Antonio Di Ieva

List of Publications by Year
in descending order

139 papers	3,230 citations	159585 30 h-index	206112 48 g-index
145 all docs	145 docs citations	145 times ranked	4167 citing authors

#	Article	IF	Citations
1	Spherical coordinates transformation pre-processing in Deep Convolution Neural Networks for brain tumor segmentation in MRI. Medical and Biological Engineering and Computing, 2022, 60, 121-134.	2.8	13
2	Application of artificial intelligence and radiomics in pituitary neuroendocrine and sellar tumors: a quantitative and qualitative synthesis. Neuroradiology, 2022, 64, 647-668.	2.2	8
3	Foundations of Multiparametric Brain Tumour Imaging Characterisation Using Machine Learning. Acta Neurochirurgica Supplementum, 2022, 134, 183-193.	1.0	4
4	Use of deep learning in the MRI diagnosis of Chiari malformation type I. Neuroradiology, 2022, , 1.	2.2	4
5	Artificial Intelligence for Survival Prediction in Brain Tumors on Neuroimaging. Neurosurgery, 2022, Publish Ahead of Print, .	1.1	5
6	Significant venous flow alterations following brain arteriovenous malformation Surgery: Assessment by transcranial colour duplex. Journal of Clinical Neuroscience, 2022, 99, 268-274.	1.5	0
7	Anchoring of a mental nerve stimulator for treatment of facial neuropathic pain: a case illustration. British Journal of Neurosurgery, 2022, , 1-3.	0.8	1
8	Semi-supervised Adversarial Learning for Stain Normalisation in Histopathology Images. Lecture Notes in Computer Science, 2021, , 581-591.	1.3	9
9	Machine Learning for the Prediction of Molecular Markers in Glioma on Magnetic Resonance Imaging: A Systematic Review and Meta-Analysis. Neurosurgery, 2021, 89, 31-44.	1.1	42
10	Texture Enhanced Generative Adversarial Network For Stain Normalisation In Histopathology Images. , 2021, , .		6
11	The Royal Australasian College of Surgeons John Mitchell Crouch Fellowship: a neurosurgical perspective. ANZ Journal of Surgery, 2021, 91, 793-794.	0.7	0
12	Assessment of eye-tracking scanpath outliers using fractal geometry. Heliyon, 2021, 7, e07616.	3.2	2
13	Brain volumetric and fractal analysis of synthetic MRI: A comparative study with conventional 3D T1-weighted images. European Journal of Radiology, 2021, 141, 109782.	2.6	8
14	Impact of Spherical Coordinates Transformation Pre-processing in Deep Convolution Neural Networks for Brain Tumor Segmentation and Survival Prediction. Lecture Notes in Computer Science, 2021, , 295-306.	1.3	8
15	Application of deep learning for automatic segmentation of brain tumors on magnetic resonance imaging: a heuristic approach in the clinical scenario. Neuroradiology, 2021, 63, 1253-1262.	2.2	36
16	Generative Adversarial Networks in Digital Pathology and Histopathological Image Processing: A Review. Journal of Pathology Informatics, 2021, 12, 43.	1.7	36
17	IOTG-01. Computational Neurosurgery in Brain Tumors: A paradigm shift on the use of Artificial Intelligence and Connectomics in pre- and intra-operative imaging. Neuro-Oncology, 2021, 23, vi227-vi227.	1.2	1
18	Do neurosurgeons follow the guidelines? A world-based survey on severe traumatic brain injury. Journal of Neurosurgical Sciences, 2021, 65, 465-473.	0.6	2

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19	Spatial and time domain analysis of eye-tracking data during screening of brain magnetic resonance images. PLoS ONE, 2021, 16, e0260717.	2.5	5
20	Two-stage U-Net++ for Medical Image Segmentation. , 2021, , .		1
