Terence D Sanger

List of Publications by Year
in descending order

111 papers	5,697 citations	126907 33 h-index	82547 72 g-index
117 all docs	117 docs citations	117 times ranked	5338 citing authors

#	Article	IF	Citations
1	Increasing Consistency of Evoked Response in Thalamic Nuclei During Repetitive Burst Stimulation of Peripheral Nerve in Humans. Lecture Notes in Computer Science, 2021, , 238-247.	1.3	3
2	Opportunities for Regulatory Changes to Promote Pediatric Device Innovation in the United States: Joint Recommendations From Pediatric Innovator Roundtables. IEEE Journal of Translational Engineering in Health and Medicine, 2021, 9, 1-5.	3.7	7
3	Constraint-induced intervention as an emergent phenomenon from synaptic competition in biological systems. Journal of Computational Neuroscience, 2021, 49, 175-188.	1.0	2
4	Can spatial filtering separate voluntary and involuntary components in children with dyskinetic cerebral palsy?. PLoS ONE, 2021, 16, e0250001.	2.5	2
5	High-fidelity transmission of high-frequency burst stimuli from peripheral nerve to thalamic nuclei in children with dystonia. Scientific Reports, 2021, 11, 8498.	3.3	3
6	Provider Antibody Serology Study of Virus in the Emergency Room (PASSOVER) Study: Special Population COVID-19 Seroprevalence. Western Journal of Emergency Medicine, 2021, 22, 565-571.	1.1	4
7	Rapid antibody testing for SARS-CoV-2 vaccine response in pediatric healthcare workers. International Journal of Infectious Diseases, 2021, 113, 1-6.	3.3	11
8	SARS-CoV-2 Serology Testing in an Asymptomatic, At-Risk Population: Methods, Results, Pitfalls. Infectious Disease Reports, 2021, 13, 910-916.	3.1	1
9	Transient Complete Resolution of Tourette Syndrome Symptoms Following Personalized Depth Electrode Placement. Brain Sciences, 2021, 11, 1559.	2.3	7
10	NCS Assessments of the Motor, Sensory, and Physical Health Domains. Frontiers in Pediatrics, 2021, 9, 622542.	1.9	0
11	Deep brain stimulation for cerebral palsy: where are we now?. Developmental Medicine and Child Neurology, 2020, 62, 28-33.	2.1	22
12	Tuning of Standing Postural Responses to Instability and Cost Function. Neuroscience, 2020, 428, 100-110.	2.3	1
13	Expansion coding and computation in the cerebellum: 50 years after the Marrâ€“Albus codon theory. Journal of Physiology, 2020, 598, 913-928.	2.9	16
14	A Cerebellar Computational Mechanism for Delay Conditioning at Precise Time Intervals. Neural Computation, 2020, 32, 2069-2084.	2.2	4
15	Evoked Potentials During Peripheral Stimulation Confirm Electrode Location in Thalamic Subnuclei in Children With Secondary Dystonia. Journal of Child Neurology, 2020, 35, 799-807.	1.4	8
16	Effect of target distance on controllability for myocontrol. International Journal of Human Computer Studies, 2020, 140, 102432.	5.6	9
17	Deep Brain Stimulation Initiative: Toward Innovative Technology, New Disease Indications, and Approaches to Current and Future Clinical Challenges in Neuromodulation Therapy. Frontiers in Neurology, 2020, 11, 597451.	2.4	27
18	A robotic forearm orthosis using soft fabric-based helical actuators. , 2019, , .		28

