

Matthew S Brown

List of Publications by Year in descending order

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Version: 2024-02-01

71
papers

4,504
citations

136740

32
h-index

155451

55
g-index

72
all docs

72
docs citations

72
times ranked

4941
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | The Lung Image Database Consortium (LIDC) and Image Database Resource Initiative (IDRI): A Completed Reference Database of Lung Nodules on CT Scans. <i>Medical Physics</i> , 2011, 38, 915-931. | 1.6 | 1,659 |
| 2 | Recurrent Glioblastoma Multiforme: ADC Histogram Analysis Predicts Response to Bevacizumab Treatment. <i>Radiology</i> , 2009, 252, 182-189. | 3.6 | 317 |
| 3 | The Lung Image Database Consortium (LIDC) Data Collection Process for Nodule Detection and Annotation. <i>Academic Radiology</i> , 2007, 14, 1464-1474. | 1.3 | 191 |
| 4 | Emphysema: Effect of Reconstruction Algorithm on CT Imaging Measures. <i>Radiology</i> , 2004, 232, 295-301. | 3.6 | 169 |
| 5 | Lung Micronodules: Automated Method for Detection at Thin-Section CT—Initial Experience. <i>Radiology</i> , 2003, 226, 256-262. | 3.6 | 130 |
| 6 | Comparison of treatment response classifications between unidimensional, bidimensional, and volumetric measurements of metastatic lung lesions on chest computed tomography. <i>Academic Radiology</i> , 2004, 11, 1355-1360. | 1.3 | 115 |
| 7 | Quantitative texture-based assessment of one-year changes in fibrotic reticular patterns on HRCT in scleroderma lung disease treated with oral cyclophosphamide. <i>European Radiology</i> , 2011, 21, 2455-2465. | 2.3 | 99 |
| 8 | Comparison of the Quantitative CT Imaging Biomarkers of Idiopathic Pulmonary Fibrosis at Baseline and Early Change with an Interval of 7 Months. <i>Academic Radiology</i> , 2015, 22, 70-80. | 1.3 | 99 |
| 9 | The Lung Image Database Consortium (LIDC): An Evaluation of Radiologist Variability in the Identification of Lung Nodules on CT Scans. <i>Academic Radiology</i> , 2007, 14, 1409-1421. | 1.3 | 91 |
| 10 | Time-resolved study of polyimide absorption layers for blister-actuated laser-induced forward transfer. <i>Journal of Applied Physics</i> , 2010, 107, 083103. | 1.1 | 88 |
| 11 | Knowledge-based method for segmentation and analysis of lung boundaries in chest X-ray images. <i>Computerized Medical Imaging and Graphics</i> , 1998, 22, 463-477. | 3.5 | 85 |
| 12 | Diagnostic performance comparison of the <i>Cartis</i> system and high-resolution computerized tomography fissure analysis for planning endoscopic lung volume reduction. <i>Respirology</i> , 2014, 19, 524-530. | 1.3 | 84 |
| 13 | Computer-aided Lung Nodule Detection in CT. <i>Academic Radiology</i> , 2005, 12, 681-686. | 1.3 | 82 |
| 14 | Impulsively actuated jets from thin liquid films for high-resolution printing applications. <i>Journal of Fluid Mechanics</i> , 2012, 709, 341-370. | 1.4 | 77 |
| 15 | Automated classification of lung bronchovascular anatomy in CT using AdaBoost. <i>Medical Image Analysis</i> , 2007, 11, 315-324. | 7.0 | 76 |
| 16 | Time-resolved dynamics of laser-induced micro-jets from thin liquid films. <i>Microfluidics and Nanofluidics</i> , 2011, 11, 199-207. | 1.0 | 76 |
| 17 | Deep learning and radiomics: the utility of Google TensorFlow, Inception in classifying clear cell renal cell carcinoma and oncocytoma on multiphasic CT. <i>Abdominal Radiology</i> , 2019, 44, 2009-2020. | 1.0 | 73 |
| 18 | Knowledge-based segmentation of thoracic computed tomography images for assessment of split lung function. <i>Medical Physics</i> , 2000, 27, 592-598. | 1.6 | 61 |

