Shimon Edelman

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/8002269/publications.pdf

Version: 2024-02-01

98 papers 6,331 citations

34 h-index 74108 75 g-index

107 all docs

107 docs citations

107 times ranked

4266 citing authors

| # | Article | IF | CITATIONS |
|----|--|-----|-----------|
| 1 | Differential Processing of Objects under Various Viewing Conditions in the Human Lateral Occipital Complex. Neuron, 1999, 24, 187-203. | 3.8 | 1,104 |
| 2 | A sequence of object-processing stages revealed by fMRI in the human occipital lobe. Human Brain Mapping, 1998, 6, 316-328. | 1.9 | 438 |
| 3 | Orientation dependence in the recognition of familiar and novel views of three-dimensional objects. Vision Research, 1992, 32, 2385-2400. | 0.7 | 436 |
| 4 | Cue-Invariant Activation in Object-Related Areas of the Human Occipital Lobe. Neuron, 1998, 21, 191-202. | 3.8 | 386 |
| 5 | Representation is representation of similarities. Behavioral and Brain Sciences, 1998, 21, 449-467. | 0.4 | 376 |
| 6 | Representation and Recognition in Vision. , 1999, , . | | 275 |
| 7 | Long-term learning in vernier acuity: Effects of stimulus orientation, range and of feedback. Vision Research, 1993, 33, 397-412. | 0.7 | 268 |
| 8 | Unsupervised learning of natural languages. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 11629-11634. | 3.3 | 241 |
| 9 | Learn locally, act globally: Learning language from variation set cues. Cognition, 2008, 109, 423-430. | 1.1 | 219 |
| 10 | Acoustic sequences in nonâ€human animals: a tutorial review and prospectus. Biological Reviews, 2016, 91, 13-52. | 4.7 | 213 |
| 11 | A model of handwriting. Biological Cybernetics, 1987, 57, 25-36. | 0.6 | 160 |
| 12 | General cognitive principles for learning structure in time and space. Trends in Cognitive Sciences, 2010, 14, 249-258. | 4.0 | 148 |
| 13 | Representation, similarity, and the chorus of prototypes. Minds and Machines, 1995, 5, 45-68. | 2.7 | 135 |
| 14 | Stimulus-specific effects in face recognition over changes in viewpoint. Vision Research, 1998, 38, 2351-2363. | 0.7 | 135 |
| 15 | Generalization to Novel Images in Upright and Inverted Faces. Perception, 1996, 25, 443-461. | 0.5 | 122 |
| 16 | A model of visual recognition and categorization. Philosophical Transactions of the Royal Society B: Biological Sciences, 1997, 352, 1191-1202. | 1.8 | 98 |
| 17 | Towards structural systematicity in distributed, statically bound visual representations. Cognitive Science, 2003, 27, 73-109. | 0.8 | 70 |
| 18 | Models of Perceptual Learning in Vernier Hyperacuity. Neural Computation, 1993, 5, 695-718. | 1.3 | 64 |