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19	Vibro-tactile EMG-based biofeedback induces changes of muscle activity patterns in childhood dystonia. , 2019, , .		3
20	Portable Motion-Analysis Device for Upper-Limb Research, Assessment, and Rehabilitation in Non-Laboratory Settings. IEEE Journal of Translational Engineering in Health and Medicine, 2019, 7, 1-14.	3.7	12
21	EMG-based vibro-tactile biofeedback training: effective learning accelerator for children and adolescents with dystonia? A pilot crossover trial. Journal of NeuroEngineering and Rehabilitation, 2019, 16, 150.	4.6	6
22	Basic and Translational Neuroscience of Childhood-Onset Dystonia: A Control-Theory Perspective. Annual Review of Neuroscience, 2018, 41, 41-59.	10.7	6
23	Noninvasive neuromodulation in essential tremor demonstrates relief in a shamâ€controlled pilot trial. Movement Disorders, 2018, 33, 1182-1183.	3.9	38
24	A Computational Model of Deep-Brain Stimulation for Acquired Dystonia in Children. Frontiers in Computational Neuroscience, 2018, 12, 77.	2.1	9
25	Case Report: Targeting for Deep Brain Stimulation Surgery Using Chronic Recording and Stimulation in an Inpatient Neuromodulation Monitoring Unit, With Implantation of Electrodes in GPi and Vim in a 7-Year-Old Child With Progressive Generalized Dystonia. Journal of Child Neurology, 2018, 33, 776-783.	1.4	13
26	Comparison of speed-accuracy tradeoff between linear and nonlinear filtering algorithms for myocontrol. Journal of Neurophysiology, 2018, 119, 2030-2035.	1.8	8
27	Pediatric Deep Brain Stimulation Using Awake Recording and Stimulation for Target Selection in an Inpatient Neuromodulation Monitoring Unit. Brain Sciences, 2018, 8, 135.	2.3	42
28	A Model to Estimate the Optimal Layout for Assistive Communication Touchscreen Devices in Children With Dyskinetic Cerebral Palsy. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 1371-1380.	4.9	6
29	PEDiDBS: The pediatric international deep brain stimulation registry project. European Journal of Paediatric Neurology, 2017, 21, 218-222.	1.6	31
30	Neuromorphic meets neuromechanics, part II: the role of fusimotor drive. Journal of Neural Engineering, 2017, 14, 025002.	3.5	22
31	Neuromorphic meets neuromechanics, part I: the methodology and implementation. Journal of Neural Engineering, 2017, 14, 025001.	3.5	27
32	Multiscale modeling in the clinic: diseases of the brain and nervous system. Brain Informatics, 2017, 4, 219-230.	3.0	33
33	Clinical Management of Pediatric Acute-Onset Neuropsychiatric Syndrome: Part IIâ€"Use of Immunomodulatory Therapies. Journal of Child and Adolescent Psychopharmacology, 2017, 27, 574-593.	1.3	79
34	Similarity of Involuntary Postures between Different Children with Dystonia. Movement Disorders Clinical Practice, 2017, 4, 870-874.	1.5	16
35	Scaled Vibratory Feedback Can Bias Muscle Use in Children With Dystonia During a Redundant, 1-Dimensional Myocontrol Task. Journal of Child Neurology, 2017, 32, 161-169.	1.4	11
36	Efficient parallel implementation of stochastic dynamic operators for robot control. , 2017, , .		0

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37	Children With and Without Dystonia Share Common Muscle Synergies While Performing Writing Tasks. Annals of Biomedical Engineering, 2017, 45, 1949-1962.	2.5	20
38	Multitarget Multiscale Simulation for Pharmacological Treatment of Dystonia in Motor Cortex. Frontiers in Pharmacology, 2016, 7, 157.	3.5	29
39	A neuromorphic model of motor overflow in focal hand dystonia due to correlated sensory input. Journal of Neural Engineering, 2016, 13, 055001.	3.5	4
40	Advances in management of movement disorders in children. Lancet Neurology, The, 2016, 15, 719-735.	10.2	84
41	Children With Dystonia Can Learn a Novel Motor Skill: Strategies That are Tolerant to High Variability. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2016, 24, 847-858.	4.9	14
42	Robustness and Reliability of Synergy-Based Myocontrol of a Multiple Degree of Freedom Robotic Arm. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2016, 24, 940-950.	4.9	54
43	Learning Visually Guided Risk-Aware Reaching on a Robot Controlled by a GPU Spiking Neural Network. Lecture Notes in Computer Science, 2016, , 282-289.	1.3	1
44	Increased task-uncorrelated muscle activity in childhood dystonia. Journal of NeuroEngineering and Rehabilitation, 2015, 12, 52.	4.6	21
45	Movement Disorders in Cerebral Palsy. Journal of Pediatric Neurology, 2015, 13, 198-207.	0.2	15
46	The Tuning of Human Motor Response to Risk in a Dynamic Environment Task. PLoS ONE, 2015, 10, e0125461.	2.5	18
47	Perceived Cost and Intrinsic Motor Variability Modulate the Speed-Accuracy Trade-Off. PLoS ONE, 2015, 10, e0139988.	2.5	22
48	Muscle synergies in children with dystonia capture “healthy” patterns regardless the altered motor performance. , 2015, 2015, 2099-102.		8
49	Current and emerging strategies for treatment of childhood dystonia. Journal of Hand Therapy, 2015, 28, 185-194.	1.5	29
50	Speed-Accuracy Trade-Off in a Trajectory-Constrained Self-Feeding Task. Journal of Child Neurology, 2015, 30, 1676-1685.	1.4	21
51	A Nonlinear Stochastic Filter for Continuous-Time State Estimation. IEEE Transactions on Automatic Control, 2015, 60, 2161-2165.	5.7	9
52	Increased long-latency reflex activity as a sufficient explanation for childhood hypertonic dystonia: a neuromorphic emulation study. Journal of Neural Engineering, 2015, 12, 036010.	3.5	8
53	Multiday Transcranial Direct Current Stimulation Causes Clinically Insignificant Changes in Childhood Dystonia. Journal of Child Neurology, 2015, 30, 1604-1615.	1.4	27
54	Emulated muscle spindle and spiking afferents validates VLSI neuromorphic hardware as a testbed for sensorimotor function and disease. Frontiers in Computational Neuroscience, 2014, 8, 141.	2.1	19

