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Molecular computation of solutions to combinatorial problems

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#	Paper	IF	Citations
2336	Adding numbers with DNA.		17
2335	On the path to computation with DNA. <i>Science</i> , 1994 , 266, 993-4	33.3	24
2334	Factoring: The DNA solution. 1995 , 419-423		5
2333	Searching Sequence Space. 1995 , 13, 549-553		24
2332	Reconstructing strings from substrings in rounds.		17
2331	Computing with DNA. 1995 , 2, 1-7		35
2330	.		7
2329	On the potential of molecular computing. <i>Science</i> , 1995 , 268, 481; author reply 483-4	33.3	11
2328	A boom in plans for DNA computing. <i>Science</i> , 1995 , 268, 498-9	33.3	13
2327	On the potential of molecular computing. <i>Science</i> , 1995 , 268, 481-2; author reply 483-4	33.3	8
2326	Fundamental ideas for a parallel computing course. 1995 , 27, 284-286		1
2325	Computer scientists rethink their discipline's foundations. <i>Science</i> , 1995 , 269, 1363-4	33.3	19
2324	Parallel molecular computation. 1995 ,		26
2323	DNA solution of hard computational problems. <i>Science</i> , 1995 , 268, 542-5	33.3	738
2322	Dissipating the logogram. 1995 , 1, 67-80		
2321	Neural component placement. 1995 , 18, 522-7		105
2320	Electron-, Energy-, and Atom-Transfer Reactions Between Metal Complexes and Dna. 1995 , 43, 127-177		26

2319	The evolution of molecular computation. <i>Science</i> , 1995 , 270, 1510	33.3	25
2318	Building an associative memory vastly larger than the brain. <i>Science</i> , 1995 , 268, 583-5	33.3	120
2317	Reduction of luminescent background in ultrasensitive fluorescence detection by photobleaching. 1996 , 68, 2270-6		44
2316	Antiparallel DNA Double Crossover Molecules As Components for Nanoconstruction. 1996 , 118, 6131-6140		223
2315	Local Stoichiometries Determined by Counting Individual Molecules. 1996 , 68, 4397-4401		93
2314	Biased Diffusion, Optical Trapping, and Manipulation of Single Molecules in Solution. 1996 , 118, 6512-6513		93
2313	Nucleobase-Specific Quenching of Fluorescent Dyes. 1. Nucleobase One-Electron Redox Potentials and Their Correlation with Static and Dynamic Quenching Efficiencies. 1996 , 100, 5541-5553		888
2312	The design and engineering of nucleic acid nanoscale assemblies. 1996 , 6, 519-26		68
2311	Models of DNA computation. 1996 , 18-36		
2310	Making DNA add. <i>Science</i> , 1996 , 273, 220-3	33.3	134
2309	Single-Molecule Detection in Liquids by Laser-Induced Fluorescence. 1996 , 29, 607-613		125
2308	DNA computations can have global memory.		1
2307	Mathematical Proof and the Reliability of DNA Evidence. 1996 , 103, 491-497		5
2306	Efficiency of DNA replication in the polymerase chain reaction. 1996 , 93, 12947-52		81
2305	From DNA recombination to DNA computing via formal languages. 1996 , 210-220		2
2304	Does DNA compute? Molecular computing. 1996 , 6, 254-7		10
2303	Universal fluctuations of quasi-optimal paths of the travelling salesman problem. 1996 , 232, 554-562		2
2302	The spontaneous generation of digital life 1996 , 91, 86-96		24

2301	On the computational power of DNA. 1996 , 71, 79-94	94
2300	Looking for the DNA killer app. 1996 , 3, 656-8	2
2299	Socio-economic mechanisms of change and biological evolution. 1996 , 46, 171-193	
2298	Chemical Wave Logic Gates. 1996 , 100, 18970-18975	165
2297	Emergent computation by catalytic reactions. 1996 , 7, 307-314	33
2296	Strategic directions in research in theory of computing. 1996 , 28, 575-590	3
2295	The power of surface-based DNA computation (extended abstract). 1997 ,	8
2294	A DNA based implementation of an evolutionary search for good encodings for DNA computation.	29
2293	The splicing mechanism and the Connex memory.	
2292	Solving ray acoustic problems with a DNA computer. 1997 , 101, 2485-2490	1
2291	Joining and rotating data with molecules.	10
2290	Chemical Kinetics is Turing Universal. 1997 , 78, 1190-1193	95
2289	Recent developments in DNA-computing.	2
2288	From solid state to quantum and molecular electronics, the deepening of information processing.	
2287	A DNA based artificial immune system for self-nonsel discrimination.	6
2286	On the generative capacity of splicing grammar systems. 1997 , 330-345	2
2285	On the power of circular splicing systems and DNA computability.	10
2284	Splicing systems and molecular processes.	1

2283 Monitoring of aseptic preparation by closed-circuit television. **1997**, 3, 174-6

2282 On the complexity of some Inductive Logic Programming problems. **1997**, 17-32

6

2281 Ensemble quantum computing by NMR spectroscopy. **1997**, 94, 1634-9

708

2280 Prolog approach to DNA computing.

5

2279 DNA computing based on chaos.

8

2278 Test tube systems with controlled applications of rules.

2277 A new algorithm for DNA based computation.

4

2276 DNA implementation of simple Horn clause computation.

3

2275 Ligation experiments in computing with DNA.

8

2274 A comparison of resource-bounded molecular computation models.

2273 Two-channel sequential single-molecule measurement. **1997**, 69, 2426-33

24

2272 Confinement and Detection of Single Molecules in Submicrometer Channels. **1997**, 69, 3400-3405

76

2271 High-efficiency molecular counting in solution: single-molecule detection in electrodynamically focused microdroplet streams. **1997**, 69, 2115-21

45

2270 Tricyclo-DNA: A Phosphodiester-Backbone Based DNA Analog Exhibiting Strong Complementary Base-Pairing Properties. **1997**, 119, 11548-11549

77

2269 Monitoring the Reactions of Single Enzyme Molecules and Single Metal Ions. **1997**, 69, 4242-4248

103

2268 Handbook of Formal Languages. **1997**,

103

2267 DNA solution of the maximal clique problem. *Science*, **1997**, 278, 446-9

33:3 414

2266 Genetic Programming 1997: Proceedings Of The Second Annual Conference On Genetic Programming [Book Reviews]. **1997**, 1, 294-295

4

2265	Unraveling the future of computing. 1997 , 13, 14-21, 30	
2264	DNA computing: Arrival of biological mathematics. 1997 , 19, 9-22	87
2263	Matrix multiplication with DNA. 1997 , 45, 161-7	15
2262	A molecular switch for biochemical logic gates: conformational studies. 1997 , 12, 85-95	38
2261	Surprising fidelity of template-directed chemical ligation of oligonucleotides. 1997 , 4, 595-605	39
2260	DNA computing. 1997 , 8, 103-6	16
2259	Biomolecular computer: roots and promises. 1997 , 44, 1-15	21
2258	DNA als Werkstoff für die Nanotechnologie. 1997 , 109, 603-606	20
2257	Computing the uncomputable. 1997 , 2, 7-12	1
2256	Parallel Evolutionary Computing with the Random PROLOG Processor. 1997 , 47, 78-85	7
2255	Parallel overlap assembly for the construction of computational DNA libraries. 1997 , 188, 333-41	26
2254	Toward a theory of molecular computing. 1998 , 106, 123-157	5
2253	Design and self-assembly of two-dimensional DNA crystals. 1998 , 394, 539-44	2279
2252	From bits to bases: computing with DNA. 1998 , 16, 830-2	9
2251	DNA Models and Algorithms for NP-Complete Problems. 1998 , 57, 172-186	15
2250	Varieties of limits to scientific knowledge. 1998 , 3, 33-38	1
2249	Toward feasible and efficient DNA computation. 1998 , 4, 20-24	1
2248	State-space search strategies gleaned from animal behavior: a traveling salesman experiment. 1998 , 78, 167-173	15

2247	Evaluating polynomials on the molecular level--a novel approach to molecular computers. 1998 , 45, 45-57	7
2246	DNA as a vehicle for the self-assembly model of computing. 1998 , 45, 59-66	28
2245	Sticker systems. 1998 , 204, 183-203	23
2244	Problem solving during artificial selection of self-replicating loops. 1998 , 115, 293-312	43
2243	Evolution: Lost worlds. 1998 , 13, 93-4	3
2242	DNA as a basis for acquired long-term memory in neurons. 1998 , 50, 451-5	2
2241	Capillary electrophoresis chips with integrated electrochemical detection. 1998 , 70, 684-8	447
2240	Detection of a Single Dendrimer Macromolecule with a Fluorescent Dihydropyrrolopyrroledione (DPP) Core Embedded in a Thin Polystyrene Polymer Film. 1998 , 31, 4493-4497	66
2239	The evolution of DNA computing: nature's solution to a path problem.	
2238	Quantitative Identification of Different Single Molecules by Selective Time-Resolved Confocal Fluorescence Spectroscopy. 1998 , 102, 6601-6613	155
2237	Counting single chromophore molecules for ultrasensitive analysis and separations on microchip devices. 1998 , 70, 431-7	142
2236	Simulation of Single-Molecule Photocount Statistics in Microdroplets. 1998 , 70, 2964-2971	9
2235	A dual-beam optical microscope for observation and cleavage of single DNA molecules. 1998 , 70, 1743-8	23
2234	Fluorescence correlation spectroscopy with patterned photoexcitation for measuring solution diffusion coefficients of robust fluorophores. 1998 , 70, 1281-7	31
2233	Solving intractable problems with DNA computing.	3
2232	Enzymatic Ligation Reactions of DNA Words on Surfaces for DNA Computing. 1998 , 120, 10277-10282	73
2231	DNA nanotechnology: novel DNA constructions. 1998 , 27, 225-48	325
2230	A DNA self-assembled monolayer for the specific attachment of unmodified double- or single-stranded DNA. 1998 , 75, 1997-2003	55

2229	Single-Molecule Probing of Mixed-Mode Adsorption at a Chromatographic Interface. 1998 , 70, 5264-5271	81
2228	Self-evolution in a constructive binary string system. 1998 , 4, 203-20	46
2227	New motifs in DNA nanotechnology. 1998 , 9, 257-273	64
2226	The fidelity of template-directed oligonucleotide ligation and its relevance to DNA computation. 1998 , 26, 5203-11	24
2225	Solution of the Knapsack Problem by Deoxyribonucleic Acid Computing. 1998 , 37, 5839-5841	4
2224	Implementation of the inference engine based on molecular computing technique.	7
2223	DNA computation: theory, practice, and prospects. 1998 , 6, 201-29	35
2222	Dynamics Based Computation. 1998 , 81, 2156-2159	148
2221	A surface-based approach to DNA computation. 1998 , 5, 255-67	54
2220	A sticker-based model for DNA computation. 1998 , 5, 615-29	108
2219	Towards a DNA solution to the shortest common superstring problem.	3
2218	Reliability and Efficiency of a DNA-Based Computation. 1998 , 80, 417-420	77
2217	Fifty years of research on self-replication: an overview. 1998 , 4, 237-57	131
2216	DNA computing on surfaces: encoding information at the single base level. 1998 , 5, 269-78	11
2215	SOFSEM98: Theory and Practice of Informatics. 1998 ,	
2214	A review on merging some recent techniques with artificial neural networks.	1
2213	Confinement and manipulation of individual molecules in attoliter volumes. 1998 , 70, 658-61	47
2212	Visual cryptanalysis. 1998 , 201-210	3

2211	DNA Computers: A New Computing Paradigm.. 1998 , 11, 681-686	0
2210	Molecular inference via unidirectional chemical reactions. 1998 , 372-379	2
2209	Simple + parallel + local = cellular computing. 1998 , 653-662	1
2208	. 1998 ,	17
2207	Evolution as a computational engine. 1998 , 35-55	2
2206	Multiple target angle tracking algorithm using angular innovations extracted from signal subspace. 1999 , 35, 1520	4
2205	Executing parallel logical operations with DNA.	1
2204	A biomolecular implementation of logically reversible computation with minimal energy dissipation.	
2203	Computing with DNA. 2000 , 132, 413-30	4
2202	TOWARDS A DNA SOLUTION TO THE SHORTEST COMMON SUPERSTRING PROBLEM. 1999 , 08, 385-399	
2201	Solving traveling salesman problems using molecular programming.	3
2200	Advances in Soft Computing. 1999 ,	7
2199	Algorithms for the Satisfiability (SAT) Problem. 1999 , 379-572	8
2198	On the reduction of errors in DNA computation. 1999 , 6, 65-75	15
2197	The PIG paradigm: the design and use of a massively parallel fine grained self-reconfigurable infinitely scalable architecture.	19
2196	Flexible Dispatching Rules for Automated Guided Vehicles Based on a Self-Adapting Fuzzy Prioritizing System. 1999 , 5, 327-336	4
2195	Four models for a decision support system. 1999 , 35, 31-42	20
2194	Rule-based programming paradigm: a formal basis for biological, chemical and physical computation. 1999 , 49, 205-28	6

2193	The evolution of cellular computing: nature's solution to a computational problem. 1999 , 52, 3-13	61
2192	Progress toward demonstration of a surface based DNA computation: a one word approach to solve a model satisfiability problem. 1999 , 52, 25-33	15
2191	Chess games: a model for RNA based computation. 1999 , 52, 35-45	35
2190	Algebraic properties of DNA operations. 1999 , 52, 55-61	7
2189	The bounded complexity of DNA computing. 1999 , 52, 63-72	10
2188	Molecular and evolutionary computation: the tug of war between context freedom and context sensitivity. 1999 , 52, 99-110	19
2187	Three dimensional DNA structures in computing. 1999 , 52, 143-53	57
2186	Length bounded molecular computing. 1999 , 52, 155-63	4
2185	Ligation errors in DNA computing. 1999 , 52, 181-7	13
2184	Counting DNA: estimating the complexity of a test tube of DNA. 1999 , 52, 193-6	3
2183	Micro flow bio-molecular computation. 1999 , 52, 197-216	28
2182	An $O(2n)$ volume molecular algorithm for Hamiltonian path. 1999 , 52, 217-26	3
2181	Splicing on tree-like structures. 1999 , 210, 227-243	1
2180	Informational symmetry breaking between proteins and nucleic acids. 1999 , 51, 21-9	1
2179	A biomolecular implementation of logically reversible computation with minimal energy dissipation. 1999 , 52, 15-23	31
2178	New computing paradigms suggested by DNA computing: computing by carving. 1999 , 52, 47-54	18
2177	State transitions by molecules. 1999 , 52, 81-91	81
2176	The cell as the smallest DNA-based molecular computer. 1999 , 52, 123-33	38

2175	On solving 3CNF-satisfiability with an in vivo algorithm. 1999 , 52, 135-41	2
2174	Article for analog vector algebra computation. 1999 , 52, 175-80	29
2173	Interconversion of electrical and DNA data for molecular computation. 1999 , 23, 63-63	
2172	A characterization of important algorithms for quantum-dot cellular automata. 1999 , 113, 193-204	15
2171	Horn Clause Computation with DNA Molecules. 1999 , 3, 277-299	10
2170	DNA implementation of addition in which the input strands are separate from the operator strands. 1999 , 52, 165-74	43
2169	Single molecule fluorescence spectroscopy at ambient temperature. 1999 , 99, 2929-56	296
2168	Nonconventional Computers. 1999 ,	3
2167	Parallel Biomolecular Computation: Models and Simulations. 1999 , 25, 142-175	29
2166	Molecular Computing, Bounded Nondeterminism, and Efficient Recursion. 1999 , 25, 222-238	4
2165	Simulating Boolean Circuits on a DNA Computer. 1999 , 25, 239-250	30
2164	A Comparison of Resource-Bounded Molecular Computation Models. 1999 , 24, 87-95	3
2163	Perspectives on molecular computing. 1999 , 17, 131-151	13
2162	On the complexity of some inductive logic programming problems. 1999 , 17, 53-75	7
2161	The emergence of cellular computing. 1999 , 32, 18-26	74
2160	The complexities of DNA computation. 1999 , 17, 151-4	31
2159	Error-resilient DNA computation. 1999 , 15, 450-466	4
2158	Designed Two-Dimensional DNA Holliday Junction Arrays Visualized by Atomic Force Microscopy. 1999 , 121, 5437-5443	431

2157	Computing with distributed chaos. 1999 , 60, 363-77	68
2156	Electronically configurable molecular-based logic gates. <i>Science</i> , 1999 , 285, 391-4	33.3 1311
2155	Circular contextual insertions/deletions with applications to biomolecular computation.	6
2154	Another logical molecular NAND gate system.	7
2153	TARGET ARTICLE. 1999 , 10, 309-328	259
2152	Scanning Probe Studies of Single Nanostructures. 1999 , 99, 1983-1990	62
2151	Detection of individual oligonucleotide pairing by single-molecule microscopy. 1999 , 71, 279-83	47
2150	AUTHOR'S RESPONSE. 1999 , 10, 362-367	10
2149	Biochemical identification of prime numbers. 1999 , 53, 361	4
2148	Biomolecular computing and programming. 1999 , 3, 236-250	38
2147	New technologies in medicine: biotechnology and nanotechnology. 1999 , 45, 449-95	10
2146	Overview. 1999 , 1-13	
2145	Efficient Raman Enhancement and Intermittent Light Emission Observed in Single Gold Nanocrystals. 1999 , 121, 9208-9214	335
2144	A Caged Ligatable DNA Strand Break. 1999 , 121, 11579-11580	26
2143	Single-molecule detection of DNA separations in microfabricated capillary electrophoresis chips employing focused molecular streams. 1999 , 71, 5137-45	113
2142	Imaging single fluorescent molecules at the interface of an optical fiber probe by evanescent wave excitation. 1999 , 71, 3101-5	79
2141	Efficient detection of single DNA fragments in flowing sample streams by two-photon fluorescence excitation. 1999 , 71, 2108-16	38
2140	Parallel helical domains in DNA branched junctions containing 5',5' and 3',3' linkages. 1999 , 38, 2832-41	19

2139	Concurrency Calculi from the Viewpoint of Molecular Computing : Making Chemical Abstract Machines More Chemical. 1999 , 11, 2-13	
2138	Virus-enhanced genetic algorithms inspired by DNA computing. 1999 , 529-537	1
2137	Biomolecular computing. 1999 , 30, 22-30	3
2136	Cross-fertilization between evolutionary computation and DNA-based computing.	
2135	Molecular implementation of computational components.	2
2134	A formal definition of the phenomenon of collective intelligence and its IQ measure. 1999 , 165-173	2
2133	Implementation of data flow logical operations via self-assembly of DNA. 1999 , 174-182	5
2132	Finite-element modelling: a new tool for the biologist. 2000 , 358, 611-631	11
2131	Nucleic acids as objects of material science: Importance of quantum chemical and quantum mechanical studies. 2000 , 77, 859-870	7
2130	DNA as a molecular wire. 2000 , 28, 241-252	92
2129	Künstliche molekulare Maschinen. 2000 , 112, 3484-3530	443
2128	Artificial Molecular Machines. 2000 , 39, 3348-3391	2027
2127	Nanotechnology: International Developments and Emerging Products. 2000 , 49, 523-545	90
2126	Cryptography with DNA binary strands. 2000 , 57, 13-22	162
2125	Computing with DNA by operating on plasmids. 2000 , 57, 87-93	110
2124	Quantum automata and quantum grammars. 2000 , 237, 275-306	220
2123	On the universality of Post and splicing systems. 2000 , 231, 157-170	3
2122	Nine test tubes generate any RE language. 2000 , 231, 171-180	6

2121	Using DNA to solve the Bounded Post Correspondence Problem. 2000 , 231, 193-203	28
2120	On strongly context-free languages. 2000 , 103, 153-165	5
2119	DNA computing on a chip. 2000 , 403, 143-4	46
2118	Aerodynamics: from insects to microvehicles. 2000 , 403, 144-5	23
2117	DNA computing on surfaces. 2000 , 403, 175-9	300
2116	Logical computation using algorithmic self-assembly of DNA triple-crossover molecules. 2000 , 407, 493-6	580
2115	Nano-sized transition-metal oxides as negative-electrode materials for lithium-ion batteries. 2000 , 407, 496-9	6948
2114	The past, present and future of molecular computing. 2000 , 1, 69-72	57
2113	Nanobiotechnology: the fabrication and applications of chemical and biological nanostructures. 2000 , 10, 428-34	131
2112	On similarity codes. 2000 , 46, 1558-1564	9
2111	Language as a Complex Adaptive System. 2000 , 17-26	46
2110	Algorithmic Self-Assembly of DNA: Theoretical Motivations and 2D Assembly Experiments. 2000 , 17 Suppl 1, 263-70	71
2109	Fidelity of enzymatic ligation for DNA computing. 2000 , 7, 839-48	10
2108	.	7
2107	Der Computer von morgen: DNA statt Silizium?. Computer of the Future: DNA Instead of Silicon?. 2000 , 24, 310-313	
2106	In the Nick of Space: Generalized Nucleic Acid Complementarity and DNA Nanotechnology. 2000 , 2000, 1536-1548	6
2105	COLLISION-BASED COMPUTING IN BIOPOLYMERS AND THEIR AUTOMATA MODELS. 2000 , 11, 1321-1346	12
2104	Time-gated Manakov spatial solitons are computationally universal. 2001 , 63, 016608	87

