## Réjean Plamondon

List of Publications by Year in descending order

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167 papers 8,577 citations

38 h-index 85 g-index

170 all docs

170 docs citations

170 times ranked

3020 citing authors

#	Article	IF	Citations
1	Reliability of the kinematic theory parameters during handwriting tasks on a vertical setup. Biomedical Signal Processing and Control, 2022, 71, 103157.	5.7	2
2	On Handwriting Pressure Normalization for Interoperability of Different Acquisition Stylus. IEEE Access, 2021, 9, 18443-18453.	4.2	3
3	Human or Machine? It Is Not What You Write, But How You Write It. , 2021, , .		3
4	iDeLog: Iterative Dual Spatial and Kinematic Extraction of Sigma-Lognormal Parameters. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2020, 42, 114-125.	13.9	28
5	Kinematic analysis of fast pen strokes in children with ADHD. Applied Neuropsychology: Child, 2020, 9, 125-140.	1.4	17
6	Handwriting Biometrics: Applications and Future Trends in e-Security and e-Health. Cognitive Computation, 2020, 12, 940-953.	5.2	71
7	Omnis $Pr\tilde{A}^{\dagger}_{l}$ dictio: Estimating the full spectrum of human performance with stroke gestures. International Journal of Human Computer Studies, 2020, 142, 102466.	5.6	9
8	Central and Peripheral Shoulder Fatigue Pre-screening Using the Sigma–Lognormal Model: A Proof of Concept. Frontiers in Human Neuroscience, 2020, 14, 171.	2.0	8
9	The Lognormality Principle: A Personalized Survey. Series in Machine Perception and Artificial Intelligence, 2020, , 1-39.	0.1	4
10	The Lognormality Principle and its Applications in e-Security, e-Learning and e-Health. Series in Machine Perception and Artificial Intelligence, 2020, , .	0.1	3
11	Muscle activation profiles based on the proportionality hypothesis of the Kinematic Theory of Human Movements. , 2020, , .		O
12	Modeling 3D Movements with the Kinematic Theory of Rapid Human Movements. Series in Machine Perception and Artificial Intelligence, 2020, , 327-342.	0.1	4
13	An Interactive Tablet-based System to Run Neuromuscular Tests. Series in Machine Perception and Artificial Intelligence, 2020, , 269-288.	0.1	5
14	Analysing the Evolution of Children's Neuromotor System Lognormality after Mild Traumatic Bain Injury. Series in Machine Perception and Artificial Intelligence, 2020, , 143-160.	0.1	4
15	Characteristics of bi-directional unimanual and bimanual drawing movements: The application of the Delta-Lognormal models and Sigma-Lognormal model. Pattern Recognition Letters, 2019, 121, 97-103.	4.2	8
16	Generating Off-line and On-line Forgeries from On-line Genuine Signatures. , 2019, , .		5
17	A Perspective Analysis of Handwritten Signature Technology. ACM Computing Surveys, 2019, 51, 1-39.	23.0	142
18	Graphonomics for the e-citizens: e-health, e-society and e-education. Pattern Recognition Letters, 2019, 121, 1-5.	4.2	2