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|----|--|-----|-----------|
| 19 | Classification of Parenchymal Abnormality in Scleroderma Lung Using a Novel Approach to Denoise Images Collected via a Multicenter Study. <i>Academic Radiology</i> , 2008, 15, 1004-1016. | 1.3 | 61 |
| 20 | Automatic Segmentation of Lung Parenchyma in the Presence of Diseases Based on Curvature of Ribs. <i>Academic Radiology</i> , 2008, 15, 1173-1180. | 1.3 | 58 |
| 21 | Toward clinically usable CAD for lung cancer screening with computed tomography. <i>European Radiology</i> , 2014, 24, 2719-2728. | 2.3 | 52 |
| 22 | The Effect of Lung Volume on Nodule Size on CT. <i>Academic Radiology</i> , 2007, 14, 476-485. | 1.3 | 51 |
| 23 | A method for the automatic quantification of the completeness of pulmonary fissures: evaluation in a database of subjects with severe emphysema. <i>European Radiology</i> , 2012, 22, 302-309. | 2.3 | 50 |
| 24 | Computer-aided quantitative bone scan assessment of prostate cancer treatment response. <i>Nuclear Medicine Communications</i> , 2012, 33, 384-394. | 0.5 | 45 |
| 25 | Finite element analysis of blister formation in laser-induced forward transfer. <i>Journal of Materials Research</i> , 2011, 26, 2438-2449. | 1.2 | 44 |
| 26 | Pulmonary nodule characterization: A comparison of conventional with quantitative and visual semi-quantitative analyses using contrast enhancement maps. <i>European Journal of Radiology</i> , 2006, 59, 244-252. | 1.2 | 43 |
| 27 | Reproducibility of Lung and Lobar Volume Measurements Using Computed Tomography. <i>Academic Radiology</i> , 2010, 17, 316-322. | 1.3 | 43 |
| 28 | Computer-aided Diagnosis in Lung Nodule Assessment. <i>Journal of Thoracic Imaging</i> , 2008, 23, 97-104. | 0.8 | 41 |
| 29 | Prediction of idiopathic pulmonary fibrosis progression using early quantitative changes on CT imaging for a short term of clinical 18-month follow-ups. <i>European Radiology</i> , 2020, 30, 726-734. | 2.3 | 38 |
| 30 | Medical Image Segmentation with Knowledge-guided Robust Active Contours. <i>Radiographics</i> , 2002, 22, 437-448. | 1.4 | 37 |
| 31 | Emphysema lung lobe volume reduction: effects on the ipsilateral and contralateral lobes. <i>European Radiology</i> , 2012, 22, 1547-1555. | 2.3 | 36 |
| 32 | Transitions to different patterns of interstitial lung disease in scleroderma with and without treatment. <i>Annals of the Rheumatic Diseases</i> , 2016, 75, 1367-1371. | 0.5 | 35 |
| 33 | Quantitative computer-aided diagnostic algorithm for automated detection of peak lesion attenuation in differentiating clear cell from papillary and chromophobe renal cell carcinoma, oncocytoma, and fat-poor angiomyolipoma on multiphasic multidetector computed tomography. <i>Abdominal Radiology</i> , 2017, 42, 1919-1928. | 1.0 | 32 |
| 34 | Database Design and Implementation for Quantitative Image Analysis Research. <i>IEEE Transactions on Information Technology in Biomedicine</i> , 2005, 9, 99-108. | 3.6 | 28 |
| 35 | Reproducibility of volume and densitometric measures of emphysema on repeat computed tomography with an interval of 1 week. <i>European Radiology</i> , 2012, 22, 287-294. | 2.3 | 25 |
| 36 | Prediction of progression in idiopathic pulmonary fibrosis using CT scans at baseline: A quantum particle swarm optimization - Random forest approach. <i>Artificial Intelligence in Medicine</i> , 2019, 100, 101709. | 3.8 | 22 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Association of qualitative and quantitative imaging features on multiphase multidetector CT with tumor grade in clear cell renal cell carcinoma. <i>Abdominal Radiology</i> , 2019, 44, 180-189. | 1.0 | 21 |
| 38 | Knowledge-Based Segmentation of Pediatric Kidneys in CT for Measurement of Parenchymal Volume. <i>Journal of Computer Assisted Tomography</i> , 2001, 25, 639-648. | 0.5 | 17 |
| 39 | CAD in clinical trials: Current role and architectural requirements. <i>Computerized Medical Imaging and Graphics</i> , 2007, 31, 332-337. | 3.5 | 16 |
| 40 | Using Transitional Changes on High-Resolution Computed Tomography to Monitor the Impact of Cyclophosphamide or Mycophenolate Mofetil on Systemic Sclerosis-Related Interstitial Lung Disease. <i>Arthritis and Rheumatology</i> , 2020, 72, 316-325. | 2.9 | 14 |
| 41 | Radiographic read paradigms and the roles of the central imaging laboratory in neuro-oncology clinical trials. <i>Neuro-Oncology</i> , 2021, 23, 189-198. | 0.6 | 11 |
| 42 | Association of tumor grade, enhancement on multiphase CT and microvessel density in patients with clear cell renal cell carcinoma. <i>Abdominal Radiology</i> , 2020, 45, 3184-3192. | 1.0 | 10 |
| 43 | Automated Endotracheal Tube Placement Check Using Semantically Embedded Deep Neural Networks. <i>Academic Radiology</i> , 2023, 30, 412-420. | 1.3 | 10 |
| 44 | CADrx for GBM Brain Tumors: Predicting Treatment Response from Changes in Diffusion-Weighted MRI. <i>Algorithms</i> , 2009, 2, 1350-1367. | 1.2 | 8 |
| 45 | Quantitative bone scan lesion area as an early surrogate outcome measure indicative of overall survival in metastatic prostate cancer. <i>Journal of Medical Imaging</i> , 2018, 5, 1. | 0.8 | 8 |
| 46 | Model-based assessment of lung structures: inferencing and control system. , 1995, , . | | 7 |
| 47 | <title>Knowledge-based automated technique for measuring total lung volume from CT</title>. , 1996, , . | | 7 |
| 48 | <title>Extensible knowledge-based architecture for segmenting CT data</title>. , 1998, 3338, 564. | | 7 |
| 49 | Interactive lung segmentation in abnormal human and animal chest CT scans. <i>Medical Physics</i> , 2014, 41, 081915. | 1.6 | 7 |
| 50 | An exploratory analysis of bone scan lesion area (BSLA), circulating tumor cell (CTC) change, pain reduction, and overall survival (OS) in patients (pts) with castration-resistant prostate cancer (CRPC) treated with cabozantinib (cabo): Updated results of a phase II nonrandomized expansion (NRE) cohort. <i>Journal of Clinical Oncology</i> , 2013, 31, 5026-5026. | 0.8 | 7 |
| 51 | <title>Object-oriented region-of-interest toolkit for workstations</title>. , 1998, 3335, 627. | | 6 |
| 52 | <title>Application development environment for advanced digital workstations</title>. , 1998, , . | | 6 |
| 53 | An Architecture for Computer-Aided Detection and Radiologic Measurement of Lung Nodules in Clinical Trials. <i>Cancer Informatics</i> , 2007, 4, 117693510700400. | 0.9 | 5 |
| 54 | An architecture for computer-aided detection and radiologic measurement of lung nodules in clinical trials. <i>Cancer Informatics</i> , 2007, 4, 25-31. | 0.9 | 4 |

