## Masaki Kobayashi

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/4527572/publications.pdf

Version: 2024-02-01

82	989	18	27
papers	citations	h-index	g-index
82	82	82	327 citing authors
all docs	docs citations	times ranked	

#	Article	IF	CITATIONS
1	Hyperbolic Hopfield Neural Networks. IEEE Transactions on Neural Networks and Learning Systems, 2013, 24, 335-341.	11.3	61
2	Quaternionic Hopfield neural networks with twin-multistate activation function. Neurocomputing, 2017, 267, 304-310.	5.9	42
3	Projection Rule for Rotor Hopfield Neural Networks. IEEE Transactions on Neural Networks and Learning Systems, 2014, 25, 1298-1307.	11.3	41
4	Twin-multistate commutative quaternion Hopfield neural networks. Neurocomputing, 2018, 320, 150-156.	5.9	41
5	Hyperbolic Hopfield neural networks with directional multistate activation function. Neurocomputing, 2018, 275, 2217-2226.	5.9	36
6	Symmetric Complex-Valued Hopfield Neural Networks. IEEE Transactions on Neural Networks and Learning Systems, 2017, 28, 1011-1015.	11.3	35
7	Exceptional Reducibility of Complex-Valued Neural Networks. IEEE Transactions on Neural Networks, 2010, 21, 1060-1072.	4.2	34
8	Rotational invariance of quaternionic hopfield neural networks. IEEJ Transactions on Electrical and Electronic Engineering, 2016, 11, 516-520.	1.4	30
9	PSEUDO-RELAXATION LEARNING ALGORITHM FOR COMPLEX-VALUED ASSOCIATIVE MEMORY. International Journal of Neural Systems, 2008, 18, 147-156.	5.2	29
10	Hybrid Quaternionic Hopfield Neural Network. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2015, E98.A, 1512-1518.	0.3	26
11	Automatic sleep stage scoring based on waveform recognition method and decision-tree learning. Systems and Computers in Japan, 2002, 33, 1-13.	0.2	25
12	Gradient descent learning rule for complexâ€valued associative memories with large constant terms. IEEJ Transactions on Electrical and Electronic Engineering, 2016, 11, 357-363.	1.4	25
13	Noise Robust Projection Rule for Hyperbolic Hopfield Neural Networks. IEEE Transactions on Neural Networks and Learning Systems, 2020, 31, 352-356.	11.3	25
14	Attractors accompanied with a training pattern of multivalued hopfield neural networks. IEEJ Transactions on Electrical and Electronic Engineering, 2015, 10, 195-200.	1.4	23
15	Noise Robust Gradient Descent Learning for Complex-Valued Associative Memory. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2011, E94-A, 1756-1759.	0.3	21
16	Complex-Valued Bipartite Auto-Associative Memory. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2014, E97.A, 1680-1687.	0.3	21
17	Stability of Rotor Hopfield Neural Networks With Synchronous Mode. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 744-748.	11.3	20
18	Decomposition of Rotor Hopfield Neural Networks Using Complex Numbers. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 1366-1370.	11.3	20