21	Magnetic Resonance Spectroscopic Assessment of Isocitrate Dehydrogenase Status inÂGliomas: The New Frontiers of Spectrobiopsy in Neurodiagnostics. World Neurosurgery, 2020, 133, e421-e427.	1.3	16
22	Paulus of Aegina and the Historical Origins of Spine Surgery. World Neurosurgery, 2020, 133, 291-301.	1.3	2
23	In Reply to the Letter to the Editor Regarding â€œDelayed Contralateral Trigeminal Neuralgia After Microvascular Decompression and Postoperative Change in Venous Outflowâ€. World Neurosurgery, 2020, 142, 564.	1.3	0
24	Isocitrate dehydrogenase (IDH) status prediction in histopathology images of gliomas using deep learning. Scientific Reports, 2020, 10, 7733.	3.3	66
25	Delayed Contralateral Trigeminal Neuralgia After Microvascular Decompression and Postoperative Changes in Venous Outflow. World Neurosurgery, 2020, 140, 107-108.	1.3	3
26	Deep learning for automated cerebral aneurysm detection on computed tomography images. International Journal of Computer Assisted Radiology and Surgery, 2020, 15, 715-723.	2.8	50
27	Radiomics in gliomas: clinical implications of computational modeling and fractal-based analysis. Neuroradiology, 2020, 62, 771-790.	2.2	32
28	Deep Learning Methodology for Differentiating Glioma Recurrence From Radiation Necrosis Using Multimodal Magnetic Resonance Imaging: Algorithm Development and Validation. JMIR Medical Informatics, 2020, 8, e19805.	2.6	15
29	Cerebral Microvascular Dysfunction and Clinical Considerations of Systemic Arterial Hypertension. Hypertension Journal, 2020, 6, 117-124.	0.1	0
30	Letter to the Editor Regarding â€œThe Exoscope in Neurosurgery: An Innovative Point of View. A Systematic Review of the Technical, Surgical, and Educational Aspectsâ€. World Neurosurgery, 2019, 127, 652.	1.3	2
31	AI-augmented multidisciplinary teams: hype or hope?. Lancet, The, 2019, 394, 1801.	13.7	24
32	Dynamics of Forest Fragmentation and Connectivity Using Particle and Fractal Analysis. Scientific Reports, 2019, 9, 12228.	3.3	38
33	Computational quantitative MR image features - a potential useful tool in differentiating glioblastoma from solitary brain metastasis. European Journal of Radiology, 2019, 119, 108634.	2.6	31
34	Cranial Nerve Nomenclature: Historical Vignette. World Neurosurgery, 2019, 128, 299-307.	1.3	8
35	How I do it: 3D exoscopic endoscope-assisted microvascular decompression. Acta Neurochirurgica, 2019, 161, 1443-1447.	1.7	3
36	Spectrobiopsy in neurodiagnostics: the new era. Neuroradiology, 2018, 60, 129-131.	2.2	7

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37	Microvascularization of Grade I meningiomas: effect on tumor volume, blood loss, and patient outcome. Journal of Neurosurgery, 2018, 128, 657-666.	1.6	22
38	Vasculogenic Mimicry in Clinically Non-functioning Pituitary Adenomas: a Histologic Study. Pathology and Oncology Research, 2017, 23, 803-809.	1.9	6
39	Overweight, obesity and height as risk factors for meningioma, glioma, pituitary adenoma and nerve sheath tumor: a large population-based prospective cohort study. Acta Oncológica, 2017, 56, 1302-1309.	1.8	26
40	Cerebrospinal fluid leaks in extended endoscopic transsphenoidal surgery: covering all the angles. Neurosurgical Review, 2017, 40, 309-318.	2.4	13
41	Training in skull base surgery: a holistic perspective. Journal of Neurosurgical Sciences, 2017, 61, 690-691.	0.6	1
42	Current Applications and Future Perspectives of the Use of 3D Printing in Anatomical Training and Neurosurgery. Frontiers in Neuroanatomy, 2016, 10, 69.	1.7	72
