Antonio Di Ieva

List of Publications by Citations

134 papers	2,264 citations	26 h-index	40 g-index
145 ext. papers	2,704 ext. citations	3.2 avg, IF	5.21 L-index

#	Paper	IF	Citations
134	Aggressive pituitary adenomas--diagnosis and emerging treatments. *Nature Reviews Endocrinology*, **2014**, 10, 423-35	15.2	183
133	Fractals in the Neurosciences, Part I: General Principles and Basic Neurosciences. *Neuroscientist*, **2014**, 20, 403-417	7.6	101
132	Fractals in the neurosciences, Part II: clinical applications and future perspectives. *Neuroscientist*, **2015**, 21, 30-43	7.6	96
131	Strong 5-aminolevulinic acid-induced fluorescence is a novel intraoperative marker for representative tissue samples in stereotactic brain tumor biopsies. *Neurosurgical Review*, **2012**, 35, 381-91; discussion 391	3.9	68
130	Fractal dimension as a quantitator of the microvasculature of normal and adenomatous pituitary tissue. *Journal of Anatomy*, **2007**, 211, 673-80	2.9	64
129	Autophagy in the endocrine glands. *Journal of Molecular Endocrinology*, **2014**, 52, R151-63	4.5	59
128	Current Applications and Future Perspectives of the Use of 3D Printing in Anatomical Training and Neurosurgery. *Frontiers in Neuroanatomy*, **2016**, 10, 69	3.6	52
127	Invasive, atypical and aggressive pituitary adenomas and carcinomas. *Endocrinology and Metabolism Clinics of North America*, **2015**, 44, 99-104	5.5	50
126	Endoscopic versus microscopic approach for surgical treatment of acromegaly. *Neurosurgical Review*, **2015**, 38, 541-8; discussion 548-9	3.9	50
125	Arginine vasopressin (AVP): a review of its historical perspectives, current research and multifunctional role in the hypothalamo-hypophysial system. *Pituitary*, **2016**, 19, 345-55	4.3	47
124	Three-dimensional susceptibility-weighted imaging at 7 T using fractal-based quantitative analysis to grade gliomas. *Neuroradiology*, **2013**, 55, 35-40	3.2	45
123	Magnetic resonance elastography: a general overview of its current and future applications in brain imaging. *Neurosurgical Review*, **2010**, 33, 137-45; discussion 145	3.9	41
122	Liquor cotunnii: the history of cerebrospinal fluid in Domenico Cotugno's work. *Neurosurgery*, **2008**, 63, 352-8; discussion 358	3.2	41
121	Progress in the Diagnosis and Classification of Pituitary Adenomas. *Frontiers in Endocrinology*, **2015**, 6, 97	5.7	39
120	Cranial sutures: a multidisciplinary review. *Child's Nervous System*, **2013**, 29, 893-905	1.7	37
119	MicroRNAs as biomarkers in pituitary tumors. *Neurosurgery*, **2014**, 75, 181-9; discussion 188-9	3.2	33
118	Sperm protein 17 is expressed in human nervous system tumours. *BMC Cancer*, **2006**, 6, 23	4.8	33