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19	Personal digital bodyguards for e-security, e-learning and e-health: A prospective survey. Pattern Recognition, 2018, 81, 633-659.	8.1	37
20	General relativity: An erfc metric. Results in Physics, 2018, 9, 456-462.	4.1	2
21	Dynamic Signature Verification System Based on One Real Signature. IEEE Transactions on Cybernetics, 2018, 48, 228-239.	9.5	84
22	A Biometric Attack Case Based on Signature Synthesis. , 2018, , .		6
23	Multimodal Acquisition and Analysis of Children Handwriting for the Study of the Efficiency of Their Handwriting Movements: The @MaGma Challenge. , 2018, , .		0
24	KeyTime. , 2018, , .		21
25	A 12-Week Cycling Training Regimen Improves Upper Limb Functions in People With Parkinson's Disease. Frontiers in Human Neuroscience, 2018, 12, 351.	2.0	13
26	Cranio-Caudal Kinematic Turn Signature Assessed with Inertial Systems As a Marker of Mobility Deficits in Parkinson's Disease. Frontiers in Neurology, 2018, 9, 22.	2.4	8
27	Gesture Input for Users with Motor Impairments on Touchscreens. , 2018, , .		15
28	A sigma-lognormal model-based approach to generating large synthetic online handwriting sample databases. International Journal on Document Analysis and Recognition, 2017, 20, 155-171.	3.4	21
29	Guest Editorial Special Issue on Drawing and Handwriting Processing for User-Centered Systems. IEEE Transactions on Human-Machine Systems, 2017, 47, 165-168.	3.5	1
30	Signature Verification Based on the Kinematic Theory of Rapid Human Movements. IEEE Transactions on Human-Machine Systems, 2017, 47, 169-180.	<b>3.</b> 5	46
31	Calligraphic Stylisation Learning with a Physiologically Plausible Model of Movement and Recurrent Neural Networks. , 2017, , .		13
32	Forgetting of unused classes in missing data environment using automatically generated data: Application to on-line handwritten gesture command recognition. Pattern Recognition, 2017, 72, 355-367.	8.1	8
33	Capturing the Cranio-Caudal Signature of a Turn with Inertial Measurement Systems: Methods, Parameters Robustness and Reliability. Frontiers in Bioengineering and Biotechnology, 2017, 5, 51.	4.1	17
34	The Kinematic Theory Produces Human-Like Stroke Gestures. Interacting With Computers, 2017, , .	1.5	11
35	Study of several parameters for the detection of amyotrophic lateral sclerosis from articulatory movement. Loquens, 2017, 4, 038.	0.1	4
36	Solar system anomalies: Revisiting Hubble's law. Physics Essays, 2017, 30, 404-412.	0.4	2

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37	Periodic oscillatory behavior on a four-node neural network model with distributed delay. International Journal of Machine Learning and Cybernetics, 2016, 7, 185-191.	3.6	1
38	Strokes of insight: User intent detection and kinematic compression of mouse cursor trails. Information Processing and Management, 2016, 52, 989-1003.	8.6	24
39	Periodic and partly periodic oscillation in Hopfield recurrent neural networks with time-varying input and delays. , 2016, , .		0
40	On the Design of Personal Digital Bodyguards: Impact of Hardware Resolution on Handwriting Analysis. , $2016,  \ldots$		6
41	Kinematic Modelling of Dipthong Articulation. Smart Innovation, Systems and Technologies, 2016, , 53-60.	0.6	8
42	A 12-Week Cycling Training Regimen Improves Gait and Executive Functions Concomitantly in People with Parkinson's Disease. Frontiers in Human Neuroscience, 2016, 10, 690.	2.0	35
43	Gestures à Go Go. ACM Transactions on Intelligent Systems and Technology, 2016, 7, 1-29.	4.5	35
44	Application of the Lognormal Model to the Vocal Tract Movement to Detect Neurological Diseases in Voice. Smart Innovation, Systems and Technologies, 2016, , 25-35.	0.6	5
45	Towards an automatic on-line signature verifier using only one reference per signer. , 2015, , .		24
46	A sigma-lognormal model for character level CAPTCHA generation. , 2015, , .		4
47	Combining sigma-lognormal modeling and classical features for analyzing graphomotor performances in kindergarten children. Human Movement Science, 2015, 43, 183-200.	1.4	26
48	Enhanced on-line signature verification based on skilled forgery detection using Sigma-LogNormal Features. , 2015, , .		25
49	Robust score normalization for DTW-based on-line signature verification. , 2015, , .		38
50	Improving sigma-lognormal parameter extraction. , 2015, , .		12
51	EMERGENCE OF A QUASI NEWTONIAN LAW OF GRAVITATION: A GEOMETRICAL IMPACT STUDY. , 2015, , .		1
52	Linking brain stroke risk factors to human movement features for the development of preventive tools. Frontiers in Aging Neuroscience, 2014, 6, 150.	3.4	17
53	A Sigma-Lognormal Model for Handwritten Text CAPTCHA Generation. , 2014, , .		3
54	Neuromuscular Representation and Synthetic Generation of Handwritten Whiteboard Notes., 2014,,.		11

