Gary J Cowin

List of Publications by Year
in descending order

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	Understanding nanomedicine treatment in an aggressive spontaneous brain cancer model at the stage of early blood brain barrier disruption. Biomaterials, 2022, 283, 121416.	5.7	13
2	Airway closure is the predominant physiological mechanism of low ventilation seen on hyperpolarized helium-3 MRI lung scans. Journal of Applied Physiology, 2021, 130, 781-791.	1.2	8
3	Engineering chitosan nano-cocktail containing iron oxide and ceria: A two-in-one approach for treatment of inflammatory diseases and tracking of material delivery. Materials Science and Engineering C, 2021, 131, 112477.	3.8	17
4	Magnetic Resonance Spectroscopy Assessment of Brain Metabolite Concentrations in Individuals With Chronic Whiplash-associated Disorder. Clinical Journal of Pain, 2021, 37, 28-37.	0.8	2
5	Temporally Altered miRNA Expression in a Piglet Model of Hypoxic Ischemic Brain Injury. Molecular Neurobiology, 2020, 57, 4322-4344.	1.9	12
6	Understanding the Uptake of Nanomedicines at Different Stages of Brain Cancer Using a Modular Nanocarrier Platform and Precision Bispecific Antibodies. ACS Central Science, 2020, 6, 727-738.	5.3	36
7	Supramolecular Fluorine Magnetic Resonance Spectroscopy Probe Polymer Based on Passerini Bifunctional Monomer. ACS Macro Letters, 2019, 8, 1479-1483.	2.3	13
8	Multi-modal imaging and analysis in the search for iron-based magnetoreceptors in the honeybeeApis mellifera. Royal Society Open Science, 2018, 5, 181163.	1.1	9
9	Impact of Epicardial Adipose Tissue, Left Ventricular Myocardial Fat Content, and Interstitial Fibrosis on Myocardial Contractile Function. Circulation: Cardiovascular Imaging, 2018, 11, e007372.	1.3	90
10	Anti-staling of high-moisture starchy food: Effect of hydrocolloids, emulsifiers and enzymes on mechanics of steamed-rice cakes. Food Hydrocolloids, 2018, 83, 454-464.	5.6	41
11	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. European Radiology, 2017, 27, 995-1003.	2.3	8
12	Switchable ¹⁹F MRI polymer theranostics: towards in situ quantifiable drug release. Polymer Chemistry, 2017, 8, 5157-5166.	1.9	22
13	Molecular imaging of activated platelets via antibody-targeted ultra-small iron oxide nanoparticles displaying unique dual MRI contrast. Biomaterials, 2017, 134, 31-42.	5.7	78
14	Effects of magnetic field strength and particle aggregation on relaxivity of ultra-small dual contrast iron oxide nanoparticles. Materials Research Express, 2017, 4, 116105.	0.8	38
15	A USPIO doped gel phantom for R2* relaxometry. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2017, 30, 15-27.	1.1	4
16	Can MRI accurately detect pilon articular malreduction? A quantitative comparison between CT and 3T MRI bone models. Quantitative Imaging in Medicine and Surgery, 2016, 6, 634-647.	1.1	4
17	A prospective study of nomogram-based adaptation of prostate radiotherapy target volumes. Radiation Oncology, 2015, 10, 243.	1.2	8
18	Microscopic diffusion properties of fixed breast tissue: Preliminary findings. Magnetic Resonance in Medicine, 2015, 74, 1733-1739.	1.9	4

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19	Quantification of Intramyocardial Metabolites by Proton Magnetic Resonance Spectroscopy. Frontiers in Cardiovascular Medicine, 2015, 2, 24.	1.1	10
20	EphA2 as a Diagnostic Imaging Target in Glioblastoma: A Positron Emission Tomography/Magnetic Resonance Imaging Study. Molecular Imaging, 2015, 14, 7290.2015.00008.	0.7	24