2103	Novel strategy for database searching in spin liouville space by NMR ensemble computing. 2000 , 85, 4815-8	25
2102	An Inventor's Guide to Patenting Polynucleotide Inventions. 2000 , 19, 155-163	
2101	Two dimensions and two States in DNA nanotechnology. 2000 , 17 Suppl 1, 253-62	10
2100	Prospects and Problems of Single Molecule Information Devices. 2000 , 39, 3835-3849	80
2099	DNA genetic algorithms for design of fuzzy systems.	2
2098	End-specific covalent photo-dependent immobilisation of synthetic DNA to paramagnetic beads. 2000 , 28, E98	17
2097	Using lateral capillary forces to compute by self-assembly. 2000 , 97, 984-9	112
2096	Evolution and assembly of an extremely scrambled gene. 2000 , 97, 3298-3303	55
2095	Computation with biomolecules. 2000 , 97, 1328-30	56
2094	Biocryptography. 2000 , 54, 394-6	5
2093	Expressing evolutionary computation, genetic programming, artificial life, autonomous agents and DNA-based computing in λ -calculus-revised version.	2
2092	Molecular computation: RNA solutions to chess problems. 2000 , 97, 1385-9	261
2091	Frontier between decidability and undecidability: a survey. 2000 , 231, 217-251	49
2090	Molecular computation by DNA hairpin formation. <i>Science</i> , 2000 , 288, 1223-6	33.3 291
2089	Probing single molecules in single living cells. 2000 , 72, 5606-11	78
2088	Single-molecule analysis of DNA immobilized on microspheres. 2000 , 72, 3678-81	36
2087	Proof-of-Principle of Molecular-Scale Arithmetic. 2000 , 122, 3965-3966	284
2086	THE INFERENCE BASED ON MOLECULAR COMPUTING. 2000 , 31, 283-315	14

2085	DNA genetic algorithm for design of the generalized membership-type Takagi-Sugeno fuzzy control system.	4
2084	The program-size complexity of self-assembled squares (extended abstract). 2000 ,	198
2083	Construction, Analysis, Ligation, and Self-Assembly of DNA Triple Crossover Complexes. 2000 , 122, 1848-1860	568
2082	Multiple Word DNA Computing on Surfaces. 2000 , 122, 7435-7440	30
2081	The Arrayed Primer Extension Method for DNA Microchip Analysis. Molecular Computation of Satisfaction Problems. 2000 , 122, 1873-1882	34
2080	High-throughput single-molecule spectroscopy in free solution. 2000 , 72, 4640-5	77
2079	Assembly of Mesoscopic Analogues of Nucleic Acids. 2000 , 122, 3546-3547	20
2078	. 2000 , 2, 83-87	10
2077	A molecular NAND gate based on Watson-Crick base pairing. 2000 , 2, 1725-7	115
2076	Toward a table-top quantum computer. 2000 , 39, 823-839	7
2075	Micromachined Electrophoresis Chips with Electrochemical Detectors for Analysis of Explosive Compounds in Soil and Groundwater. 2000 , 34, 3046-3050	61
2074	Hydrodynamic flow profiling in microchannel structures by single molecule fluorescence correlation spectroscopy. 2000 , 72, 3260-5	103
2073	. 2001 , 89, 1147-1173	24
2072	Cellular Automata and Artificial Life. 2001 , 151-200	1
2071	An experimental comparison of the maximum likelihood estimation and nonlinear least-squares fluorescence lifetime analysis of single molecules. 2001 , 73, 2078-86	186
2070	A quantum conversation. <i>Science</i> , 2001 , 293, 2035-7	33-3
2069	Solution of a satisfiability problem on a gel-based DNA computer. 2001 , 27-42	48
2068	Semi-synthetic nucleic acid-protein conjugates: applications in life sciences and nanobiotechnology. 2001 , 82, 47-66	20

2067	Nonconventional computing paradigms in the new millennium: a roundtable. 2001 , 3, 82-99	6
2066	Organizing and synchronizing multi-agent systems with the help of abstract money (currency).	
2065	Genetic applets: biological integrated circuits for cellular control.	
2064	Nature's algorithms [genetic algorithms]. 2001 , 20, 21-24	9
2063	Determination of subyoctomole amounts of nonfluorescent molecules using a thermal lens microscope: subsingle-molecule determination. 2001 , 73, 2112-6	177
2062	Real-time dynamics of single-DNA molecules undergoing adsorption and desorption at liquid-solid interfaces. 2001 , 73, 1091-9	112
2061	Orientation Imaging and Reorientation Dynamics of Single Dye Molecules. 2001 , 105, 3453-3462	65
2060	Probing DNA Surface Attachment and Local Environment Using Single Molecule Spectroscopy. 2001 , 105, 3120-3126	50
2059	DNA Nicks and Nodes and Nanotechnology. 2001 , 1, 22-26	139
2058	Scouting context-sensitive components.	8
2057	Conformationally Gated Rate Processes in Biological Macromolecules. 2001 , 105, 5666-5678	68
2056	Review of "DNA based computers V" by Eric Winfree and David K. Gifford. American Mathematics Society.. 2001 , 32, 11-13	
2055	Artificial and Natural Computation. 2001 , 777-783	
2054	DNA computing in microreactors. 2001 ,	1
2053	Logische Schaltungen mit leuchtenden Molek[un]en. 2001 , 49, 602-606	19
2052	DNA-Computing [un]ein funktionales Modell im laborpraktischen Experiment. 2001 , 16, 35-52	1
2051	Fuzzy logic with biomolecules. 2001 , 5, 2-9	8
2050	Experimental aspects of DNA neural network computation. 2001 , 5, 10-18	11

2049	A design for DNA computation of the OneMax problem. 2001 , 5, 19-24	2
2048	DNA-based logic. 2001 , 5, 102-105	6
2047	Sticker systems with complex structures. 2001 , 5, 114-120	7
2046	A computer scientist's guide to molecular biology. 2001 , 5, 95-101	2
2045	Molecular genetic programming. 2001 , 5, 106-113	2
2044	Local repeat sequence organization of an intergenic spacer in the chloroplast genome of <i>Chlamydomonas reinhardtii</i> leads to DNA expansion and sequence scrambling: a complex mode of "copy-choice replication"?. 2001 , 26, 583-94	4
2043	Biomolecular realizations of a parallel architecture for solving combinatorial problems. 2001 , 19, 301-312	8
2042	Mikroelektronik 2001 \rightarrow auf dem Weg zum künstlichen Menschen. 2001 , 118, 509-516	
2041	DNA computing in vitro and in vivo. 2001 , 17, 823-834	6
2040	DNA computing: implementation of data flow logical operations. 2001 , 17, 361-378	8
2039	A formal definition of the phenomenon of collective intelligence and its IQ measure. 2001 , 17, 489-500	17
2038	An improved surface-based method for DNA computation. 2001 , 59, 1-5	27
2037	From cells to computers: computing with membranes (P systems). 2001 , 59, 139-58	41
2036	Multiple splicing systems and the universal computability. 2001 , 264, 3-23	3
2035	Logical string rewriting. 2001 , 264, 25-51	10
2034	Language-theoretic aspects of DNA complementarity. 2001 , 250, 163-178	24
2033	Vehicle dispatching system based on Taguchi-tuned fuzzy rules. 2001 , 128, 545-557	32
2032	NMR quantum computation. 2001 , 38, 325-360	131

2031	Software agents for knowledge management: coordination in multi-agent supply chains and auctions. 2001 , 20, 51-64	100
2030	Edge-sharing motifs in structural DNA nanotechnology. 2001 , 1, 229-237	12
2029	The covalent casting of one-dimensional hydrogen bonding motifs: toward oligomers and polymers of predefined topography. 2001 , 7, 2059-65	49
2028	Bioorganic applications of semisynthetic DNA-protein conjugates. 2001 , 7, 3188-95	50
2027	Towards Biolinguistics. 2001 , 4, 187-203	1
2026	Persons Versus Brains: Biological Intelligence in Human Organisms. 2001 , 16, 3-27	4
2025	Optically programming DNA computing in microflow reactors. 2001 , 59, 125-38	47
2024	Detection of single-base DNA mutations by enzyme-amplified electronic transduction. 2001 , 19, 253-7	341
2023	A DNA computing readout operation based on structure-specific cleavage. 2001 , 19, 1053-9	27
2022	Parasitic computing. 2001 , 412, 894-7	48
2021	Universal behaviour in compressive failure of brittle materials. 2001 , 412, 897-900	134
2020	Programmable and autonomous computing machine made of biomolecules. 2001 , 414, 430-4	555
2019	Superconductivity in CaCuO ₂ as a result of field-effect doping. 2001 , 414, 434-6	55
2018	Scenarios on the future of biotechnology. 2001 , 68, 109-129	24
2017	DNA computation function. 2001 , 11, R336	8
2016	Using three-dimensional microfluidic networks for solving computationally hard problems. 2001 , 98, 2961-6	74
2015	Design of fuzzy control system by a new DNA-based immune genetic algorithm.	0
2014	Trajectory planning of mobile robots using DNA computing.	2

2013	Intramolecular electronic-transfer phenomena in organic mixed-valence compounds. 2001 , 303-327	4
2012	Heuristic Search. 949-951	1
2011	DNA coded GA for the rule base optimization of a fuzzy logic controller.	0
2010	String tile models for DNA computing by self-assembly. 2001 , 63-88	17
2009	Can silicon dimers form logic gates?. 2001 , 12, 391-393	8
2008	Artificial chemistries--a review. 2001 , 7, 225-75	255
2007	Strategies for the development of a peptide computer. 2001 , 17, 364-8	24
2006	Evolving control metabolisms for a robot. 2001 , 7, 171-90	29
2005	Processing DNA tokens in parallel computing.	
2004	. 2001 , 3, 32-39	16
2003	On combinatorial DNA word design. 2001 , 8, 201-19	123
2002	DNA-based computation. 2001 , 3, 94-96	
2001	Probabilistic logical inference using quantities of DNA strands.	
2000	Rapid solution of problems by nuclear-magnetic-resonance quantum computation. 2001 , 63,	11
1999	DNA Computing. 2001 ,	3
1998	From molecular computing to molecular programming. 2001 , 89-102	7
1997	Equilibrium analysis of the efficiency of an autonomous molecular computer. 2002 , 65, 021910	20
1996	. 2002 , 4, 32-41	7

- 1995 Biocomputation: An emerging discipline at the intersection of the computational and biological sciences. **2002**,
- 1994 Computing. Successes and challenges. *Science*, **2002**, 296, 478-9 33.3 56
- 1993 Flexible parallel implementation of logic gates using chaotic elements. **2002**, 65, 036216 38
- 1992 Solution of a 20-variable 3-SAT problem on a DNA computer. *Science*, **2002**, 296, 499-502 33.3 406
- 1991 Unconventional Models of Computation. **2002**,
- 1990 Chaos computing: implementation of fundamental logical gates by chaotic elements. **2002**, 49, 1629-1633 65
- 1989 LOCAL SEARCH BY CONCENTRATION-CONTROLLED DNA COMPUTING. **2002**, 02, 447-455 8
- 1988 Protein-DNA computation by stochastic assembly cascade. **2002**, 99, 11589-92 31
- 1987 DNA Computing in Microreactors. **2002**, 33-45 14
- 1986 How Molecules Matter to Mental Computation. **2002**, 69, 497-518 37
- 1985 Intelligence in architectures: reconfigurable learning techniques in autonomous agents. 0
- 1984 Hybrid poly(dimethylsiloxane)-silicon microreactors used for molecular computing. **2002**, 11, 756-760 12
- 1983 TOWARDS A HIGH RELIABILITY OF THE PCR AMPLIFICATION PROCESS IN DNA COMPUTING. **2002**, 02, 423-432
- 1982 The Evolutionary Unfolding of Complexity. **2002**, 67-94 6
- 1981 String and graph reduction systems for gene assembly in ciliates. **2002**, 12, 113-134 36
- 1980 Graph Transformation. **2002**, 7
- 1979 A novel method to correct the nonlinearity of piezoelectric scanner in STM by DNA evolution algorithm.
- 1978 Design of a PCR protocol for improving reliability of PCR in DNA computing.

1977	On the decidability of self-assembly of infinite ribbons.	14
1976	DNA strand exchange stimulated by spontaneous complex formation with cationic comb-type copolymer. 2002 , 124, 12676-7	79
1975	A DNA algorithm for the graph coloring problem. 2002 , 42, 1176-8	9
1974	Toward complex matter: supramolecular chemistry and self-organization. 2002 , 99, 4763-8	1109
1973	Measuring the number of independent emitters in single-molecule fluorescence images and trajectories using coincident photons. 2002 , 74, 5342-9	116
1972	High-resolution colocalization of single dye molecules by fluorescence lifetime imaging microscopy. 2002 , 74, 3511-7	92
1971	DNA Word Design Strategy for Creating Sets of Non-interacting Oligonucleotides for DNA Microarrays. 2002 , 18, 805-812	34
1970	A Chinese Postman Problem based on DNA computing. 2002 , 42, 222-4	15
1969	Dynamics of single-protein molecules at a liquid/solid interface: implications in capillary electrophoresis and chromatography. 2002 , 74, 6334-9	57
1968	Information and computation: Classical and quantum aspects. 2002 , 74, 347-423	378
1967	Deoxyribozyme-based logic gates. 2002 , 124, 3555-61	405
1966	Key experimental approaches in DNA nanotechnology. 2002 , Chapter 12, Unit 12.1	7
1965	Self-Assembly of Frayed Wires and Frayed-Wire Networks: Nanoconstruction with Multistranded DNA. 2002 , 2, 269-274	51
1964	A massively parallel algorithm based on DNA computations for constructing minimal spanning trees. 2002 , 5, 199-214	
1963	A new DNA-based evolutionary algorithm with application to the design of fuzzy controllers.	0
1962	On Ladders' complexity mechanism and quantitative regulation of scalable molecular computers by Rho family GTPases.	
1961	DNA Computing. 2002 ,	4
1960	Peptide Computing - Universality and Complexity. 2002 , 290-299	10

1959	Computation with DNA on surfaces. 2002 , 500, 699-721	12
1958	On applying molecular computation to binary linear codes. 2002 , 48, 505-510	4
1957	Exact pairwise error probability of space-time codes. 2002 , 48, 510-513	99
1956	Gene expression profiling diagnosis through DNA molecular computation. 2002 , 20, 137-40	11
1955	Digital Processing and Communication with Molecular Switches. 2002 , 14, 401-414	585
1954	An evolvable proteomic computing method for robust artificial chemistry systems. 2002 , 6, 126-128	0
1953	Aqueous computing: A survey with an invitation to participate. 2002 , 17, 672-681	14
1952	The emerging discipline of biomolecular computation in the US. 2002 , 20, 217-236	12
1951	Models of molecular computing based on molecular reactions. 2002 , 20, 237-249	0
1950	A separation method for DNA computing based on concentration control. 2002 , 20, 251-261	13
1949	DNA sequence design using templates. 2002 , 20, 263-277	87
1948	Experimental efficiency of programmed mutagenesis. 2002 , 20, 307-315	1
1947	Programmed Mutagenesis Is Universal. 2002 , 35, 483-500	4
1946	Signal and noise in bridging PCR. 2002 , 2, 13	16
1945	Roots and promises of chemical-based computing. 2002 , 64, 169-78	8
1944	From molecular biology to nanotechnology and nanomedicine. 2002 , 65, 123-38	159
1943	Universal computation with Watson-Crick D0L systems. 2002 , 289, 485-501	3
1942	Uni-transitional Watson-Crick D0L systems. 2002 , 281, 537-553	15

1941	Complexity analysis of the SAT engine: DNA algorithms as probabilistic algorithms. 2002 , 287, 59-71	1
1940	Topics in the theory of DNA computing. 2002 , 287, 3-38	51
1939	Strand design for biomolecular computation. 2002 , 287, 39-58	64
1938	A guide to membrane computing. 2002 , 287, 73-100	204
1937	Syntheses of nucleic acid mimics designed for metal-induced strand formation on DNA. 2002 , 58, 2965-2972	11
1936	The dawn of biocomputing?. 2002 , 3, 325-325	
1935	Unlimited capacity and processibility of sequence information: prerequisites for a system of biological chains. 2002 , 66, 121-44	
1934	Pattern recognition techniques in microarray data analysis: a survey. 2002 , 980, 41-64	98
1933	Efficient DNA sticker algorithms for NP-complete graph problems. 2002 , 144, 297-309	31
1932	Toward self-organization and complex matter. <i>Science</i> , 2002 , 295, 2400-3	33-3 1916
1931	It started with Watson and Crick, but it sure didn't end there: Pitfalls and possibilities beyond the classic double helix. 2002 , 1, 53-84	10
1930	A DNA-based in vitro Genetic Program. 2002 , 28, 493-8	24
1929	Molecular computing paradigm toward freedom from Turing's charm. 2002 , 1, 333-390	3
1928	How to Program Artificial Chemistries. 2003 , 20-30	
1927	A DNA Computing-based Genetic Program for In Vitro Protein Evolution via Constrained Pseudomodule Shuffling. 2003 , 4, 139-152	7
1926	DNA-based algorithms for learning Boolean formulae. 2003 , 2, 153-171	5
1925	Exordium for DNA Codes. 2003 , 7, 369-379	22
1924	In vitro selection of non-crosshybridizing oligonucleotides for computation. 2003 , 2, 417-426	12

1923 How efficiently can room at the bottom be traded away for speed at the top?. **2003**, 2, 349-389

1922 DNA molecule provides a computing machine with both data and fuel. **2003**, 100, 2191-6 177

1921 Sticky-free and overhang-free DNA languages. **2003**, 40, 119-157 37

1920 Molecular computing revisited: a Moore's Law?. **2003**, 21, 98-101 16

1919 Molecular logic circuits. **2003**, 4, 49-59 246

1918 Emergence of self-learning fuzzy systems by a new virus DNA-based evolutionary algorithm. **2003**, 18, 339-354 8

1917 On existence of complete sets for bounded reducibilities. **2003**, 49, 567-575

1916 Measurement of the number of molecules of a single mRNA species in a complex mRNA preparation. **2003**, 221, 615-24 29

1915 The four-state model of a linear lattice: application to ligand-controlled hybridization of short duplex DNAs. **2003**, 69, 406-20 1

1914 The DNA double helix fifty years on. **2003**, 27, 461-7 9

1913 Block structure and stability of the genetic code. **2003**, 222, 177-88 24

1912 Implementation of a multifunctional logic gate based on folding/unfolding transitions of a protein. **2003**, 19, 87-97 41

1911 Arithmetic inside the universal genetic code. **2003**, 70, 187-209 22

1910 Hairpin formation in DNA computation presents limits for large NP-complete problems. **2003**, 72, 203-7 13

1909 Solving the set cover problem and the problem of exact cover by 3-sets in the Adleman-Lipton model. **2003**, 72, 263-75 29

1908 Forbidding-enforcing systems. **2003**, 292, 611-638 16

1907 DNA computing by blocking. **2003**, 292, 653-665 27

1906 Is DNA computing viable for 3-SAT problems?. **2003**, 290, 2095-2107 5

1905	Watson-Crick DOL systems: the power of one transition. 2003 , 301, 187-200	8
1904	Watson-Crick DOL systems: generative power and undecidable problems. 2003 , 306, 101-112	4
1903	RNA LEGO: magnesium-dependent formation of specific RNA assemblies through kissing interactions. 2003 , 10, 645-54	48
1902	The quantum mechanical solution of the traveling salesman problem. 2003 , 16, 280-285	4
1901	Functional tuning of nucleic acids by chemical modifications: tailored oligonucleotides as drugs, devices, and diagnostics. 2003 , 3, 51-60	36
1900	Rumer's transformation, in biology, as the negation, in classical logic. 2003 , 94, 65-74	3
1899	DNA in a material world. 2003 , 421, 427-31	2261
1898	Computing with DNA. 2003 , 4, 7-10	37
1897	Playing to win at DNA computation. 2003 , 21, 1013-5	13
1896	Simulation and verification of P systems through communicating X-machines. 2003 , 70, 135-48	8
1895	The general form of 0-1 programming problem based on DNA computing. 2003 , 70, 73-8	11
1894	A new approach to advance the DNA computing. 2003 , 3, 177-189	7
1893	DNA library design for molecular computation. 2003 , 10, 215-29	63
1892	DNA-based Cryptography. 2003 , 167-188	69
1891	Newer optical-based molecular devices from older coordination chemistry. 2003 , 1902-1913	163
1890	Applicability of DNA computing algorithm solving image recognition in intelligent visual mechanics.	4
1889	Adsorption and Diffusion of Single Molecules at Chromatographic Interfaces. 2003 , 107, 6258-6268	67
1888	Light-induced molecular cutting: localized reaction on a single DNA molecule. 2003 , 75, 4188-94	21

1887	Ultrasensitive coincidence fluorescence detection of single DNA molecules. 2003 , 75, 1664-70	148
1886	Parallel molecular computations of pairwise exclusive-or (XOR) using DNA "string tile" self-assembly. 2003 , 125, 14246-7	50
1885	Biochemistry and structural DNA nanotechnology: an evolving symbiotic relationship. 2003 , 42, 7259-69	147
1884	DNA-templated self-assembly of protein arrays and highly conductive nanowires. <i>Science</i> , 2003 , 301, 1882-4	33-3 1510
1883	DNA-based photonic logic gates: AND, NAND, and INHIBIT. 2003 , 125, 346-7	239
1882	Finite field arithmetic using self-assembly of DNA tilings.	2
1881	Branching DNA machines based on transitions of hairpin structures.	7
1880	Efficiency and reliability of genomic information storage and retrieval in DNA-based memories with compaction.	2
1879	A biomolecular computing method based on Rho family GTPases. 2003 , 2, 58-62	4
1878	Solving the 3-SAT problem based on DNA computing. 2003 , 43, 1872-5	1
1877	Molecular immunocomputing with application to alphabetical pattern recognition mimics the characterization of ABO blood type.	
1876	. 2003 , 5, 25-29	2
1875	A coding and control mechanism of natural computation. 2003 ,	
1874	Directed nucleation assembly of DNA tile complexes for barcode-patterned lattices. 2003 , 100, 8103-8	268
1873	High Performance Computing. 2003 ,	2
1872	Photochemical ligation of DNA "words" for DNA computing. 2003 , 183-4	1
1871	Static and dynamic properties of DNA languages.	1
1870	Addressable procedures for logic and arithmetic operations with DNA strands.	2