#	Article	IF	CITATIONS
19	Singularities of Three-Layered Complex-Valued Neural Networks With Split Activation Function. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 1900-1907.	11.3	19
20	Gradient descent learning for quaternionic Hopfield neural networks. Neurocomputing, 2017, 260, 174-179.	5.9	18
21	Projection rule for complex-valued associative memory with large constant terms. Nonlinear Theory and Its Applications IEICE, 2012, 3, 426-435.	0.6	16
22	Symmetric quaternionic Hopfield neural networks. Neurocomputing, 2017, 240, 110-114.	5.9	16
23	Hypercomplex Widely Linear Estimation Through the Lens of Underpinning Geometry. IEEE Transactions on Signal Processing, 2019, 67, 3985-3994.	5.3	16
24	Twisted quaternary neural networks. IEEJ Transactions on Electrical and Electronic Engineering, 2012, 7, 397-401.	1.4	15
25	Storage capacity of hyperbolic Hopfield neural networks. Neurocomputing, 2019, 369, 185-190.	5.9	15
26	Hopfield neural networks using Klein four-group. Neurocomputing, 2020, 387, 123-128.	5.9	15
27	Global Hyperbolic Hopfield Neural Networks. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2016, E99.A, 2511-2516.	0.3	14
28	Fundamental Abilities of Rotor Associative Memory. , 2010, , .		13
29	Storage capacity of rotor Hopfield neural networks. Neurocomputing, 2018, 316, 30-33.	5.9	13
30	Fixed points of split quaternionic hopfield neural networks. Signal Processing, 2017, 136, 38-42.	3.7	11
31	Uniqueness theorem for quaternionic neural networks. Signal Processing, 2017, 136, 102-106.	3.7	11
32	\$O(2)\$ -Valued Hopfield Neural Networks. IEEE Transactions on Neural Networks and Learning Systems, 2019, 30, 3833-3838.	11.3	11
33	Bicomplex-valued twin-hyperbolic Hopfield neural networks. Neurocomputing, 2021, 434, 203-210.	5.9	11
34	Hyperbolic Hopfield neural networks with fourâ€state neurons. IEEJ Transactions on Electrical and Electronic Engineering, 2017, 12, 428-433.	1.4	10
35	Complex-valued Hopfield neural networks with real weights in synchronous mode. Neurocomputing, 2021, 423, 535-540.	5.9	10

Construction of high-dimensional neural networks by linear connections of matrices. Electronics and Communications in Japan, Part III: Fundamental Electronic Science (English Translation of Denshi) Tj ETQq0 0 00gBT /Overlock 10 Tf

2

36

#	Article	IF	Citations
37	Rotor Associative Memory with a Periodic Activation Function. , 2012, , .		9
38	Multistate vector product hopfield neural networks. Neurocomputing, 2018, 272, 425-431.	5.9	9
39	Complex-valued multidirectional associative memory. Electrical Engineering in Japan (English) Tj ETQq1 1 0.78431	14 rgBT /C	verlock 10 T
40	Fast Recall for Complex-Valued Hopfield Neural Networks with Projection Rules. Computational Intelligence and Neuroscience, 2017, 2017, 1-6.	1.7	8
41	Quaternion-Valued Twin-Multistate Hopfield Neural Networks With Dual Connections. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 892-899.	11.3	8
42	Dynamic Complex-Valued Associative Memory with Strong Bias Terms. Lecture Notes in Computer Science, 2011, , 509-518.	1.3	8
43	Uniqueness Theorem of Complex-Valued Neural Networks with Polar-Represented Activation Function. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2015, E98.A, 1937-1943.	0.3	7
44	Chaotic pseudo-orthogonalized Hopfield associative memory. Neurocomputing, 2017, 241, 147-151.	5.9	7
45	Pseudomemories of twoâ€dimensional multistate hopfield neural networks. IEEJ Transactions on Electrical and Electronic Engineering, 2017, 12, 269-272.	1.4	7
46	Split Quaternion-Valued Twin-Multistate Hopfield Neural Networks. Advances in Applied Clifford Algebras, 2020, 30, 1.	1.0	7
47	Multidirectional associative memory with a hidden layer. Systems and Computers in Japan, 2002, 33, 1-9.	0.2	6
48	Chaotic complex-valued bidirectional associative memory with a real-valued context part. Nonlinear Theory and Its Applications IEICE, 2013, 4, 299-312.	0.6	6
49	On the performance of Quaternionic Bidirectional Auto-Associative Memory. , 2015, , .		6
50	Three-Dimensional Quaternionic Hopfield Neural Networks. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2017, E100.A, 1575-1577.	0.3	6
51	Two-Level Complex-Valued Hopfield Neural Networks. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 2274-2278.	11.3	6
52	Quaternion Projection Rule for Rotor Hopfield Neural Networks. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 900-908.	11.3	6
53	Gradient Descent Learning for Rotor Associative Memory. IEEJ Transactions on Electronics, Information and Systems, 2011, 131, 116-121.	0.2	6
54	Multidirectional associative memory with two hidden layers. IEEJ Transactions on Electrical and Electronic Engineering, 2013, 8, 299-300.	1.4	5