21	RorÎ± deficiency and decreased adiposity are associated with induction of thermogenic gene expression in subcutaneous white adipose and brown adipose tissue. American Journal of Physiology - Endocrinology and Metabolism, 2015, 308, E159-E171.	1.8	38
22	PSMA-targeting iron oxide magnetic nanoparticles enhance MRI of preclinical prostate cancer. Nanomedicine, 2015, 10, 375-386.	1.7	85
23	Effect of 1-h moderate-intensity aerobic exercise on intramyocellular lipids in obese men before and after a lifestyle intervention. Applied Physiology, Nutrition and Metabolism, 2015, 40, 1262-1268.	0.9	14
24	Magnetic particle-mediated magnetoreception. Journal of the Royal Society Interface, 2015, 12, 20150499.	1.5	67
25	Non-destructive 1H-MRI assessment of flesh bruising in avocado (Persea americana M.) cv. Hass. Postharvest Biology and Technology, 2015, 100, 33-40.	2.9	35
26	The connective tissue and ligaments of the distal interphalangeal joint: a review and investigation using ultra-high field 16.4 Tesla magnetic resonance imaging. Journal of Hand Surgery: European Volume, 2014, 39, 398-404.	0.5	3
27	Resveratrol Does Not Benefit Patients With Nonalcoholic Fatty Liver Disease. Clinical Gastroenterology and Hepatology, 2014, 12, 2092-2103.e6.	2.4	237
28	Rapid determination of vertebral fat fraction over a large range of vertebral bodies. Journal of Medical Imaging and Radiation Oncology, 2014, 58, 155-163.	0.9	18
29	Metal artifacts from titanium and steel screws in CT, 1.5T and 3T MR images of the tibial Pilon: a quantitative assessment in 3D. Quantitative Imaging in Medicine and Surgery, 2014, 4, 163-72.	1.1	37
30	Detection of endogenous iron deposits in the injured mouse spinal cord through highâ€resolution ex vivo and in vivo MRI. NMR in Biomedicine, 2013, 26, 141-150.	1.6	22
31	Vertebral landmarks for the identification of spinal cord segments in the mouse. NeuroImage, 2013, 68, 22-29.	2.1	144
32	Longitudinal assessment of white matter pathology in the injured mouse spinal cord through ultra-high field (16.4T) in vivo diffusion tensor imaging. NeuroImage, 2013, 82, 574-585.	2.1	51
33	Correction of step artefact associated with MRI scanning of long bones. Medical Engineering and Physics, 2013, 35, 988-993.	0.8	5
34	Transgenic Muscle-Specific Nor-1 Expression Regulates Multiple Pathways That Effect Adiposity, Metabolism, and Endurance. Molecular Endocrinology, 2013, 27, 1897-1917.	3.7	50
35	Non-Invasive Monitoring of Sucrose Mobilization from Culm Storage Parenchyma by Magnetic Resonance Spectroscopy. Bioscience, Biotechnology and Biochemistry, 2013, 77, 487-496.	0.6	5
36	Neuroanatomy and psychomimetic-induced locomotion in C57BL/6J and 129/X1SvJ mice exposed to developmental vitamin D deficiency. Behavioural Brain Research, 2012, 230, 125-131.	1.2	34

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37	Ventilation distribution in rats: Part I - The effect of gas composition as measured with electrical impedance tomography. BioMedical Engineering OnLine, 2012, 11, 64.	1.3	5
38	Ventilation distribution in rats: Part 2 â€“ A comparison of electrical impedance tomography and hyperpolarised helium magnetic resonance imaging. BioMedical Engineering OnLine, 2012, 11, 68.	1.3	14
39	Ski Overexpression in Skeletal Muscle Modulates Genetic Programs That Control Susceptibility to Dietâ€Induced Obesity and Insulin Signaling. Obesity, 2012, 20, 2157-2167.	1.5	14
40	High-field magnetic resonance imaging using solenoid radiofrequency coils. Magnetic Resonance Imaging, 2012, 30, 1177-1185.	1.0	4