1869	DNA Nanotubes: Construction and Characterization of Filaments Composed of TX-tile Lattice. 2003 , 10-21	2
1868	A DNA-based, biomolecular cryptography design.	5
1867	Design and test of noncrosshybridizing oligonucleotide building blocks for DNA computers and nanostructures. 2003 , 82, 1305-1307	26
1866	Studies of temperature-dependent electronic transduction on DNA hairpin loop sensor. 2003 , 31, e108	70
1865	Molecular flip-flops formed by overlapping Fis sites. 2003 , 31, 6663-73	12
1864	DNA duplex-quadruplex exchange as the basis for a nanomolecular machine. 2003 , 100, 1569-73	362
1863	Biological Computation: From DNA to Cells. 2003 , 371-405	
1862	Biomolecular computing paradigms.	
1861	Tools for intelligent control: fuzzy controllers, neural networks and genetic algorithms. 2003 , 361, 1781-808	26
1860	Working operation problem based on DNA computing. 2003 ,	
1859	Write or radiate? [information flow]. 2003 ,	
1858	Microarrays for biocomputing.	
1857	A surface-based DNA algorithm for the minimal vertex coverproblem. 2003 , 13, 78-80	2
1856	Writing Information into DNA. 2003 , 23-35	7
1855	An Effective Molecular Algorithm for Solving the Satisfiability Problem. 2003 , 274-280	
1854	A DNA-Based Memory with In Vitro Learning and Associative Recall. 2004 , 145-156	8
1853	. 2004 ,	250
1852	. 2004 ,	2

1851	Semantic Model for Artificial Intelligence Based on Molecular Computing. 2004 , 32-39	1
1850	DNA self-assembled parallel computer architectures. 2004 , 15, 1688-1694	16
1849	A probabilistic parameterized algorithm for vertex cover in sticker model.	0
1848	Proofreading Tile Sets: Error Correction for Algorithmic Self-Assembly. 2004 , 126-144	86
1847	Biologically inspired rule-based multiset programming paradigm for soft-computing. 2004 ,	1
1846	Algebraic characterization of RNA operations for DNA-based computation. 2004 , 14, 1019-1022	
1845	Three-dimensional self-consistent simulations of symmetric and asymmetric laterally coupled vertical quantum dots. 2004 , 69,	11
1844	Soundness and quality of semantic retrieval in DNA-based memories with abiotic data.	1
1843	A probabilistic analysis of in vitro selection of independent DNA words for computation.	
1842	Circuit designs and fabrication of swarm-intelligence LSIs based on modeling foraging behaviors of ants.	1
1841	Molecule algorithm for perfect matching problem based on sticker models.	
1840	Stochastic computing with biomolecular automata. 2004 , 101, 9960-5	81
1839	DNA computing using single-molecule hybridization detection. 2004 , 32, 4962-8	20
1838	Nanotechnology and medicine. 2004 , 230, 315-8	62
1837	The stability of Seeman JX DNA topoisomers of paranemic crossover (PX) molecules as a function of crossover number. 2004 , 32, 6047-56	66
1836	Chaotic binary sequences for efficient wireless multipath channel estimation.	0
1835	Self-organizing PID control design based on DNA computing method.	
1834	Parameter optimization for a class of general TS fuzzy controllers via a new DNA-based genetic algorithm.	

1833 Time hopping-ultra wideband (TH-UWB) spectrum optimization using a novel GP-DNA algorithm.

1832 Advanced Computer Technology for Novel Information Processing Paradigms. **2004**, 1, 308-317

1

1831 Demonstration of a universal surface DNA computer. **2004**, 32, 3115-23

24

1830 Two-step total gene synthesis method. **2004**, 32, e59

103

1829 Nanotechnologie. **2004**,

1828 Protocol, Control, and Networks. **2004**, 17, 6-29

16

1827 Genetic algorithm in DNA computing: A solution to the maximal clique problem. **2004**, 49, 967

2

1826 Sticker DNA computer model ??Part ??: Theory. **2004**, 49, 772

0

1825 Self-assembled DNA Structures for Nanoconstruction. **2004**,

12

1824 A concurrent multi-string matching from multi-text algorithm based on the algorithm of Hamiltonian Path Problem and DNA computation. **2004**, 7, 71-96

1823 Controlled assembly of dendrimer-like DNA. **2004**, 3, 38-42

371

1822 An autonomous molecular computer for logical control of gene expression. **2004**, 429, 423-9

691

1821 DNA as a Nanomaterial□**2004**, 28, 155-166

52

1820 Automata theory based on quantum logic: some characterizations. **2004**, 190, 179-195

50

1819 Highly sensitive biosensors based on water-soluble conjugated polymers. **2004**, 49, 2227

11

1818 Codeword design and information encoding in DNA ensembles. **2004**, 3, 253-292

30

1817 Entropy Based Approach to Data Loss Reparation Through the Indeterminate Fine-Grained Parallel Computation. **2004**, 11, 161-175

1816 A logical method of cell-based molecular computation using the pathways regulated by Rho family GTPases. **2004**, 8, 62-66

1815	Sticker DNA computer model [Part II: Application. 2004 , 49, 863-871	2
1814	Genetic algorithm in DNA computing: A solution to the maximal clique problem. 2004 , 49, 967-971	7
1813	Sticker DNA computer model [Part I: Theory. 2004 , 49, 772-780	3
1812	Linearly programmed DNA-based molecular computer operated on magnetic particle surface in test-tube. 2004 , 49, 17-22	11
1811	Trends in computing with DNA. 2004 , 19, 98-113	5
1810	Robust and emergent Physarum logical-computing. 2004 , 73, 45-55	157
1809	Quantum computation, non-demolition measurements, and reflective control in living systems. 2004 , 77, 47-56	39
1808	Parallel computation of simple arithmetic using peptide-antibody interactions. 2004 , 76, 303-7	7
1807	Statistical thermodynamic analysis and design of DNA-based computers. 2004 , 3, 443-459	16
1806	Virtual test tubes. 2004 , 3, 461-477	15
1805	Physical modeling of biomolecular computers: Models, limitations, and experimental validation. 2004 , 3, 411-426	7
1804	Development, evaluation and benchmarking of simulation software for biomolecule-based computing. 2004 , 3, 427-442	10
1803	An autonomous DNA nanomotor powered by a DNA enzyme. 2004 , 43, 3554-7	225
1802	An Autonomous DNA Nanomotor Powered by a DNA Enzyme. 2004 , 116, 3638-3641	56
1801	A Novel 3-D Self-Penetrating Topological Network Assembled by Mixed Bridging Ligands. 2004 , 2004, 2228-2231	38
1800	Nano-scaled Biomolecular Field-Effect Transistors: Prototypes and Evaluations. 2004 , 16, 1853-1862	11
1799	Rewriting systems and the modelling of biological systems. 2004 , 5, 95-9	14
1798	Molecular-scale logic gates. 2004 , 10, 574-86	553

1797	Fast parallel molecular solution to the dominating-set problem on massively parallel bio-computing. 2004 , 30, 1109-1125	29
1796	Towards solution of the set-splitting problem on gel-based DNA computing. 2004 , 20, 875-885	19
1795	DNA containing phenanthroline- and phenanthrene-derived, non-nucleosidic base surrogates. 2004 , 45, 9273-9276	15
1794	Signaling-pathway-based molecular computing for efficient 3-SAT problem solving. 2004 , 161, 121-137	1
1793	Molecular solutions for the subset-sum problem on DNA-based supercomputing. 2004 , 73, 117-30	35
1792	DNA computation model to solve 0-1 programming problem. 2004 , 74, 9-14	7
1791	A new DNA computing model for the NAND gate based on induced hairpin formation. 2004 , 77, 87-92	11
1790	Solving traveling salesman problems with DNA molecules encoding numerical values. 2004 , 78, 39-47	90
1789	Entity grammar systems: a grammatical tool for studying the hierarchical structures of biological systems. 2004 , 66, 447-71	12
1788	Interactive DNA sequence and structure design for DNA nanotechnology and DNA computation.	
1787	Solving unconstraint assignment problem by a molecular-based computing algorithm. 2004 ,	1
1786	Boolean logic functions of a synthetic peptide network. 2004 , 126, 11140-1	193
1785	DNA computing approach to optimal decision problems.	3
1784	Agent-oriented approach to DNA computing.	0
1783	On Scalable Biomolecular Computers Based on Crosstalked Phosphorylation and Dephosphorylation Pathways Regulated by Rho Family GTPases of Cells.	
1782	CAEN-BIST: testing the nanofabric.	24
1781	On the integrality ratio for asymmetric TSP.	1
1780	Interactive DNA sequence and structure design for DNA nanoapplications. 2004 , 3, 286-92	20

1779	Virtual Molecular Computing [Emulating DNA Molecules. 2004 , 95-101	1
1778	Aspects of Molecular Computing. 2004 ,	6
1777	Putting a brake on an autonomous DNA nanomotor. 2004 , 126, 8626-7	92
1776	Thermodynamic parameters based on a nearest-neighbor model for DNA sequences with a single-bulge loop. 2004 , 43, 7143-50	33
1775	DNA-based matching of digital signals.	10
1774	Direct observation of single native DNA molecules in a microchannel by differential interference contrast microscopy. 2004 , 76, 4459-64	16
1773	Information content in organic molecules: reaction pathway analysis via Brownian processing. 2004 , 44, 1612-22	13
1772	Fast parallel molecular algorithms for DNA-based computation: factoring integers.	
1771	DNA logic gates. 2004 , 126, 9458-63	211
1770	DNA computing from a signal processing viewpoint. 2004 , 21, 100-106	14
1769	Synthesis of DNA triangles with vertexes of bis(terpyridine)iron(II) complexes. 2004 , 126, 8606-7	86
1768	Transposition based contextual insertion on linear DNA strands with deletion precedence. 2004 , 81, 647-660	3
1767	Current Topics in Artificial Intelligence. 2004 ,	
1766	Algorithmics for Hard Problems. 2004 ,	34
1765	Digital photoswitching of fluorescence based on the photochromism of diarylethene derivatives at a single-molecule level. 2004 , 126, 14843-9	389
1764	PROCEDURES FOR LOGIC AND ARITHMETIC OPERATIONS WITH DNA MOLECULES. 2004 , 15, 461-474	17
1763	Supramolecular chemistry: from molecular information towards self-organization and complex matter. 2004 , 67, 249-265	157
1762	Advanced Computer Technology for Novel Information Processing Paradigms. 2004 ,	

1761	Introduction to nanotechnology and its applications to medicine. 2004 , 61, 216-20	158
1760	The future of computing--new architectures and new technologies. 2004 , 151, 1-9	3
1759	From DNA to transistors. 2004 , 53, 441-496	84
1758	Circular splicing and regularity. 2004 , 38, 189-228	10
1757	Formal Verification of Molecular Computational Models in ACL2: A Case Study. 2004 , 344-353	
1756	Word-paired insertions of languages. 2004 , 81, 169-181	3
1755	Solid phase based DNA solution of the coloring problem. 2004 , 14, 459-462	1
1754	A DNA based model for addition computation. 2004 , 14, 705-709	3
1753	Manipulation of DNA molecules using optical techniques for optically assisted DNA computing. 2004 ,	2
1752	Structure variable PID control design based on DNA coding method. 2004 ,	1
1751	Autonomous Biomolecular Computer Modeled after Retroviral Replication. 2004 , 203-212	9
1750	Using sticker to solve the 3-dimensional matching problem in molecular supercomputers. 2004 , 1, 128	5
1749	Equilibrium Modelling of Oligonucleotide Hybridization, Error, and Efficiency for DNA-Based Computational Systems. 2004 , 8-10	1
1748	Improving the Quality of Semantic Retrieval in DNA-Based Memories with Learning. 2004 , 18-24	4
1747	The Capacity of DNA for Information Encoding. 2005 , 281-292	3
1746	DNA Extraction by XPCR. 2005 , 104-112	6
1745	Comparison of two approaches to oligo sets optimization. 2005 ,	
1744	PDMS valves in DNA computers. 2005 ,	2

1743	Toward Wet Implementation of Genetic Algorithm for Protein Engineering. 2005 , 308-318	5
1742	The Challenge of Structural Control on the Nanoscale: Bottom-Up Self-Assembly of Nucleic Acids in 3D. 2005 , 2, 348-370	9
1741	DNA-Based Algorithm for 0-1 Planning Problem. 2005 , 733-742	
1740	Programmable Control of Nucleation for Algorithmic Self-assembly. 2005 , 319-328	27
1739	Computing by Observing Bio-systems: The Case of Sticker Systems. 2005 , 1-13	8
1738	DNA implementation of k-shortest paths computation.	4
1737	Complete Pattern Matching: Recursivity Versus Multi-threading. 2005 , 598-609	
1736	Prospects for the De Novo Design of Nucleic Acid Biosensors. 2005 , 5-43	1
1735	Biomolecular autonomous solution of the Hamiltonian path problem via hairpin formation. 2005 , 1, 389-98	4
1734	Design of an Autonomous DNA Nanomechanical Device Capable of Universal Computation and Universal Translational Motion. 2005 , 426-444	18
1733	A Special Class of Additive Cyclic Codes for DNA Computing. 2005 , 284-287	
1732	Solution of a SAT Problem on a Photochemical DNA Computer. 2005 , 34, 378-379	8
1731	Estimating the sequence complexity of a random oligonucleotide population by using in vitro thermal melting and Cot analyses. 2005 , 1, 220-30	9
1730	Is optimal solution of every NP-complete or NP-hard problem determined from its characteristic for DNA-based computing. 2005 , 80, 71-82	34
1729	A DNA solution of SAT problem by a modified sticker model. 2005 , 81, 1-9	14
1728	Public-key system using DNA as a one-way function for key distribution. 2005 , 81, 25-9	73
1727	DNA databases. 2005 , 81, 234-46	9
1726	DNA solution of integer linear programming. 2005 , 170, 626-632	9

1725	A Bayesian approach to paired comparison rankings based on a graphical model. 2005 , 48, 269-290	5
1724	DNA facilitating electron transfer reaction of xanthine oxidase. 2005 , 7, 562-566	14
1723	Self-replication and Evolution of DNA Crystals. 2005 , 734-743	15
1722	Computer-aided organic synthesis. 2005 , 34, 247-66	118
1721	Template-independent ligation of single-stranded DNA by T4 DNA ligase. 2005 , 272, 5991-6000	56
1720	Self-assembled architectures and the temporal aspects of computing. 2005 , 38, 56-64	10
1719	An error-resilient encoding with fewer DNA strands for graph problems on DNA computing. 2005 , 88, 49-58	
1718	DNA codes for nanoscience. 2005 , 44, 1166-81	72
1717	Assembly of the complete eight-base artificial genetic helix, xDNA, and its interaction with the natural genetic system. 2005 , 44, 3118-22	78
1716	A DNA-protein nanoengine for "on-demand" release and precise delivery of molecules. 2005 , 44, 5464-7	69
1715	DNA-Codes für die Nanowissenschaften. 2005 , 117, 1190-1206	26
1714	Assembly of the Complete Eight-Base Artificial Genetic Helix, xDNA, and Its Interaction with the Natural Genetic System. 2005 , 117, 3178-3182	12
1713	A DNA-Protein Nanoengine for On-Demand Release and Precise Delivery of Molecules. 2005 , 117, 5600-5603	18
1712	Potential for enlarging DNA memory: the validity of experimental operations of scaled-up nested primer molecular memory. 2005 , 80, 99-112	8
1711	Fast parallel molecular solutions for DNA-based supercomputing: the subset-product problem. 2005 , 80, 233-50	10
1710	Markov chains: computing limit existence and approximations with DNA. 2005 , 81, 261-6	8
1709	The surface-based approach for DNA computation is unreliable for SAT. 2005 , 82, 20-5	1
1708	DNA algorithm for an unbounded fan-in Boolean circuit. 2005 , 82, 52-60	6

1707	Solving maximum cut problems in the Adleman-Lipton model. 2005 , 82, 203-7	13
1706	A probabilistic model of computing with words. 2005 , 70, 176-200	21
1705	Linear constructions for DNA codes. 2005 , 334, 99-113	85
1704	Nanofluidics: what is it and what can we expect from it?. 2005 , 1, 249-267	525
1703	An algorithmic analysis of DNA structure. 2005 , 9, 761-768	4
1702	Solving minimum spanning tree problem with DNA computing. 2005 , 22, 112-117	1
1701	Molecular Computing. 2005 , 6, 349-351	0
1700	DNA and quantum based algorithms for VLSI circuits testing. 2005 , 4, 53-72	1
1699	A DNA-based memory with in vitro learning and associative recall. 2005 , 4, 83-101	16
1698	Retrovirus-based computer. 2005 , 4, 127-139	2
1697	Protein output for DNA computing. 2005 , 4, 1-10	10
1696	On DNA Codes. 2005 , 41, 349-367	11
1695	Nanofabrication with biomolecules. 2005 , 8, 30-39	163
1694	DNA nanodevices. 2005 , 1, 284-99	215
1693	Characterization of Non-crosshybridizing DNA Oligonucleotides Manufactured In Vitro. 2005 , 50-61	9
1692	Bibliography. 2005 , 309-330	
1691	Combinatorial Aspects of Minimal DNA Expressions. 2005 , 375-388	2
1690	. 2005 ,	114

1689	Testing Structure Freeness of Regular Sets of Biomolecular Sequences. 2005 , 192-201	7
1688	Molecular Computing by Signaling Pathways. 2005 , 269-284	
1687	Membrane Computing [Current Results and Future Problems. 2005 , 49-53	
1686	Nanoarrays. 2005 , 89-118	4
1685	Efficient Initial Pool Generation for Weighted Graph Problems Using Parallel Overlap Assembly. 2005 , 215-223	7
1684	An analysis of the effect of parallelism in the control of dynamical systems. 2005 , 20, 147-168	7
1683	New Developments in Computational Fluid Dynamics. 2005 ,	1
1682	New Horizons of Parallel and Distributed Computing. 2005 ,	0
1681	Design, Simulation, and Experimental Demonstration of Self-assembled DNA Nanostructures and Motors. 2005 , 173-187	9
1680	Optimization for Parameter of PID Based on DNA Genetic Algorithm.	2
1679	Tunneling Spectroscopy Analysis of Hexachloro-Fluorescein Phosphoramidite Fluorescent Dye Attached to Deoxyribonucleic Acid. 2005 , 44, 5386-5389	3
1678	Structural DNA nanotechnology: an overview. 2005 , 303, 143-66	65
1677	Mathematics as a Basis for Chemistry. 2005 , 55-76	
1676	Unconventional Computation. 2005 ,	1
1675	On DNA Computers Controlling Gene Expression Levels.	0
1674	On designing error-correctable codes by biomolecular computation. 2005 ,	
1673	DNA Computing for Efficient Encoding of Weights in the Traveling Salesman Problem.	
1672	OPERATIONS ON TRAJECTORIES WITH APPLICATIONS TO CODING AND BIOINFORMATICS. 2005 , 16, 531-546	3

1671	Solving the Independent-set Problem in a DNA-Based Supercomputer Model. 2005 , 15, 469-479	8
1670	Journeys in non-classical computation I: A grand challenge for computing research. 2005 , 20, 5-19	40
1669	Design of nucleic acid sequences for DNA computing based on a thermodynamic approach. 2005 , 33, 903-11	43
1668	Thermodynamically based DNA strand design. 2005 , 33, 4951-64	51
1667	Preliminary experiments on hairpin structure dissociation for constructing robust DNA machines.	
1666	Adaptive DNA computing algorithm by using PCR and restriction enzyme.	
1665	Scanning Probe Microscopy Studies of Surface-Immobilised DNA/Oligonucleotide Molecules. 113-160	5
1664	An integrated microfluidic processor for single nucleotide polymorphism-based DNA computing. 2005 , 5, 1033-40	57
1663	Two computational primitives for algorithmic self-assembly: copying and counting. 2005 , 5, 2586-92	154
1662	Multiobjective evolutionary optimization of DNA sequences for reliable DNA computing. 2005 , 9, 143-158	105
1661	NanoBiotechnology Protocols. 2005 ,	5
1660	Nucleic Acid Nanostructures: Bottom-Up Control of Geometry on the Nanoscale. 2005 , 68, 237-270	149
1659	Computer-aided design for DNA self-assembly: process and applications.	1
1658	Experimental Comparison of Initial Pool Generation for Direct-Proportional Length-Based DNA Computing. 2005 ,	
1657	Research on DNA computer with coprocessor organizational model. 2005 ,	
1656	Single-molecule tracing on a fluidic microchip for quantitative detection of low-abundance nucleic acids. 2005 , 127, 5354-9	97
1655	New results on DNA codes. 2005 ,	4
1654	Direct-Proportional Length-Based DNA Computing Implementation for Elevator Scheduling Problem. 2005 ,	1