#	Article	IF	CITATIONS
55	Complex-valued bidirectional auto-associative memory. , 2013, , .		5
56	Synthesis of complex- and hyperbolic-valued Hopfield neural networks. Neurocomputing, 2021, 423, 80-88.	5.9	5
57	Diagonal rotor Hopfield neural networks. Neurocomputing, 2020, 415, 40-47.	5.9	5
58	Prime producing quadratic polynomials and class-number one problem for real quadratic fields. Proceedings of the Japan Academy Series A: Mathematical Sciences, 1990, 66, .	0.4	5
59	Dualâ€numbered Hopfield neural networks. IEEJ Transactions on Electrical and Electronic Engineering, 2018, 13, 280-284.	1.4	4
60	Hyperbolic-Valued Hopfield Neural Networks in Synchronous Mode. Neural Computation, 2020, 32, 1685-1696.	2.2	4
61	Hyperbolic-valued Hopfield neural networks in hybrid mode. Neurocomputing, 2021, 440, 275-278.	5.9	4
62	Information geometry of rotor Boltzmann machines. Nonlinear Theory and Its Applications IEICE, 2016, 7, 266-282.	0.6	3
63	Storage Capacities of Twin-Multistate Quaternion Hopfield Neural Networks. Computational Intelligence and Neuroscience, 2018, 2018, 1-5.	1.7	3
64	Bicomplex Projection Rule for Complex-Valued Hopfield Neural Networks. Neural Computation, 2020, 32, 2237-2248.	2.2	3
65	Matrix-valued twin-multistate Hopfield neural networks. Neurocomputing, 2020, 397, 108-113.	5.9	3
66	Stability Conditions of Bicomplex-Valued Hopfield Neural Networks. Neural Computation, 2021, 33, 552-562.	2.2	3
67	Reducing Spurious States by Rotor Associative Memory. IEEJ Transactions on Electronics, Information and Systems, 2011, 131, 109-115.	0.2	3
68	Three-Dimensional Associative Memory Using Exterior Product. IEEJ Transactions on Electronics, Information and Systems, 2004, 124, 150-156.	0.2	2
69	Pattern Retrieval by Quaternionic Associative Memory with Dual Connections. Lecture Notes in Computer Science, 2016, , 317-325.	1.3	2
70	Fixed points of symmetric complex-valued Hopfield neural networks. Neurocomputing, 2018, 275, 132-136.	5.9	2
71	Reducibilities of hyperbolic neural networks. Neurocomputing, 2020, 378, 129-141.	5.9	2
72	On Ono's problem for quadratic fields. Proceedings of the Japan Academy Series A: Mathematical Sciences, 1993, 69, .	0.4	2

#	Article	IF	CITATIONS
73	Multidirectional associative memory with self-connections. Nonlinear Theory and Its Applications IEICE, 2014, 5, 222-234.	0.6	1
74	Retrieval performance of Hopfield Associative Memory with Complex-valued and Real-valued neurons. , 2016, , .		1
75	Chaotic complexâ€valued bipartite autoâ€associative memory with a periodic activation function. IEEJ Transactions on Electrical and Electronic Engineering, 2017, 12, 584-588.	1.4	1
76	Gradient Descent Learning for Hyperbolic Hopfield Associative Memory. Transactions of the Institute of Systems Control and Information Engineers, 2021, 34, 11-22.	0.1	1
77	Information geometry of hyperbolic-valued Boltzmann machines. Neurocomputing, 2021, 431, 163-168.	5.9	1
78	Noise-Robust Projection Rule for Rotor and Matrix-Valued Hopfield Neural Networks. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 567-576.	11.3	1
79	On generators of ideal class groups in quadratic fields. Japanese Journal of Mathematics, 1995, 21, 105-116.	2.1	0
80	A Projection Rule for Complexâ€Valued Associative Memory with Partial Connections. IEEJ Transactions on Electrical and Electronic Engineering, 2020, 15, 1327-1336.	1.4	0
81	Noise Robust Projection Rule for Klein Hopfield Neural Networks. Neural Computation, 2021, 33, 1698-1716.	2.2	0
82	Storage Capacity of Quaternion-Valued Hopfield Neural Networks With Dual Connections. Neural Computation, 2021, 33, 2226-2240.	2.2	0