RÃ©jean Plamondon

List of Publications by Year
in descending order

167	8,577	87888	53230
papers	citations	38	85
		h-index	g-index

170	170	170	3020
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	Automatic signature verification and writer identification — the state of the art. Pattern Recognition, 1989, 22, 107-131.	8.1	859
3	Speed/accuracy trade-offs in target-directed movements. Behavioral and Brain Sciences, 1997, 20, 279-303.	0.7	509
4	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
5	A kinematic theory of rapid human movements: Part I. Movement representation and generation. Biological Cybernetics, 1995, 72, 295-307.	1.3	291
6	UNIPEN project of on-line data exchange and recognizer benchmarks. , 0, , .		248
7	A kinematic theory of rapid human movements: Part II. Movement time and control. Biological Cybernetics, 1995, 72, 309-320.	1.3	178
8	A Perspective Analysis of Handwritten Signature Technology. ACM Computing Surveys, 2019, 51, 1-39.	23.0	142
9	Development of a Sigma–Lognormal representation for on-line signatures. Pattern Recognition, 2009, 42, 3324-3337.	8.1	137
10	Modelling velocity profiles of rapid movements: a comparative study. Biological Cybernetics, 1993, 69, 119-128.	1.3	130
11	An evaluation of motor models of handwriting. IEEE Transactions on Systems, Man, and Cybernetics, 1989, 19, 1060-1072.	0.9	120
12	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
13	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
14	On the stability analysis of delayed neural networks systems. Neural Networks, 2001, 14, 1181-1188.	5.9	106
15	Segmenting handwritten signatures at their perceptually important points. IEEE Transactions on Pattern Analysis and Machine Intelligence, 1993, 15, 953-957.	13.9	105
16	The generation of handwriting with delta-lognormal synergies. Biological Cybernetics, 1998, 78, 119-132.	1.3	102
17	Synthetic on-line signature generation. Part I: Methodology and algorithms. Pattern Recognition, 2012, 45, 2610-2621.	8.1	102
18	Optimal Movement Selection. Psychological Science, 1991, 2, 86-91.	3.3	101

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19	A kinematic theory of rapid human movements: Part III. Kinetic outcomes. Biological Cybernetics, 1998, 78, 133-145.	1.3	84
20	A multi-level representation paradigm for handwriting stroke generation. Human Movement Science, 2006, 25, 586-607.	1.4	84
21	Dynamic Signature Verification System Based on One Real Signature. IEEE Transactions on Cybernetics, 2018, 48, 228-239.	9.5	84
22	Stability analysis of bidirectional associative memory networks with time delays. IEEE Transactions on Neural Networks, 2003, 14, 1560-1565.	4.2	80
23	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
24	On-line recognition of handprinted characters: Survey and beta tests. Pattern Recognition, 1990, 23, 1031-1044.	8.1	71
25	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
26	Handwriting Biometrics: Applications and Future Trends in e-Security and e-Health. Cognitive Computation, 2020, 12, 940-953.	5.2	71
27	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
28	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
29	The relation between pen force and pen-point kinematics in handwriting. Biological Cybernetics, 1990, 63, 277-289.	1.3	62
30	Normalizing and restoring on-line handwriting. Pattern Recognition, 1993, 26, 419-431.	8.1	60
31	Looking at handwriting generation from a velocity control perspective. Acta Psychologica, 1993, 82, 89-101.	1.5	60
32	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
33	The lognormal handwriter: learning, performing, and declining. Frontiers in Psychology, 2013, 4, 945.	2.1	57
34	A kinematic theory of rapid human movements. Biological Cybernetics, 1995, 72, 295-307.	1.3	57
35	Studying the variability of handwriting patterns using the Kinematic Theory. Human Movement Science, 2009, 28, 588-601.	1.4	52
36	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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37	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
38	Synthetic on-line signature generation. Part II: Experimental validation. Pattern Recognition, 2012, 45, 2622-2632.	8.1	48
39	Signature Verification Based on the Kinematic Theory of Rapid Human Movements. IEEE Transactions on Human-Machine Systems, 2017, 47, 169-180.	3.5	46
40	Handwritten Signature Verification: New Advancements and Open Issues. , 2012, , .		44
41	Segmentation and reconstruction of on-line handwritten scripts. Pattern Recognition, 1998, 31, 675-684.	8.1	41
42	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
43	Extraction of signatures from check background based on a filiformity criterion. IEEE Transactions on Image Processing, 1998, 7, 1425-1438.	9.8	38
44	Robust score normalization for DTW-based on-line signature verification. , 2015, , .		38
45	Personal digital bodyguards for e-security, e-learning and e-health: A prospective survey. Pattern Recognition, 2018, 81, 633-659.	8.1	37
46	A 12-Week Cycling Training Regimen Improves Gait and Executive Functions Concomitantly in People with Parkinsonâ€™s Disease. Frontiers in Human Neuroscience, 2016, 10, 690.	2.0	35
47	Gestures Ã Go Go. ACM Transactions on Intelligent Systems and Technology, 2016, 7, 1-29.	4.5	35
48	Kinematic characteristics of bidirectional delta-lognormal primitives in young and older subjects. Human Movement Science, 2011, 30, 1-17.	1.4	32
49	Off-line Identification With Handwritten Signature Images: Survey and Perspectives. , 1992, , 219-234.		30
50	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
51	The 2/3 power law: When and why?. Acta Psychologica, 1998, 100, 85-96.	1.5	27
52	Impact of the principal stroke risk factors on human movements. Human Movement Science, 2011, 30, 792-806.	1.4	27
53	The limit profile of a rapid movement velocity. Human Movement Science, 2010, 29, 48-61.	1.4	26
54	Combining sigma-lognormal modeling and classical features for analyzing graphomotor performances in kindergarten children. Human Movement Science, 2015, 43, 183-200.	1.4	26