1653	The impact of the nanoscale on computing systems.	4
1652	Multifunctional photoelectrochemical logic gates based on a hemicyanine sensitized semiconductor electrode. 2005 , 15, 3015	24
1651	DNA codes that avoid secondary structures. 2005 ,	7
1650	Parallel biomolecular computation on surfaces with advanced finite automata. 2005 , 127, 3935-43	47
1649	Single DNA molecules as probes of chromatographic surfaces. 2005 , 77, 3256-60	20
1648	Molecular Information Technology. 2005 , 30, 33-69	41
1647	Ultrasensitive reporter protein detection in genetically engineered bacteria. 2005 , 77, 2683-9	40
1646	Molecular Computation. 2005 , 15-58	1
1645	Fast parallel molecular algorithms for DNA-based computation: factoring integers. 2005 , 4, 149-63	51
1644	Examining the architecture of cellular computing through a comparative study with a computer. 2005 , 2, 187-95	9
1643	DNA Nanostructures for Mechanics and Computing: Nonlinear Thinking with Life's Central Molecule. 2005 , 308-318	3
1642	Single-molecule optoelectronics. 2005 , 38, 534-41	195
1641	Computing with Nucleic Acids. 2005 , 427-455	38
1640	A Programmable Molecular Computer in Microreactors. 2005 , 365-374	7
1639	Size-expanded DNA bases: an ab initio study of their structural and electronic properties. 2005 , 109, 21135-9	63
1638	Current Trends in High Performance Computing and Its Applications. 2005 ,	1
1637	DNA computing: applications and challenges. 2006 , 17, R27-R39	124
1636	Coding and Cryptography. 2006 ,	

1635 RNA Towards Medicine. **2006,**

1634 Designing Nucleotide Sequences for Computation: A Survey of Constraints. **2006,** 275-289

14

1633 Introducing Computational Systems Biology. **2006,** 1-14

7

1632 Flexible Word Design and Graph Labeling. **2006,** 48-60

2

1631 Chemistry. Pulling strings. *Science*, **2006,** 314, 1552-3

33:3 6

1630 Aptazymes: Allosteric Ribozymes and Deoxyribozymes as Biosensors. **2006,** 290-310

6

1629 Towards in vivo computing: Quantitative analysis of an artificial gene regulatory network behaving as a RS flip-flop and simulating the system in silico. **2006,**

1628 RLM: A New Method of Encoding Weights in DNA Strands. **2006,**

1

1627 Multiset Rule-Based Programming Paradigm for Soft-Computing in Complex Systems. **2006,** 77-109

1

1626 The Algebraic Computing Structure of Four DNA Bases. **2006,**

1625 Hybridization-ligation versus parallel overlap assembly: an experimental comparison of initial pool generation for direct-proportional length-based DNA computing. **2006,** 5, 103-9

3

1624 A New DNA-Based Approach to Solve the Maximum Weight Clique Problem. **2006,** 320-327

2

1623 BioMEMS and Biomedical Nanotechnology. **2006,**

1

1622 Biologically Inspired Approaches to Advanced Information Technology. **2006,**

1

1621 DNA Computing. **2006,**

2

1620 Predicting Melting Temperature (T_m) of DNA Duplex Based on Neural Network. **2006,** 275-285

1619 Complex Systems Science in Biomedicine. **2006,**

18

1618 . **2006,**

1

1617	. 2006,	4
1616	DNA Encoding Method of Weight for Chinese Postman Problem.	0
1615	Natural Computation with Connectionist Systems.	
1614	A Hybrid Methodology for Robotic Architectures with a Cellular Approach. 2006,	1
1613	Nanobiotechnology enables new opportunities in material sciences: bacteriorhodopsin as a first example. 2006, 209-216	2
1612	DNA Secret Sharing.	1
1611	Medium scale integration of molecular logic gates in an automaton. 2006, 6, 2598-603	166
1610	Preservation of the biofunctionality of DNA and protein during microfabrication. 2006, 22, 877-81	12
1609	Sequencing DNA by dynamic force spectroscopy: limitations and prospects. 2006, 6, 1483-6	18
1608	Towards Reliable Simulation of Bounded Fan-in Boolean Circuits using Molecular Beacon. 2006,	1
1607	DNA Algorithm of Image Recognition and its Application. 2006,	3
1606	Counting single native biomolecules and intact viruses with color-coded nanoparticles. 2006, 78, 1061-70	127
1605	A mathematical formulation of DNA computation. 2006, 5, 32-40	13
1604	Single molecule spectroscopy studies of diffusion in mesoporous silica thin films. 2006, 110, 9164-70	68
1603	Self-organized PID control design using DNA computing approach. 2006, 29, 251-261	9
1602	Conceptual and contextual DNA-based memory. 2006, 10, 41-48	
1601	Engineering RNA-based circuits. 2006, 423-45	
1600	. 2006,	106

1599	DNA Sequencing. 2006,	
1598	Biocomputation. 2006,	
1597	Molecular Electronics. 2006,	
1596	Photonic DNA computing: concept and implementation. 2006,	1
1595	Fast parallel bio-molecular solutions: the set-basis problem. 2006, 2, 72	3
1594	Semantic retrieval in DNA-based memories with Gibbs energy models. 2006, 22, 86-90	15
1593	Computing with motile bio-agents. 2006,	1
1592	Enzyme optimization for next level molecular computing. 2006, 6347, 633	
1591	DNA algorithm of minimal spanning tree. 2006, 6358, 1016	1
1590	DNA Probes. 2006,	
1589	Towards computing with proteins. 2006, 63, 53-64	81
1588	Molecular computational elements encode large populations of small objects. 2006, 5, 787-90	214
1587	Direct measurement of T-cell receptor repertoire diversity with AmpliCot. 2006, 3, 895-901	20
1586	Designed DNA molecules: principles and applications of molecular nanotechnology. 2006, 7, 565-75	119
1585	DNA polymerase programmed with a hairpin DNA incorporates a multiple-instruction architecture into molecular computing. 2006, 83, 18-25	22
1584	Molecular solutions to the binary integer programming problem based on DNA computation. 2006, 83, 56-66	22
1583	Procedures for a dynamical system on $\{0,1\}^n$ with DNA molecules. 2006, 84, 207-16	13
1582	Scalability of the surface-based DNA algorithm for 3-SAT. 2006, 85, 95-8	3

1581	Membrane computing: brief introduction, recent results and applications. 2006 , 85, 11-22	55
1580	DNA ternary addition. 2006 , 182, 977-986	13
1579	A DNA procedure for solving the shortest path problem. 2006 , 183, 79-84	9
1578	Morphological computation: A basis for the analysis of morphology and control requirements. 2006 , 54, 619-630	101
1577	Construction of cyclic codes over for DNA computing. 2006 , 343, 448-457	45
1576	Applications of Supermolecules [Molecular Devices and Nanotechnology]. 2006 , 137-174	
1575	Theoretical and Experimental DNA Computation. 2006 , 7, 287-291	
1574	A Parallel Approach Eliminates Measurement Perturbations in RLC Circuits. 2006 , 35, 155-164	1
1573	Characterization of Non-crosshybridizing DNA Oligonucleotides Manufactured in vitro. 2006 , 5, 165-181	16
1572	The Construction of Minimal DNA Expressions. 2006 , 5, 127-149	0
1571	Multiplying with DNA. 2006 , 5, 427-441	5
1570	The stability and characteristics of a DNA Holliday junction switch. 2006 , 124, 214-21	9
1569	DNA-assisted binding of microspheres on glass substrates and their laser-induced release. 2006 , 26, 1401-14075	
1568	New field of cryptography: DNA cryptography. 2006 , 51, 1413-1420	86
1567	A DNA computer model for solving vertex coloring problem. 2006 , 51, 2541-2549	14
1566	Mastering the complexity of DNA nanostructures. 2006 , 24, 235-43	31
1565	Covalent incorporation of methyl red dyes into double-stranded DNA for their ordered clustering. 2006 , 12, 777-84	49
1564	Rational design of DNA nanoarchitectures. 2006 , 45, 1856-76	490

1563	Construction of molecular logic gates with a DNA-cleaving deoxyribozyme. 2006 , 45, 1759-62	67
1562	Finite-size, fully addressable DNA tile lattices formed by hierarchical assembly procedures. 2006 , 45, 735-9	231
1561	Rationaler Entwurf von DNA-Nanoarchitekturen. 2006 , 118, 1888-1910	145
1560	Construction of Molecular Logic Gates with a DNA-Cleaving Deoxyribozyme. 2006 , 118, 1791-1794	29
1559	Finite-Size, Fully Addressable DNA Tile Lattices Formed by Hierarchical Assembly Procedures. 2006 , 118, 749-753	60
1558	Efficient Chaotic Spreading Codes for DS-UWB Communication System.	
1557	The Semi-roboticized DNA Computing Model of the 0-1 Integer Programming Problem. 2006 ,	
1556	A modular DNA signal translator for the controlled release of a protein by an aptamer. 2006 , 34, 1581-7	73
1555	Deoxyribozymes that recode sequence information. 2006 , 34, 2166-72	16
1554	Chemical approaches to nanometre-scale logic gates. 2006 , 18, S1847-S1872	50
1553	Towards in vivo computing. 2006 ,	4
1552	Dynamic Nanodevices Based on Protein Molecular Motors. 2006 , 327-361	
1551	Abstract DNA-type systems. 2006 , 19, 575-589	4
1550	On the dynamics of molecular conformation. 2006 , 103, 7542-7	33
1549	Soft Methods for Integrated Uncertainty Modelling. 2006 ,	2
1548	BioMEMS and Biomedical Nanotechnology. 2006 ,	7
1547	Genetic code based coding and mathematical formulation for DNA computation.	
1546	Nanotechnology: Science and Computation. 2006 ,	9

1545	Molecular shift register and its utilization as an autonomous DNA synthesizer. 2006 , 97, 208103	0
1544	The Improvement on Algorithm of DNA Computing on 0-1 Planning Problem. 2006 ,	3
1543	Text Classifiers Evolved on a Simulated DNA Computer.	1
1542	Journeys in non-classical computation II: initial journeys and waypoints. 2006 , 21, 97-125	21
1541	Building a Managerial Support System for Work Rotation Based on Bio-Soft Computing. 2006 ,	5
1540	An Algorithm of Sticker DNA Chip Model on Making Spanning Tree Problem. 2006 ,	2
1539	. 2006 ,	
1538	Parametric estimation of nonlinear systems through sequences designed using DNA computation.	
1537	Design and evaluation of single-stranded DNA carrier molecules for DNA-directed assembly. 2006 , 23, 657-66	9
1536	On the Integrality Ratio for the Asymmetric Traveling Salesman Problem. 2006 , 31, 245-252	28
1535	Complete Pattern Matching for DNA Computing. 2006 , 05, 337-343	
1534	EVOLVING INDUCTIVE GENERALIZATION VIA GENETIC SELF-ASSEMBLY. 2006 , 09, 1-29	10
1533	THREE COUNTEREXAMPLES TO DISPEL THE MYTH OF THE UNIVERSAL COMPUTER. 2006 , 16, 381-403	18
1532	On the Design of Codes for DNA Computing. 2006 , 100-119	33
1531	MOLECULAR MODEL CHECKING. 2006 , 17, 733-741	7
1530	Control of Biomolecular Activity by Nanoparticle Antennas. 2006 , 459-476	
1529	Intelligent Algorithms in Ambient and Biomedical Computing. 2006 ,	1
1528	DNA Computing. 2006 ,	3

1527	Design of Autonomous DNA Cellular Automata. 2006 , 399-416	9
1526	Handbook of Nature-Inspired and Innovative Computing. 2006 ,	22
1525	Recent Advances in Formal Languages and Applications. 2006 ,	1
1524	INVOLUTIVELY BORDERED WORDS. 2007 , 18, 1089-1106	12
1523	Programming Nanotechnology: Learning from Nature. 2007 , 71, 1-37	3
1522	AsiaSim 2007. 2007 ,	2
1521	PROCEDURES FOR COMPUTING THE MAXIMUM WITH DNA. 2007 , 18, 475-493	2
1520	Error Tolerance in DNA Self-Assembly by $(2k-1) \times (2k-1)$ Snake Tile Sets. 2007 ,	2
1519	ASPECTS OF BIOMOLECULAR COMPUTING. 2007 , 17, 185-211	6
1518	Non-deterministic Algorithm for Routing Optimization: A Case Study. 2007 ,	1
1517	Evolutionary hypernetwork models for aptamer-based cardiovascular disease diagnosis. 2007 ,	9
1516	Fault and adversary tolerance as an emergent property of distributed systems' software architectures. 2007 ,	18
1515	Protein Linear Molecular Motor-Powered Nanodevices. 2007 , 60, 314	54
1514	Hybrid Architecture for Accelerating DNA Codeword Library Searching. 2007 ,	
1513	Traveling Salesman Problem Based on DNA Computing. 2007 ,	
1512	Modeling molecular computing systems by an artificial chemistry - its expressive power and application. 2007 , 13, 223-47	7
1511	Hardware acceleration of multi-deme genetic algorithm for the application of DNA codeword searching. 2007 ,	1
1510	Materials science. DNA circuits get up to speed. <i>Science</i> , 2007 , 318, 1078-9	33-3 8

1509	A DNA Computing Approach to Cluster-Based Logistic Design. 2007,	0
1508	Systems Biology. 2007,	4
1507	DNA Inspired Digital Signal Pattern Matching Algorithm. 2007,	5
1506	Current Status and Future Trends of Nanoscale Technology and Its Impact on Modern Computing, Biology, Medicine and Agricultural Biotechnology. 2007,	6
1505	A Branch and Cut Algorithm for DNA Encoding. 2007,	1
1504	DNA Nanodevices: Prototypes and Applications. 2007,	
1503	DNA algorithms for fractal construction—An application of the SinsDelP system. 2007, 84, 437-450	0
1502	A DNA computing model based on Acrydite™ gel technology to solve the timetabling problem. 2007,	2
1501	Intelligent Computing Everywhere. 2007,	5
1500	Bioelectronics. 455-503	
1499	Self-assembled DNA Nanotubes. 2007,	
1498	A hyper-step DNA computing system based on surface plasmon resonance. 2007,	
1497	The feasibility of a nano-interial measurement unit that uses chemistry to record position. 2007,	1
1496	Closed Circle DNA Algorithm of the Maximal Matching Problem. 2007,	
1495	A Parallel DNA Algorithm Using a Microfluidic Device to Build Scheduling Grids. 2007, 193-202	
1494	Differential dependence on DNA ligase of type II restriction enzymes: a practical way toward ligase-free DNA automaton. 2007, 353, 733-7	2
1493	Barbie nanoatelier. 2007, 1, 7-12	1
1492	Nonenzymatic parallel DNA logic circuits. 2007, 8, 1520-5	18

1491	A systems perspective to digital structures in molecular analysis. 2007 , 5, 214-22	11
1490	Photochromism of diarylethene single molecules in polymer matrices. 2007 , 129, 5932-8	150
1489	A simple DNA-based translation system. 2007 , 7, 480-3	20
1488	Engineered holliday junctions as single-molecule reporters for protein-DNA interactions with application to a MerR-family regulator. 2007 , 129, 12461-7	19
1487	How do size-expanded DNA nucleobases enhance duplex stability? Computational analysis of the hydrogen-bonding and stacking ability of xDNA bases. 2007 , 111, 2999-3009	35
1486	Intelligent Computing Everywhere. 2007 , 3-23	3
1485	Molecular Computation and Evolutionary Wetware: A Cutting-Edge Technology for Artificial Life and Nanobiotechnologies. 2007 , 37, 325-336	8
1484	. 2007 ,	
1483	Fast parallel DNA-based algorithms for molecular computation: the set-partition problem. 2007 , 6, 346-53	22
1482	Organization-Oriented Chemical Programming. 2007 ,	1
1481	A conventional strands evaluator for DNA computations. 2007 ,	
1480	Information Security Technology Based on DNA Computing. 2007 ,	25
1479	Efficient DNA Algorithms for Chromatic Number of Graph Problems. 2007 ,	
1478	A new approach to computing equilibrium state of combinatorial Hybridization Reaction Systems. 2007 ,	
1477	Optimal part orientation in layered manufacturing using evolutionary stickers-based DNA algorithm. 2007 , 2, 3-19	32
1476	Self-assembly of graphs. 2007 ,	0
1475	. 2007 ,	1
1474	Digital and biological storage systems \square quantitative comparison. 2007 ,	

1473	A Symmetrical Linear Transform Learning Algorithm on Quantum Group. 2007,	
1472	An Architectural Style for Solving Computationally Intensive Problems on Large Networks. 2007,	21
1471	. 2007,	1
1470	Phosphate-mediated molecular memory driven by two different protein kinases as information input elements. 2007, 129, 8345-52	45
1469	Detection of 100 aM fluorophores using a high-sensitivity on-chip CE system and transient isotachopheresis. 2007, 79, 345-9	70
1468	Reducing facet nucleation during algorithmic self-assembly. 2007, 7, 2913-9	51
1467	Fast Parallel Molecular Algorithms for DNA-Based Computation: Solving the Elliptic Curve Discrete Logarithm Problem over $GF(2^n)$. 2007,	2
1466	Rings of single-walled carbon nanotubes: molecular-template directed assembly and Monte Carlo modeling. 2007, 7, 276-80	41
1465	. 2007,	56
1464	A programmable biomolecular computing machine with bacterial phenotype output. 2007, 8, 1255-60	17
1463	Design of molecular logic devices based on a programmable DNA-regulated semisynthetic enzyme. 2007, 46, 3955-8	64
1462	Design of Molecular Logic Devices Based on a Programmable DNA-Regulated Semisynthetic Enzyme. 2007, 119, 4029-4032	15
1461	Self-assembly of strings and languages. 2007, 374, 74-81	16
1460	Simulations of SELEX against complex receptors with a condensed statistical model. 2007, 31, 1007-1019	8
1459	DNA computing based RNA genetic algorithm with applications in parameter estimation of chemical engineering processes. 2007, 31, 1602-1618	53
1458	Triplet-Singlet spin communication between DNA nucleotides serves the basis for quantum computing. 2007, 436, 258-262	5
1457	Solving satisfiability problems using a novel microarray-based DNA computer. 2007, 90, 242-52	8
1456	Modelling the dynamic structure of biological state-based systems. 2007, 87, 142-9	8

1455	Taking the example of computer systems engineering for the analysis of biological cell systems. 2007 , 90, 623-35	2
1454	Binary templates for comma-free DNA codes. 2007 , 155, 831-839	34
1453	A microfluidic systems-based DNA algorithm for solving special 0/1 integer programming problem. 2007 , 185, 1160-1170	5
1452	Molecular solution to the 0/1 knapsack problem based on DNA computing. 2007 , 187, 1033-1037	30
1451	A Model in Γ for DNA Addition. 2007 , 171, 209-222	1
1450	The potential for signal integration and processing in interacting MAP kinase cascades. 2007 , 246, 604-20	11
1449	Molecular logic and computing. 2007 , 2, 399-410	746
1448	Biotechnology: logic goes in vitro. 2007 , 2, 84-5	40
1447	Computational genes: a tool for molecular diagnosis and therapy of aberrant mutational phenotype. 2007 , 8, 365	8
1446	Biomolecular computing: is it ready to take off?. 2007 , 2, 91-101	21
1445	Hairpin Finite Automata. 2007 , 108-119	2
1444	Problem solving by intelligent water drops. 2007 ,	108
1443	Towards biomedical applications for nucleic acid nanodevices. 2007 , 2, 817-30	79
1442	Quantum Algorithms: Philosophical Lessons. 2007 , 17, 233-247	7
1441	Bond-free DNA language classes. 2007 , 6, 371-402	5
1440	Design of an irreversible DNA memory element. 2007 , 6, 403-411	3
1439	Two-State Dynamics for Replicating Two-Strand Systems. 2007 , 14, 397-410	5
1438	Bio-soft computing with fixed-length DNA to a group control optimization problem. 2007 , 12, 223-228	7

1437	The molecular algorithm of connectivity based on three dimensional DNA structure. 2007 , 24, 104-107	1
1436	An overview of structural DNA nanotechnology. 2007 , 37, 246-57	360
1435	Symmetric-key cryptosystem with DNA technology. 2007 , 50, 324-333	32
1434	DNA addition using linear self-assembly. 2007 , 52, 1462-1467	2
1433	Chemical organisation theory. 2007 , 69, 1199-231	119
1432	Towards an intelligent database system founded on the SP theory of computing and cognition. 2007 , 60, 596-624	13
1431	A P system and a constructive membrane-inspired DNA algorithm for solving the Maximum Clique Problem. 2007 , 90, 687-97	7
1430	Arithmetic computation in the tile assembly model: Addition and multiplication. 2007 , 378, 17-31	50
1429	A DNA sticker algorithm for bit-substitution in a block cipher. 2008 , 68, 1201-1206	5
1428	'Extremotaxis': computing with a bacterial-inspired algorithm. 2008 , 94, 47-54	4
1427	Nondeterministic polynomial time factoring in the tile assembly model. 2008 , 395, 3-23	31
1426	Abstraction layers for scalable microfluidic biocomputing. 2008 , 7, 255-275	125
1425	On length-separating test tube systems. 2008 , 7, 167-181	6
1424	Automating the DNA computer: solving n-Variable 3-SAT problems. 2008 , 7, 239-253	4
1423	Solving the Hamiltonian path problem with a light-based computer. 2008 , 7, 57-70	44
1422	Experimental implementation and analysis of a DNA computing readout method based on real-time PCR with TaqMan probes. 2008 , 7, 277-286	3
1421	Incorporation and use of modified nucleotides in aqueous DNA computing. 2008 , 7, 423-438	
1420	Solutions to computational problems through gene assembly. 2008 , 7, 385-401	2