43	The impact of body mass index and height on the risk for glioblastoma and other glioma subgroups: a large prospective cohort study. Neuro-Oncology, 2016, 19, now272.	1.2	29
44	Biomarkers of pituitary carcinomas. Expert Review of Endocrinology and Metabolism, 2016, 11, 253-261.	2.4	2
45	The Fractal Geometry of the Brain: An Overview. Springer Series in Computational Neuroscience, 2016, , 3-12.	0.3	7
46	Histological Fractal-Based Classification of Brain Tumors. Springer Series in Computational Neuroscience, 2016, , 371-391.	0.3	3
47	Fractal Geometry Meets Computational Intelligence: Future Perspectives. Springer Series in Computational Neuroscience, 2016, , 567-580.	0.3	1
48	Fractal Analysis in Clinical Neurosciences: An Overview. Springer Series in Computational Neuroscience, 2016, , 189-198.	0.3	0
49	Computational Fractal-Based Analysis of MR Susceptibility-Weighted Imaging (SWI) in Neuro-oncology and Neurotraumatology. Springer Series in Computational Neuroscience, 2016, , 311-332.	0.3	0
50	Fractals in Neuroanatomy and Basic Neurosciences: An Overview. Springer Series in Computational Neuroscience, 2016, , 83-89.	0.3	0
51	Diagnostic Value of Fractal Analysis for the Differentiation of Brain Tumors Using 3-Tesla Magnetic Resonance Susceptibility-Weighted Imaging. Neurosurgery, 2016, 79, 839-846.	1.1	30
52	Arginine vasopressin (AVP): a review of its historical perspectives, current research and multifunctional role in the hypothalamo-hypophysial system. Pituitary, 2016, 19, 345-355.	2.9	72
53	Fractal Analysis in Neurological Diseases. Springer Series in Computational Neuroscience, 2016, , 199-211.	0.3	2
54	Fractals in Neuroimaging. Springer Series in Computational Neuroscience, 2016, , 295-309.	0.3	1

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55	Fractal-Based Analysis of Arteriovenous Malformations (AVMs). Springer Series in Computational Neuroscience, 2016, , 279-293.	0.3	1
56	Computational Fractal-Based Neurosciences: An Overview. Springer Series in Computational Neuroscience, 2016, , 499-502.	0.3	0
57	Computational Fractal-Based Analysis of Brain Tumor Microvascular Networks. Springer Series in Computational Neuroscience, 2016, , 393-411.	0.3	2
58	Crooke's Cell Tumors of the Pituitary. Neurosurgery, 2015, 76, 616-622.	1.1	38
59	Human Kallikrein 10 Expression in Surgically Removed Human Pituitary Corticotroph Adenomas. Applied Immunohistochemistry and Molecular Morphology, 2015, 23, 433-437.	1.2	5
60	Progress in the Diagnosis and Classification of Pituitary Adenomas. Frontiers in Endocrinology, 2015, 6, 97.	3.5	51
61	Pituitary Adenoma and the Chemokine Network: A Systemic View. Frontiers in Endocrinology, 2015, 6, 141.	3.5	15
62	The indusium griseum and the longitudinal striae of the corpus callosum. Cortex, 2015, 62, 34-40.	2.4	25
63	Invasive, Atypical and Aggressive Pituitary Adenomas and Carcinomas. Endocrinology and Metabolism Clinics of North America, 2015, 44, 99-104.	3.2	59
64	Treatment of Invasive Silent Somatotroph Pituitary Adenoma with Temozolomide. Report of a Case and Review of the Literature. Endocrine Pathology, 2015, 26, 135-139.	9.0	7
65	Letter to the Editor. Endocrine Pathology, 2015, 26, 93-94.	9.0	13
66	Magnetic resonance susceptibility weighted imaging in neurosurgery: current applications and future perspectives. Journal of Neurosurgery, 2015, 123, 1463-1475.	1.6	41