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55	Training of On-Line Handwriting Text Recognizers with Synthetic Text Generated Using the Kinematic Theory of Rapid Human Movements. , $2014$ , , .		10
56	Recent developments in the study of rapid human movements with the kinematic theory: Applications to handwriting and signature synthesis. Pattern Recognition Letters, 2014, 35, 225-235.	4.2	71
57	Online Signature Verification. , 2014, , 917-947.		23
58	Strokes against strokeâ€"strokes for strides. Pattern Recognition, 2014, 47, 929-944.	8.1	25
59	Writing Generation Model for Health Care Neuromuscular System Investigation. Lecture Notes in Computer Science, 2014, , 137-148.	1.3	14
60	A Hausdorff Heuristic for Efficient Computation of Graph Edit Distance. Lecture Notes in Computer Science, 2014, , 83-92.	1.3	9
61	Agonistic and antagonistic interaction in speed/accuracy tradeoff: A delta-lognormal perspective. Human Movement Science, 2013, 32, 1040-1055.	1.4	8
62	Using kinematic analysis of movement to predict the time occurrence of an evoked potential associated with a motor command. European Journal of Neuroscience, 2013, 37, 173-180.	2.6	14
63	Time-dependence between upper arm muscles activity during rapid movements: Observation of the proportional effects predicted by the kinematic theory. Human Movement Science, 2013, 32, 1026-1039.	1.4	19
64	Variations of handwritten signatures with time: A sigma-lognormal analysis., 2013,,.		5
65	The lognormal handwriter: learning, performing, and declining. Frontiers in Psychology, 2013, 4, 945.	2.1	57
66	Stability of Dynamic Signatures: From the Representation to the Generation Domain. Lecture Notes in Computer Science, 2013, , 122-130.	1.3	3
67	A Globally Optimal Estimator for the Delta-Lognormal Modeling of Fast Reaching Movements. IEEE Transactions on Systems, Man, and Cybernetics, 2012, 42, 1428-1442.	5.0	13
68	Design of a neuromuscular disorders diagnostic system using human movement analysis. , 2012, , .		25
69	Invited Lecture I: Strokes against Stroke - Stroke For Strides. , 2012, , .		2
70	Handwritten Signature Verification: New Advancements and Open Issues. , 2012, , .		44
71	An oscillatory criterion for a time delayed neural ring network model. Neural Networks, 2012, 29-30, 70-79.	5.9	12
72	Synthetic on-line signature generation. Part II: Experimental validation. Pattern Recognition, 2012, 45, 2622-2632.	8.1	48

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73	Synthetic on-line signature generation. Part I: Methodology and algorithms. Pattern Recognition, 2012, 45, 2610-2621.	8.1	102
74	Analyzing Oscillations for an \$N\$-node Recurrent Neural Networks Model With Time Delays and General Activation Functions. IEEE Transactions on Circuits and Systems I: Regular Papers, 2011, 58, 1877-1887.	5.4	7
75	Quality Analysis of Dynamic Signature Based on the Sigma-Lognormal Model. , 2011, , .		10
76	Kinematic characteristics of bidirectional delta-lognormal primitives in young and older subjects. Human Movement Science, $2011, 30, 1-17$ .	1,4	32
77	Impact of the principal stroke risk factors on human movements. Human Movement Science, 2011, 30, 792-806.	1.4	27
78	Can computer mice be used as low-cost devices for the acquisition of planar human movement velocity signals?. Behavior Research Methods, 2011, 43, 229-238.	4.0	11
79	Characterization of Bi-Directional Movement Primitives and Their Agonist-Antagonist Synergy with the Delta-Lognormal Model. Motor Control, 2010, 14, 1-25.	0.6	14
80	The limit profile of a rapid movement velocity. Human Movement Science, 2010, 29, 48-61.	1.4	26
81	Permanent oscillations in a 3-node recurrent neural network model. Neurocomputing, 2010, 74, 274-283.	5.9	4
82	Prototype-Based Methodology for the Statistical Analysis of Local Features in Stereotypical Handwriting Tasks. , $2010, \dots$		11
83	On Some Necessary and Sufficient Conditions for a Recurrent Neural Network Model With Time Delays to Generate Oscillations. IEEE Transactions on Neural Networks, 2010, 21, 1197-1205.	4.2	6
84	Kinematical Analysis of Synthetic Dynamic Signatures Using the Sigma-Lognormal Model., 2010,,.		2
85	Studying the variability of handwriting patterns using the Kinematic Theory. Human Movement Science, 2009, 28, 588-601.	1.4	52
86	Development of a Sigma–Lognormal representation for on-line signatures. Pattern Recognition, 2009, 42, 3324-3337.	8.1	137
87	A New Algorithm and System for the Characterization of Handwriting Strokes with Delta-Lognormal Parameters. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2009, 31, 2060-2072.	13.9	50
88	An interactive system for the automatic generation of huge handwriting databases from a few specimens. , $2008,  \ldots$		9
89	DETERMINISTIC AND EVOLUTIONARY EXTRACTION OF DELTA-LOGNORMAL PARAMETERS: PERFORMANCE COMPARISON. International Journal of Pattern Recognition and Artificial Intelligence, 2007, 21, 21-41.	1.2	6
90	A software assistant for the design and analysis of neuromuscular tests., 2007,,.		6