1419	Large-scale DNA memory based on the nested PCR. 2008 , 7, 335-346	18
1418	A software tool for verification of Spiking Neural P Systems. 2008 , 7, 485-497	10
1417	Molecular solution to the optimal linear arrangement problem based on DNA computation. 2008 , 44, 172-183	1
1416	Construction of Constant GC-Content DNA Codes via a Variable Neighbourhood Search Algorithm. 2008 , 7, 311-326	17
1415	Exact Cover with Light. 2008 , 26, 329-346	17
1414	DNA labelled graphs with DNA computing. 2008 , 51, 437-452	3
1413	Antibody-based computing: an application to the stable marriage problem. 2008 , 12, 125-128	2
1412	DNA computing, computation complexity and problem of biological evolution rate. 2008 , 56, 285-95	6
1411	Sequence-addressable DNA logic. 2008 , 4, 427-31	69
1410	DNA Double Helix Based Hybrid GA for the Gasoline Blending Recipe Optimization Problem. 2008 , 31, 440-451	17
1409	A fluorescent-switch-based computing platform in defending information risk. 2008 , 14, 6342-51	57
1408	Ambipolar Charge Transport in DNA Molecules. 2008 , 20, 1258-1262	
1407	Solving satisfiability in the tile assembly model with a constant-size tileset. 2008 , 63, 151-166	16
1406	Towards molecular computers that operate in a biological environment. 2008 , 237, 1165-1172	61
1405	The neglected pillar of material computation. 2008 , 237, 1157-1164	72
1404	A DNA-based algorithm for arranging weighted cliques. 2008 , 16, 1561-1570	4
1403	A DNA-based solution to the graph isomorphism problem using Adleman-Lipton model with stickers. 2008 , 197, 672-686	12
1402	Biological computation of the solution to the quadratic assignment problem. 2008 , 200, 369-377	6

1401	A DNA-based graph encoding scheme with its applications to graph isomorphism problems. 2008 , 203, 502-512	18
1400	Discrepancy between mRNA and protein abundance: insight from information retrieval process in computers. 2008 , 32, 462-8	52
1399	DNA approach to solve clustering problem based on a mutual order. 2008 , 91, 1-12	37
1398	An evolutionary Monte Carlo algorithm for predicting DNA hybridization. 2008 , 91, 69-75	3
1397	Solving the SAT problem using a DNA computing algorithm based on ligase chain reaction. 2008 , 91, 117-25	23
1396	Solving NP-complete problems in the tile assembly model. 2008 , 395, 31-46	39
1395	Hierarchical self-assembly of DNA into symmetric supramolecular polyhedra. 2008 , 452, 198-201	964
1394	Reliable neuronal logic devices from patterned hippocampal cultures. 2008 , 4, 967-973	114
1393	Enhanced immunostimulatory activity of oligodeoxynucleotides by Y-shape formation. 2008 , 124, 247-55	80
1392	Improved Lower Bounds for Constant GC-Content DNA Codes. 2008 , 54, 391-394	35
1391	DNA media storage. 2008 , 18, 603-609	5
1390	Improved taboo search algorithm for designing DNA sequences. 2008 , 18, 623-627	7
1389	DNA computing model based on lab-on-a-chip and its application on solving the timetabling problem. 2008 , 18, 633-637	
1388	The Algorithm Design Manual. 2008 ,	244
1387	Screening for amyloid aggregation by Semi-Denaturing Detergent-Agarose Gel Electrophoresis. 2008 ,	112
1386	Unconventional Computing. 2008 ,	1
1385	Matrix Multiplication with DNA Based Computing: A Comparison Study between Hybridization-Ligation and Parallel Overlap Assembly. 2008 ,	
1384	A Survey on Continuous Time Computations. 2008 , 383-423	30

1383	Solving NP-Complete Problems with Delayed Signals: An Overview of Current Research Directions. 2008 , 115-127	5
1382	Optical SuperComputing. 2008 ,	2
1381	Engineering bacteria to solve the Burnt Pancake Problem. 2008 , 2, 8	30
1380	Mathematics and Technology. 2008 ,	5
1379	New Computational Paradigms. 2008 ,	6
1378	Computing by polymerase chain reaction. 2008 , 211, 282-98	16
1377	The many facets of natural computing. 2008 , 51, 72-83	136
1376	Projective Measurement-Based Logic Synthesis of Quantum Circuits. 2008 ,	
1375	Biosensors based on direct electron transfer of protein. 2008 , 531-581	6
1374	Systems chemistry. 2008 , 37, 101-8	488
1373	A DNA genetic algorithm for beam angle selection in radiotherapy planning. 2008 ,	1
1372	Quantum algorithms for bio-molecular solutions to the satisfiability problem on a quantum computer. 2008 ,	
1371	Algorithm for elliptic curve Diffie-Hellman key exchange based on DNA tile self-assembly. 2008 ,	
1370	The design of reversible gate and reversible sequential circuit based on DNA computing. 2008 ,	2
1369	Computational Intelligence in Bioinformatics. 2008 ,	11
1368	DNA computing approach for automated test pattern generation for digital circuits. 2008 , 39, 173-180	
1367	Efficient DNA sticker algorithms for DES. 2008 ,	1
1366	A Model to Optimize DNA Sequences Based on Particle Swarm Optimization. 2008 ,	4

1365	Quantum algorithms for biomolecular solutions of the satisfiability problem on a quantum machine. 2008 , 7, 215-22	17
1364	Biomolecular ubi-computing with potential multimodal applications. 2008 ,	
1363	An efficient genetic algorithm based on the cultural algorithm applied to DNA codewords design. 2008 ,	1
1362	Fast parallel bio-molecular logic computing algorithms: Protein folding. 2008 ,	
1361	One-Time-Pads encryption in the tile assembly model. 2008 ,	2
1360	A new approach for Boolean matrix multiplication with DNA computing. 2008 ,	1
1359	Fast Parallel Molecular Solution to the Hitting-Set Problem. 2008 ,	0
1358	A DNA nanotransport device powered by polymerase phi29. 2008 , 8, 3870-8	34
1357	Length-based encoding of binary data in DNA. 2008 , 24, 1613-6	9
1356	Time and distance dependence of reversible polymer bridging followed by single-molecule force spectroscopy. 2008 , 24, 4738-42	18
1355	DNA Computing and Its Applications. 2008 ,	21
1354	DNA-templated assemblies of nickel hexacyanoferrate crystals. 2008 , 112, 6467-72	9
1353	An encryption scheme using DNA technology. 2008 ,	44
1352	From DNA nanotechnology to synthetic biology. 2008 , 2, 99-109	23
1351	Similarity Cyclic DNA Codes over Rings. 2008 ,	5
1350	A New Approach for Modelling Circuits Containing NAND Gates Using Biomolecular Computing. 2008 ,	
1349	Molecular computing with deoxyribozymes. 2008 , 82, 199-217	30
1348	Using Sticker-based Model to Solve the Clique Problem on DNA-based Computing. 2008 ,	0

1347	Research on the DNA Sequence Design Based on GA/PSO Algorithms. 2008,		8
1346	A Novel Generalized Model for Constructing Reusable and Reliable Logic Gates Using DNA. 2008,		4
1345	Introduction to DNA Microarrays. 1-26		4
1344	The use of gold nanoparticle aggregation for DNA computing and logic-based biomolecular detection. 2008, 19, 395103		16
1343	Computational Issues in Biomedical Nanometrics and Nano-Materials. 2008, 1, 50-58		1
1342	Cell biology. RNA computing in a living cell. <i>Science</i> , 2008, 322, 387-8	33.3	26
1341	. 2008, 20, 965-975		11
1340	Biological computation of optimal task arrangement for a flexible machining cell. 2008, 222, 605-618		3
1339	DNA Encoding Methods in the Field of DNA Computing. 2008, 293-322		
1338	DNA Computing Models. 2008,		4
1337	DNA cryptography: a novel paradigm for secure routing in Mobile Ad hoc Networks (MANETs). 2008, 11, 393-404		12
1336	Tying new knots in synthetic biology. 2008, 2, 124-8		3
1335	. 2008,		1
1334	. 2008,		1
1333	Molecular solutions for the set-partition problem on DNA-based computing. 2008,		1
1332	Toward integration of in vivo molecular computing devices: successes and challenges. 2008, 2, 239-43		2
1331	A Surface-Based DNA Algorithm for the 0-1 Programming Problem. 2008,		
1330	Solving the 0/1 planning problem based on self-assembly of DNA tiles. 2008,		

1329	Fast parallel bio-molecular logic computing algorithms of discrete logarithm. 2008,	1
1328	DNA encoding for solving the NP problems. 2008,	1
1327	Fuzzy C-means clustering for DNA computing readout method implemented on LightCycler System. 2008,	1
1326	DNA immune algorithm and its application. 2008,	
1325	A DNA algorithm for solving 0/1 programming. 2008,	
1324	Chapter 3 Computing by Self-Assembly: DNA Molecules, Polyominoes, Cells. 2008, 5, 49-78	1
1323	Recent patents in bionanotechnologies: nanolithography, bionanocomposites, cell-based computing and entropy production. 2008, 2, 72-83	6
1322	Computational thinking and thinking about computing. 2008, 366, 3717-25	572
1321	Harnessing vision for computation. 2008, 37, 1131-4	
1320	THE FUTURE OF CEREBRAL SURGERYA KALEIDOSCOPE OF OPPORTUNITIES. 2008,	3
1319	Neurosurgery in the realm of 10(-9), part 1: stardust and nanotechnology in neuroscience. 2008, 62, 1-20	32
1318	The future of cerebral surgery: a kaleidoscope of opportunities. 2008, 62, 1555-79; discussion 1579-82	20
1317	Fast parallel molecular algorithms for DNA-based computation: solving the elliptic curve discrete logarithm problem over GF2. 2008, 2008, 518093	6
1316	. 2009,	7
1315	DNA Code Word Design for DNA Computing with Real-Time Polymerase Chain Reaction. 2009, 5, 1-10	4
1314	References. 137-146	
1313	. 2009,	
1312	. 2009,	15

1311	Advanced Nanosensors for Environmental Monitoring. 2009 , 391-415	1
1310	Design of a dynamic model of genes with multiple autonomous regulatory modules by evolution in silico. 2009 ,	
1309	Linear Data Structure for DNA Computer. 2009 ,	1
1308	A DNA Encoding Method to Determine and Sequence All Cliques in a Weighted Graph. 2009 ,	1
1307	The Breadth First Search Traversing Algorithm of the Graphs in DNA Computer. 2009 ,	
1306	. 2009 ,	
1305	Sensitivity Analysis on Bio-op Errors in DNA Computing. 2009 ,	
1304	Closed Circle DNA Algorithm of Hamilton Circuit Problem. 2009 ,	
1303	A data streams clustering algorithm using DNA computing techniques based on mobile agent. 2009 ,	0
1302	. 2009 ,	
1301	DNA algorithm on optimal path selection for bus travel network. 2009 ,	1
1300	Automation of DNA Computing Readout Method Implemented on LightCycler System. 2009 ,	
1299	A DNA Computing Model of Perceptron. 2009 ,	1
1298	Computational cluster validation in DNA-based computation. 2009 ,	
1297	The Working Operation Problem on Triple-stranded DNA Structure Model. 2009 ,	1
1296	WiMAX: Forecasting by integrating scenario planning and Bass model methodologies. 2009 ,	
1295	A DNA-Based Clustering Method Based on Statistics Adapted to Heterogeneous Coordinate Data. 2009 ,	1
1294	A microfluidic DNA computing processor for gene expression analysis and gene drug synthesis. 2009 , 3, 44105	13

1293	A General Object Oriented Description for DNA Computing Technique. 2009 ,	
1292	DNA Computing for Traveling Salesman Problem. 2009 ,	1
1291	Research on application of NC program optimization based on TSP. 2009 ,	2
1290	Spatial Cluster Analysis Based on Evolutionary DNA Computing Technique. 2009 ,	1
1289	A CONSTANT TIME ALGORITHM FOR DNA ADD. 2009 , 20, 549-558	1
1288	DNA Cryptographic Algorithms. 2009 , 223-226	16
1287	Supramolecular DNA nanotechnology. 2009 , 81, 2157-2181	13
1286	Towards Complex Matter: Supramolecular Chemistry and Self-organization*. 2009 , 17, 263-280	56
1285	Fast Parallel Molecular Algorithms for DNA-Based Computation: Graph Isomorphism Problem. 2009 ,	
1284	Quantum demonstration of a bio-molecular solution of the satisfiability problem on spin-based ensemble. 2009 , 18, 5173-5178	
1283	Biologically-implemented genetic algorithm for protein engineering. 2009 ,	1
1282	. 2009 ,	
1281	Improved Genetic Algorithm for Designing DNA Sequences. 2009 ,	2
1280	. 2009 ,	1
1279	ARTIFICIALLY DESIGNED DNA NANOSTRUCTURES. 2009 , 04, 119-139	18
1278	Implementation of a Nanoscale Automaton Using DNA Conformation Controlled by Optical Signals. 2009 , 48, 09LA01	3
1277	Living buildings: plectic systems architecture. 2009 , 7, 79-94	6
1276	Liposome logic. 2009 ,	1

1275	Randomized fast design of short DNA words. 2009 , 5, 1-24	5
1274	Emergence of Animals from Heat Engines [Part 1. Before the Snowball Earths. 2009 , 11, 463-512	4
1273	A programming language for composable DNA circuits. 2009 , 6 Suppl 4, S419-36	120
1272	Infochemistry and infofuses for the chemical storage and transmission of coded information. 2009 , 106, 9147-50	38
1271	Parallel Computing. 2009 ,	7
1270	Fireworks for the information age. 2009 , 106, 9127-8	2
1269	Arithmetic computation using self-assembly of DNA tiles: subtraction and division. 2009 , 19, 377-388	11
1268	DNA Nanotechnology and its Biological Applications. 349-375	4
1267	Nucleic Acid Engineering. 549-575	
1266	Fluorescent Logic Gates Chemically Attached to Silicon Nanowires. 2009 , 121, 3521-3524	15
1265	Encoding and processing of alphanumeric information by chemical mixtures. 2009 , 10, 3303-9	15
1264	A Substrate-Independent Approach for the Surface Immobilization of Oligonucleotides using Aldehyde Functionalized Surfaces. 2009 , 15, 122-127	2
1263	A splicing model-based DNA-computing approach on microfluidic chip. 2009 , 30, 3514-8	6
1262	Fluorescent logic gates chemically attached to silicon nanowires. 2009 , 48, 3469-72	57
1261	Complexity classes for self-assembling flexible tiles. 2009 , 410, 332-346	17
1260	Cyclic DNA codes over the ring based on the deletion distance. 2009 , 346, 731-740	33
1259	Recurrent neuro fuzzy control design for tracking of mobile robots via hybrid algorithm. 2009 , 36, 8993-8999	23
1258	System identification: DNA computing approach. 2009 , 48, 254-63	7

1257	Solving the subset-sum problem with a light-based device. 2009 , 8, 321-331	21
1256	Performing DNA computation with RecA-mediated triple-stranded DNA structure. 2009 , 8, 149-156	
1255	On codeword design in metric DNA spaces. 2009 , 8, 571-588	18
1254	Successful preparation and analysis of a 5-site 2-variable DNA library. 2009 , 8, 333-347	3
1253	In some curved spaces, one can solve NP-hard problems in polynomial time. 2009 , 158, 727-740	3
1252	Chemical approaches for mimicking logic functions within fluorescent MPT dyes. 2009 , 52, 700-714	8
1251	Highly fluorescing solid DNA-cationic polyelectrolyte complexes prepared from a natural DNA and a poly(fluorenevinylene-alt-phenylene) bearing quaternary ammonium pendants. 2009 , 17, 245-249	3
1250	Multi-agent system for distributed computer-aided process planning problem in e-manufacturing environment. 2009 , 44, 579-594	15
1249	Factorizing RSA Keys, An Improved Analogue Solution. 2009 , 27, 159-176	5
1248	Biomolecular computing: Molecules that reason. 2009 , 4, 625-6; correction 626	1
1247	What are melanocytes really doing all day long...?. 2009 , 18, 799-819	197
1246	Neuronal computers. 2009 , 71, e2372-e2376	8
1245	Computational virtuality in biological systems. 2009 , 410, 323-331	42
1244	Twin-roots of words and their properties. 2009 , 410, 2393-2400	3
1243	On pseudoknot-bordered words and their properties. 2009 , 75, 113-121	9
1242	Parallel bioinspired algorithms for NP complete graph problems. 2009 , 69, 221-229	8
1241	Parallel DNA arithmetic operation based on n-moduli set. 2009 , 212, 177-184	39
1240	Optical computing. 2009 , 215, 1417-1430	15

1239	A polynomial-time DNA computing solution for the Bin-Packing Problem. 2009 , 215, 2055-2062	24
1238	A new solution for maximal clique problem based sticker model. 2009 , 95, 145-9	14
1237	A novel generalized design methodology and realization of Boolean operations using DNA. 2009 , 97, 146-53	9
1236	Construction of a DNA nano-object directly demonstrates computation. 2009 , 98, 80-4	18
1235	Biocomputers: from test tubes to live cells. 2009 , 5, 675-85	146
1234	Production of random DNA oligomers for scalable DNA computing. 2009 , 4, 119-28	1
1233	Information Processing with Structured Chemical Excitable Medium. 2009 , 48-69	1
1232	Intelligent medical diagnostics via molecular logic. 2009 , 131, 13232-3	133
1231	Multi-objective resource assignment problem in a product-driven supply chain using a Taguchi-based DNA algorithm. 2009 , 47, 2345-2371	17
1230	DNA Computing and Its Application to Information Security Field. 2009 ,	14
1229	On the lower bounds of DNA word sets for DNA computing. 2009 ,	
1228	Maximum Weight Clique Problem Based on Sticker Model. 2009 ,	
1227	DNA Implementation of Arithmetic Operations. 2009 ,	6
1226	A molecular computing model for 3-coloring graph problem based on circular DNA branch migration. 2009 ,	
1225	Dual-controlled nanoparticles exhibiting AND logic. 2009 , 131, 11344-6	278
1224	Encyclopedia of Complexity and Systems Science. 2009 , 6388-6407	1
1223	Self-assembly from milli- to nanoscales: methods and applications. 2009 , 19, 83001	162
1222	Nanochemistry. 899-939	

1221	Potassium-lead-switched G-quadruplexes: a new class of DNA logic gates. 2009 , 131, 15082-3	339
1220	Decision making with an interpretive structural modeling method using a DNA-based algorithm. 2009 , 8, 181-91	9
1219	Advances in Computational Intelligence. 2009 ,	4
1218	Materials science of DNA. 2009 , 19, 1353-1380	139
1217	Universal translators for nucleic acid diagnosis. 2009 , 131, 9368-77	55
1216	A Bio-inspired Evolutionary Approach to Identifying Minimal Length Decision Rules in Emotional Usability Engineering. 2009 , 181-187	
1215	Ballistic deflection transistors and the emerging nanoscale era. 2009 ,	5
1214	Knowledge politics and new converging technologies: a social epistemological perspective. 2009 , 22, 7-34	9
1213	Solving a Hamiltonian Path Problem with a bacterial computer. 2009 , 3, 11	37
1212	Solving the fully-connected 15-city TSP using probabilistic DNA computing. 2009 , 1, 275-80	7
1211	Searching Cliques in a Fuzzy Graph Based on an Evolutionary and Biological Method. 2009 , 166-173	
1210	DNA Computing. 2009 ,	2
1209	Study on the Site Selection Model of Logistics Distribution Center under Supply Chain Management. 2009 ,	
1208	Solving the 0-1 multi-objective knapsack problem using self-assembly of DNA tiles. 2009 ,	1
1207	Gender classification with cortical thickness measurement from magnetic resonance imaging by using a feature selection method based on evolutionary hypernetworks. 2009 ,	
1206	Efficient DNA algorithm for constructing Ramsey graph based on minimal degree vertex. 2009 ,	
1205	An $O(1.414n)$ Volume Molecular Solutions for the Subset-Product Problem on DNA-Based Supercomputing. 2009 ,	
1204	DNA computing in control systems: A survey. 2009 ,	1

1203	Study on Constructing Generalized Decision Tree by Using DNA Coding Genetic Algorithm. 2009,	1
1202	Obtaining homology groups in binary 2D images using P systems. 2009,	
1201	Molecular computations of the maximal clique problem using DNA self-assembly. 2009,	
1200	Solving Capacitated Vehicle Routing Problem Using DNA-based Computation. 2009,	0
1199	A multilevel image encryption algorithm based on chaos and DNA coding. 2009,	3
1198	A DNA-based supercomputing for privilege query in hybrid role hierarchy. 2009,	
1197	Matrix Multiplication Based on DNA Computing. 2009,	
1196	A Novel Biological Computation Method for Deriving and Resolving Discernibility Relations. 2009,	
1195	0/1 Programming problem based on sticker model. 2009,	
1194	Molecular beacon based DNA computing model for 0/1 programming problem. 2009,	1
1193	DNA algorithm on making spanning tree problem. 2009,	1
1192	. 2009,	0
1191	Development of an in vivo computer for 3-SAT problem. 2009,	
1190	Diol/Boric acid complexes integrated by responsive polymers: a route to chemical sensing and logic operations. 2009, 5, 3839	31
1189	Deterministic algorithm for the reordering problem using tile assembly. 2009,	
1188	DNA computation model based on self-assembled nanoparticle probes for 0/1 integer programming problem. 2009,	
1187	Errors in DNA Self-Assembly by Synthesized Tile Sets. 2009,	1
1186	The improvement of DNA algorithm to the Directed Shortest Hamilton Path Problem. 2009,	1

