

# Amir Amedi

## List of Publications by Year in descending order

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90  
papers

8,077  
citations

87723

38  
h-index

79541

73  
g-index

92  
all docs

92  
docs citations

92  
times ranked

5520  
citing authors

#	ARTICLE	IF	CITATIONS
1	THE PLASTIC HUMAN BRAIN CORTEX. Annual Review of Neuroscience, 2005, 28, 377-401.	5.0	1,452
2	Visuo-haptic object-related activation in the ventral visual pathway. Nature Neuroscience, 2001, 4, 324-330.	7.1	621
3	Early "visual" cortex activation correlates with superior verbal memory performance in the blind. Nature Neuroscience, 2003, 6, 758-766.	7.1	562
4	Convergence of Visual and Tactile Shape Processing in the Human Lateral Occipital Complex. Cerebral Cortex, 2002, 12, 1202-1212.	1.6	375
5	Shape conveyed by visual-to-auditory sensory substitution activates the lateral occipital complex. Nature Neuroscience, 2007, 10, 687-689.	7.1	359
6	A Ventral Visual Stream Reading Center Independent of Visual Experience. Current Biology, 2011, 21, 363-368.	1.8	293
7	Transcranial magnetic stimulation of the occipital pole interferes with verbal processing in blind subjects. Nature Neuroscience, 2004, 7, 1266-1270.	7.1	256
8	Reading with Sounds: Sensory Substitution Selectively Activates the Visual Word Form Area in the Blind. Neuron, 2012, 76, 640-652.	3.8	243
9	Negative BOLD Differentiates Visual Imagery and Perception. Neuron, 2005, 48, 859-872.	3.8	197
10	Origins of the specialization for letters and numbers in ventral occipitotemporal cortex. Trends in Cognitive Sciences, 2015, 19, 374-382.	4.0	180
11	Multisensory Processes: A Balancing Act across the Lifespan. Trends in Neurosciences, 2016, 39, 567-579.	4.2	177
12	Sensory substitution: Closing the gap between basic research and widespread practical visual rehabilitation. Neuroscience and Biobehavioral Reviews, 2014, 41, 3-15.	2.9	165
13	What blindness can tell us about seeing again: merging neuroplasticity and neuroprostheses. Nature Reviews Neuroscience, 2005, 6, 71-77.	4.9	160
14	A Putative Model of Multisensory Object Representation. Brain Topography, 2009, 21, 269-274.	0.8	156
15	Visual Cortex Extrastriate Body-Selective Area Activation in Congenitally Blind People "Seeing" by Using Sounds. Current Biology, 2014, 24, 687-692.	1.8	142
16	EyeMusic: Introducing a "visual" colorful experience for the blind using auditory sensory substitution. Restorative Neurology and Neuroscience, 2014, 32, 247-257.	0.4	136
17	V1 Activation in Congenitally Blind Humans is Associated with Episodic Retrieval. Cerebral Cortex, 2005, 15, 1459-1468.	1.6	135
18	Combined Activation and Deactivation of Visual Cortex During Tactile Sensory Processing. Journal of Neurophysiology, 2007, 97, 1633-1641.	0.9	132

#	ARTICLE	IF	CITATIONS
19	Functional connectivity of visual cortex in the blind follows retinotopic organization principles. <i>Brain</i> , 2015, 138, 1679-1695.	3.7	132
20	The large-Scale Organization of "Visual" Streams Emerges Without Visual Experience. <i>Cerebral Cortex</i> , 2012, 22, 1698-1709.	1.6	115
21	Cortical activity during tactile exploration of objects in blind and sighted humans. <i>Restorative Neurology and Neuroscience</i> , 2010, 28, 143-156.	0.4	107
22	The "EyeCane", a new electronic travel aid for the blind: Technology, behavior & swift learning. <i>Restorative Neurology and Neuroscience</i> , 2014, 32, 813-824.	0.4	107
23	A number-form area in the blind. <i>Nature Communications</i> , 2015, 6, 6026.	5.8	103
24	Multisensory visual-tactile object related network in humans: insights gained using a novel crossmodal adaptation approach. <i>Experimental Brain Research</i> , 2009, 198, 165-182.	0.7	101
25	Extensive Cochleotopic Mapping of Human Auditory Cortical Fields Obtained with Phase-Encoding fMRI. <i>PLoS ONE</i> , 2011, 6, e17832.	1.1	100
26	"Visual"™ Acuity of the Congenitally Blind Using Visual-to-Auditory Sensory Substitution. <i>PLoS ONE</i> , 2012, 7, e33136.	1.1	99
27	Negative blood oxygenation level dependent homunculus and somatotopic information in primary motor cortex and supplementary motor area. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 18565-18570.	3.3	84
28	Origins of task-specific sensory-independent organization in the visual and auditory brain: neuroscience evidence, open questions and clinical implications. <i>Current Opinion in Neurobiology</i> , 2015, 35, 169-177.	2.0	81
29	Massive cortical reorganization in sighted Braille readers. <i>ELife</i> , 2016, 5, e10762.	2.8	81
30	Navigation Using Sensory Substitution in Real and Virtual Mazes. <i>PLoS ONE</i> , 2015, 10, e0126307.	1.1	75
31	Task Selectivity as a Comprehensive Principle for Brain Organization. <i>Trends in Cognitive Sciences</i> , 2017, 21, 307-310.	4.0	75
32	The brain as a flexible task machine. <i>Current Opinion in Neurology</i> , 2012, 25, 86-95.	1.8	71
33	New Whole-Body Sensory-Motor Gradients Revealed Using Phase-Locked Analysis and Verified Using Multivoxel Pattern Analysis and Functional Connectivity. <i>Journal of Neuroscience</i> , 2015, 35, 2845-2859.	1.7	66
34	The Occipital Cortex in the Blind. <i>Current Directions in Psychological Science</i> , 2005, 14, 306-311.	2.8	65
35	Sensory Substitution and the Neural Correlates of Navigation in Blindness. , 2018, , 167-200.		64
36	Increasing Accessibility to the Blind of Virtual Environments, Using a Virtual Mobility Aid Based On the "EyeCane": Feasibility Study. <i>PLoS ONE</i> , 2013, 8, e72555.	1.1	62