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91	A Genetic Algorithm for the Resolution of Superimposed Motor Unit Action Potentials. IEEE Transactions on Biomedical Engineering, 2007, 54, 2163-2171.	4.2	8
92	Extraction of delta-lognormal parameters from handwriting strokes. Frontiers of Computer Science, 2007, 1, 106-113.	0.6	18
93	A multi-level representation paradigm for handwriting stroke generation. Human Movement Science, 2006, 25, 586-607.	1.4	84
94	THE GENERATION OF VELOCITY PROFILES WITH AN ARTIFICIAL SIMULATOR. International Journal of Pattern Recognition and Artificial Intelligence, 2004, 18, 1207-1219.	1.2	5
95	Using the Framework of the Kinematic Theory for the Definition of a Movement Primitive. Motor Control, 2004, 8, 547-557.	0.6	25
96	A kinematic theory of rapid human movement. Part IV: a formal mathematical proof and new insights. Biological Cybernetics, 2003, 89, 126-138.	1.3	69
97	Stability analysis of bidirectional associative memory networks with time delays. IEEE Transactions on Neural Networks, 2003, 14, 1560-1565.	4.2	80
98	Title is missing!. Pattern Recognition, 2002, 35, 981-982.	8.1	2
99	Learning handwriting with pen-based systems: computational issues. Pattern Recognition, 2002, 35, 1049-1057.	8.1	22
100	On the stability analysis of delayed neural networks systems. Neural Networks, 2001, 14, 1181-1188.	5.9	106
101	Detection of Control Points for Warping Map Images. Intelligent Automation and Soft Computing, 2001, 7, 205-217.	2.1	0
102	Online and off-line handwriting recognition: a comprehensive survey. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2000, 22, 63-84.	13.9	1,955
103	Training hidden Markov models with multiple observations-a combinatorial method. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2000, 22, 371-377.	13.9	117
104	The segmentation of cursive handwriting: an approach based on off-line recovery of the motor-temporal information. IEEE Transactions on Image Processing, 1999, 8, 80-91.	9.8	66
105	The 2/3 power law: When and why?. Acta Psychologica, 1998, 100, 85-96.	1.5	27
106	The generation of handwriting with delta-lognormal synergies. Biological Cybernetics, 1998, 78, 119-132.	1.3	102
107	A kinematic theory of rapid human movements: Part III. Kinetic outcomes. Biological Cybernetics, 1998, 78, 133-145.	1.3	84
108	Segmentation and reconstruction of on-line handwritten scripts. Pattern Recognition, 1998, 31, 675-684.	8.1	41