41	In vivo Imaging and Biodistribution of Multimodal Polymeric Nanoparticles Delivered to the Optic Nerve. Small, 2012, 8, 1579-1589.	5.2	40
42	Microscopic diffusivity compartmentation in formalinâ€fixed prostate tissue. Magnetic Resonance in Medicine, 2012, 68, 614-620.	1.9	34
43	Biexponential diffusion decay in formalinâ€fixed prostate tissue: Preliminary findings. Magnetic Resonance in Medicine, 2012, 68, 954-959.	1.9	21
44	Microscopic diffusion anisotropy in formalin fixed prostate tissue: Preliminary findings. Magnetic Resonance in Medicine, 2012, 68, 1943-1948.	1.9	23
45	Spinal cord metabolism and muscle water diffusion in whiplash. Spinal Cord, 2012, 50, 474-476.	0.9	24
46	Diffusion-weighted imaging in the prostate: an apparent diffusion coefficient comparison of half-Fourier acquisition single-shot turbo spin-echo and echo planar imaging. Magnetic Resonance Imaging, 2012, 30, 189-194.	1.0	18
47	Magnetic Resonance Imaging: The Underlying Principles. Journal of Orthopaedic and Sports Physical Therapy, 2011, 41, 806-819.	1.7	27
48	Magnetic resonance microimaging of the spinal cord in the SOD1 mouse model of amyotrophic lateral sclerosis detects motor nerve root degeneration. NeuroImage, 2011, 58, 69-74.	2.1	12
49	Non-invasive diffusion tensor imaging detects white matter degeneration in the spinal cord of a mouse model of amyotrophic lateral sclerosis. NeuroImage, 2011, 55, 455-461.	2.1	39
50	Cues to body size in the formant spacing of male koala (Phascolarctos cinereus) bellows: honesty in an exaggerated trait. Journal of Experimental Biology, 2011, 214, 3414-3422.	0.8	99
51	Low density lipoprotein cholesterol is inversely correlated with abdominal visceral fat area: a magnetic resonance imaging study. Lipids in Health and Disease, 2011, 10, 12.	1.2	15
52	MRI resolution enhancement: How useful are shifted images obtained by changing the demodulation frequency?. Magnetic Resonance in Medicine, 2011, 65, 664-672.	1.9	17
53	16 T Diffusion microimaging of fixed prostate tissue: Preliminary findings. Magnetic Resonance in Medicine, 2011, 66, 244-247.	1.9	37
54	MRI demodulation frequency changes provide different information. Magnetic Resonance in Medicine, 2011, 66, 1513-1514.	1.9	2

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55	Liver fat percent is associated with metabolic risk factors and the metabolic syndrome in a high-risk vascular cohort. Nutrition and Metabolism, 2010, 7, 50.	1.3	7
56	Magnetic resonance microscopy of the barramundi (Lates calcarifer) brain. Journal of Morphology, 2010, 271, 1446-1456.	0.6	15
57	A three-dimensional digital atlas of the zebrafish brain. NeuroImage, 2010, 51, 76-82.	2.1	85
58	Quantitative Assessment of Brain Volumes in Fish: Comparison of Methodologies. Brain, Behavior and Evolution, 2010, 76, 261-270.	0.9	28
59	Magnetic resonance histology of the adult zebrafish brain: optimization of fixation and gadolinium contrast enhancement. NMR in Biomedicine, 2009, 23, n/a-n/a.	1.6	27
60	Combined approach for non-invasive measurement of liver pathology by MR. Journal of Hepatology, 2009, 51, 1083-1084.	1.8	1
61	Dorsal Digital Septum of the Distal Interphalangeal Joint. Journal of Hand Surgery, 2009, 34, 467-473.	0.7	5
62	Magnetic resonance imaging and spectroscopy accurately estimate the severity of steatosis provided the stage of fibrosis is considered. Journal of Hepatology, 2009, 51, 389-397.	1.8	156