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|----|---|------|-----------|
| 19 | How seriously should we take Minimalist syntax?. Trends in Cognitive Sciences, 2003, 7, 60-61. | 4.0 | 64 |
| 20 | On the nature of minds, or: truth and consequences. Journal of Experimental and Theoretical Artificial Intelligence, 2008, 20, 181-196. | 1.8 | 60 |
| 21 | (Coarse coding of shape fragments) + (Retinotopy) â‰^ Representation of structure. Spatial Vision, 2000, 13, 255-264. | 1.4 | 58 |
| 22 | The evolution of cognitive mechanisms in response to cultural innovations. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 7915-7922. | 3.3 | 57 |
| 23 | An empirical generative framework for computational modeling of language acquisition. Journal of Child Language, 2010, 37, 671-703. | 0.8 | 56 |
| 24 | Evolved to adapt: A computational approach to animal innovation and creativity. Environmental Epigenetics, 2015, 61, 350-368. | 0.9 | 56 |
| 25 | Evolution of protolinguistic abilities as a by-product of learning to forage in structured environments. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20150353. | 1.2 | 53 |
| 26 | Representation of objective similarity among three-dimensional shapes in the monkey. Biological Cybernetics, 1998, 78, 1-7. | 0.6 | 52 |
| 27 | Canonical views in object representation and recognition. Vision Research, 1994, 34, 3037-3056. | 0.7 | 50 |
| 28 | Representation of object similarity in human vision: psychophysics and a computational model. Vision Research, 1998, 38, 2229-2257. | 0.7 | 50 |
| 29 | Visual Recognition and Categorization on the Basis of Similarities to Multiple Class Prototypes. International Journal of Computer Vision, 1999, 33, 201-228. | 10.9 | 49 |
| 30 | Receptive field spaces and class-based generalization from a single view in face recognition. Network: Computation in Neural Systems, 1995, 6, 551-576. | 2.2 | 48 |
| 31 | Representation of Similarity in Three-Dimensional Object Discrimination. Neural Computation, 1995, 7, 408-423. | 1.3 | 48 |
| 32 | Reading cursive handwriting by alignment of letter prototypes. International Journal of Computer Vision, 1990, 5, 303-331. | 10.9 | 47 |
| 33 | Towards a computational theory of experience. Consciousness and Cognition, 2011, 20, 807-827. | 0.8 | 43 |
| 34 | Combining Classification with fMRI-Derived Complex Network Measures for Potential Neurodiagnostics. PLoS ONE, 2013, 8, e62867. | 1.1 | 39 |
| 35 | The evolution of the capacity for language: the ecological context and adaptive value of a process of cognitive hijacking. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170052. | 1.8 | 38 |
| 36 | Learning as Extraction of Low-Dimensional Representations. Psychology of Learning and Motivation - Advances in Research and Theory, 1997, 36, 353-380. | 0.5 | 36 |

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|----|---|-----|-----------|
| 37 | Similarity, Connectionism, and the Problem of Representation in Vision. Neural Computation, 1997, 9, 701-720. | 1.3 | 31 |
| 38 | Constraining the neural representation of the visual world. Trends in Cognitive Sciences, 2002, 6, 125-131. | 4.0 | 29 |
| 39 | The interaction of shape- and location-based priming in object categorisation: Evidence for a hybrid "what+where―representation stage. Vision Research, 2005, 45, 2065-2080. | 0.7 | 28 |
| 40 | Imperfect Invariance to Object Translation in the Discrimination of Complex Shapes. Perception, 2001, 30, 707-724. | 0.5 | 27 |
| 41 | Learning a Generative Probabilistic Grammar of Experience: A Processâ€Level Model of Language Acquisition. Cognitive Science, 2015, 39, 227-267. | 0.8 | 27 |
| 42 | Renewing the respect for similarity. Frontiers in Computational Neuroscience, 2012, 6, 45. | 1.2 | 24 |
| 43 | Juvenile zebra finches learn the underlying structural regularities of their fathers' song. Frontiers in Psychology, 2015, 6, 571. | 1.1 | 23 |
| 44 | The evolution of continuous learning of the structure of the environment. Journal of the Royal Society Interface, 2014, 11, 20131091. | 1.5 | 22 |
| 45 | Dynamical Emergence Theory (DET): A Computational Account of Phenomenal Consciousness. Minds and Machines, 2020, 30, 1-21. | 2.7 | 21 |
| 46 | Representing three-dimensional objects by sets of activities of receptive fields. Biological Cybernetics, 1993, 70, 37-45. | 0.6 | 20 |
| 47 | Between Pleasure and Contentment: Evolutionary Dynamics of Some Possible Parameters of Happiness. PLoS ONE, 2016, 11, e0153193. | 1.1 | 19 |
| 48 | The minority report: some common assumptions to reconsider in the modelling of the brain and behaviour. Journal of Experimental and Theoretical Artificial Intelligence, 2016, 28, 751-776. | 1.8 | 18 |
| 49 | Models of object recognition. Current Opinion in Neurobiology, 1991, 1, 270-273. | 2.0 | 17 |
| 50 | Line connectivity algorithms for an asynchronous pyramid computer. Computer Vision, Graphics, and Image Processing, 1987, 40, 169-187. | 1.1 | 13 |
| 51 | System, Subsystem, Hive: Boundary Problems in Computational Theories of Consciousness. Frontiers in Psychology, 2016, 7, 1041. | 1.1 | 13 |
| 52 | Learning of visual modules from examples: A framework for understanding adaptive visual performance. CVGIP Image Understanding, 1992, 56, 22-30. | 1.3 | 11 |
| 53 | Representation of similarity as a goal of early visual processing. Network: Computation in Neural Systems, 1995, 6, 19-41. | 2.2 | 11 |
| 54 | Language and other complex behaviors: Unifying characteristics, computational models, neural mechanisms. Language Sciences, 2017, 62, 91-123. | 0.5 | 11 |