- 1185 A migrating DNA computing technique for grid clustering. **2009**,
- 1184 Determining feasible operating schedules for a job shop scheduling problem based on bio-soft computing. **2009**,
- 1183 . **2009**,
- 1182 High-resolution structural analysis of a DNA nanostructure by cryoEM. **2009**, 9, 2747-50 73
- 1181 Encyclopedia of Complexity and Systems Science. **2009**, 5466-5482 1
- 1180 The Undecidability of the Infinite Ribbon Problem: Implications for Computing by Self-Assembly. **2009**, 38, 2356-2381 14
- 1179 Retrieval efficiency of DNA-based databases of digital signals. **2009**, 8, 259-70 1
- 1178 The collision of multimode dromions and a firewall in the two-component long-wave/short-wave resonance interaction equation. **2009**, 42, 102002 19
- 1177 A Parallel Algorithm for Solving Sat Problem Based on Dna Computing. **2009**, 31, 128-131
- 1176 An efficient artificial immune algorithm for power system reliability optimisation. **2009**, 1, 178 5
- 1175 Reconfigurable Logic blocks based on a discrete chaotic circuit: Implementation of all fundamental two input, one output logic functions. **2009**, 42, 296-301
- 1174 A novel DNA evolutionary algorithm and its application for MP. **2009**,
- 1173 DNA in the material world: electrical properties and nano-applications. **2009**, 3, 135-53 15
- 1172 Using Implicit Enumeration to Solve 0-1 Planning Problem Based on DNA Computing. **2009**, 1
- 1171 Approximate reasoning on a DNA-chip. **2010**, 3, 514-553 4
- 1170 User Authorization Queries in RBAC systems based on DNA computation. **2010**,
- 1169 A Nano-Dial; Molecular Computing Model Based on Circular DNA. **2010**, 6, 285-291
- 1168 A DNA-based encoding and retrieving method for Jiaguwen. **2010**,

1167 . 2010,

1166 Bacterial Computing: Using E. coli to Solve the Burnt Pancake Problem. **2010**, 17, 5-10 2

1165 Algorithm for thermodynamically based prediction of DNA/DNA cross-hybridisation. **2010**, 6, 82-97 0

1164 Bacterial computing. **2010**, 17, 10-15 4

1163 DNA Computing for Subgraph Isomorphism Problem and Related Problems. **2010**, 171-190

1162 A DNA-based algorithm for capacitated vehicle routing problem using temperature gradient technique. **2010**, 2, 371 1

1161 Manipulation of Single DNA Using a Micronanobubble Formed by Local Laser Heating on a Au-coated Surface. **2010**, 39, 92-93 20

1160 Controlled polymer synthesis--from biomimicry towards synthetic biology. **2010**, 39, 286-300 62

1159 Image encryption using DNA addition combining with chaotic maps. **2010**, 52, 2028-2035 267

1158 Asymmetric encryption and signature method with DNA technology. **2010**, 53, 506-514 48

1157 A novel computing model of the maximum clique problem based on circular DNA. **2010**, 53, 1409-1416 3

1156 A DNA length reducing computing model for maximum independent set problem. **2010**, 55, 890-896 1

1155 DNA modular subtraction algorithm based on linear self-assembly. **2010**, 55, 1574-1580 2

1154 Experimental validation and optimization of signal dependent operation in whiplash PCR. **2010**, 9, 207-218 6

1153 Operon structure optimization by random self-assembly. **2010**, 9, 173-181 1

1152 On the regularity of circular splicing languages: a survey and new developments. **2010**, 9, 397-420 5

1151 Bioinspired Parallel Algorithms for Maximum Clique Problem on FPGA Architectures. **2010**, 58, 117-124 6

1150 A feasible solution to the beam-angle-optimization problem in radiotherapy planning with a DNA-based genetic algorithm. **2010**, 57, 499-508 14

1149	Integral biomathics: a post-Newtonian view into the logos of bios. 2010 , 102, 85-121	38
1148	Nanobiotechnology. 2010 , 251-277	
1147	Images come to life. 2010 , 11, 947-9	2
1146	Programmable Shape-Shifting Micelles. 2010 , 122, 5202-5206	21
1145	Programmable shape-shifting micelles. 2010 , 49, 5076-80	185
1144	PNIPAM Copolymers Containing Light-Responsive Chromophores: A Method Toward Molecular Logic Gates. 2010 , 31, 1456-61	37
1143	P systems and computational algebraic topology. 2010 , 52, 1982-1996	14
1142	Development of an in vivo computer for the SAT problem. 2010 , 52, 2043-2047	1
1141	Bacteria-based communication in nanonetworks. 2010 , 1, 244-256	169
1140	Solving the minimum bisection problem using a biologically inspired computational model. 2010 , 411, 888-896	10
1139	A DNA-based computing method for solving control chart pattern recognition problems. 2010 , 3, 293-303	9
1138	The simulation of virus life cycle with quantum gates. 2010 , 40, 359-62	0
1137	Shaping up nucleic acid computation. 2010 , 21, 392-400	48
1136	Applying DNA computation to intractable problems in social network analysis. 2010 , 101, 222-32	6
1135	Optical modification of the vibrational distribution of the iodine molecule. 2010 , 493, 170-172	
1134	A molecular solution to the hitting-set problem in DNA-based supercomputing. 2010 , 180, 1010-1019	9
1133	Molecular robots guided by prescriptive landscapes. 2010 , 465, 206-10	718
1132	Nanotechnology: Molecular robots on the move. 2010 , 465, 167-8	19

1131	Origins of life: Common ancestry put to the test. 2010 , 465, 168-9	21
1130	Training a molecular automaton to play a game. 2010 , 5, 773-7	153
1129	Design of a dynamic model of genes with multiple autonomous regulatory modules by evolution in silico. 2010 ,	
1128	Computing and information storage solutions. 76-120	1
1127	Design of a Reconfigurable Pulsed Quad-Cell for Cellular-Automata-Based Conformal Computing. 2010 , 2010, 1-11	1
1126	Recombinant Production of an Inulinase in a <i>Saccharomyces cerevisiae</i> gal80 Strain. 2010 , 20, 1529-33	11
1125	A New Encryption Method Based on Rijndael Algorithm and DNA Computing. 2010 , 20-23, 1241-1246	
1124	Logic integration of mRNA signals by an RNAi-based molecular computer. 2010 , 38, 2692-701	51
1123	Polystochastic Models for Complexity. 2010 ,	15
1122	Hierarchy Evolutionary Searching Algorithm for DNA Encoding Sequence. 2010 , 20-23, 94-98	
1121	Matrix splicing system. 2010 , 87, 278-309	
1120	Multiplexer and demultiplexer design with DNA-Computation. 2010 ,	
1119	Contextual-insertion to solve #P version of the Square-Tiling Problem. 2010 ,	
1118	A SEMI-GENERAL METHOD TO SOLVE THE COMBINATORIAL OPTIMIZATION PROBLEMS BASED ON NANOCOMPUTING. 2010 , 09, 391-398	2
1117	Chaos DNA Hooke-Jeeves evolutionary algorithm and its application in river pollution control. 2010 ,	
1116	Quantum key distribution and Denial-of-Service: Using strengthened classical cryptography as a fallback option. 2010 ,	3
1115	An Analytical Error Model for Pattern Clipping in DNA Self-Assembly. 2010 ,	
1114	Digital game design principles for spatial ability enhancement. 2010 ,	

- 1113 An evolution based biosensor receptor DNA sequence generation algorithm. **2010**, 10, 330-41 2
- 1112 Unconventional Computing [Reversible Signed Digit Adders for Future Nanocomputing Devices. **2010**, 52, 147-152
- 1111 Analysis of gene co-expression in Arabidopsis anther. **2010**,
- 1110 Experimental demonstration of lossy recording of information into DNA. **2010**,
- 1109 . **2010**,
- 1108 Logarithmic behavior of the degradation dynamics of metal oxide semiconductor devices. **2010**, 2010, P04025 18
- 1107 Solving Maximal Clique Problem through Genetic Algorithm. **2010**,
- 1106 Molecular communication for nanoscale communication networks. **2010**,
- 1105 An image encryption algorithm based on DNA self-assembly technology. **2010**, 1
- 1104 Smart lipids for programmable nanomaterials. **2010**, 10, 2690-3 67
- 1103 Selective manipulation of ICT and PET Processes in styryl-Bodipy derivatives: applications in molecular logic and fluorescence sensing of metal ions. **2010**, 132, 8029-36 343
- 1102 (Re)defining computing curricula by (re)defining computing. **2010**, 41, 195-207 17
- 1101 An encryption algorithm inspired from DNA. **2010**, 14
- 1100 Design of PID Controller Based on DNA Computing. **2010**,
- 1099 DNA Codewords Design Using Ant Colony Optimization Algorithm. **2010**,
- 1098 Label-free, dual-analyte electrochemical biosensors: a new class of molecular-electronic logic gates. **2010**, 132, 8557-9 110
- 1097 Plasmid DNA computing model of 0/1 programming problem. **2010**,
- 1096 DNA solution based on triangle subgraph to the vertex cover problem. **2010**,

1095	Structural DNA Nanotechnology: From Bases to Bricks, From Structure to Function. 2010 , 1, 1994-2005	52
1094	Independent sets of DNA oligonucleotides for nanotechnology applications. 2010 , 9, 38-43	5
1093	Systems theoretic analysis of the central dogma of molecular biology: some recent results. 2010 , 9, 59-70	7
1092	DNA word set design based on minimum free energy. 2010 , 9, 273-7	13
1091	Nanoinformatics and DNA-based computing: catalyzing nanomedicine. 2010 , 67, 481-9	45
1090	A new nanonetwork architecture using flagellated bacteria and catalytic nanomotors. 2010 , 28, 612-619	109
1089	Terminal Group Effects on Demulsification Using Dendrimers. 2010 , 28, 883-891	8
1088	A bio-inspired software for segmenting digital images. 2010 ,	5
1087	Image encryption algorithm based on DNA biological properties and chaotic systems. 2010 ,	3
1086	Boronic acid-modified DNA that changes fluorescent properties upon carbohydrate binding. 2010 , 46, 1073-5	31
1085	A novel and fast parallel solution for the vertex cover problem on DNA-based supercomputing. 2010 ,	
1084	Constructing molecular parallel subtractor and modular with basic bio-logic operations in the Adleman-Lipton model. 2010 ,	
1083	A DNA algorithm for maximal matching problem. 2010 ,	
1082	Construct Logic Operation Gates of OR and AND with Multiple Enzymes. 2010 ,	
1081	DNA secret writing techniques. 2010 ,	31
1080	An $O(1.414n)$ volume molecular solution for the 0/1 knapsack problem on DNA-based supercomputing. 2010 ,	
1079	DNA sequence generation algorithm using DNA coding method for 0/1 knapsack problem. 2010 ,	
1078	A novel solution for the P2P network observer placement problem on DNA-based supercomputing. 2010 ,	

- 1077 DNA based algorithms for solving both MAX-SAT and MAX-W-SAT problems. **2010**,
- 1076 A parallel type of DNA computing model for graph vertex coloring problem. **2010**,
- 1075 DNA accelerating evolutionary algorithm and its application in the parameter optimization of Muskingum routing model. **2010**,
- 1074 Improved molecular solutions for the N-QUEEN problem on DNA-based supercomputing. **2010**,
- 1073 Multi-responsive copolymers: using thermo-, light- and redox stimuli as three independent inputs towards polymeric information processing. **2011**, 47, 8859-61 72
- 1072 Adaptive DNA-based materials for switching, sensing, and logic devices. **2011**, 21, 6113 26
- 1071 DNA Computing Model Based on Photoelectric Detection System with Magnetic Beads. **2011**,
- 1070 Photoelectric DNA-Detection Platform with Assembled Magnetic Beads. **2011**,
- 1069 Molecular computing with plant cell phenotype serving as quality controlled output. **2011**, 7, 1113-20 4
- 1068 Empirical Robustness Evaluation of DNA-based Clustering Methods. **2011**, 4, 1-12
- 1067 Hybrid Optimization Method Based on Membrane Computing. **2011**, 50, 1691-1704 16
- 1066 Spanning tree problem based on sticker model. **2011**,
- 1065 Breaking DES in tile assembly models. **2011**,
- 1064 Clique-Detection Algorithm Using Clique-Self-Assembly. **2011**,
- 1063 Realization of Reversible Logic in DNA Computing. **2011**, 7 7
- 1062 Toehold of dsDNA exchange affects the hydrogel swelling kinetics of a polymer/dsDNA hybrid hydrogel. **2011**, 7, 1741-1746 38
- 1061 Solving minimum vertex cover problems with microfluidic DNA computer. **2011**,
- 1060 Analyzing Thermodynamics of DNA Spaces. **2011**,

1059	Implementation of Maximum Independent Set Problem by Algorithmic Tile Self-Assembly. 2011 ,	
1058	An immune-inspired information-theoretic approach to the problem of ICA over a Galois field. 2011	9
1057	Multiple entities interaction model through DNA based Petri Net. 2011 ,	0
1056	P Systems Based on Sticker Operations. 2011 ,	
1055	A binary vector evaluated particle swarm optimization based method for DNA sequence design problem. 2011 ,	5
1054	Spiking DNA neural trees with applications to conceptual design. 2011 ,	
1053	Semigraph Structure on DNA Splicing System. 2011 ,	1
1052	GIS integrated DNA computing for solving Travelling Salesman Problem. 2011 ,	2
1051	Scaling up digital circuit computation with DNA strand displacement cascades. <i>Science</i> , 2011 , 332, 1196-1199	1007
1050	Membrane Computing. 2011 ,	2
1049	Morphogenesis. 2011 ,	11
1048	Detection of multiple disease indicators by an autonomous biomolecular computer. 2011 , 11, 2989-96	35
1047	RTRACS: a modularized RNA-dependent RNA transcription system with high programmability. 2011 , 44, 1369-79	20
1046	A few DNA-based security techniques. 2011 ,	8
1045	DNA Sequences Optimization Based on Gravitational Search Algorithm for Reliable DNA Computing. 2011 ,	8
1044	Luminescent Photoinduced Electron Transfer (PET) Molecules for Sensing and Logic Operations. 2011 , 2, 2865-2871	63
1043	Algorithms in nature: the convergence of systems biology and computational thinking. 2011 , 7, 546	66
1042	Bacteria-based biocomputing with Cellular Computing Circuits to sense, decide, signal, and act. 2011 , 4, 4907	39

1041	Electrorheological fluid and its applications in microfluidics. 2011 , 304, 91-115	14
1040	A Unified Framework for the Analysis of Availability, Reliability and Security, With Applications to Quantum Networks. 2011 , 41, 107-119	7
1039	Neural network computation with DNA strand displacement cascades. 2011 , 475, 368-72	698
1038	Self-assembling DNA templates for programmed artificial biomineralization. 2011 , 7, 3240	29
1037	Nanopatterning by block copolymer micelle nanolithography and bioinspired applications. 2011 , 6, MR1-12	102
1036	Design of a DNA electronic logic gate (INHIBIT gate) with an assaying application for Ag ⁺ and cysteine. 2011 , 47, 9080-2	23
1035	Digital Information and Communication Technology and Its Applications. 2011 ,	1
1034	Collective stability of networks of winner-take-all circuits. 2011 , 23, 735-73	43
1033	Molecular Machines and Motors. 2011 , 339-382	
1032	Biochemistry. Scaling up DNA computation. <i>Science</i> , 2011 , 332, 1156-7	33-3 19
1031	Formal Modeling: Actors, Open Systems, Biological Systems. 2011 ,	4
1030	DNA cage delivery to mammalian cells. 2011 , 5, 5427-32	423
1029	A two-dimensional DNA lattice implanted polymer solar cell. 2011 , 22, 375202	29
1028	Evolution as computation: integrating self-organization with generalized Darwinism. 2011 , 7, 393-423	27
1027	An improved binary particle swarm optimization algorithm for DNA encoding enhancement. 2011 ,	4
1026	Programmable molecular recognition based on the geometry of DNA nanostructures. 2011 , 3, 620-7	276
1025	FPGA-Based Parallel DNA Algorithm for Optimal Configurations of an Omnidirectional Mobile Service Robot Performing Fire Extinguishment. 2011 , 58, 1016-1026	41
1024	An unenumerative DNA computing model for vertex coloring problem. 2011 , 10, 94-8	16

1023	A DNA-based algorithm for minimizing decision rules: a rough sets approach. 2011 , 10, 139-51	6
1022	Species Identification on a Small Sample Size of RNA Sequences by Combined Method of Noise Filtering with L2-Norm. 2011 , 1, 214-220	
1021	Nanofabrication for Molecular Scale Devices. 2011 ,	
1020	Star Colouring Problem: The DNA Solution. 2011 , 5, 423-436	
1019	Fuzzy molecular automaton using splicing theory. 2011 , 3, 320	2
1018	On the Regularity of Iterated Hairpin Completion of a Single Word. 2011 , 110, 201-215	2
1017	Dynamic DNA nanotechnology using strand-displacement reactions. 2011 , 3, 103-13	1213
1016	Molecular computing: DNA as a logic operator. 2011 , 469, 45-6	62
1015	On the scalability of biocomputing algorithms: The case of the maximum clique problem. 2011 , 412, 7075-70862	
1014	Region-based segmentation of 2D and 3D images with tissue-like P systems. 2011 , 32, 2206-2212	17
1013	G-quadruplex DNAzyme based molecular catalytic beacon for label-free colorimetric logic gates. 2011 , 32, 7318-24	66
1012	A DNA assembly model of sentence generation. 2011 , 106, 51-6	5
1011	Biologically Relevant Molecular Finite Automata. 2011 , 51, 67-86	7
1010	Nucleic-Acid-Based Switches. 2011 , 227-256	2
1009	On aggregation in multiset-based self-assembly of graphs. 2011 , 10, 17-38	5
1008	A review of the nondeterministic waiting time algorithm. 2011 , 10, 139-149	1
1007	Algorithmic applications of XPCR. 2011 , 10, 805-819	16
1006	Solving the generalized Subset Sum problem with a light based device. 2011 , 10, 541-550	3

1005	Unconventional complexity measures for unconventional computers. 2011 , 10, 1245-1259	6
1004	Padlock probe-mediated qRT-PCR for DNA computing answer determination. 2011 , 10, 947-959	3
1003	DNA chips for species identification and biological phylogenies. 2011 , 10, 375-389	11
1002	A renewable, modular, and time-responsive DNA circuit. 2011 , 10, 467-485	7
1001	Graph multiset transformation: a new framework for massively parallel computation inspired by DNA computing. 2011 , 10, 961-986	13
1000	Fast parallel DNA-based algorithms for molecular computation: discrete logarithm. 2011 , 56, 129-163	15
999	The history of little things that changed our lives. 2011 , 27, 1513-20	
998	Using sticker model of DNA computing to solve domatic partition, kernel and induced path problems. 2011 , 181, 3581-3600	4
997	Computing with bacterial constituents, cells and populations: from bioputing to bactoputing. 2011 , 130, 211-28	12
996	From foundational issues in artificial intelligence to intelligent memristive nano-devices. 2011 , 2, 75-87	5
995	Molecular logic computing model based on self-assembly of DNA nanoparticles. 2011 , 56, 3566-3571	17
994	A light trigger for DNA nanotechnology. 2011 , 7, 2163-7	25
993	Nukleinsäure-basierte molekulare Werkzeuge. 2011 , 123, 3180-3215	107
992	DNA-Linked Nanoparticle Building Blocks for Programmable Matter. 2011 , 123, 9351-9356	1
991	Nucleic acid based molecular devices. 2011 , 50, 3124-56	493
990	DNA-linked nanoparticle building blocks for programmable matter. 2011 , 50, 9185-90	73
989	Computational Complexity in Non-Turing Models of Computation. 2011 , 270, 17-28	2
988	A CLIQUE algorithm using DNA computing techniques based on closed-circle DNA sequences. 2011 , 105, 73-82	18

987	Synthetic Biology, Tinkering Biology, and Artificial Biology. What are We Learning?. 2011 , 14, 372-387	47
986	Molecular computing by PNA:PNA duplex formation. 2011 , 2, 16-22	5
985	Humanity 2.0. 2011 ,	70
984	CLASSIFICATION OF SODAR DATA BY DNA COMPUTING. 2011 , 07, 413-432	5
983	Self-Assembly-Based Structural DNA Nanotechnology. 2011 , 15, 534-547	2
982	Solving Maximum Clique Problems with Microfluidic DNA Computer. 2011 ,	
981	Three Dimensional DNA Self-Assembly Model for the Minimum Vertex Cover Problem. 2011 ,	1
980	Synchronous sequential computation with molecular reactions. 2011 ,	23
979	Storing Clocked Programs Inside DNA: A Simplifying Framework for Nanocomputing. 2011 , 3, 1-73	2
978	DNA Algorithm Employing Temperature Gradient for Chinese Postman Problem. 2011 ,	1
977	New construction of DNA codes with constant-GC contents from binary sequences with ideal autocorrelation. 2011 ,	1
976	DNA-based computing of strategic assignment problems. 2011 , 106, 188702	21
975	Secret data writing using DNA sequences. 2011 ,	15
974	Unconventional Computation. 2011 ,	1
973	DNA Computing in Microreactors: A Solution to the Minimum Vertex Cover Problem. 2011 ,	
972	Artificial Organic Networks. 2011 ,	20
971	DNA computing research progress and application. 2011 ,	3
970	Asynchronous computation with molecular reactions. 2011 ,	3