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109	A new method for the analysis of simple and complex planar rapid movements. Journal of Neuroscience Methods, 1998, 82, 35-45.	2.5	21
110	Human identification of letters in mixed-script handwriting: an upper bound on recognition rates. IEEE Transactions on Systems, Man, and Cybernetics, 1998, 28, 78-81.	5.0	7
111	Extraction of signatures from check background based on a filiformity criterion. IEEE Transactions on Image Processing, 1998, 7, 1425-1438.	9.8	38
112	The Generation of Oriental Characters. International Journal of Pattern Recognition and Artificial Intelligence, 1998, 12, 31-44.	1.2	12
113	Speed/accuracy trade-offs in target-directed movements. Behavioral and Brain Sciences, 1997, 20, 279-303.	0.7	509
114	The kinematic theory: A new window to study and analyze simple and complex human movements. Behavioral and Brain Sciences, 1997, 20, 325-343.	0.7	5
115	Effect of variability on letters generation with the vectorial delta-lognormal model. Lecture Notes in Computer Science, 1997, , 74-83.	1.3	3
116	A neural model for generating and learning a rapid movement sequence. Biological Cybernetics, 1996, 74, 117-130.	1.3	18
117	A neural model for generating and learning a rapid movement sequence. Biological Cybernetics, 1996, 74, 117-130.	1.3	2
118	A kinematic theory of rapid human movements: Part I. Movement representation and generation. Biological Cybernetics, 1995, 72, 295-307.	1.3	291
119	A kinematic theory of rapid human movements: Part II. Movement time and control. Biological Cybernetics, 1995, 72, 309-320.	1.3	178
120	A renaissance for handwriting. Machine Vision and Applications, 1995, 8, 195-196.	2.7	3
121	Integration of lexical and syntactical knowledge in a handwriting-recognition system. Machine Vision and Applications, 1995, 8, 249-259.	2.7	7
122	A fuzzy-syntactic approach to allograph modeling for cursive script recognition. IEEE Transactions on Pattern Analysis and Machine Intelligence, 1995, 17, 702-712.	13.9	58
123	A kinematic theory of rapid human movements. Biological Cybernetics, 1995, 72, 295-307.	1.3	57
124	Signal Processing for the Parameter Extraction of the Delta Lognormal Model ( $\hat{l}^*\hat{l}_*$ ). , 1995, , 217-232.		8
125	A kinematic theory of rapid human movements. Biological Cybernetics, 1995, 72, 309-320.	1.3	8
126	THE DESIGN OF AN ON-LINE SIGNATURE VERIFICATION SYSTEM: FROM THEORY TO PRACTICE. International Journal of Pattern Recognition and Artificial Intelligence, 1994, 08, 795-811.	1.2	51

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127	AUTOMATIC SIGNATURE VERIFICATION: THE STATE OF THE ART—1989–1993. International Journal of Pattern Recognition and Artificial Intelligence, 1994, 08, 643-660.	1.2	319
128	AUTOMATIC SIGNATURE VERIFICATION: THE STATE OF THE ART—1989–1993. Series in Machine Perception and Artificial Intelligence, 1994, , 3-20.	0.1	22
129	A Model-Based Dynamic Signature Verification System. , 1994, , 417-434.		4
130	Handwriting processing and recognition. Pattern Recognition, 1993, 26, 379.	8.1	17
131	Normalizing and restoring on-line handwriting. Pattern Recognition, 1993, 26, 419-431.	8.1	60
132	Modelling velocity profiles of rapid movements: a comparative study. Biological Cybernetics, 1993, 69, 119-128.	1.3	130
133	A complexity measure of handwritten curves: modeling of dynamic signature forgery. IEEE Transactions on Systems, Man, and Cybernetics, 1993, 23, 400-413.	0.9	78
134	Looking at handwriting generation from a velocity control perspective. Acta Psychologica, 1993, 82, 89-101.	1.5	60
135	Segmenting handwritten signatures at their perceptually important points. IEEE Transactions on Pattern Analysis and Machine Intelligence, 1993, 15, 953-957.	13.9	105
136	Off-line Identification With Handwritten Signature Images: Survey and Perspectives., 1992,, 219-234.		30
137	Dependence of peripheral and central parameters describing handwriting generation on movement direction. Human Movement Science, 1991, 10, 193-221.	1.4	15
138	Optimal Movement Selection. Psychological Science, 1991, 2, 86-91.	3.3	101
139	On the automatic extraction of biomechanical information from handwriting signals. IEEE Transactions on Systems, Man, and Cybernetics, 1991, 21, 90-101.	0.9	18
140	A STRUCTURAL APPROACH TO ON-LINE CHARACTER RECOGNITION: SYSTEM DESIGN AND APPLICATIONS. International Journal of Pattern Recognition and Artificial Intelligence, 1991, 05, 311-335.	1.2	4
141	On the Origin of Asymmetric Bell-Shaped Velocity Profiles in Rapid-Aimed Movements. , 1991, , 283-295.		22
142	On-line recognition of handprinted characters: Survey and beta tests. Pattern Recognition, 1990, 23, 1031-1044.	8.1	71
143	Motor program coding representation from a handwriting generator model: The production of line responses. Biological Cybernetics, 1990, 63, 443-451.	1.3	9
144	The relation between pen force and pen-point kinematics in handwriting. Biological Cybernetics, 1990, 63, 277-289.	1.3	62