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|----|---|-----|-----------|
| 55 | Six Challenges to Theoretical and Philosophical Psychology. Frontiers in Psychology, 2012, 3, 219. | 1.1 | 10 |
| 56 | The problem of multimodal concurrent serial order in behavior. Neuroscience and Biobehavioral Reviews, 2015, 56, 252-265. | 2.9 | 9 |
| 57 | Dynamic Computation in Visual Thalamocortical Networks. Entropy, 2019, 21, 500. | 1.1 | 9 |
| 58 | Representation of similarity as a goal of early visual processing. Network: Computation in Neural Systems, 1995, 6, 19-41. | 2.2 | 9 |
| 59 | Class similarity and viewpoint invariance in the recognition of 3D objects. Biological Cybernetics, 1995, 72, 207-220. | 0.6 | 9 |
| 60 | Receptive field spaces and class-based generalization from a single view in face recognition. Network: Computation in Neural Systems, 1995, 6, 551-576. | 2.2 | 8 |
| 61 | Multidimensional space: the final frontier. Nature Neuroscience, 2002, 5, 1252-1254. | 7.1 | 7 |
| 62 | Vision, Reanimated and Reimagined. Perception, 2012, 41, 1116-1127. | 0.5 | 7 |
| 63 | Neural spaces: A general framework for the understanding of cognition?. Behavioral and Brain Sciences, 2001, 24, 664-665. | 0.4 | 6 |
| 64 | On Look-Ahead in Language: Navigating a Multitude of Familiar Paths., 2011,, 170-189. | | 6 |
| 65 | The neglected universals: Learnability constraints and discourse cues. Behavioral and Brain Sciences, 2009, 32, 471-472. | 0.4 | 5 |
| 66 | Similarity, kernels, and the fundamental constraints on cognition. Journal of Mathematical Psychology, 2016, 70, 21-34. | 1.0 | 5 |
| 67 | The (lack of) mental life of some machines. Advances in Consciousness Research, 2012, , 95-120. | 0.2 | 5 |
| 68 | To bee or not to bee?. Animal Sentience, 2016, 1, . | 0.3 | 5 |
| 69 | A swan, a pike, and a crawfish walk into a bar. Journal of Experimental and Theoretical Artificial Intelligence, 2008, 20, 257-264. | 1.8 | 4 |
| 70 | Varieties of perceptual truth and their possible evolutionary roots. Psychonomic Bulletin and Review, 2015, 22, 1519-1522. | 1.4 | 4 |
| 71 | Happiness as an intrinsic motivator in reinforcement learning. Adaptive Behavior, 2016, 24, 292-305. | 1.1 | 4 |
| 72 | Parental speech to typical and atypical populations: a study on linguistic partial repetition. Language Sciences, 2021, 83, 101311. | 0.5 | 4 |

