

# Gary J Cowin

## List of Publications by Year in descending order

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Version: 2024-02-01

84  
papers

3,200  
citations

147726

31  
h-index

161767

54  
g-index

85  
all docs

85  
docs citations

85  
times ranked

5576  
citing authors

#	ARTICLE	IF	CITATIONS
1	Resveratrol Does Not Benefit Patients With Nonalcoholic Fatty Liver Disease. <i>Clinical Gastroenterology and Hepatology</i> , 2014, 12, 2092-2103.e6.	2.4	237
2	Effect of Rosiglitazone on Insulin Sensitivity and Body Composition in Type 2 Diabetic Patients. <i>Obesity</i> , 2002, 10, 1008-1015.	4.0	191
3	Magnetic resonance imaging and spectroscopy for monitoring liver steatosis. <i>Journal of Magnetic Resonance Imaging</i> , 2008, 28, 937-945.	1.9	174
4	Magnetic resonance imaging and spectroscopy accurately estimate the severity of steatosis provided the stage of fibrosis is considered. <i>Journal of Hepatology</i> , 2009, 51, 389-397.	1.8	156
5	Geometric distortion in clinical MRI systems. <i>Magnetic Resonance Imaging</i> , 2004, 22, 1211-1221.	1.0	152
6	A novel phantom and method for comprehensive 3-dimensional measurement and correction of geometric distortion in magnetic resonance imaging. <i>Magnetic Resonance Imaging</i> , 2004, 22, 529-542.	1.0	146
7	Vertebral landmarks for the identification of spinal cord segments in the mouse. <i>NeuroImage</i> , 2013, 68, 22-29.	2.1	144
8	Use of spherical harmonic deconvolution methods to compensate for nonlinear gradient effects on MRI images. <i>Magnetic Resonance in Medicine</i> , 2004, 52, 115-122.	1.9	135
9	Cues to body size in the formant spacing of male koala ( <i>Phascolarctos cinereus</i> ) bellows: honesty in an exaggerated trait. <i>Journal of Experimental Biology</i> , 2011, 214, 3414-3422.	0.8	99
10	Impact of Epicardial Adipose Tissue, Left Ventricular Myocardial Fat Content, and Interstitial Fibrosis on Myocardial Contractile Function. <i>Circulation: Cardiovascular Imaging</i> , 2018, 11, e007372.	1.3	90
11	A three-dimensional digital atlas of the zebrafish brain. <i>NeuroImage</i> , 2010, 51, 76-82.	2.1	85
12	PSMA-targeting iron oxide magnetic nanoparticles enhance MRI of preclinical prostate cancer. <i>Nanomedicine</i> , 2015, 10, 375-386.	1.7	85
13	Functional anatomy of the caudal thoracolumbar and lumbosacral spine in the horse. <i>Equine Veterinary Journal</i> , 2006, 38, 393-399.	0.9	80
14	Molecular imaging of activated platelets via antibody-targeted ultra-small iron oxide nanoparticles displaying unique dual MRI contrast. <i>Biomaterials</i> , 2017, 134, 31-42.	5.7	78
15	Magnetic particle-mediated magnetoreception. <i>Journal of the Royal Society Interface</i> , 2015, 12, 20150499.	1.5	67
16	Geometric distortion in clinical MRI systems. <i>Magnetic Resonance Imaging</i> , 2004, 22, 1223-1232.	1.0	63
17	MR image-based measurement of rates of change in volumes of brain structures. Part II: application to a study of Alzheimer's disease and normal aging. <i>Magnetic Resonance Imaging</i> , 2002, 20, 41-48.	1.0	53
18	Longitudinal assessment of white matter pathology in the injured mouse spinal cord through ultra-high field (16.4T) in vivo diffusion tensor imaging. <i>NeuroImage</i> , 2013, 82, 574-585.	2.1	51

