NMR. <i>Magnetic Resonance in Medicine</i> , 2019, 82, 1199-1213.	3.0	21
15	Diffusion tensor of water in partially aligned fibre networks. <i>Journal Physics D: Applied Physics</i> , 2013, 46, 455401.	2.8	20
16	Molecular Dynamics of a Hydrated Collagen Peptide: Insights into Rotational Motion and Residence Times of Single-Water Bridges in Collagen. <i>Journal of Physical Chemistry B</i> , 2016, 120, 12432-12443.	2.6	20
17	Structure and Dynamics of Collagen Hydration Water from Molecular Dynamics Simulations: Implications of Temperature and Pressure. <i>Journal of Physical Chemistry B</i> , 2019, 123, 4901-4914.	2.6	17
18	The distribution of the apparent diffusion coefficient as an indicator of the response to chemotherapeutics in ovarian tumour xenografts. <i>Scientific Reports</i> , 2017, 7, 42905.	3.3	16

#	ARTICLE	IF	CITATIONS
19	Enhancement of Na <sup>+</sup> Diffusion in a Bicontinuous Cubic Phase by the Ionophore Monensin. <i>Langmuir</i> , 2004, 20, 2660-2666.	3.5	15
20	Progression of Post-Traumatic Osteoarthritis in rat meniscectomy models: Comprehensive monitoring using MRI. <i>Scientific Reports</i> , 2018, 8, 6861.	3.3	15
21	Proton NMR Relaxation in Six-Coordinate Low-Spin Iron(III) Tetraphenylporphyrinates: A Temperature Dependence of Proton Relaxation Rates and Interpretation of NOESY Experiments. <i>Journal of Physical Chemistry A</i> , 1997, 101, 9207-9216.	2.5	14
22	Toroid Cavity Detectors for High-Resolution NMR Spectroscopy and Rotating Frame Imaging: Capabilities and Limitations. <i>Journal of Magnetic Resonance</i> , 2000, 142, 348-357.	2.1	14
23	Heparanase Promotes Syndecan-1 Expression to Mediate Fibrillar Collagen and Mammographic Density in Human Breast Tissue Cultured ex vivo. <i>Frontiers in Cell and Developmental Biology</i> , 2020, 8, 599.	3.7	14
24	Langevin dynamics modeling of the water diffusion tensor in partially aligned collagen networks. <i>Physical Review E</i> , 2012, 86, 031917.	2.1	13
25	Quantification of breast tissue density: Correlation between single-sided portable NMR and micro-CT measurements. <i>Magnetic Resonance Imaging</i> , 2019, 62, 111-120.	1.8	12
26	Acquisition of pure-phase diffusion spectra using oscillating-gradient spin echo. <i>Journal of Magnetic Resonance</i> , 2005, 176, 151-159.	2.1	11
27	Rotational-Diffusion Propagator of the Intramolecular Proton "Proton Vector in Liquid Water: A Molecular Dynamics Study. <i>Journal of Physical Chemistry B</i> , 2017, 121, 10893-10905.	2.6	11
28	Anisotropic diffusion in stretched hydrogels containing erythrocytes: evidence of cell shape distortion recorded by PGSE NMR spectroscopy. <i>Magnetic Resonance in Chemistry</i> , 2017, 55, 438-446.	1.9	10
29	Na <sup>+</sup> and solute diffusion in aqueous channels of Myverol bicontinuous cubic phase: PGSE NMR and computer modelling. <i>Magnetic Resonance in Chemistry</i> , 2017, 55, 464-471.	1.9	10
30	Load-induced changes in the diffusion tensor of ovine anulus fibrosus: A pilot MRI study. <i>Journal of Magnetic Resonance Imaging</i> , 2017, 45, 1723-1735.	3.4	10
31	Rate Constants and Thermodynamic Parameters of Rotation of Axial Ligands in a Bisligated Ferric Tetramesitylporphyrinate Complex Measured from the Temperature Dependence of <sup>1</sup> H Transverse Relaxation Rates. <i>Journal of Physical Chemistry A</i> , 1998, 102, 10682-10688.	2.5	8
32	Inhomogeneous NMR Line Shape as a Probe of Microscopic Organization of Bicontinuous Cubic Phases. <i>Journal of Physical Chemistry B</i> , 2008, 112, 6636-6645.	2.6	7
33	Microstructural magnetic resonance imaging of articular cartilage. <i>Biomedical Spectroscopy and Imaging</i> , 2012, 1, 27-37.	1.2	7
34	Characterization of the Microarchitecture of Direct Writing Melt Electrospun Tissue Engineering Scaffolds Using Diffusion Tensor and Computed Tomography Microimaging. <i>3D Printing and Additive Manufacturing</i> , 2014, 1, 95-103.	2.9	7
35	Fourier Transform Ion Cyclotron Resonance Studies of Gas-Phase Reactions between Tungsten Ions and Hydrocarbons. <i>Organometallics</i> , 1994, 13, 2536-2538.	2.3	6
36	Magnetic resonance microimaging of cancer cell spheroid constructs. <i>Biomedical Spectroscopy and Imaging</i> , 2017, 5, 41-54.	1.2	6