67	Diagnostic and prognostic biomarkers of a sellar melanocytic tumor mimicking pituitary adenoma: Case report and literature review. Pathology Research and Practice, 2015, 211, 682-687.	2.3	4
68	Osteomalacia-Inducing Tumors of the Brain: A Case Report, Review and a Hypothesis. World Neurosurgery, 2015, 84, 189.e1-189.e5.	1.3	14
69	Chordoid meningiomas: Incidence and clinicopathological features of a case series over 18 years. Neuropathology, 2015, 35, 137-147.	1.2	20
70	Endoscopic versus microscopic approach for surgical treatment of acromegaly. Neurosurgical Review, 2015, 38, 541-549.	2.4	63
71	Autophagy in endocrine tumors. Endocrine-Related Cancer, 2015, 22, R205-R218.	3.1	31
72	Current status on histological classification in Cushing's disease. Pituitary, 2015, 18, 217-224.	2.9	19

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73	Computational Analyses of Arteriovenous Malformations in Neuroimaging. Journal of Neuroimaging, 2015, 25, 354-360.	2.0	17
74	Fractals in the Neurosciences, Part II. Neuroscientist, 2015, 21, 30-43.	3.5	139
75	Human kallikrein 10 in surgically removed human pituitary adenomas. Hormones, 2014, 14, 272-9.	1.9	3
76	Detrended fluctuation analysis of brain hemisphere magnetic resonnance images to detect cerebral arteriovenous malformations. , 2014, , .		12
77	A Journey into the Technical Evolution of Neuroendoscopy. World Neurosurgery, 2014, 82, e777-e789.	1.3	44
78	Watertight Dural Closure in Brain Surgery: A Simple Model for Training. Journal of Neurological Surgery, Part A: Central European Neurosurgery, 2014, 75, 241-245.	0.8	4
79	The Comprehensive AOCMF Classification: Skull Base and Cranial Vault Fractures â€" Level 2 and 3 Tutorial. Craniomaxillofacial Trauma & Reconstruction, 2014, 7, 103-113.	1.3	14
80	The Comprehensive AOCMF Classification System: Radiological Issues and Systematic Approach. Craniomaxillofacial Trauma & Reconstruction, 2014, 7, 123-130.	1.3	15
81	The First AO Classification System for Fractures of the Craniomaxillofacial Skeleton: Rationale, Methodological Background, Developmental Process, and Objectives. Craniomaxillofacial Trauma & Reconstruction, 2014, 7, 6-14.	1.3	20
82	Fractal-based arteriovenous malformations detection in brain magnetic resonance images. , 2014, , .		6
83	Autophagy in the endocrine glands. Journal of Molecular Endocrinology, 2014, 52, R151-R163.	2.5	76
84	Improving differential diagnosis of pituitary adenomas. Expert Review of Endocrinology and Metabolism, 2014, 9, 377-386.	2.4	9
85	Computational Fractal-Based Analysis of Brain Arteriovenous Malformation Angioarchitecture. Neurosurgery, 2014, 75, 72-79.	1.1	16
86	MicroRNAs as Biomarkers in Pituitary Tumors. Neurosurgery, 2014, 75, 181-189.	1.1	43
87	Skull base embryology: a multidisciplinary review. Child's Nervous System, 2014, 30, 991-1000.	1.1	37
88	Aggressive pituitary adenomasâ€"diagnosis and emerging treatments. Nature Reviews Endocrinology, 2014, 10, 423-435.	9.6	239
89	Fractals in the Neurosciences, Part I: General Principles and Basic Neurosciences. Neuroscientist, 2014, 20, 403-417.	3.5	142
90	Evaluation of cerebral aneurysm wall thickness in experimental aneurysms: Comparison of 3T-MR imaging with direct microscopic measurements. Acta Neurochirurgica, 2014, 156, 27-34.	1.7	12

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91	Canula-assisted endoscopy in bi-portal transphenoidal cranial base surgery: technical note. Acta Neurochirurgica, 2013, 155, 909-911.	1.7	3