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19	Transgenic Muscle-Specific Nor-1 Expression Regulates Multiple Pathways That Effect Adiposity, Metabolism, and Endurance. <i>Molecular Endocrinology</i> , 2013, 27, 1897-1917.	3.7	50
20	Anti-staling of high-moisture starchy food: Effect of hydrocolloids, emulsifiers and enzymes on mechanics of steamed-rice cakes. <i>Food Hydrocolloids</i> , 2018, 83, 454-464.	5.6	41
21	In vivo Imaging and Biodistribution of Multimodal Polymeric Nanoparticles Delivered to the Optic Nerve. <i>Small</i> , 2012, 8, 1579-1589.	5.2	40
22	Non-invasive diffusion tensor imaging detects white matter degeneration in the spinal cord of a mouse model of amyotrophic lateral sclerosis. <i>NeuroImage</i> , 2011, 55, 455-461.	2.1	39
23	Ror1± deficiency and decreased adiposity are associated with induction of thermogenic gene expression in subcutaneous white adipose and brown adipose tissue. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2015, 308, E159-E171.	1.8	38
24	Effects of magnetic field strength and particle aggregation on relaxivity of ultra-small dual contrast iron oxide nanoparticles. <i>Materials Research Express</i> , 2017, 4, 116105.	0.8	38
25	16 T Diffusion microimaging of fixed prostate tissue: Preliminary findings. <i>Magnetic Resonance in Medicine</i> , 2011, 66, 244-247.	1.9	37
26	Metal artifacts from titanium and steel screws in CT, 1.5T and 3T MR images of the tibial Pilon: a quantitative assessment in 3D. <i>Quantitative Imaging in Medicine and Surgery</i> , 2014, 4, 163-72.	1.1	37
27	Understanding the Uptake of Nanomedicines at Different Stages of Brain Cancer Using a Modular Nanocarrier Platform and Precision Bispecific Antibodies. <i>ACS Central Science</i> , 2020, 6, 727-738.	5.3	36
28	Non-destructive 1H-MRI assessment of flesh bruising in avocado ( <i>Persea americana</i> M.) cv. Hass. <i>Postharvest Biology and Technology</i> , 2015, 100, 33-40.	2.9	35
29	Neuroanatomy and psychomimetic-induced locomotion in C57BL/6J and 129/X1Svj mice exposed to developmental vitamin D deficiency. <i>Behavioural Brain Research</i> , 2012, 230, 125-131.	1.2	34
30	Microscopic diffusivity compartmentation in formalin-fixed prostate tissue. <i>Magnetic Resonance in Medicine</i> , 2012, 68, 614-620.	1.9	34
31	Intrauterine growth restriction due to uteroplacental vascular insufficiency leads to increased hypoxia-induced cerebral apoptosis in newborn piglets. <i>Brain Research</i> , 2006, 1098, 19-25.	1.1	32
32	Quantitative Assessment of Brain Volumes in Fish: Comparison of Methodologies. <i>Brain, Behavior and Evolution</i> , 2010, 76, 261-270.	0.9	28
33	Magnetic resonance histology of the adult zebrafish brain: optimization of fixation and gadolinium contrast enhancement. <i>NMR in Biomedicine</i> , 2009, 23, n/a-n/a.	1.6	27
34	Magnetic Resonance Imaging: The Underlying Principles. <i>Journal of Orthopaedic and Sports Physical Therapy</i> , 2011, 41, 806-819.	1.7	27
35	Spinal cord metabolism and muscle water diffusion in whiplash. <i>Spinal Cord</i> , 2012, 50, 474-476.	0.9	24
36	EphA2 as a Diagnostic Imaging Target in Glioblastoma: A Positron Emission Tomography/Magnetic Resonance Imaging Study. <i>Molecular Imaging</i> , 2015, 14, 7290.2015.00008.	0.7	24