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55	Using the Framework of the Kinematic Theory for the Definition of a Movement Primitive. Motor Control, 2004, 8, 547-557.	0.6	25
56	Design of a neuromuscular disorders diagnostic system using human movement analysis. , 2012, , .		25
57	Strokes against strokeâ€"strokes for strides. Pattern Recognition, 2014, 47, 929-944.	8.1	25
58	Enhanced on-line signature verification based on skilled forgery detection using Sigma-LogNormal Features. , 2015, , .		25
59	Towards an automatic on-line signature verifier using only one reference per signer. , 2015, , .		24
60	Strokes of insight: User intent detection and kinematic compression of mouse cursor trails. Information Processing and Management, 2016, 52, 989-1003.	8.6	24
61	Online Signature Verification. , 2014, , 917-947.		23
62	AUTOMATIC SIGNATURE VERIFICATION: THE STATE OF THE ARTâ€"1989â€"1993. Series in Machine Perception and Artificial Intelligence, 1994, , 3-20.	0.1	22
63	Learning handwriting with pen-based systems: computational issues. Pattern Recognition, 2002, 35, 1049-1057.	8.1	22
64	On the Origin of Asymmetric Bell-Shaped Velocity Profiles in Rapid-Aimed Movements. , 1991, , 283-295.		22
65	A new method for the analysis of simple and complex planar rapid movements. Journal of Neuroscience Methods, 1998, 82, 35-45.	2.5	21
66	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
67	KeyTime. , 2018, , .		21
68	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
69	On the automatic extraction of biomechanical information from handwriting signals. IEEE Transactions on Systems, Man, and Cybernetics, 1991, 21, 90-101.	0.9	18
70	A neural model for generating and learning a rapid movement sequence. Biological Cybernetics, 1996, 74, 117-130.	1.3	18
71	Extraction of delta-lognormal parameters from handwriting strokes. Frontiers of Computer Science, 2007, 1, 106-113.	0.6	18
72	DYNAMIC APPROACHES TO HANDWRITTEN SIGNATURE VERIFICATION. , 1990, , 21-47.		18

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73	Modelization of Handwriting: A System Approach. Advances in Psychology, 1986, 37, 169-183.	0.1	17
74	Handwriting processing and recognition. Pattern Recognition, 1993, 26, 379.	8.1	17
75	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
76	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
77	Kinematic analysis of fast pen strokes in children with ADHD. Applied Neuropsychology: Child, 2020, 9, 125-140.	1.4	17
78	Dependence of peripheral and central parameters describing handwriting generation on movement direction. Human Movement Science, 1991, 10, 193-221.	1.4	15
79	Gesture Input for Users with Motor Impairments on Touchscreens. , 2018, , .		15
80	Programmable high-amplitude balanced stimulus current-source for implantable microstimulators. , 0, , .		14
81	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
82	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
83	Writing Generation Model for Health Care Neuromuscular System Investigation. Lecture Notes in Computer Science, 2014, , 137-148.	1.3	14
84	A HANDWRITING MODEL BASED ON DIFFERENTIAL GEOMETRY. , 1989, , 179-192.		13
85	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
86	Calligraphic Stylisation Learning with a Physiologically Plausible Model of Movement and Recurrent Neural Networks. , 2017, , .		13
87	A 12-Week Cycling Training Regimen Improves Upper Limb Functions in People With Parkinsonâ€™s Disease. Frontiers in Human Neuroscience, 2018, 12, 351.	2.0	13
88	The Generation of Oriental Characters. International Journal of Pattern Recognition and Artificial Intelligence, 1998, 12, 31-44.	1.2	12
89	An oscillatory criterion for a time delayed neural ring network model. Neural Networks, 2012, 29-30, 70-79.	5.9	12
90	Improving sigma-lognormal parameter extraction. , 2015, , .		12