#	ARTICLE	IF	CITATIONS
37	Assessment of collagen fiber orientation dispersion in articular cartilage by small-angle X-ray scattering and diffusion tensor imaging: Preliminary results. <i>Magnetic Resonance Imaging</i> , 2018, 48, 115-121.	1.8	6
38	Digital Processing of Diffusion-Tensor Images of Avascular Tissues. <i>Biological and Medical Physics Series</i> , 2011, , 341-371.	0.4	5
39	MRI magic-angle effect in femorotibial cartilages of the red kangaroo. <i>Magnetic Resonance Imaging</i> , 2017, 43, 66-73.	1.8	5
40	Introduction to Cartilage. <i>New Developments in NMR</i> , 2016, , 1-43.	0.1	5
41	Looking beyond the mammogram to assess mammographic density: A narrative review. <i>Biomedical Spectroscopy and Imaging</i> , 2018, 7, 63-80.	1.2	4
42	Reorientational dynamics of molecules in liquid methane: A molecular dynamics simulation study. <i>Journal of Molecular Liquids</i> , 2021, 324, 114727.	4.9	4
43	Nuclear magnetic resonance radiation damping in inhomogeneous radio frequency fields: The toroid cavity detector. <i>Journal of Chemical Physics</i> , 2001, 115, 3992-4002.	3.0	3
44	Magnetic-Resonance Evaluation of the Suitability of Microstructured Polymer Optical Fibers As Sensors for Ionic Aqueous Solutions. <i>ACS Applied Materials &amp; Interfaces</i> , 2009, 1, 197-203.	8.0	3
45	Biomechanics of Synthetic Elastin: Insights from Magnetic Resonance Microimaging. <i>Advanced Materials Research</i> , 2013, 699, 457-463.	0.3	3
46	Diffusion-sensitive magnetic resonance spectroscopy and imaging in biomedical sciences. <i>Biomedical Spectroscopy and Imaging</i> , 2013, 2, 265-287.	1.2	3
47	Anatomical MR imaging of long bones: Comparative performance of MRI at 1.5 T and 3 T. <i>Biomedical Spectroscopy and Imaging</i> , 2013, 2, 21-35.	1.2	3
48	Effects of Hydrogen Bonding on the Rotational Dynamics of Water-Like Molecules in Liquids: Insights from Molecular Dynamics Simulations. <i>Australian Journal of Chemistry</i> , 2020, 73, 734.	0.9	3
49	Sensing mammographic density using single-sided portable Nuclear Magnetic Resonance. <i>Saudi Journal of Biological Sciences</i> , 2022, 29, 2447-2454.	3.8	3
50	Mechanical Pressure Driving Proteoglycan Expression in Mammographic Density: a Self-perpetuating Cycle?. <i>Journal of Mammary Gland Biology and Neoplasia</i> , 2021, 26, 277-296.	2.7	2
51	Portable NMR for quantification of breast density in vivo: Proof-of-concept measurements and comparison with quantitative MRI. <i>Magnetic Resonance Imaging</i> , 2022, 92, 212-223.	1.8	2
52	Sensitivity of the NMR density matrix to pulse sequence parameters: A simplified analytic approach. <i>Journal of Magnetic Resonance</i> , 2012, 221, 57-68.	2.1	1
53	A study of the diffusion characteristics of normal, delipidized and relipidized articular cartilage using magnetic resonance imaging. <i>Journal of Materials Science: Materials in Medicine</i> , 2013, 24, 1005-1013.	3.6	1
54	Further development of discrete computational techniques for calculation of restricted diffusion propagators in porous media. <i>Microporous and Mesoporous Materials</i> , 2015, 205, 24-30.	4.4	1

#	ARTICLE	IF	CITATIONS
55	RASSF1A Suppression as a Potential Regulator of Mechano-Pathobiology Associated with Mammographic Density in BRCA Mutation Carriers. <i>Cancers</i> , 2021, 13, 3251.	3.7	1
56	CHAPTER 3. Introduction to NMR and MRI. <i>New Developments in NMR</i> , 0, , 62-108.	0.1	1
57	Load-induced changes in the diffusion tensor of ovine anulus fibrosus: A pilot MRI study. <i>Journal of Magnetic Resonance Imaging</i> , 2017, 45, spcone-spcone.	3.4	0
58	CHAPTER 7. Quantification of Articular Cartilage Microstructure by the Analysis of the Diffusion Tensor. <i>New Developments in NMR</i> , 0, , 191-224.	0.1	0