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37	Microscopic diffusion anisotropy in formalin fixed prostate tissue: Preliminary findings. <i>Magnetic Resonance in Medicine</i> , 2012, 68, 1943-1948.	1.9	23
38	Detection of endogenous iron deposits in the injured mouse spinal cord through high-resolution <i>ex vivo</i> and <i>in vivo</i> MRI. <i>NMR in Biomedicine</i> , 2013, 26, 141-150.	1.6	22
39	Switchable <sup>19</sup> F MRI polymer theranostics: towards in situ quantifiable drug release. <i>Polymer Chemistry</i> , 2017, 8, 5157-5166.	1.9	22
40	Increased cerebral lactate during hypoxia may be neuroprotective in newborn piglets with intrauterine growth restriction. <i>Brain Research</i> , 2007, 1179, 79-88.	1.1	21
41	Biexponential diffusion decay in formalin-fixed prostate tissue: Preliminary findings. <i>Magnetic Resonance in Medicine</i> , 2012, 68, 954-959.	1.9	21
42	<sup>23</sup> Na-NMR detects hypoxic injury in intact kidney: Increases in sodium inhibited by DMSO and DMTU. <i>Magnetic Resonance in Medicine</i> , 1993, 30, 465-475.	1.9	20
43	Diffusion-weighted imaging in the prostate: an apparent diffusion coefficient comparison of half-Fourier acquisition single-shot turbo spin-echo and echo planar imaging. <i>Magnetic Resonance Imaging</i> , 2012, 30, 189-194.	1.0	18
44	Rapid determination of vertebral fat fraction over a large range of vertebral bodies. <i>Journal of Medical Imaging and Radiation Oncology</i> , 2014, 58, 155-163.	0.9	18
45	MRI resolution enhancement: How useful are shifted images obtained by changing the demodulation frequency?. <i>Magnetic Resonance in Medicine</i> , 2011, 65, 664-672.	1.9	17
46	Engineering chitosan nano-cocktail containing iron oxide and ceria: A two-in-one approach for treatment of inflammatory diseases and tracking of material delivery. <i>Materials Science and Engineering C</i> , 2021, 131, 112477.	3.8	17
47	Serine isotopomer analysis by <sup>13</sup> C-NMR defines glycine-serine interconversion in situ in the renal proximal tubule. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 1996, 1310, 32-40.	1.9	16
48	Magnetic resonance microscopy of the barramundi ( <i>Lates calcarifer</i> ) brain. <i>Journal of Morphology</i> , 2010, 271, 1446-1456.	0.6	15
49	Low density lipoprotein cholesterol is inversely correlated with abdominal visceral fat area: a magnetic resonance imaging study. <i>Lipids in Health and Disease</i> , 2011, 10, 12.	1.2	15
50	An inverse design of an open, head/neck RF coil for MRI. <i>IEEE Transactions on Biomedical Engineering</i> , 2002, 49, 1024-1030.	2.5	14
51	Feasibility of functional magnetic resonance lung imaging in Australia with long distance transport of hyperpolarized helium from Germany. <i>Respirology</i> , 2008, 13, 599-602.	1.3	14
52	Ventilation distribution in rats: Part 2 – A comparison of electrical impedance tomography and hyperpolarised helium magnetic resonance imaging. <i>BioMedical Engineering OnLine</i> , 2012, 11, 68.	1.3	14
53	<i>Ski</i> Overexpression in Skeletal Muscle Modulates Genetic Programs That Control Susceptibility to Diet-Induced Obesity and Insulin Signaling. <i>Obesity</i> , 2012, 20, 2157-2167.	1.5	14
54	Effect of 1-h moderate-intensity aerobic exercise on intramyocellular lipids in obese men before and after a lifestyle intervention. <i>Applied Physiology, Nutrition and Metabolism</i> , 2015, 40, 1262-1268.	0.9	14