117	Angioarchitectural heterogeneity in human glioblastoma multiforme: a fractal-based histopathological assessment. *Microvascular Research*, **2011**, 81, 222-30	3.7	32
116	Magnetic resonance susceptibility weighted imaging in neurosurgery: current applications and future perspectives. *Journal of Neurosurgery*, **2015**, 123, 1463-75	3.2	31
115	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.e11-21	2.1	31
114	A journey into the technical evolution of neuroendoscopy. *World Neurosurgery*, **2014**, 82, e777-89	2.1	28
113	Isocitrate dehydrogenase (IDH) status prediction in histopathology images of gliomas using deep learning. *Scientific Reports*, **2020**, 10, 7733	4.9	27
112	Endoscopic approaches to the trigeminal nerve and clinical consideration for trigeminal schwannomas: a cadaveric study. *Journal of Neurosurgery*, **2012**, 117, 690-6	3.2	27
111	Euclidean and fractal geometry of microvascular networks in normal and neoplastic pituitary tissue. *Neurosurgical Review*, **2008**, 31, 271-81	3.9	26
110	The impact of body mass index and height on the risk for glioblastoma and other glioma subgroups: a large prospective cohort study. *Neuro-Oncology*, **2017**, 19, 976-985	1	26
109	Angioarchitectural morphometrics of brain tumors: are there any potential histopathological biomarkers?. *Microvascular Research*, **2010**, 80, 522-33	3.7	25
108	Autophagy in endocrine tumors. *Endocrine-Related Cancer*, **2015**, 22, R205-18	5.7	24
107	Crooke's cell tumors of the pituitary. *Neurosurgery*, **2015**, 76, 616-22	3.2	24
106	Fractal analysis of microvascular networks in malignant brain tumors **2012**, 31, 342-51		24
105	The veins of the nucleus dentatus: anatomical and radiological findings. *NeuroImage*, **2011**, 54, 74-9	7.9	23
104	Deep learning for automated cerebral aneurysm detection on computed tomography images. *International Journal of Computer Assisted Radiology and Surgery*, **2020**, 15, 715-723	3.9	22
103	Skull base embryology: a multidisciplinary review. *Child's Nervous System*, **2014**, 30, 991-1000	1.7	22
102	Microvascular morphometrics of the hypophysis and pituitary tumors: from bench to operating theatre. *Microvascular Research*, **2013**, 89, 7-14	3.7	22
101	Analysis of intracranial pressure: past, present, and future. *Neuroscientist*, **2013**, 19, 592-603	7.6	22
100	Correlation of microvascular fractal dimension with positron emission tomography [(11)C]-methionine uptake in glioblastoma multiforme: preliminary findings. *Microvascular Research*, **2010**, 80, 267-73	3.7	22

99	Berengario da Carpi: a pioneer in neurotraumatology. *Journal of Neurosurgery*, **2011**, 114, 1461-70	3.2	22
98	Diagnostic Value of Fractal Analysis for the Differentiation of Brain Tumors Using 3-Tesla Magnetic Resonance Susceptibility-Weighted Imaging. *Neurosurgery*, **2016**, 79, 839-846	3.2	21
97	Overweight, obesity and height as risk factors for meningioma, glioma, pituitary adenoma and nerve sheath tumor: a large population-based prospective cohort study. *Acta Oncologica*, **2017**, 56, 1302-1309	3.2	20
96	Dynamics of Forest Fragmentation and Connectivity Using Particle and Fractal Analysis. *Scientific Reports*, **2019**, 9, 12228	4.9	20
95	Computational quantitative MR image features - a potential useful tool in differentiating glioblastoma from solitary brain metastasis. *European Journal of Radiology*, **2019**, 119, 108634	4.7	20
94	Endoscopic extradural subtemporal approach to lateral and central skull base: a cadaveric study. *World Neurosurgery*, **2013**, 80, 591-7	2.1	20
93	Microvascularization of Grade I meningiomas: effect on tumor volume, blood loss, and patient outcome. *Journal of Neurosurgery*, **2018**, 128, 657-666	3.2	19
92	A management algorithm for cerebrospinal fluid leak associated with anterior skull base fractures: detailed clinical and radiological follow-up. *Neurosurgical Review*, **2012**, 35, 227-37; discussion 237-8	3.9	19
91	Endoscopic telovelar approach to the fourth ventricle: anatomic study. *Neurosurgical Review*, **2012**, 35, 341-8; discussion 348-9	3.9	19
90	Vertebroplasty for pain relief and spinal stabilization in multiple myeloma. *Neurological Sciences*, **2010**, 31, 151-7	3.5	19
89	Antiangiogenic strategies in medulloblastoma: reality or mystery. *Pediatric Research*, **2008**, 63, 584-90	3.2	19
88	Radiomics in gliomas: clinical implications of computational modeling and fractal-based analysis. *Neuroradiology*, **2020**, 62, 771-790	3.2	18
87	The indusium griseum and the longitudinal striae of the corpus callosum. *Cortex*, **2015**, 62, 34-40	3.8	18
86	The First AO Classification System for Fractures of the Craniomaxillofacial Skeleton: Rationale, Methodological Background, Developmental Process, and Objectives. *Craniomaxillofacial Trauma & Reconstruction*, **2014**, 7, S006-14	1.3	18
85	Lancisi's nerves and the seat of the soul. *Neurosurgery*, **2007**, 60, 563-8; discussion 568	3.2	18
84	Computer-assisted and fractal-based morphometric assessment of microvascularity in histological specimens of gliomas. *Scientific Reports*, **2012**, 2, 429	4.9	17
83	Chordoid meningiomas: incidence and clinicopathological features of a case series over 18 years. *Neuropathology*, **2015**, 35, 137-47	2	15
82	The neuroanatomical plates of Guido da Vigevano. *Neurosurgical Focus*, **2007**, 23, 1-4	4.2	15