92	Cranial sutures: a multidisciplinary review. Child's Nervous System, 2013, 29, 893-905.	1.1	46
93	Microvascular morphometrics of the hypophysis and pituitary tumors: From bench to operating theatre. Microvascular Research, 2013, 89, 7-14.	2.5	29
94	Analysis of Intracranial Pressure. Neuroscientist, 2013, 19, 592-603.	3.5	34
95	Distinguishing Alzheimer's Disease from Normal Pressure Hydrocephalus: A Search for MRI Biomarkers. Journal of Alzheimer's Disease, 2013, 38, 331-350.	2.6	11
96	Practical Guidelines for Setting up an Endoscopic/Skull Base Cadaver Laboratory. World Neurosurgery, 2013, 79, S16.e1-S16.e7.	1.3	19
97	Endoscopic Extradural Subtemporal Approach to Lateral and Central Skull Base: AÂCadaveric Study. World Neurosurgery, 2013, 80, 591-597.	1.3	24
98	Endoscopic far-lateral approach to the posterolateral craniovertebral junction: an anatomical study. Neurosurgical Review, 2013, 36, 239-247.	2.4	9
99	Three-dimensional susceptibility-weighted imaging at 7ÂT using fractal-based quantitative analysis to grade gliomas. Neuroradiology, 2013, 55, 35-40.	2.2	61
100	Ghrelin: A GH-Releasing, Appetite-Regulating Gastric Hormone. Advances in Neuroimmune Biology, 2013, 4, 51-65.	0.7	0
101	Rethinking immunotherapy for brain cancers in the light of cancer complexity. Indian Journal of Medical Research, 2013, 137, 871-3.	1.0	0
102	Computerized Occlusion Rating: A Superior Predictor of Aneurysm Rebleeding for Ruptured Embolized Aneurysms. American Journal of Neuroradiology, 2012, 33, 1481-1487.	2.4	9
103	Endoscopic approaches to the trigeminal nerve and clinical consideration for trigeminal schwannomas: a cadaveric study. Journal of Neurosurgery, 2012, 117, 690-696.	1.6	38
104	Computer-assisted and fractal-based morphometric assessment of microvascularity in histological specimens of gliomas. Scientific Reports, 2012, 2, 429.	3.3	28
105	Sperm Protein 17: Is It a Useful Target Antigen in Human Pituitary Adenomas?. Procedia in Vaccinology, 2012, 6, 39-46.	0.4	0
106	Fractal Analysis of the Susceptibility Weighted Imaging Patterns in Malignant Brain Tumors During Antiangiogenic Treatment: Technical Report on Four Cases Serially Imaged by 7 T Magnetic Resonance During a Period of Four Weeks. World Neurosurgery, 2012, 77, 785.e11-785.e21.	1.3	43
107	The subdiaphragmatic cistern: historic and radioanatomic findings. Acta Neurochirurgica, 2012, 154, 667-674.	1.7	18
108	A management algorithm for cerebrospinal fluid leak associated with anterior skull base fractures: detailed clinical and radiological follow-up. Neurosurgical Review, 2012, 35, 227-238.	2.4	24

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109	Endoscopic telovelar approach to the fourth ventricle: anatomic study. Neurosurgical Review, 2012, 35, 341-349.	2.4	26
110	Strong 5-aminolevulinic acid-induced fluorescence is a novel intraoperative marker for representative tissue samples in stereotactic brain tumor biopsies. Neurosurgical Review, 2012, 35, 381-391.	2.4	86
111	Fractal analysis of microvascular networks in malignant brain tumors. , 2012, 31, 342-351.		33
112	The veins of the nucleus dentatus: Anatomical and radiological findings. NeuroImage, 2011, 54, 74-79.	4.2	29
113	Angioarchitectural heterogeneity in human glioblastoma multiforme: A fractal-based histopathological assessment. Microvascular Research, 2011, 81, 222-230.	2.5	53
114	On the Fractal Nature of Nervous Cell System. Frontiers in Neuroanatomy, 2011, 5, 45.	1.7	17