63	Magnetic resonance imaging and spectroscopy for monitoring liver steatosis. Journal of Magnetic Resonance Imaging, 2008, 28, 937-945.	1.9	174
64	Feasibility of functional magnetic resonance lung imaging in Australia with long distance transport of hyperpolarized helium from Germany. Respirology, 2008, 13, 599-602.	1.3	14
65	An Approach of Deriving Relative Sensitivity Profiles for Image Reconstruction in MRI. IEEE Journal on Selected Topics in Signal Processing, 2008, 2, 817-827.	7.3	1
66	Fast parallel image reconstruction using smacker for functional magnetic resonance imaging. , 2008, , .		2
67	Increased cerebral lactate during hypoxia may be neuroprotective in newborn piglets with intrauterine growth restriction. Brain Research, 2007, 1179, 79-88.	1.1	21
68	Functional anatomy of the caudal thoracolumbar and lumbosacral spine in the horse. Equine Veterinary Journal, 2006, 38, 393-399.	0.9	80
69	Intrauterine growth restriction due to uteroplacental vascular insufficiency leads to increased hypoxia-induced cerebral apoptosis in newborn piglets. Brain Research, 2006, 1098, 19-25.	1.1	32
70	Geometric distortion in clinical MRI systems. Magnetic Resonance Imaging, 2004, 22, 1223-1232.	1.0	63
71	MR microscopy and microspectroscopy of the intact kidney. Concepts in Magnetic Resonance, 2004, 22A, 50-59.	1.3	3
72	Use of spherical harmonic deconvolution methods to compensate for nonlinear gradient effects on MRI images. Magnetic Resonance in Medicine, 2004, 52, 115-122.	1.9	135

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73	A novel phantom and method for comprehensive 3-dimensional measurement and correction of geometric distortion in magnetic resonance imaging. Magnetic Resonance Imaging, 2004, 22, 529-542.	1.0	146
74	Geometric distortion in clinical MRI systems. Magnetic Resonance Imaging, 2004, 22, 1211-1221.	1.0	152
75	An inverse design of an open, head/neck RF coil for MRI. IEEE Transactions on Biomedical Engineering, 2002, 49, 1024-1030.	2.5	14
76	MR image-based measurement of rates of change in volumes of brain structures. Part II: application to a study of Alzheimerâ€™s disease and normal aging. Magnetic Resonance Imaging, 2002, 20, 41-48.	1.0	53
77	Effect of Rosiglitazone on Insulin Sensitivity and Body Composition in Type 2 Diabetic Patients. Obesity, 2002, 10, 1008-1015.	4.0	191
78	Cortical and medullary betaine-GPC modulated by osmolality independently of oxygen in the intact kidney. American Journal of Physiology - Renal Physiology, 1999, 277, F338-F346.	1.3	2
79	Regional proton nuclear magnetic resonance spectroscopy differentiates cortex and medulla in the isolated perfused rat kidney. Magnetic Resonance Materials in Physics, Biology, and Medicine, 1997, 5, 151-158.	1.1	12
80	Modulation of glycine-serine interconversion by TCA and glycolytic intermediates in normoxic and hypoxic proximal tubules. Biochimica Et Biophysica Acta - Molecular Cell Research, 1996, 1310, 41-47.	1.9	8
81	Serine isotopomer analysis by 13C-NMR defines glycine-serine interconversion in situ in the renal proximal tubule. Biochimica Et Biophysica Acta - Molecular Cell Research, 1996, 1310, 32-40.	1.9	16
82	23Na NMR Detects Protection by Glycine and Alanine Against Hypoxic Injury in the Isolated Perfused Rat Kidney. Biochemical and Biophysical Research Communications, 1994, 202, 1639-1644.	1.0	5
83	23Na-NMR detects hypoxic injury in intact kidney: Increases in sodium inhibited by DMSO and DMTU. Magnetic Resonance in Medicine, 1993, 30, 465-475.	1.9	20
84	Volume Localised1H MRS of Renal Osmolytes. , 0, , 431-437.		0