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37	Cross-sensory transfer of sensory-motor information: visuomotor learning affects performance on an audiomotor task, using sensory-substitution. <i>Scientific Reports</i> , 2012, 2, 949.	1.6	44
38	Disentangling unisensory and multisensory components in audiovisual integration using a novel multifrequency fMRI spectral analysis. <i>NeuroImage</i> , 2010, 52, 617-632.	2.1	42
39	Multisensory integration, sensory substitution and visual rehabilitation. <i>Neuroscience and Biobehavioral Reviews</i> , 2014, 41, 1-2.	2.9	41
40	Positive and Negative Somatotopic BOLD Responses in Contralateral Versus Ipsilateral Penfield Homunculus. <i>Cerebral Cortex</i> , 2017, 27, 962-980.	1.6	41
41	Decoding Natural Sounds in Early "Visual" Cortex of Congenitally Blind Individuals. <i>Current Biology</i> , 2020, 30, 3039-3044.e2.	1.8	41
42	Increased functional connectivity between language and visually deprived areas in late and partial blindness. <i>NeuroImage</i> , 2016, 136, 162-173.	2.1	37
43	Negative BOLD in Sensory Cortices During Verbal Memory: A Component in Generating Internal Representations?. <i>Brain Topography</i> , 2009, 21, 221-231.	0.8	34
44	Are critical periods reversible in the adult brain? Insights on cortical specializations based on sensory deprivation studies. <i>Neuroscience and Biobehavioral Reviews</i> , 2020, 116, 494-507.	2.9	33
45	Color improves "visual" acuity via sound. <i>Frontiers in Neuroscience</i> , 2014, 8, 358.	1.4	27
46	Discontinuity of cortical gradients reflects sensory impairment. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 16024-16029.	3.3	27
47	Intensity-based masking: A tool to improve functional connectivity results of resting-state fMRI. <i>Human Brain Mapping</i> , 2016, 37, 2407-2418.	1.9	27
48	The origins of metamodality in visual object area LO: Bodily topographical biases and increased functional connectivity to S1. <i>NeuroImage</i> , 2016, 127, 363-375.	2.1	26
49	Perception of Graphical Virtual Environments by Blind Users via Sensory Substitution. <i>PLoS ONE</i> , 2016, 11, e0147501.	1.1	25
50	Reorganization of early visual cortex functional connectivity following selective peripheral and central visual loss. <i>Scientific Reports</i> , 2017, 7, 43223.	1.6	24
51	Neuroplasticity: Unexpected Consequences of Early Blindness. <i>Current Biology</i> , 2015, 25, R998-R1001.	1.8	20
52	Reading in the dark: neural correlates and cross-modal plasticity for learning to read entire words without visual experience. <i>Neuropsychologia</i> , 2016, 83, 149-160.	0.7	20
53	Immediate improvement of speech-in-noise perception through multisensory stimulation via an auditory to tactile sensory substitution. <i>Restorative Neurology and Neuroscience</i> , 2019, 37, 155-166.	0.4	20
54	Neural and behavioral correlates of drawing in an early blind painter: A case study. <i>Brain Research</i> , 2008, 1242, 252-262.	1.1	19