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|----|---|-----|-----------|
| 55 | The effects of slice thickness and radiation dose level variations on computer-aided diagnosis (CAD) nodule detection performance in pediatric chest CT scans. , 2017, , . | | 3 |
| 56 | CADrx for GBM Brain Tumors. Advances in Bioinformatics and Biomedical Engineering Book Series, 2012, , 297-314. | 0.2 | 3 |
| 57 | Unusual Presentation of Infantile Myofibroma in the Deep Palm of a Child: A Case Report and Discussion of the Differential Diagnosis. Journal of Hand Surgery, 2017, 42, e193-e198. | 0.7 | 2 |
| 58 | The effects of variations in parameters and algorithm choices on calculated radiomics feature values: initial investigations and comparisons to feature variability across CT image acquisition conditions. , 2018, , . | | 2 |
| 59 | Automated tumor size assessment: Consistency of computer measurements with an expert panel.. Journal of Clinical Oncology, 2013, 31, 7566-7566. | 0.8 | 2 |
| 60 | Towards quantitative imaging: stability of fully automated nodule segmentation across varied dose levels and reconstruction parameters in a low-dose CT screening patient cohort. , 2018, , . | | 2 |
| 61 | <title>Patient-specific models for lung nodule detection and surveillance in CT images</title>. , 2001, , . | | 1 |
| 62 | Preliminary results of automated removal of degenerative joint disease in bone scan lesion segmentation. Proceedings of SPIE, 2013, , . | 0.8 | 1 |
| 63 | Automated segmentation of pulmonary lobes in chest CT scans using evolving surfaces. , 2013, , . | | 1 |
| 64 | Differentiation of low grade from high grade clear cell renal cell carcinoma neoplasms using a CAD algorithm on four-phase CT.. Journal of Clinical Oncology, 2016, 34, 4564-4564. | 0.8 | 1 |
| 65 | Effects of CT dose and nodule characteristics on lung-nodule detectability in a cohort of 90 national lung screening trial patients. , 2016, , . | | 0 |
| 66 | Computer-aided bone scan lesion area quantitation: Inter-reader measurement variability.. Journal of Clinical Oncology, 2013, 31, e16019-e16019. | 0.8 | 0 |
| 67 | Computer-aided lung cancer screening with CT: A clinically usable nodule detection and assessment system.. Journal of Clinical Oncology, 2013, 31, 7562-7562. | 0.8 | 0 |
| 68 | CAD-based discrimination of clear cell renal cell carcinoma from RCC subtypes and benign small renal masses at multidetector CT.. Journal of Clinical Oncology, 2015, 33, e15616-e15616. | 0.8 | 0 |
| 69 | Predicting the outcome of percutaneous biopsy in renal neoplasms using a CAD algorithm to derive peak lesion enhancement on four-phase CT.. Journal of Clinical Oncology, 2016, 34, e16067-e16067. | 0.8 | 0 |
| 70 | Correlation of tumor enhancement and imaging features on multiphase multidetector CT with microvessel density as a step toward a minimally invasive method to predict Fuhrman nuclear grade in patients with clear cell renal cell carcinoma.. Journal of Clinical Oncology, 2017, 35, e16049-e16049. | 0.8 | 0 |
| 71 | High throughput image labeling on chest computed tomography by deep learning. Journal of Medical Imaging, 2020, 7, 1. | 0.8 | 0 |