115	Microsurgical Venous Pouch Arterial-Bifurcation Aneurysms in the Rabbit Model: Technical Aspects. Journal of Visualized Experiments, 2011, , .	0.3	10
116	Berengario da Carpi: a pioneer in neurotraumatology. Journal of Neurosurgery, 2011, 114, 1461-1470.	1.6	32
117	Vertebroplasty for pain relief and spinal stabilization in multiple myeloma. Neurological Sciences, 2010, 31, 151-157.	1.9	22
118	Magnetic resonance elastography: a general overview of its current and future applications in brain imaging. Neurosurgical Review, 2010, 33, 137-145.	2.4	49
119	Letter to the Editor. Journal of Neurosurgery: Pediatrics, 2010, 6, 304-306.	1.3	4
120	Lumbar Arachnoiditis and Thecaloscopy: Brief Review and Proposed Treatment Algorithm. Central European Neurosurgery, 2010, 71, 207-212.	0.7	17
121	Correlation of microvascular fractal dimension with positron emission tomography [11C]-methionine uptake in glioblastoma multiforme: Preliminary findings. Microvascular Research, 2010, 80, 267-273.	2.5	26
122	Angioarchitectural morphometrics of brain tumors: Are there any potential histopathological biomarkers?. Microvascular Research, 2010, 80, 522-533.	2.5	31
123	The microvascular network of the pituitary gland: a model for the application of fractal geometry to the analysis of angioarchitecture and angiogenesis of brain tumors. Journal of Neurosurgical Sciences, 2010, 54, 49-54.	0.6	10
124	Euclidean and fractal geometry of microvascular networks in normal and neoplastic pituitary tissue. Neurosurgical Review, 2008, 31, 271-281.	2.4	30
125	Antiangiogenic Strategies in Medulloblastoma: Reality or Mystery. Pediatric Research, 2008, 63, 584-590.	2.3	21
126	LIQUOR COTUNNII. Neurosurgery, 2008, 63, 352-358.	1.1	48

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127	Memetics in Neurosurgery and Neuroscience. NeuroQuantology, 2008, 6, .	0.2	6
128	LANCISI'S NERVES AND THE SEAT OF THE SOUL. Neurosurgery, 2007, 60, 563-568.	1.1	21
129	The neuroanatomical plates of Guido da Vigevano. Neurosurgical Focus, 2007, 23, 1-4.	2.3	18
130	Fractal dimension as a quantitator of the microvasculature of normal and adenomatous pituitary tissue. Journal of Anatomy, 2007, 211, 673-680.	1.5	75
131	Intramedullary astrocytoma with granular cell differentiation. Neurosurgical Review, 2007, 30, 339-343.	2.4	7
132	The neuroanatomical plates of Guido da Vigevano. Neurosurgical Focus, 2007, 23, E15.	2.3	6
133	Focal extra-axial hemorrahagic mass with subdural hemorrhage secondare to extramedullary hematopoiesis in idiopathic myelodysplastic sindrome. Journal of Neurosurgical Sciences, 2007, 51, 29-32.	0.6	5
134	Spinal decompression and vertebroplasty in Paget's disease of the spine. World Neurosurgery, 2006, 66, 189-191.	1.3	14
135	Cancer initiation and progression: an unsimplifiable complexity. Theoretical Biology and Medical Modelling, 2006, 3, 37.	2.1	36
136	Sperm protein 17 is expressed in human nervous system tumours. BMC Cancer, 2006, 6, 23.	2.6	36
137	Functional disability after instrumented stabilization in lumbar degenerative spondylolisthesis: a follow-up study. Functional Neurology, 2006, 21, 31-7.	1.3	7
138	Oligodendroglial gliomatosis cerebri. Case report. Journal of Neurosurgical Sciences, 2006, 50, 123-5.	0.6	5
139	Calvarial metastases as clinical presentation of renal cell carcinoma: report of two cases and review of the literature. Clinical Neurology and Neurosurgery, 2005, 107, 329-333.	1.4	18