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55	Cathodal Transcranial Direct Current Stimulation in Children With Dystonia. Journal of Child Neurology, 2014, 29, 232-239.	1.4	38
56	Crouching tiger, hidden dimensions. Nature Neuroscience, 2014, 17, 338-340.	14.8	4
57	Speed-Accuracy Testing on the Apple iPad^{Â®} Provides a Quantitative Test of Upper Extremity Motor Performance in Children with Dystonia. Journal of Child Neurology, 2014, 29, 1460-1466.	1.4	30
58	Deep Brain Stimulation Evoked Potentials May Relate to Clinical Benefit in Childhood Dystonia. Brain Stimulation, 2014, 7, 718-726.	1.6	21
59	Risk-Aware Control. Neural Computation, 2014, 26, 2669-2691.	2.2	25
60	Vowel generation for children with cerebral palsy using myocontrol of a speech synthesizer. Frontiers in Human Neuroscience, 2014, 8, 1077.	2.0	8
61	Cathodal Transcranial Direct Current Stimulation in Children With Dystonia. Journal of Child Neurology, 2013, 28, 1238-1244.	1.4	38
62	Deep brain stimulation in children and young adults with secondary dystonia: the Children's Hospital Los Angeles experience. Neurosurgical Focus, 2013, 35, E7.	2.3	69
63	Continuous-time estimation of latent variables from Poisson-spiking neurons. , 2013, , .		1
64	Hyperkinetic Disorders in Childhood. , 2012, , 221-258.		2
65	Clinical and molecular characterisation of hereditary dopamine transporter deficiency syndrome: an observational cohort and experimental study. Lancet Neurology, The, 2011, 10, 54-62.	10.2	179
66	Finger muscle control in children with dystonia. Movement Disorders, 2011, 26, 1290-1296.	3.9	16
67	Deep brain stimulation in children: experience and technical pearls. Journal of Neurosurgery: Pediatrics, 2011, 8, 566-574.	1.3	137
68	Distributed Control of Uncertain Systems Using Superpositions of Linear Operators. Neural Computation, 2011, 23, 1911-1934.	2.2	16
69	Visual Feedback Reduces Co-contraction in Children With Dystonia. Journal of Child Neurology, 2011, 26, 37-43.	1.4	29
70	Harnessing neuroplasticity for clinical applications. Brain, 2011, 134, 1591-1609.	7.6	907
71	Birth-related syndromes of athetosis and kernicterus. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2011, 100, 387-395.	1.8	16
72	Contributors to excess antagonist activity during movement in children with secondary dystonia due to cerebral palsy. Journal of Neurophysiology, 2011, 105, 2100-2107.	1.8	15