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91	Low resistance and tip potential of glass microelectrode: Improvement through a new filling method. Vision Research, 1976, 16, 1355-IN9.	1.4	11
92	Prototype-Based Methodology for the Statistical Analysis of Local Features in Stereotypical Handwriting Tasks. , 2010, , .		11
93	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
94	Neuromuscular Representation and Synthetic Generation of Handwritten Whiteboard Notes. , 2014, , .		11
95	The Kinematic Theory Produces Human-Like Stroke Gestures. Interacting With Computers, 2017, , .	1.5	11
96	WHAT TYPES OF SCRIPTS CAN BE USED FOR PERSONAL IDENTITY VERIFICATION?. , 1989, , 77-90.		11
97	Tip potential of open-tip glass microelectrodes: theoretical and experimental studies. Canadian Journal of Physiology and Pharmacology, 1983, 61, 857-869.	1.4	10
98	Quality Analysis of Dynamic Signature Based on the Sigma-Lognormal Model. , 2011, , .		10
99	Training of On-Line Handwriting Text Recognizers with Synthetic Text Generated Using the Kinematic Theory of Rapid Human Movements. , 2014, , .		10
100	Motor program coding representation from a handwriting generator model: The production of line responses. Biological Cybernetics, 1990, 63, 443-451.	1.3	9
101	An interactive system for the automatic generation of huge handwriting databases from a few specimens. , 2008, , .		9
102	Omnis PrÃ¦dictio: Estimating the full spectrum of human performance with stroke gestures. International Journal of Human Computer Studies, 2020, 142, 102466.	5.6	9
103	A Hausdorff Heuristic for Efficient Computation of Graph Edit Distance. Lecture Notes in Computer Science, 2014, , 83-92.	1.3	9
104	A Genetic Algorithm for the Resolution of Superimposed Motor Unit Action Potentials. IEEE Transactions on Biomedical Engineering, 2007, 54, 2163-2171.	4.2	8
105	Agonistic and antagonistic interaction in speed/accuracy tradeoff: A delta-lognormal perspective. Human Movement Science, 2013, 32, 1040-1055.	1.4	8
106	Kinematic Modelling of Dipthong Articulation. Smart Innovation, Systems and Technologies, 2016, , 53-60.	0.6	8
107	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
108	Cranio-Caudal Kinematic Turn Signature Assessed with Inertial Systems As a Marker of Mobility Deficits in Parkinsonâ€™s Disease. Frontiers in Neurology, 2018, 9, 22.	2.4	8

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109	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
110	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
111	Signal Processing for the Parameter Extraction of the Delta Lognormal Model (î"î›). , 1995, , 217-232.		8
112	DESIGNING AN AUTOMATIC SIGNATURE VERIFIER: PROBLEM DEFINITION AND SYSTEM DESCRIPTION. , 1990, , 3-20.		8
113	A kinematic theory of rapid human movements. Biological Cybernetics, 1995, 72, 309-320.	1.3	8
114	Integration of lexical and syntactical knowledge in a handwriting-recognition system. Machine Vision and Applications, 1995, 8, 249-259.	2.7	7
115	Extraction of items from checks. , 0, , .		7
116	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
117	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
118	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
119	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
120	A software assistant for the design and analysis of neuromuscular tests. , 2007, , .		6
121	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
122	On the Design of Personal Digital Bodyguards: Impact of Hardware Resolution on Handwriting Analysis. , 2016, , .		6
123	A Biometric Attack Case Based on Signature Synthesis. , 2018, , .		6
124	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
125	THE GENERATION OF VELOCITY PROFILES WITH AN ARTIFICIAL SIMULATOR. International Journal of Pattern Recognition and Artificial Intelligence, 2004, 18, 1207-1219.	1.2	5
126	Variations of handwritten signatures with time: A sigma-lognormal analysis. , 2013, , .		5