81	Calvarial metastases as clinical presentation of renal cell carcinoma: report of two cases and review of the literature. *Clinical Neurology and Neurosurgery*, **2005**, 107, 329-33	2	15
80	Current status on histological classification in Cushing's disease. *Pituitary*, **2015**, 18, 217-24	4.3	14
79	AI-augmented multidisciplinary teams: hype or hope?. *Lancet, The*, **2019**, 394, 1801	40	14
78	Practical guidelines for setting up an endoscopic/skull base cadaver laboratory. *World Neurosurgery*, **2013**, 79, S16.e1-7	2.1	14
77	Lumbar arachnoiditis and thecaloscopy: brief review and proposed treatment algorithm. *Central European Neurosurgery*, **2010**, 71, 207-12		14
76	The Comprehensive AOCMF Classification System: Radiological Issues and Systematic Approach. *Craniomaxillofacial Trauma & Reconstruction*, **2014**, 7, S123-30	1.3	13
75	The subdiaphragmatic cistern: historic and radioanatomic findings. *Acta Neurochirurgica*, **2012**, 154, 667-74; discussion 674	3	13
74	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	3.2	13
73	Osteomalacia-Inducing Tumors of the Brain: A Case Report, Review and a Hypothesis. *World Neurosurgery*, **2015**, 84, 189.e1-5	2.1	12
72	Spinal decompression and vertebroplasty in Paget's disease of the spine. *World Neurosurgery*, **2006**, 66, 189-91; discussion 191		12
71	Letter to the editor. *Endocrine Pathology*, **2015**, 26, 93-4	4.2	11
70	Computational analyses of arteriovenous malformations in neuroimaging. *Journal of Neuroimaging*, **2015**, 25, 354-60	2.8	11
69	Pituitary Adenoma and the Chemokine Network: A Systemic View. *Frontiers in Endocrinology*, **2015**, 6, 141	5.7	11
68	Distinguishing Alzheimer's disease from normal pressure hydrocephalus: a search for MRI biomarkers. *Journal of Alzheimer's Disease*, **2014**, 38, 331-50	4.3	10
67	On the fractal nature of nervous cell system. *Frontiers in Neuroanatomy*, **2011**, 5, 45	3.6	10
66	Evaluation of cerebral aneurysm wall thickness in experimental aneurysms: comparison of 3T-MR imaging with direct microscopic measurements. *Acta Neurochirurgica*, **2014**, 156, 27-34	3	9
65	Cerebrospinal fluid leaks in extended endoscopic transsphenoidal surgery: covering all the angles. *Neurosurgical Review*, **2017**, 40, 309-318	3.9	9
64	The Comprehensive AOCMF Classification: Skull Base and Cranial Vault Fractures - Level 2 and 3 Tutorial. *Craniomaxillofacial Trauma & Reconstruction*, **2014**, 7, S103-13	1.3	9