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73	Definition and classification of hyperkinetic movements in childhood. Movement Disorders, 2010, 25, 1538-1549.	3.9	374
74	Prolonged Electromyogram Biofeedback Improves Upper Extremity Function in Children With Cerebral Palsy. Journal of Child Neurology, 2010, 25, 1480-1484.	1.4	43
75	Controlling Variability. Journal of Motor Behavior, 2010, 42, 401-407.	0.9	10
76	Neuro-mechanical control using differential stochastic operators. , 2010, 2010, 4494-7.		7
77	Hypertonia in childhood secondary dystonia due to cerebral palsy is associated with reflex muscle activation. Movement Disorders, 2009, 24, 965-971.	3.9	19
78	Testing objective measures of motor impairment in early Parkinson's disease: Feasibility study of an atâ€home testing device. Movement Disorders, 2009, 24, 551-556.	3.9	130
79	Force variability during isometric biceps contraction in children with secondary dystonia due to cerebral palsy. Movement Disorders, 2009, 24, 1299-1305.	3.9	25
80	Use of Surface Electromyography (EMG) in the Diagnosis of Childhood Hypertonia: A Pilot Study. Journal of Child Neurology, 2008, 23, 644-648.	1.4	10
81	Abnormalities of Tactile Sensory Function in Children With Dystonic and Diplegic Cerebral Palsy. Journal of Child Neurology, 2007, 22, 289-293.	1.4	71
82	Botulinum Toxin Type B Improves the Speed of Reaching in Children With Cerebral Palsy and Arm Dystonia: An Open-Label, Dose-Escalation Pilot Study. Journal of Child Neurology, 2007, 22, 116-122.	1.4	49
83	Poor Penmanship in Children Correlates With Abnormal Rhythmic Tapping: A Broad Functional Temporal Impairment. Journal of Child Neurology, 2007, 22, 543-549.	1.4	19
84	Bayesian Filtering of Myoelectric Signals. Journal of Neurophysiology, 2007, 97, 1839-1845.	1.8	103
85	Prospective Open-Label Clinical Trial of Trihexyphenidyl in Children With Secondary Dystonia due to Cerebral Palsy. Journal of Child Neurology, 2007, 22, 530-537.	1.4	243
86	Optimizing Assisted Communication Devices for Children With Motor Impairments Using a Model of Information Rate and Channel Capacity. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2007, 15, 458-468.	4.9	18
87	Does dystonia always include co-contraction? A study of unconstrained reaching in children with primary and secondary dystonia. Experimental Brain Research, 2007, 176, 206-216.	1.5	56
88	Arm Trajectories in Dyskinetic Cerebral Palsy Have Increased Random Variability. Journal of Child Neurology, 2006, 21, 551-557.	1.4	61
89	Feedback Error Learning with basis function networks. , 2006, , .		3
90	Uniform Boundedness of Feedback Error Learning for a Class of Stochastic Nonlinear Systems. , 2006, , .		0

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91	Definition and Classification of Negative Motor Signs in Childhood. Pediatrics, 2006, 118, 2159-2167.	2.1	226
92	Hypertonia in children: How and when to treat. Current Treatment Options in Neurology, 2005, 7, 427-439.	1.8	18
93	Reaching Movements in Childhood Dystonia Contain Signal-Dependent Noise. Journal of Child Neurology, 2005, 20, 489-496.	1.4	37
94	Failure of Motor Learning for Large Initial Errors. Neural Computation, 2004, 16, 1873-1886.	2.2	52
95	Severe resting clonus caused by thyrotoxicosis in a 16-year-old girl with hereditary spastic paraparesis: A case report. Movement Disorders, 2004, 19, 712-713.	3.9	2
96	Toward a definition of childhood dystonia. Current Opinion in Pediatrics, 2004, 16, 623-627.	2.0	35
97	Neural population codes. Current Opinion in Neurobiology, 2003, 13, 238-249.	4.2	111
98	Classification and Definition of Disorders Causing Hypertonia in Childhood. Pediatrics, 2003, 111, e89-e97.	2.1	641
99	Pediatric movement disorders. Current Opinion in Neurology, 2003, 16, 529-535.	3.6	29
100	Pathophysiology of Pediatric Movement Disorders. Journal of Child Neurology, 2003, 18, S9-S24.	1.4	80
101	Pediatric movement disorders. Current Opinion in Neurology, 2003, 16, 529-35.	3.6	28
102	Decoding Neural Spike Trains: Calculating the Probability That a Spike Train and an External Signal Are Related. Journal of Neurophysiology, 2002, 87, 1659-1663.	1.8	8
103	Nonlinear sensory cortex response to simultaneous tactile stimuli in writer's cramp. Movement Disorders, 2002, 17, 105-111.	3.9	52
104	Abnormalities of spatial and temporal sensory discrimination in writer's cramp. Movement Disorders, 2001, 16, 94-99.	3.9	172
105	Abnormalities of spatial and temporal sensory discrimination in writer's cramp. , 2001, 16, 94.		1
106	Sensory discrimination capabilities in patients with focal hand dystonia. Annals of Neurology, 2000, 47, 377-380.	5.3	157
107	Computational Model of the Role of Sensory Disorganization in Focal Task-Specific Dystonia. Journal of Neurophysiology, 2000, 84, 2458-2464.	1.8	78
108	Electroencephalogram and Clinical Focalities in Juvenile Myoclonic Epilepsy. Journal of Child Neurology, 1998, 13, 541-545.	1.4	14

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109	MERRF syndrome with overwhelming lactic acidosis. Pediatric Neurology, 1996, 14, 57-61.	2.1	12
110	Theoretical Considerations for the Analysis of Population Coding in Motor Cortex. Neural Computation, 1994, 6, 29-37.	2.2	115
111	A Tree-Structured Algorithm for Reducing Computation in Networks with Separable Basis Functions. Neural Computation, 1991, 3, 67-78.	2.2	40