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|----|---|-----|-----------|
| 73 | A possible evolutionary function of phenomenal conscious experience of pain. Neuroscience of Consciousness, 2021, 2021, niab012. | 1.4 | 4 |
| 74 | Learning low-dimensional representations via the usage of multiple-class labels. Network: Computation in Neural Systems, 1997, 8, 259-281. | 2.2 | 4 |
| 75 | Regarding Reality: Some Consequences of Two Incapacities. Frontiers in Psychology, 2011, 2, 44. | 1.1 | 3 |
| 76 | THE METAPHYSICS OF EMBODIMENT. International Journal of Machine Consciousness, 2011, 03, 321-325. | 1.0 | 3 |
| 77 | Fundamental computational constraints on the time course of perception and action. Progress in Brain Research, 2017, 236, 121-141. | 0.9 | 3 |
| 78 | Beyond uncertainty: A broader scope for "incentive hope―mechanisms and its implications. Behavioral and Brain Sciences, 2019, 42, e44. | 0.4 | 3 |
| 79 | Competitive learning in biological and artificial neural computation. Trends in Cognitive Sciences, 1997, 1, 268-272. | 4.0 | 2 |
| 80 | No reconstruction, no impenetrability (at least not much). Behavioral and Brain Sciences, 1999, 22, 376-376. | 0.4 | 2 |
| 81 | On the virtues of going all the way. Behavioral and Brain Sciences, 1999, 22, 614-614. | 0.4 | 2 |
| 82 | Better limited systematicity in hand than structural descriptions in the bush: A reply to Hummel. Cognitive Science, 2003, 27, 331-332. | 0.8 | 2 |
| 83 | Survival in a world of probable objects: A fundamental reason for Bayesian enlightenment. Behavioral and Brain Sciences, 2011, 34, 197-198. | 0.4 | 2 |
| 84 | The bottleneck may be the solution, not the problem. Behavioral and Brain Sciences, 2016, 39, e83. | 0.4 | 2 |
| 85 | Being in time. Advances in Consciousness Research, 2012, , 81-94. | 0.2 | 2 |
| 86 | Evolution of Dynamic Coordination., 2010,, 59-82. | | 2 |
| 87 | Generative grammar with a human face?. Behavioral and Brain Sciences, 2003, 26, 675-676. | 0.4 | 1 |
| 88 | On What It Means to See, and WhatWe Can Do About It., 0,, 69-86. | | 1 |
| 89 | How representation works is more important than what representations are. Behavioral and Brain Sciences, 1995, 18, 630-631. | 0.4 | 0 |
| 90 | An integrated approach to the study of object features in visual recognition. Network: Computation in Neural Systems, 1995, 6, 603-618. | 2.2 | 0 |

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|----|--|-----|-----------|
| 91 | Things are what they seem. Behavioral and Brain Sciences, 1998, 21, 25-25. | 0.4 | O |
| 92 | Shape representation by Second-order Isomorphism and the Chorus model: SIC. Behavioral and Brain Sciences, 1998, 21, 484-493. | 0.4 | 0 |
| 93 | Brahe, looking for Kepler. Behavioral and Brain Sciences, 2000, 23, 538-540. | 0.4 | O |
| 94 | Ted Briscoe (ed.), Linguistic evolution through language acquisition: formal and computational models. Cambridge: Cambridge University Press, 2002. Pp. vii+349 Journal of Linguistics, 2004, 40, 396-400. | 0.5 | 0 |
| 95 | How to write a †how-to-build-a-brain' book. Trends in Cognitive Sciences, 2014, 18, 118-119. | 4.0 | 0 |
| 96 | Cortical Transformation of Stimulus Space in Order to Linearize a Linearly Inseparable Task. Journal of Cognitive Neuroscience, 2020, 32, 2342-2355. | 1.1 | 0 |
| 97 | Dissociating the Effects of Relevance and Predictability on Visual Detection Sensitivity. Journal of Vision, 2017, 17, 149. | 0.1 | 0 |
| 98 | Damasio, Antonio, 2018. The Strange Order of Things: Life, Feeling, and the Making of Cultures. New York: Pantheon. 336 pages Evolutionary Studies in Imaginative Culture, 2018, 2, 119-124. | 0.1 | 0 |