- 969 A DNA genetic algorithm with reconstruct operator for chemical process modeling. **2011**,
- 968 Solution to the 0-1 Multidimensional Knapsack Problem Based on DNA Computation. **2011**, 58-60, 1767-1772
- 967 Computing by physical interaction in neurons. **2011**, 10, 413-22 19
- 966 The Modified DNA Identification Classification on Fuzzy Relation. **2011**, 48-49, 1275-1281 4
- 965 DNA as an Engineering Material: From Assembly to Computation on Silicon. **2011**, 1346, 1
- 964 Surface- Based Computing Model of Maximum Independent Set Problem. **2011**, 328-330, 1729-1733
- 963 Unsupervised remote sensing image classification using an artificial DNA computing. **2011**,
- 962 Using DNA Self-assembly Design Strategies to Motivate Graph Theory Concepts. **2011**, 6, 96-107 4
- 961 Experimental Demonstration of Hopfield Neural Network using DNA molecules. **2011**, 1346, 1
- 960 Similarity-based fuzzy reasoning by DNA computing. **2011**, 3, 112 7
- 959 Agent-based modeling of molecular self-assembly mechanisms. **2011**, 1
- 958 DNA words based on an enhanced algorithm of multi-objective particle swarm optimization in a continuous search space. **2011**,
- 957 A molecular evolutionary algorithm for learning hypernetworks on simulated DNA computers. **2011** 0
- 956 High-precision, in vitro validation of the sequestration mechanism for generating ultrasensitive dose-response curves in regulatory networks. **2011**, 7, e1002171 39
- 955 Computational Biology: A Programming Perspective. **2011**, 403-433 1
- 954 Design of the Stack Structure Based on DNA Computing Model. **2012**, 263-266, 1393-1397
- 953 DNA Addition Algorithm Based on Molecular Beacon. **2012**, 424-425, 1164-1169 1
- 952 DNA Optimization Threshold Autoregressive Prediction Model and Its Application in Ice Condition Time Series. **2012**, 2012, 1-10 2

951	Communication P Systems on Simplicial Complexes with Applications in Cluster Analysis. 2012 , 2012, 1-17	11
950	Optimal control of gene mutation in DNA replication. 2012 , 2012, 743172	1
949	DNA computing for a dominating set problem based on sticker models. 2012 , 41, 1343-1350	1
948	DNA Computing Model Based on Self-Assembled Nanoparticle Probes for SAT Problem . 2012 , 443-444, 513-517	
947	Twisted duality for embedded graphs. 2012 , 364, 1529-1569	31
946	Spatial Cluster Analysis by the Adleman-Lipton DNA Computing Model and Flexible Grids. 2012 , 2012, 1-32	7
945	A DNA-PID Controller for an Industry Robot. 2012 , 461, 109-112	
944	DNA algorithm employing temperature gradient for Freeze-Tag Problem in swarm robotics. 2012 , 34, 278-290	3
943	Abstractions for DNA circuit design. 2012 , 9, 470-86	71
942	Using DNA to Solve the Minimal Vertex Covering Problem. 2012 , 220-223, 2987-2990	
941	Quencher-free multiplexed monitoring of DNA reaction circuits. 2012 , 40, e118	24
940	DNA sequence design for reliable DNA computing by using a multiobjective approach. 2012 ,	
939	A molecular computing model for maximal clique problem using circular DNA length growth. 2012 ,	
938	DNA cryptography. 2012 ,	18
937	Sequence-dependent thermodynamics of a coarse-grained DNA model. 2012 , 137, 135101	191
936	Study on some modeling problems in the process of gene expression with finite state machine. 2012 ,	
935	Logical operations with localized structures. 2012 , 14, 013040	23
934	Engineering Natural Computation by Autonomous DNA-Based Biomolecular Devices. 2012 , 1319-1353	

- 933 DNA biomolecular-electronic encoder and decoder devices constructed by multiplex biosensors. **2012**, 4, e1-e1 125
- 932 Supramolecular Chemistry: From Molecular Information toward Self-Organization and Complex Matter. **2012**, 137-162
- 931 Biologically Inspired Hardware: Status and Perspectives (Invited Talk). **2012**,
- 930 Integration of DNA and Real Coded GA for the design of PID-like fuzzy controllers. **2012**, 1
- 929 Dual-axis cross-coupling controller design using DNA algorithm. **2012**,
- 928 Mathematical modeling of genetic evolution. **2012**,
- 927 3D DNA Self-Assembly Model for Minimum Control Sets Problem. **2012**, 562-564, 1610-1614
- 926 Non-enzymatic Polymerization of Nucleic Acids from Monomers: Monomer Self- Condensation and Template-Directed Reactions. **2012**, 9, 735-763 14
- 925 Reasoning with disposition using DNA tweezers. **2012**, 4, 302 1
- 924 Future trends in nanotechnology and molecular assembly: conceptualising technological innovation and social impact towards 2025. **2012**, 1, 265
- 923 Biomimetic Approaches to Self-Assembly of Nanomaterials. **2012**,
- 922 DNA computation: a photochemically controlled AND gate. **2012**, 134, 3810-5 89
- 921 Pattern clustering with statistical methods using a DNA-based algorithm. **2012**, 11, 100-10 2
- 920 Engineering integrated digital circuits with allosteric ribozymes for scaling up molecular computation and diagnostics. **2012**, 1, 471-82 32
- 919 An artificial ants model for fast construction and approximation of proximity graphs. **2012**, 20, 443-459
- 918 A mechanical Turing machine: blueprint for a biomolecular computer. **2012**, 2, 497-503 13
- 917 DNA biosensors that reason. **2012**, 109, 91-104 8
- 916 A DNA-based and electrochemically transduced keypad lock system with reset function. **2012**, 18, 14939-42 30

915	Emerging Strategies in Infohybrid Systems. 2012 , 2012, 5145-5143	7
914	Application of DNA computing in graph theory. 2012 , 38, 223-235	8
913	Designing a new software tool for Digital Imagery based on P systems. 2012 , 11, 381-386	5
912	Programming and evolving physical self-assembling systems in three dimensions. 2012 , 11, 475-498	6
911	Extended Watson-Crick L systems with regular trigger languages and restricted derivation modes. 2012 , 11, 653-664	1
910	Molecular solutions of the RSA public-key cryptosystem on a DNA-based computer. 2012 , 61, 642-672	12
909	Synthetic in vitro circuits. 2012 , 16, 253-9	50
908	Graphene-based aptamer logic gates and their application to multiplex detection. 2012 , 6, 6659-66	132
907	Nanoelectronics. 2012 ,	
906	Theoretical consideration of selective enrichment in in vitro selection: optimal concentration of target molecules. 2012 , 240, 201-11	6
905	An OR logic gate based on two molecular beacons. 2012 , 8, 927-30	6
904	DNA Sequence Design for Direct-Proportional Length-Based DNA Computing: Particle Swarm Optimization vs Population Based Ant Colony Optimization. 2012 ,	
903	Design of a dual-output fluorescent DNA logic gate and detection of silver ions and cysteine based on graphene oxide. 2012 , 48, 82-4	108
902	Molecular beacon-based half-adder and half-subtractor. 2012 , 48, 112-4	32
901	Object identification using DNA computing algorithm. 2012 ,	3
900	3D DNA self-assembly for the maximum clique problem. 2012 ,	
899	The thyroid disease analysis by a class of tissue P system. 2012 ,	
898	. 2012 ,	

897	An aptamer-based keypad lock system. 2012 , 48, 802-4	47
896	A reversible fluorescent DNA logic gate based on graphene oxide and its application for iodide sensing. 2012 , 48, 3647-9	67
895	Solving graph vertex coloring problem with microfluidic DNA computer. 2012 ,	0
894	Nanotechnology for Biology and Medicine. 2012 ,	2
893	DNA-modified silicon nanocrystals studied by X-ray luminescence and X-ray absorption spectroscopies: Observation of a strong infra-red luminescence band. 2012 , 111, 054311	4
892	Theory of algorithmic self-assembly. 2012 , 55, 78-88	74
891	pH-programmable DNA logic arrays powered by modular DNAzyme libraries. 2012 , 12, 6049-54	96
890	Orientation and Ordering in Sequence- and Length-Mismatched Surface-Bound DNA Hybrids. 2012 , 116, 11133-11140	11
889	Logical NAND and NOR Operations Using Algorithmic Self-assembly of DNA Molecules. 2012 , 33, 954-961	2
888	Next-generation digital information storage in DNA. <i>Science</i> , 2012 , 337, 1628	33-3 599
887	Computational Intelligence Applied on Cryptology: a brief review. 2012 , 10, 1798-1810	12
886	Biomolecular Computing. 2012 , 189-206	1
885	DNA-like linguistic secret sharing for strategic information systems. 2012 , 32, 175-181	46
884	Implementing conventional logic unconventionally: photochromic molecular populations as registers and logic gates. 2012 , 109, 35-51	7
883	Computational simulation of a gene regulatory network implementing an extendable synchronous single-input delay flip-flop. 2012 , 109, 57-71	12
882	Field programmable chemistry: integrated chemical and electronic processing of informational molecules towards electronic chemical cells. 2012 , 109, 2-17	8
881	DNA as a nanomateria. 2012 , 54, 531-539	3
880	EGNAS: an exhaustive DNA sequence design algorithm. 2012 , 13, 138	12

879	Autocatalytic sets extended: Dynamics, inhibition, and a generalization. 2012 , 3,	19
878	Biocomputing: Explore Its Realization and Intelligent Logic Detection. 2012 , 117-131	
877	Biomolecular Finite Automata. 2012 , 145-179	
876	Biomolecular Computing Systems. 2012 , 199-223	2
875	Restriction Enzymes in Language Generation and Plasmid Computing. 2012 , 245-263	0
874	Conclusions and Perspectives. 2012 , 347-350	
873	Artificial DNA Computing-Based Spectral Encoding and Matching Algorithm for Hyperspectral Remote Sensing Data. 2012 , 50, 4085-4104	34
872	DNA Computing [Foundations and Implications. 2012 , 1073-1127	11
871	Solving traveling salesman problem in the Adleman-DiPietro model. 2012 , 219, 2267-2270	17
870	Accepting Networks of Genetic Processors are computationally complete. 2012 , 456, 18-29	7
869	Artificial Life Needs a Real Epistemology. 2012 , 227-243	
868	Polythiophene-g-poly(dimethylaminoethyl methacrylate) doped methyl cellulose hydrogel behaving like a polymeric AND logic gate. 2012 , 8, 6066	22
867	Rare Example of TICT Based Optical Responses for the Specific Recognition of Cr ³⁺ by a 2,2':6,2'-Terpyridine Derivative and Demonstration of Multiple Logic Operations. 2012 , 116, 17448-17457	55
866	Biocatalytic Enzyme Networks Designed for Binary-Logic Control of Smart Electroactive Nanobiointerfaces. 2012 , 55, 1201-1216	11
865	Integral Biomathics. 2012 ,	7
864	Theory and Practice of Natural Computing. 2012 ,	1
863	ON SMALL UNIVERSAL SPLICING SYSTEMS. 2012 , 23, 1423-1438	7
862	Technological Innovations in Sensing and Detection of Chemical, Biological, Radiological, Nuclear Threats and Ecological Terrorism. 2012 ,	4

861	Coarse-Grained Modelling of DNA and DNA Self-Assembly. 2012,	20
860	Eco-friendly Computing and Communication Systems. 2012,	3
859	Encyclopedia of Nanotechnology. 2012, 1436-1436	
858	LAWS, LANGUAGE and LIFE. 2012,	40
857	Chromatin computation. 2012, 7, e35703	11
856	Programmable in vivo selection of arbitrary DNA sequences. 2012, 7, e47795	1
855	Oscillatory threshold logic. 2012, 7, e48498	22
854	The Application of DNA Self-Assembly Model for Bin Packing Problem. 2012, 3, 1-15	
853	Complexity Issues in Computational Biology. 2012, 118, 385-401	4
852	Splicing operation and fuzzy molecular automaton. 2012, 5, 206-225	1
851	Sticker P System. 2012, 3, 28-43	
850	Breaking A Feistel-Type Block Cipher by Bacteria Engineering. 2012, 3, 1-23	2
849	A Design and Solving LPP Method for Binary Linear Programming Problem Using DNA Approach. 2012, 2, 11-21	
848	A Dynamically Programmed DNA Transporter. 2012, 124, 4398-4402	3
847	Re-engineering Electrochemical Biosensors To Narrow or Extend Their Useful Dynamic Range. 2012 , 124, 6821-6825	1
846	A dynamically programmed DNA transporter. 2012, 51, 4322-6	50
845	Re-engineering electrochemical biosensors to narrow or extend their useful dynamic range. 2012, 51, 6717-21	65
844	Connectable DNA logic gates: OR and XOR logics. 2012, 7, 534-40	29

843	Biomolecular computing systems: principles, progress and potential. 2012 , 13, 455-68	291
842	Computing by molecular self-assembly. 2012 , 2, 504-11	9
841	Data Clustering for the DNA Computing Readout Method Implemented on LightCycler and Based on Particle Swarm Optimization. 2012 , 37, 697-707	6
840	Comparison of different methods to analyze a DNA computing library using the polymerase chain reaction. 2012 , 11, 339-349	
839	Biocomputing: an insight from linguistics. 2012 , 11, 131-139	3
838	Faltkunst mit DNA-Origami. 2012 , 18, 271-274	
837	Cyclic codes over $F_2[u]/(u^4-1)$ and applications to DNA codes. 2012 , 63, 1169-1176	31
836	Universal Biochip Readout of Directed Hamiltonian Path Problems. 2003 , 168-181	3
835	A PCR-based Protocol for In Vitro Selection of Non-crosshybridizing Oligonucleotides. 2003 , 196-204	23
834	On Template Method for DNA Sequence Design. 2003 , 205-214	12
833	Splicing Systems: Regularity and Below. 2003 , 262-268	4
832	Temperature Gradient-Based DNA Computing for Graph Problems with Weighted Edges. 2003 , 73-84	6
831	Shortening the Computational Time of the Fluorescent DNA Computing. 2003 , 85-94	1
830	Solving the Set-Splitting Problem in Sticker-Based Model and the Lipton-Adelmann Model. 2003 , 185-196	3
829	From Reconfigurability to Evolution in Construction Systems: Spanning the Electronic, Microfluidic and Biomolecular Domains. 2000 , 286-299	7
828	Computationally inspired biotechnologies: Improved DNA synthesis and associative search using Error-Correcting Codes and Vector-Quantization?. 2001 , 145-172	13
827	Challenges and applications for self-assembled DNA nanostructures?. 2001 , 173-198	19
826	A DNA-based random walk method for solving k-SAT. 2001 , 209-220	4

825	Solving computational learning problems of Boolean formulae on DNA computers. 2001 , 220-230	3
824	The fidelity of annealing-ligation: A theoretical analysis. 2001 , 231-246	5
823	Steady flow micro-reactor module for pipelined DNA computations. 2001 , 263-270	4
822	Graph replacement chemistry for DNA processing. 2001 , 103-116	7
821	DNA and circular splicing?. 2001 , 117-129	9
820	Decision Problems for Linear and Circular Splicing Systems. 2003 , 78-92	11
819	Problems on RNA Secondary Structure Prediction and Design. 2003 , 22-32	8
818	Efficiency and Reliability of DNA-Based Memories. 2003 , 379-389	1
817	DNA-Like Genomes for Evolution in silico. 2003 , 413-424	3
816	Molecular Assembly and Computation: From Theory to Experimental Demonstrations. 2002 , 1-21	11
815	Codes, Involutions, and DNA Encodings. 2002 , 376-393	23
814	A Magic Pot : Self-assembly Computation Revisited. 2002 , 418-429	9
813	Specification of Adleman's Restricted Model Using an Automated Reasoning System: Verification of Lipton's Experiment. 2002 , 126-136	1
812	How to Compute with DNA. 1999 , 269-282	5
811	Biomolecular Computation in Virtual Test Tubes. 2002 , 117-128	9
810	PUNCH: An Evolutionary Algorithm for Optimizing Bit Set Selection. 2002 , 150-160	7
809	Solutions of Shortest Path Problems by Concentration Control. 2002 , 203-212	7
808	Another Realization of Aqueous Computing with Peptide Nucleic Acid. 2002 , 213-222	5

807	Experimental Confirmation of the Basic Principles of Length-only Discrimination. 2002 , 223-230	2
806	Programmed Mutagenesis Is a Universal Model of Computation. 2002 , 300-307	1
805	DNA-based Parallel Computation of Simple Arithmetic. 2002 , 321-328	4
804	Cascadable Hybridisation Transfer of Specific DNA between Microreactor Selection Modules. 2002 , 46-56	6
803	DNA Computing: New Ideas and Paradigms. 1999 , 106-118	11
802	Artificial life needs a real epistemology. 1995 , 21-38	12
801	Logistic networks with DNA-like encoding and interactions. 1995 , 215-222	4
800	Morphogenesis for evolvable systems. 1996 , 99-117	25
799	Parallel computing with DNA: Toward the anti-universal machine. 1996 , 696-705	9
798	Fizzy-Fuzzy inferencing. 1996 , 172-187	2
797	A reduced distributed splicing system for RE languages. 1997 , 319-329	4
796	DNA2DNA computations: A potential killer app?. 1997 , 56-64	7
795	Molecular computing, bounded nondeterminism, and efficient recursion. 1997 , 816-826	4
794	Molecular Electronics. 2006 , 1219-1239	2
793	Encyclopedia of Complexity and Systems Science. 2009 , 2089-2104	1
792	Encyclopedia of Complexity and Systems Science. 2009 , 3220-3233	8
791	Encyclopedia of Complexity and Systems Science. 2009 , 5859-5889	3
790	Molecular Motors and Machines. 2012 , 71-100	1

789	Application of Biomolecular Computing to Medical Science: A Biomolecular Database System for Storage, Processing, and Retrieval of Genetic Information and Material. 2006 , 701-735	1
788	From Cells to (Silicon) Computers, and Back. 2008 , 343-371	6
787	Nucleic Acids for Computation. 2009 , 355-375	1
786	Encyclopedia of Optimization. 2008 , 1508-1520	6
785	On P Systems with Active Membranes. 2001 , 187-201	18
784	Splicing Systems, Aqueous Computing, and Beyond. 2001 , 68-84	6
783	Features of Linguistic Threshold Schemes. 2014 , 125-129	4
782	Biological Computing. 1997 , 179-195	11
781	A Survey of Continuous-Time Computation Theory. 1997 , 209-224	22
780	Computational Complexity. 2012 , 1821-1836	2
779	Computational Complexity. 2012 , 2138-2156	1
778	Computational Complexity. 2012 , 465-478	3
777	Computational Complexity. 2012 , 1030-1042	2
776	The Maximum Clique Problem. 1999 , 1-74	290
775	Artificial Chemistry. 2009 , 577-599	1
774	Biomolecular Automata. 2008 , 267-299	1
773	The Future of Parallel Computation. 2009 , 471-510	6
772	A Content-Addressable DNA Database with Learned Sequence Encodings. 2018 , 55-70	13

771	Context-Sensitive Fusion Grammars Are Universal. 2020 , 275-286	1
770	New Genomic Information Systems (GenISs): Species Delimitation and IDentification. 2020 , 163-174	3
769	Profiling Environmental Conditions from DNA. 2020 , 647-658	5
768	Fluorescence detection of single molecules applicable to small volume assays. 1999 , 311-329	3
767	Leader Election and Shape Formation with Self-organizing Programmable Matter. 2015 , 117-132	24
766	Surface-Immobilised DNA Molecular Machines for Information Processing. 2015 , 3-12	1
765	Searching Parameter Values in Support Vector Machines Using DNA Genetic Algorithms. 2016 , 588-598	3
764	Universal Totalistic Asynchronous Cellular Automaton and Its Possible Implementation by DNA. 2016 , 182-195	8
763	Fusion Grammars: A Novel Approach to the Generation of Graph Languages. 2017 , 90-105	6
762	Improved Leader Election for Self-organizing Programmable Matter. 2017 , 127-140	19
761	The Biomolecular Computation Paradigm: A Survey in Massive Biological Computation. 2018 , 157-167	1
760	Deterministic Sensing (5'→3') Watson-Crick Automata Without Sensing Parameter. 2018 , 173-187	6
759	P Systems with Cutting/Recombination Rules Assigned to Membranes. 2004 , 191-202	2
758	Mathematical Considerations in the Design of Microreactor-Based DNA Computers. 2004 , 180-189	7
757	Parallel Translation of DNA Clusters by VCSEL Array Trapping and Temperature Control with Laser Illumination. 2004 , 10-18	3
756	Conformational Addressing Using the Hairpin Structure of Single-Strand DNA. 2004 , 219-224	7
755	Digital Information Encoding on DNA. 2003 , 152-166	5
754	An Algorithm for Testing Structure Freeness of Biomolecular Sequences. 2003 , 266-277	2