63	Computational fractal-based analysis of brain arteriovenous malformation angioarchitecture. *Neurosurgery*, **2014**, 75, 72-9	3.2	9
62	Computerized occlusion rating: a superior predictor of aneurysm rebleeding for ruptured embolized aneurysms. *American Journal of Neuroradiology*, **2012**, 33, 1481-7	4.4	9
61	Magnetic Resonance Spectroscopic Assessment of Isocitrate Dehydrogenase Status in Gliomas: The New Frontiers of Spectrobiopsy in Neurodiagnostics. *World Neurosurgery*, **2020**, 133, e421-e427	2.1	9
60	Detrended fluctuation analysis of brain hemisphere magnetic resonnance images to detect cerebral arteriovenous malformations **2014**,		8
59	Endoscopic far-lateral approach to the posterolateral craniovertebral junction: an anatomical study. *Neurosurgical Review*, **2013**, 36, 239-47; discussion 247	3.9	8
58	Microsurgical venous pouch arterial-bifurcation aneurysms in the rabbit model: technical aspects. *Journal of Visualized Experiments*, **2011**,	1.6	8
57	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	1.3	8
56	Cranial Nerve Nomenclature: Historical Vignette. *World Neurosurgery*, **2019**, 128, 299-307	2.1	7
55	Improving differential diagnosis of pituitary adenomas. *Expert Review of Endocrinology and Metabolism*, **2014**, 9, 377-386	4.1	7
54	Intramedullary astrocytoma with granular cell differentiation. *Neurosurgical Review*, **2007**, 30, 339-43; discussion 343	3.9	7
53	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	3.2	7
52	Treatment of invasive silent somatotroph pituitary adenoma with temozolomide. Report of a case and review of the literature. *Endocrine Pathology*, **2015**, 26, 135-9	4.2	6
51	Spectrobiopsy in neurodiagnostics: the new era. *Neuroradiology*, **2018**, 60, 129-131	3.2	6
50	Generative Adversarial Networks in Digital Pathology and Histopathological Image Processing: A Review. *Journal of Pathology Informatics*, **2021**, 12, 43	4.4	6
49	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	3.6	6
48	Functional disability after instrumented stabilization in lumbar degenerative spondylolisthesis: a follow-up study. *Functional Neurology*, **2006**, 21, 31-7	2.2	6
47	Vasculogenic Mimicry in Clinically Non-functioning Pituitary Adenomas: a Histologic Study. *Pathology and Oncology Research*, **2017**, 23, 803-809	2.6	5
46	Fractal-based arteriovenous malformations detection in brain magnetic resonance images **2014**,		5

45	The neuroanatomical plates of Guido da Vigevano. *Neurosurgical Focus*, **2007**, 23, E15	4.2	5
44	Oligodendroglial gliomatosis cerebri. Case report. *Journal of Neurosurgical Sciences*, **2006**, 50, 123-5	1.3	5
43	Focal extra-axial hemorrahagic mass with subdural hemorrhage secondare to extramedullary hematopoiesis in idiopathic myelodysplastic sindrome. *Journal of Neurosurgical Sciences*, **2007**, 51, 29-32	1.3	5
42	Spherical coordinates transformation pre-processing in Deep Convolution Neural Networks for brain tumor segmentation in MRI. *Medical and Biological Engineering and Computing*, **2021**, 1	3.1	4
41	The Fractal Geometry of the Brain: An Overview. *Springer Series in Computational Neuroscience*, **2016**, 3-12	1.1	4
40	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	0.9	4
39	Diagnostic and prognostic biomarkers of a sellar melanocytic tumor mimicking pituitary adenoma: Case report and literature review. *Pathology Research and Practice*, **2015**, 211, 682-7	3.4	3
38	Human kallikrein 10 expression in surgically removed human pituitary corticotroph adenomas: an immunohistochemical study. *Applied Immunohistochemistry and Molecular Morphology*, **2015**, 23, 433-7	1.9	3
37	Microvessel density. *Journal of Neurosurgery: Pediatrics*, **2010**, 6, 304-6; author reply 306	2.1	3
36	Memetics in Neurosurgery and Neuroscience. *NeuroQuantology*, **2008**, 6,	4.2	3
35	Application of artificial intelligence and radiomics in pituitary neuroendocrine and sellar tumors: a quantitative and qualitative synthesis. *Neuroradiology*, **2021**, 1	3.2	3
34	Delayed Contralateral Trigeminal Neuralgia After Microvascular Decompression and Postoperative Changes in Venous Outflow. *World Neurosurgery*, **2020**, 140, 107-108	2.1	2
33	Watertight dural closure in brain surgery: a simple model for training. *Journal of Neurological Surgery, Part A: Central European Neurosurgery*, **2014**, 75, 241-5	1.1	2
32	Biomarkers of pituitary carcinomas. *Expert Review of Endocrinology and Metabolism*, **2016**, 11, 253-261	4.1	2
31	Semi-supervised Adversarial Learning for Stain Normalisation in Histopathology Images. *Lecture Notes in Computer Science*, **2021**, 581-591	0.9	2
30	How I do it: 3D exoscopic endoscope-assisted microvascular decompression. *Acta Neurochirurgica*, **2019**, 161, 1443-1447	3	1
29	Canula-assisted endoscopy in bi-portal transphenoidal cranial base surgery: technical note. *Acta Neurochirurgica*, **2013**, 155, 909-11	3	1
28	Advanced computational and statistical multiparametric analysis of Susceptibility-Weighted Imaging to characterize gliomas and brain metastases		1