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55	A Whole-Body Sensory-Motor Gradient is Revealed in the Medial Wall of the Parietal Lobe. <i>Journal of Neuroscience</i> , 2019, 39, 7882-7892.	1.7	18
56	Flexibility and Stability in Sensory Processing Revealed Using Visual-to-Auditory Sensory Substitution. <i>Cerebral Cortex</i> , 2015, 25, 2049-2064.	1.6	16
57	Large-Scale Brain Plasticity Following Blindness and the Use of Sensory Substitution Devices. , 2010, , 351-380.		16
58	Vision through other senses: Practical use of Sensory Substitution devices as assistive technology for visual rehabilitation. , 2014, , .		14
59	Waist-up protection for blind individuals using the EyeCane as a primary and secondary mobility aid. <i>Restorative Neurology and Neuroscience</i> , 2017, 35, 225-235.	0.4	12
60	The development of white matter structural changes during the process of deterioration of the visual field. <i>Scientific Reports</i> , 2019, 9, 2085.	1.6	12
61	The Implications of Brain Plasticity and Task Selectivity for Visual Rehabilitation of Blind and Visually Impaired Individuals. <i>Contemporary Clinical Neuroscience</i> , 2018, , 295-321.	0.3	11
62	'Visual' parsing can be taught quickly without visual experience during critical periods. <i>Scientific Reports</i> , 2015, 5, 15359.	1.6	8
63	A self-training program for sensory substitution devices. <i>PLoS ONE</i> , 2021, 16, e0250281.	1.1	8
64	The Effect of Irrelevant Environmental Noise on the Performance of Visual-to-Auditory Sensory Substitution Devices Used by Blind Adults. <i>Multisensory Research</i> , 2019, 32, 87-109.	0.6	7
65	Core knowledge of geometry can develop independently of visual experience. <i>Cognition</i> , 2021, 212, 104716.	1.1	7
66	Integration and binding in rehabilitative sensory substitution: Increasing resolution using a new Zooming-in approach. <i>Restorative Neurology and Neuroscience</i> , 2015, 34, 97-105.	0.4	6
67	Topographic maps and neural tuning for sensory substitution dimensions learned in adulthood in a congenital blind subject. <i>NeuroImage</i> , 2021, 235, 118029.	2.1	6
68	Neurophysiological Mechanisms Underlying Plastic Changes and Rehabilitation following Sensory Loss in Blindness and Deafness. <i>Frontiers in Neuroscience</i> , 2011, , 395-422.	0.0	6
69	Neurophysiological Mechanisms Underlying Plastic Changes and Rehabilitation following Sensory Loss in Blindness and Deafness. <i>Frontiers in Neuroscience</i> , 2011, , 395-422.	0.0	6
70	A case study in phenomenology of visual experience with retinal prosthesis versus visual-to-auditory sensory substitution. <i>Neuropsychologia</i> , 2022, , 108305.	0.7	6
71	Social Sensing. , 2016, , .		5
72	Backward spatial perception can be augmented through a novel visual-to-auditory sensory substitution algorithm. <i>Scientific Reports</i> , 2021, 11, 11944.	1.6	4

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73	The sound of reading: Color-to-timbre substitution boosts reading performance via OVAL, a novel auditory orthography optimized for visual-to-auditory mapping. PLoS ONE, 2020, 15, e0242619.	1.1	4
74	Congenitally blind adults can learn to identify face-shapes via auditory sensory substitution and successfully generalize some of the learned features. Scientific Reports, 2022, 12, 4330.	1.6	4
75	Applying Plasticity to Visual Rehabilitation in Adulthood. , 2012, , 229-254.		3
76	Virtually zooming-in with sensory substitution for blind users. , 2015, , .		3
77	Depth-To-Audio Sensory Substitution for Increasing the Accessibility of Virtual Environments. Lecture Notes in Computer Science, 2014, , 398-406.	1.0	3
78	Vision-deprived virtual navigation patterns using depth cues & the effect of extended sensory range. , 2014, , .		2
79	Body Ownership of Anatomically Implausible Hands in Virtual Reality. Frontiers in Human Neuroscience, 2021, 15, 713931.	1.0	2
80	Seeing with Your Ears: A Wondrous Journey Across the Senses. Frontiers for Young Minds, 2013, 1, .	0.8	1
81	Virtual Self-Training of a Sensory Substitution Device for Blind Individuals. , 2019, , .		1
82	The Topo-Speech Algorithm: An intuitive Sensory Substitution for Spatial Information. , 2019, , .		1
83	A systematic computerized training program for using Sensory Substitution Devices in real-life. , 2019, , .		1
84	Task-selectivity in the sensory deprived brain and sensory substitution approaches for clinical practice. , 2020, , 321-342.		1
85	Applying a novel visual-to-touch sensory substitution for studying tactile reference frames. Scientific Reports, 2021, 11, 10636.	1.6	1
86	The mapping and reconstruction of the brain's mind eye in the absence of visual experience: a population receptive field mapping of soundscape space. Journal of Vision, 2018, 18, 1228.	0.1	0
87	Title is missing!. , 2020, 15, e0242619.		0
88	Title is missing!. , 2020, 15, e0242619.		0
89	Title is missing!. , 2020, 15, e0242619.		0
90	Title is missing!. , 2020, 15, e0242619.		0