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127	Generating Off-line and On-line Forgeries from On-line Genuine Signatures. , 2019, , .		5
128	IDENTITY VERIFICATION FROM AUTOMATIC PROCESSING OF SIGNATURES: BIBLIOGRAPHY. , 1990, , 65-85.		5
129	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
130	An Interactive Tablet-based System to Run Neuromuscular Tests. Series in Machine Perception and Artificial Intelligence, 2020, , 269-288.	0.1	5
131	Studies on Electroosmotic Effects in Glass Microelectrodes - Improvement of Microelectrode Selection. IEEE Transactions on Biomedical Engineering, 1984, BME-31, 512-519.	4.2	4
132	Open Tip Glass Microelectrodes: Conduction Through the Wall at the Tip. IEEE Transactions on Biomedical Engineering, 1987, BME-34, 56-61.	4.2	4
133	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
134	A comparative study of two velocity profile models for rapid stroke analysis. , 0, , .		4
135	Permanent oscillations in a 3-node recurrent neural network model. Neurocomputing, 2010, 74, 274-283.	5.9	4
136	A sigma-lognormal model for character level CAPTCHA generation. , 2015, , .		4
137	A Model-Based Dynamic Signature Verification System. , 1994, , 417-434.		4
138	The Lognormality Principle: A Personalized Survey. Series in Machine Perception and Artificial Intelligence, 2020, , 1-39.	0.1	4
139	Study of several parameters for the detection of amyotrophic lateral sclerosis from articulatory movement. Loquens, 2017, 4, 038.	0.1	4
140	Modeling 3D Movements with the Kinematic Theory of Rapid Human Movements. Series in Machine Perception and Artificial Intelligence, 2020, , 327-342.	0.1	4
141	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
142	A renaissance for handwriting. Machine Vision and Applications, 1995, 8, 195-196.	2.7	3
143	A Sigma-Lognormal Model for Handwritten Text CAPTCHA Generation. , 2014, , .		3
144	On Handwriting Pressure Normalization for Interoperability of Different Acquisition Stylus. IEEE Access, 2021, 9, 18443-18453.	4.2	3

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145	Human or Machine? It Is Not What You Write, But How You Write It. , 2021, , .		3
146	Effect of variability on letters generation with the vectorial delta-lognormal model. Lecture Notes in Computer Science, 1997, , 74-83.	1.3	3
147	Stability of Dynamic Signatures: From the Representation to the Generation Domain. Lecture Notes in Computer Science, 2013, , 122-130.	1.3	3
148	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
149	Power Spectrum Density Analysis of Electrical Noise in Glass Microelectrodes. IEEE Transactions on Biomedical Engineering, 1984, BME-31, 428-434.	4.2	2
150	Schematic coding on an IBM-PC. Journal of Microcomputer Applications, 1987, 10, 91-100.	0.1	2
151	A self-organizing neural network for learning and generating sequences of target-directed movements in the context of a delta-lognormal synergy. , 0, , .		2
152	Title is missing!. Pattern Recognition, 2002, 35, 981-982.	8.1	2
153	Kinematical Analysis of Synthetic Dynamic Signatures Using the Sigma-Lognormal Model. , 2010, , .		2
154	Invited Lecture I: Strokes against Stroke - Stroke For Strides. , 2012, , .		2
155	General relativity: An erfc metric. Results in Physics, 2018, 9, 456-462.	4.1	2
156	Graphonomics for the e-citizens: e-health, e-society and e-education. Pattern Recognition Letters, 2019, 121, 1-5.	4.2	2
157	Solar system anomalies: Revisiting Hubble's law. Physics Essays, 2017, 30, 404-412.	0.4	2
158	Reliability of the kinematic theory parameters during handwriting tasks on a vertical setup. Biomedical Signal Processing and Control, 2022, 71, 103157.	5.7	2
159	A neural model for generating and learning a rapid movement sequence. Biological Cybernetics, 1996, 74, 117-130.	1.3	2
160	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
161	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
162	EMERGENCE OF A QUASI NEWTONIAN LAW OF GRAVITATION: A GEOMETRICAL IMPACT STUDY. , 2015, , .		1

#	Article	IF	Citations
163	CASE tool for microprocessing. Microprocessors and Microsystems, 1989, 13, 637-643.	2.8	0
164	Detection of Control Points for Warping Map Images. Intelligent Automation and Soft Computing, 2001, 7, 205-217.	2.1	0
165	Periodic and partly periodic oscillation in Hopfield recurrent neural networks with time-varying input and delays. , 2016, , .		0
166	Multimodal Acquisition and Analysis of Children Handwriting for the Study of the Efficiency of Their Handwriting Movements: The @MaGma Challenge. , 2018, , .		0
167	Muscle activation profiles based on the proportionality hypothesis of the Kinematic Theory of Human Movements. , 2020, , .		0