#	Title		
27	Spatial and time domain analysis of eye-tracking data during screening of brain magnetic resonance images. *PLoS ONE*, **2021**, 16, e0260717	3.7	1
26	Deep Learning Methodology for Differentiating Glioma Recurrence From Radiation Necrosis Using Multimodal Magnetic Resonance Imaging: Algorithm Development and Validation (Preprint)		1
25	Fractals in Neuroimaging. *Springer Series in Computational Neuroscience*, **2016**, 295-309	1.1	1
24	Computational Fractal-Based Analysis of Brain Tumor Microvascular Networks. *Springer Series in Computational Neuroscience*, **2016**, 393-411	1.1	1
23	Histological Fractal-Based Classification of Brain Tumors. *Springer Series in Computational Neuroscience*, **2016**, 371-391	1.1	1
22	Brain volumetric and fractal analysis of synthetic MRI: A comparative study with conventional 3D T1-weighted images. *European Journal of Radiology*, **2021**, 141, 109782	4.7	1
21	Letter to the Editor Regarding "The Exoscope in Neurosurgery: An Innovative Point of View. A Systematic Review of the Technical, Surgical, and Educational Aspects". *World Neurosurgery*, **2019**, 127, 652	2.1	0
20	Human kallikrein 10 in surgically removed human pituitary adenomas. *Hormones*, **2015**, 14, 272-9	3.1	0
19	Do neurosurgeons follow the guidelines? A world-based survey on severe traumatic brain injury. *Journal of Neurosurgical Sciences*, **2021**, 65, 465-473	1.3	0
18	Foundations of Multiparametric Brain Tumour Imaging Characterisation Using Machine Learning. *Acta Neurochirurgica Supplementum*, **2022**, 134, 183-193	1.7	0
17	Fractal Analysis in Neurological Diseases. *Springer Series in Computational Neuroscience*, **2016**, 199-211	1.1	0
16	Paulus of Aegina and the Historical Origins of Spine Surgery. *World Neurosurgery*, **2020**, 133, 291-301	2.1	0
15	Fractal Geometry Meets Computational Intelligence: Future Perspectives. *Springer Series in Computational Neuroscience*, **2016**, 567-580	1.1	0
14	Assessment of eye-tracking scanpath outliers using fractal geometry. *Heliyon*, **2021**, 7, e07616	3.6	0
13	Use of deep learning in the MRI diagnosis of Chiari malformation type I.. *Neuroradiology*, **2022**, 1	3.2	0
12	Computational Fractal-Based Analysis of MR Susceptibility-Weighted Imaging (SWI) in Neuro-oncology and Neurotraumatology. *Springer Series in Computational Neuroscience*, **2016**, 311-332	1.1	
11	Fractals in Neuroanatomy and Basic Neurosciences: An Overview. *Springer Series in Computational Neuroscience*, **2016**, 83-89	1.1	
10	Ghrelin: A GH-Releasing, Appetite-Regulating Gastric Hormone. *Advances in Neuroimmune Biology*, **2013**, 4, 51-65	0.7	

List of Publications

9   Sperm Protein 17: Is It a Useful Target Antigen in Human Pituitary Adenomas?. *Procedia in Vaccinology*, **2012**, 6, 39-46

8   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

7   Fractal-Based Analysis of Arteriovenous Malformations (AVMs). *Springer Series in Computational Neuroscience*, **2016**, 279-293   1.1

6   Training in skull base surgery: a holistic perspective. *Journal of Neurosurgical Sciences*, **2017**, 61, 690-691   1.3

5   In Reply to the Letter to the Editor Regarding "Delayed Contralateral Trigeminal Neuralgia After Microvascular Decompression and Postoperative Change in Venous Outflow". *World Neurosurgery*, **2020**, 142, 564   2.1

4   The Royal Australasian College of Surgeons John Mitchell Crouch Fellowship: a neurosurgical perspective. *ANZ Journal of Surgery*, **2021**, 91, 793-794   1

3   Fractal Analysis in Clinical Neurosciences: An Overview. *Springer Series in Computational Neuroscience*, **2016**, 189-198   1.1

2   Significant venous flow alterations following brain arteriovenous malformation Surgery: Assessment by transcranial colour duplex.. *Journal of Clinical Neuroscience*, **2022**, 99, 268-274   2.2

1   Anchoring of a mental nerve stimulator for treatment of facial neuropathic pain: a case illustration.. *British Journal of Neurosurgery*, **2022**, 1-3   1