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145	A comparative analysis of regional correlation, dynamic time warping, and skeletal tree matching for signature verification. IEEE Transactions on Pattern Analysis and Machine Intelligence, 1990, 12, 710-717.	13.9	119
146	DYNAMIC APPROACHES TO HANDWRITTEN SIGNATURE VERIFICATION. , 1990, , 21-47.		18
147	IDENTITY VERIFICATION FROM AUTOMATIC PROCESSING OF SIGNATURES: BIBLIOGRAPHY. , 1990, , 65-85.		5
148	DESIGNING AN AUTOMATIC SIGNATURE VERIFIER: PROBLEM DEFINITION AND SYSTEM DESCRIPTION. , $1990$ , , $3-20$ .		8
149	A HANDWRITING MODEL BASED ON DIFFERENTIAL GEOMETRY. , 1989, , 179-192.		13
150	Acceleration measurement with an instrumented pen for signature verification and handwriting analysis. IEEE Transactions on Instrumentation and Measurement, 1989, 38, 1132-1138.	4.7	40
151	An evaluation of motor models of handwriting. IEEE Transactions on Systems, Man, and Cybernetics, 1989, 19, 1060-1072.	0.9	120
152	CASE tool for microprocessing. Microprocessors and Microsystems, 1989, 13, 637-643.	2.8	0
153	Automatic signature verification and writer identification — the state of the art. Pattern Recognition, 1989, 22, 107-131.	8.1	859
154	WHAT TYPES OF SCRIPTS CAN BE USED FOR PERSONAL IDENTITY VERIFICATION?., 1989, , 77-90.		11
155	Schematic coding on an IBM-PC. Journal of Microcomputer Applications, 1987, 10, 91-100.	0.1	2
156	Open Tip Glass Microelectrodes: Conduction Through the Wall at the Tip. IEEE Transactions on Biomedical Engineering, 1987, BME-34, 56-61.	4.2	4
157	Modelization of Handwriting: A System Approach. Advances in Psychology, 1986, 37, 169-183.	0.1	17
158	Power Spectrum Density Analysis of Electrical Noise in Glass Microelectrodes. IEEE Transactions on Biomedical Engineering, 1984, BME-31, 428-434.	4.2	2
159	Studies on Electroosmotic Effects in Glass Microelectrodes - Improvement of Microelectrode Selection. IEEE Transactions on Biomedical Engineering, 1984, BME-31, 512-519.	4.2	4
160	Tip potential of open-tip glass microelectrodes: theoretical and experimental studies. Canadian Journal of Physiology and Pharmacology, 1983, 61, 857-869.	1.4	10
161	On the Influence of Diffusion, Double Layer, and Glass Conduction on the Electrical Resistance of Open Tip Glass Microelectrodes. IEEE Transactions on Biomedical Engineering, 1980, BME-27, 260-270.	4.2	6
162	Low resistance and tip potential of glass microelectrode: Improvement through a new filling method. Vision Research, $1976$ , $16$ , $1355$ -IN9.	1.4	11

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163	UNIPEN project of on-line data exchange and recognizer benchmarks. , 0, , .		248
164	A self-organizing neural network for learning and generating sequences of target-directed movements in the context of a delta-lognormal synergy. , 0, , .		2
165	Programmable high-amplitude balanced stimulus current-source for implantable microstimulators. , 0, , .		14
166	Extraction of items from checks. , 0, , .		7
167	A comparative study of two velocity profile models for rapid stroke analysis. , 0, , .		4