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55	Supramolecular Fluorine Magnetic Resonance Spectroscopy Probe Polymer Based on Passerini Bifunctional Monomer. <i>ACS Macro Letters</i> , 2019, 8, 1479-1483.	2.3	13
56	Understanding nanomedicine treatment in an aggressive spontaneous brain cancer model at the stage of early blood brain barrier disruption. <i>Biomaterials</i> , 2022, 283, 121416.	5.7	13
57	Regional proton nuclear magnetic resonance spectroscopy differentiates cortex and medulla in the isolated perfused rat kidney. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 1997, 5, 151-158.	1.1	12
58	Magnetic resonance microimaging of the spinal cord in the SOD1 mouse model of amyotrophic lateral sclerosis detects motor nerve root degeneration. <i>NeuroImage</i> , 2011, 58, 69-74.	2.1	12
59	Temporally Altered miRNA Expression in a Piglet Model of Hypoxic Ischemic Brain Injury. <i>Molecular Neurobiology</i> , 2020, 57, 4322-4344.	1.9	12
60	Quantification of Intramyocardial Metabolites by Proton Magnetic Resonance Spectroscopy. <i>Frontiers in Cardiovascular Medicine</i> , 2015, 2, 24.	1.1	10
61	Multi-modal imaging and analysis in the search for iron-based magnetoreceptors in the honeybee <i>Apis mellifera</i> . <i>Royal Society Open Science</i> , 2018, 5, 181163.	1.1	9
62	Modulation of glycine-serine interconversion by TCA and glycolytic intermediates in normoxic and hypoxic proximal tubules. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 1996, 1310, 41-47.	1.9	8
63	A prospective study of nomogram-based adaptation of prostate radiotherapy target volumes. <i>Radiation Oncology</i> , 2015, 10, 243.	1.2	8
64	Spinal multiparametric MRI and DEXA changes over time in men with prostate cancer treated with androgen deprivation therapy: a potential imaging biomarker of treatment toxicity. <i>European Radiology</i> , 2017, 27, 995-1003.	2.3	8
65	Airway closure is the predominant physiological mechanism of low ventilation seen on hyperpolarized helium-3 MRI lung scans. <i>Journal of Applied Physiology</i> , 2021, 130, 781-791.	1.2	8
66	Liver fat percent is associated with metabolic risk factors and the metabolic syndrome in a high-risk vascular cohort. <i>Nutrition and Metabolism</i> , 2010, 7, 50.	1.3	7
67	<sup>23</sup> Na NMR Detects Protection by Glycine and Alanine Against Hypoxic Injury in the Isolated Perfused Rat Kidney. <i>Biochemical and Biophysical Research Communications</i> , 1994, 202, 1639-1644.	1.0	5
68	Dorsal Digital Septum of the Distal Interphalangeal Joint. <i>Journal of Hand Surgery</i> , 2009, 34, 467-473.	0.7	5
69	Ventilation distribution in rats: Part I - The effect of gas composition as measured with electrical impedance tomography. <i>BioMedical Engineering OnLine</i> , 2012, 11, 64.	1.3	5
70	Correction of step artefact associated with MRI scanning of long bones. <i>Medical Engineering and Physics</i> , 2013, 35, 988-993.	0.8	5
71	Non-Invasive Monitoring of Sucrose Mobilization from Culm Storage Parenchyma by Magnetic Resonance Spectroscopy. <i>Bioscience, Biotechnology and Biochemistry</i> , 2013, 77, 487-496.	0.6	5
72	High-field magnetic resonance imaging using solenoid radiofrequency coils. <i>Magnetic Resonance Imaging</i> , 2012, 30, 1177-1185.	1.0	4

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73	Microscopic diffusion properties of fixed breast tissue: Preliminary findings. <i>Magnetic Resonance in Medicine</i> , 2015, 74, 1733-1739.	1.9	4
74	Can MRI accurately detect pilon articular malreduction? A quantitative comparison between CT and 3T MRI bone models. <i>Quantitative Imaging in Medicine and Surgery</i> , 2016, 6, 634-647.	1.1	4
75	A USPIO doped gel phantom for R2* relaxometry. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2017, 30, 15-27.	1.1	4
76	MR microscopy and microspectroscopy of the intact kidney. <i>Concepts in Magnetic Resonance</i> , 2004, 22A, 50-59.	1.3	3
77	The connective tissue and ligaments of the distal interphalangeal joint: a review and investigation using ultra-high field 16.4 Tesla magnetic resonance imaging. <i>Journal of Hand Surgery: European Volume</i> , 2014, 39, 398-404.	0.5	3
78	Cortical and medullary betaine-GPC modulated by osmolality independently of oxygen in the intact kidney. <i>American Journal of Physiology - Renal Physiology</i> , 1999, 277, F338-F346.	1.3	2
79	Fast parallel image reconstruction using smacker for functional magnetic resonance imaging. , 2008, , .		2
80	MRI demodulation frequency changes provide different information. <i>Magnetic Resonance in Medicine</i> , 2011, 66, 1513-1514.	1.9	2
81	Magnetic Resonance Spectroscopy Assessment of Brain Metabolite Concentrations in Individuals With Chronic Whiplash-associated Disorder. <i>Clinical Journal of Pain</i> , 2021, 37, 28-37.	0.8	2
82	An Approach of Deriving Relative Sensitivity Profiles for Image Reconstruction in MRI. <i>IEEE Journal on Selected Topics in Signal Processing</i> , 2008, 2, 817-827.	7.3	1
83	Combined approach for non-invasive measurement of liver pathology by MR. <i>Journal of Hepatology</i> , 2009, 51, 1083-1084.	1.8	1
84	Volume Localised 1H MRS of Renal Osmolytes. , 0, , 431-437.		0