753	A DNA Algorithm for the Hamiltonian Path Problem Using Microfluidic Systems. 2003 , 289-296	2
752	Molecular Tiling and DNA Self-assembly. 2003 , 61-83	5
751	Modelling Dynamic Organization of Biology-Inspired Multi-agent Systems with Communicating X-Machines and Population P Systems. 2005 , 389-403	11
750	Replicative Distribution Rules in P Systems with Active Membranes. 2005 , 68-83	3
749	DNA Algorithms for Rough Set Analysis. 2003 , 498-513	1
748	Adaptive Nonlinear Control Using TSK-Type Recurrent Fuzzy Neural Network System. 2007 , 38-44	3
747	Morphic Computing: Concept and Foundation. 2007 , 155-170	2
746	A Bio-soft Computing Approach to Re-arrange a Flexible Manufacturing Robot. 2007 , 308-315	5
745	DNA Memory with 16.8M Addresses. 2008 , 99-108	3
744	Dynamic Neighborhood Searches for Thermodynamically Designing DNA Sequence. 2007 , 130-139	7
743	Heuristic Solution to a 10-City Asymmetric Traveling Salesman Problem Using Probabilistic DNA Computing. 2007 , 152-160	1
742	An Approach for Using Modified Nucleotides in Aqueous DNA Computing. 2007 , 161-169	1
741	Constant-Size Tileset for Solving an NP-Complete Problem in Nondeterministic Linear Time. 2007 , 26-35	1
740	DNA Computing and its Application. 2008 , 1065-1089	13
739	Graph Multiset Transformation as a Framework for Massively Parallel Computation. 2008 , 351-365	7
738	Design of DNA Sequence Based on Improved Genetic Algorithm. 2008 , 9-14	1
737	Programmable DNA-Based Finite Automata. 2009 , 505-516	1
736	Engineering of Software-Intensive Systems: State of the Art and Research Challenges. 2008 , 1-44	20

735	Emerging Models of Computation: Directions in Molecular Computing. 2008 , 255-265	1
734	Application of DNA Computing by Self-assembly on 0-1 Knapsack Problem. 2009 , 684-693	2
733	Improved Quantum Evolutionary Algorithm Combined with Chaos and Its Application. 2009 , 704-713	5
732	Implementation of Binary Particle Swarm Optimization for DNA Sequence Design. 2009 , 450-457	4
731	Experimental Validation of Signal Dependent Operation in Whiplash PCR. 2009 , 1-10	2
730	Speeding Up Local-Search Type Algorithms for Designing DNA Sequences under Thermodynamical Constraints. 2009 , 168-178	2
729	Application of DNA Self-assembly on Maximum Clique Problem. 2009 , 359-368	3
728	Using Membrane Computing for Obtaining Homology Groups of Binary 2D Digital Images. 2009 , 383-396	4
727	Segmentation in 2D and 3D Image Using Tissue-Like P System. 2009 , 169-176	14
726	Computing a Solution for the Subset Sum Problem with a Light Based Device. 2009 , 70-76	4
725	DNA Chips for Species Identification and Biological Phylogenies. 2009 , 55-66	2
724	Renewable, Time-Responsive DNA Logic Gates for Scalable Digital Circuits. 2009 , 67-77	4
723	Computer Morphogenesis. 2011 , 315-339	5
722	Grammar Encoding in DNA-Like Secret Sharing Infrastructure. 2010 , 175-182	27
721	Using the SRSim Software for Spatial and Rule-Based Modeling of Combinatorially Complex Biochemical Reaction Systems. 2010 , 240-256	10
720	Efficient Turing-Universal Computation with DNA Polymers. 2011 , 123-140	65
719	Search and Validation of Short Genome-Wide Biomarkers for Bacterial Biological Phylogenies. 2011 , 49-58	1
718	Cryptography Basics. 2011 , 121-208	1

717	An Improved DNA-Sticker Addition Algorithm and Its Application to Logarithmic Arithmetic. 2011 , 34-48	5
716	Graph-Theoretic Formalization of Hybridization in DNA Sticker Complexes. 2011 , 49-63	4
715	Localized Hybridization Circuits. 2011 , 64-83	40
714	A Formal Model for Databases in DNA. 2012 , 18-37	4
713	The Engine of Engines ¶ Toward a Computational Ecology. 2012 , 297-309	1
712	A DNA Computing Algorithm for Solving the Knapsack Problem. 2012 , 84-90	1
711	Towards Hypercomputations¶(in Membrane Computing). 2012 , 207-220	3
710	Color Segmentation of 2D Images with Thresholding. 2012 , 162-169	2
709	DNA Self-Assembly and Computation Studied with a Coarse-Grained Dynamic Bonded Model. 2012 , 123-134	2
708	A Type System for DNAQL. 2012 , 12-24	2
707	Probabilistic Reasoning with a Bayesian DNA Device Based on Strand Displacement. 2012 , 110-122	3
706	Computing with Large Populations Using Interactions. 2012 , 234-246	5
705	Theory and Applications of DNA Codeword Design. 2012 , 11-26	1
704	Programming Self-Assembling Systems via Physically Encoded Information. 2012 , 157-188	1
703	Weighted Splicing Systems. 2012 , 416-424	0
702	Probabilistic Splicing Systems. 2013 , 259-268	0
701	Brief History of DNA Nanotechnology. 2013 , 3-5	1
700	An Improved DNA Computing Method for Elevator Scheduling Problem. 2013 , 869-875	7

699	SMT-Based Analysis of Biological Computation. 2013 , 78-92	19
698	Logically and Physically Reversible Natural Computing: A Tutorial. 2013 , 247-262	3
697	Minimal Tile and Bond-Edge Types for Self-Assembling DNA Graphs. 2014 , 241-270	1
696	Potentialities of Molecular Nanomagnets for Information Technologies. 2014 , 249-273	3
695	Computational Aspects of Gene (Un)Scrambling in Ciliates. 2002 , 216-256	8
694	Universal Molecular Computation in Ciliates. 2002 , 257-274	6
693	Evolutionary Computation as a Paradigm for DNA-Based Computing. 2002 , 15-40	3
692	Advanced Simulation in the Configurable Massively Parallel Hardware MereGen. 2002 , 107-118	2
691	L Systems. 1997 , 253-328	22
690	Iterated GSM Mappings: A Collapsing Hierarchy. 1999 , 182-193	9
689	Reversible Molecular Computation in Ciliates. 1999 , 353-363	14
688	Reversible Codes and Applications to DNA. 2014 , 124-128	2
687	Design and Numerical Analysis of RNA Oscillator. 2009 , 201-212	1
686	Factorizing RSA Keys. 2009 , 16-27	2
685	Algorithmic Tile Self-assembly Model for the Minimum Dominating Set Problem. 2013 , 379-390	1
684	Emerging Technologies: Biosecurity and Consequence Management Implications. 2012 , 25-33	3
683	Supramolecular Chemistry / Science. 1999 , 287-304	37
682	Biologically Related Aspects of Nanoparticles, Nanostructured Materials, and Nanodevices. 1999 , 113-130	10

681	Applications: Nanodevices, Nanoelectronics, and Nanosensors. 2000 , 111-138	1
680	Universal and Simple Operations for Gene Assembly in Ciliates. 2001 , 329-342	13
679	Writing by Methylation Proposed for Aqueous Computing. 2001 , 353-360	3
678	A Model to Demonstrate the Universality of DNA-NAND Gate. 2018 , 67-76	1
677	Data Security Techniques Based on DNA Encryption. 2020 , 239-249	14
676	Review on DNA Cryptography. 2020 , 134-148	2
675	In vitro implementation of finite-state machines. 1998 , 56-74	10
674	Self-Assembly. 2008 , 403-429	4
673	Solving probability reasoning based on DNA strand displacement and probability modules. 2017 , 71, 274-279	9
672	Cancer diagnosis with DNA molecular computation. 2020 , 15, 709-715	48
671	Evolution and assembly of an extremely scrambled gene. 2000 , 97, 3298-303	35
670	DNA encryption algorithm based on Huffman coding. 1-14	2
669	Performing Mathematics Using DNA: Complex Number Arithmetic Using Sticker Model. 2017 ,	1
668	Fast and Secure Data Accessing by using DNA Computing for the Cloud Environment. 2020 , 1-1	26
667	A DNA-Based Archival Storage System. 2016 , 51, 637-649	17
666	A DNA-Based Archival Storage System. 2016 , 50, 637-649	39
665	A DNA-Based Archival Storage System. 2016 , 44, 637-649	19
664	Color Image Encryption using Synchronous CML-DNA and Weighted Bi-objective Genetic Algorithm. 2019 ,	8

663	Security, Privacy, Trust, and Anonymity. 2018 , 138-150	5
662	An Introduction to Evolutionary Computation. 2001 ,	13
661	Algorithmic self-assembly of DNA Sierpinski triangles. 2004 , 2, e424	557
660	Binary DNA nanostructures for data encryption. 2012 , 7, e44212	27
659	New insights into the existing image encryption algorithms based on DNA coding. 2020 , 15, e0241184	4
658	A DNA algorithm for the job shop scheduling problem based on the Adleman-Lipton model. 2020 , 15, e0242083	4
657	Chaos, Fractal in Biology, Biothermodynamics and Matrix Representation on Hypercycle. 2013 , 11,	2
656	Study of Statistical Characteristics of GB-speckles, Forming at Scattering of Light on Virtual Structures of Nucleotide Gene Sequences of Enterobacteria. 2018 , 18, 123-137	1
655	An Optical Interferometer for Parallel Modulo Operation. 2008 , 36, 1327-1330	3
654	The role of rules in the evolution of the market system: Hayek's concept of evolutionary epistemology. 2012 , 57, 123-140	5
653	Amoeba-inspired combinatorial optimization machines. 2020 , 59, 060502	2
652	DNA Computation Based on Piezoelectric Genosensor. 2009 , 31, 2109-2115	1
651	Breaking the NTRU Public Key Cryptosystem Using Self-Assembly of DNA Tilings. 2009 , 31, 2129-2137	2
650	Genetic Algorithm-Based Design for DNA Sequences Sets. 2009 , 31, 2193-2199	2
649	Improved Volume Molecular Solutions for the Maximum Clique Problem on DNA-Based Supercomputing. 2009 , 31, 2173-2181	3
648	Molecular Beacon Based DNA Computing Model for General Satisfiability Problem. 2009 , 31, 2200-2206	1
647	The Optimization of DNA Encodings Based on Modified PSO/GA Algorithm. 2010 , 33, 311-316	7
646	Progress of Microfluidics for Biology and Medicine. 2013 , 5, 66	5

645	Modified Kernel-based Intuitionistic Fuzzy C-means Clustering Method Using DNA Genetic Algorithm. 2017 , 11, 172-182	2
644	DNA cyclic codes over rings. 2017 , 11, 83-98	9
643	Decision maker based on atomic switches. 2016 , 3, 245-259	15
642	Computational Mechanisms and Models of Computation. 2014 , 215-228	3
641	DNA Computing Using Carbon Nanotube-DNA Hybrid Nanostructure. 2016 , 744-774	1
640	Organization-Oriented Chemical Programming of Distributed Artifacts. 2009 , 1, 1-19	2
639	DNA-Based Indexing. 2010 , 2, 25-45	4
638	A New Sensing 5'→3' Watson-Crick Automata Concept. 252, 195-204	9
637	Solving the independent set problem by sticker based DNA computers. 2012 , 02, 153-158	4
636	Applying Surface-Based DNA Computing for Solving the Dominating Set Problem. 2012 , 02, 286-290	5
635	Equivalence of Subclasses of Two-Way Non-Deterministic Watson Crick Automata. 2013 , 04, 26-34	3
634	Cryptanalysis of a Substitution-Permutation Network Using Gene Assembly in Ciliates. 2012 , 05, 154-164	1
633	Applying DNA Computation to Error Detection Problem in Rule-Based Systems. 2015 , 07, 21-36	1
632	Design of DNA Coding Based on Immune Clone Selection Algorithm. 2012 , 7,	1
631	DNA and DNA computation based on toehold-mediated strand-displacement reactions. 2016 , 65, 178106	2
630	Progress and perspective on chiral plasmonic nanostructures enabled by DNA programming methodology.	0
629	A Finite Precision Implementation of an Image Encryption Scheme Based on DNA Encoding and Binarized Chaotic Cores. 2021 , 9, 136905-136916	1
628	Distributed Transformations of Hamiltonian Shapes Based on Line Moves. 2021 , 1-16	

627	Nucleic acid-based molecular computation heads towards cellular applications. 2021 , 50, 12551-12575	6
626	DNA Strand Displacement Computing Model for the SAT Problem. 2021 , 2026, 012040	
625	Information Encryption Scheme Based on Chaotic Map and Hybridization Chain Reaction. 2021 , 2026, 012013	
624	An Electrocatalytic Reaction As a Basis for Chemical Computing in Water Droplets. 2021 , 143, 16908-16912	3
623	Mechanical computing. 2021 , 598, 39-48	15
622	Metal-Organic Framework Nanoparticles Power DNAzyme Logic Circuits for Aberrant MicroRNA Imaging. 2021 , 93, 14675-14684	9
621	Scaling up DNA digital data storage by efficiently predicting DNA hybridisation using deep learning. 2021 , 11, 20517	0
620	Insertion-deletion systems with substitutions I. 2021 , 1-27	
619	Stigmergic electronic gates and networks. 2021 , 20, 2614	2
618	Determining Sequence-Dependent DNA Oligonucleotide Hybridization and Dehybridization Mechanisms Using Coarse-Grained Molecular Simulation, Markov State Models, and Infrared Spectroscopy. 2021 , 143, 17395-17411	5
617	Take Advantage of the Computing Power of DNA Computers. 2000 , 570-577	3
616	A Surface-Based DNA Algorithm for the Expansion of Symbolic Determinants. 2000 , 653-659	
615	Splicing Normalization and Regularity. 2000 , 199-215	4
614	Nicks, Nodes, and New Motifs for DNA Nanotechnology. 2000 , 177-197	
613	Mathematical Sciences and The New Biology. 2000 , 265-276	
612	A Characterization of Non-Iterated Splicing with Regular Rules. 2001 , 319-327	2
611	DNA implementation of a Royal Road fitness evaluation. 2001 , 247-262	1
610	Solving Constraint Satisfaction Problems with DNA Computing. 2002 , 171-180	

- 609 Simulating DNA Computing. **2002**, 411-419
- 608 Schmerzlindernde Mittel. **2002**, 113-145
- 607 Aqueous Solutions of Algorithmic Problems: Emphasizing Knights on a 3 B. **2002**, 191-202 2
- 606 The Minimum-Model DNA Computation on a Sequence of Probe Arrays. **2002**, 38-49
- 605 Artificial chemistry - a new metaphor for evolutionary algorithms. **2002**, 665-673
- 604 Nanometer addressable lateral surface structuring by use of nucleic acids. **2002**, 23-28
- 603 An Analysis of Computational Efficiency of DNA Computing. **2002**, 191-198
- 602 An Aqueous Algorithm for Finding the Bijections Contained in a Binary Relation. **2002**, 354-360 1
- 601 A Proposal of DNA Computing on Beads with Application to SAT Problems. **2002**, 182-190
- 600 A Sight-seeing Tour of the Computational Landscape of Graph Transformation. **2002**, 119-137 2
- 599 DNA Complementarity and Paradigms of Computing. **2002**, 3-17
- 598 Tutorial on DNA Computing and Graph Transformation - Computational Nature of Gene Assembly in Ciliates. **2002**, 430-434 1
- 597 Bio-, info- et nano-technologies : l'essor de la biotique. **2002**, 18, 489-491
- 596 A PNA-mediated Whiplash PCR-based Program for In Vitro Protein Evolution. **2003**, 47-60 4
- 595 DNA Hybridization, Shifts of Finite Type, and Tiling of the Integers. **2003**, 369-380
- 594 Implementation of a Random Walk Method for Solving 3-SAT on Circular DNA Molecules. **2003**, 133-142 0
- 593 DNA Tree Structures. **2003**, 413-422
- 592 The Power of Networks of Watson-Crick D0L Systems. **2003**, 106-118 1

- 591 How Efficiently Can Room at the Bottom Be Traded Away for Speed at the Top?. **2003**, 95-111
- 590 Restriction Enzyme Computation. **2003**, 686-693
- 589 The eternal molecule. **2003**, 82-139
- 588 Mimicking Nature. **2003**, 13-19
- 587 Is Cook's Theorem Correct for DNA-Based Computing?. **2003**, 222-233
- 586 The Future of the Electronics Industry and the Potential of Molecular Electronics. **2003**, 401-415
- 585 DNA Based Algorithms for Some Scheduling Problems. **2003**, 673-683
- 584 Power Functions in Multiple Sampling Plans Using DNA Computation. **2003**, 643-651
- 583 Transducers with Programmable Input by DNA Self-assembly. **2003**, 219-240 5
- 582 Splicing Test Tube Systems and Their Relation to Splicing Membrane Systems. **2003**, 139-151 1
- 581 Epilogue. **2003**, 425-432
- 580 Epilogue: Toward New Physics and New Biology. **2003**, 425-432
- 579 Physicists plunder life's tool chest.
- 578 DNA Computing Adopting DNA Coding Method to solve Maximal Clique Problem. **2003**, 10B, 769-776 0
- 577 Towards Molecular Programming [a] Personal Report on DNA8 and Molecular Computing. **2004**, 125-140 2
- 576 In Silico Chemistry: Past, Present and Future. **2004**, 3-21
- 575 Noise-immune universal computation using Manakov soliton collision cycles. **2004**,
- 574 A Lab-on-a-Chip Module for Bead Separation in DNA-Based Concept Learning. **2004**, 1-9 2

- 573 Conceptual and Contextual DNA-Based Memory. **2004**, 25-31 1
- 572 DNA Coded GA: Rule Base Optimization of FLC for Mobile Robot. **2004**, 503-516
- 571 Developmental Languages Versus DNA Computing. **2004**, 457-469
- 570 A Study on Lower Bound of Direct Proportional Length-Based DNA Computing for Shortest Path Problem. **2004**, 71-76 3
- 569 Neural Network-Based Sensor Fault Diagnosis in the Gas Monitoring System. **2004**, 14, 1-8
- 568 DNA Computing Adopting DNA coding Method to solve Traveling Salesman Problem. **2004**, 14, 105-111
- 567 Exceptional Creativity and Chance: Creative Thought as a Stochastic Combinatorial Process. **2004**, 45-78
- 566 Linear Self-Assemblies. **2004**, 51-62
- 565 A DNA Based Evolutionary Algorithm for the Minimal Set Cover Problem. **2005**, 80-89
- 564 DNA Computing Approach to Construction of Semantic Model. **2005**, 1174-1181
- 563 Bio-inspired Computing Paradigms (Natural Computing). **2005**, 155-160 1
- 562 DNA Computing Model of Graph Isomorphism Based on Three Dimensional DNA Graph Structures. **2005**, 90-98
- 561 Die Mathematik und andere Kurzsprachen. **2005**, 65-74
- 560 BIBLIOGRAPHY. **2005**, 575-631
- 559 Demonstration of DNA-Based Semantic Model by Using Parallel Overlap Assembly. **2005**, 562-570
- 558 Using Automated Reasoning Systems on Molecular Computing. **2005**, 128-137
- 557 On Designing DNA Databases for the Storage and Retrieval of Digital Signals. **2005**, 1192-1201 2
- 556 Photonic DNA computing. **2005**, 33, 239-240

- 555 A DNA-Based Genetic Algorithm Implementation for Graph Coloring Problem. **2005**, 99-108 1
- 554 Dynamic Updating DNA Computing Algorithms. **2005**, 153-164
- 553 DNA Computing Adopting DNA coding Method to solve effective Knapsack Problem. **2005**, 15, 730-735
- 552 Mitsunori Ogihara. **2006**, 255-267
- 551 Programmable Pushdown Store Base on DNA Computing. **2006**, 286-293 1
- 550 A Framework for Modeling DNA Based Molecular Systems. **2006**, 250-265 2
- 549 Analysing the Density of Subgroups in Valued Relationships Based on DNA Computing. **2006**, 964-971
- 548 Hybrid Concentration-Controlled Direct-Proportional Length-Based DNA Computing for Numerical Optimization of the Shortest Path Problem. **2006**, 206-221
- 547 Experimentally Constructing Semantic Models Based on DNA Computing. **2006**, 10, 77-83
- 546 Counting Time in Computing with Cells. **2006**, 112-128 2
- 545 DNA Computing Model of the Integer Linear Programming Problem Based on Molecular Beacon. **2006**, 238-247
- 544 DNA Computing Processor: An Integrated Scheme Based on Biochip Technology for Performing DNA Computing. **2006**, 248-257
- 543 A Novel Approach Model for Chinese Postman Problem. **2006**, 230-237
- 542 Template Frame for DNA Computing. **2006**, 312-319
- 541 A DNA Sequence Generation Algorithm for Traveling Salesman Problem using DNA Computing with Evolution Model. **2006**, 16, 222-227 0
- 540 DNA COMPUTING. **2006**, 483-520
- 539 On Multiple Comparison of Geometric Means of Exponential Parameters via Graphical Model. **2006**, 19, 447-460
- 538 Adaptive DNA Computing Algorithm by Using PCR and Restriction Enzyme. **2007**, 269-275

- 537 Artificial Intelligence and DNA Computing. **2007**, 195-209 3
- 536 Taming Non-compositionality Using New Binders. **2007**, 150-162 1
- 535 An Improved Parallel DNA Algorithm of 3-SAT. **2007**, 6, S566-S570
- 534 References. **2007**, 281-291
- 533 Note bibliografiche. **2008**, 533-601
- 532 The DNA Computer. **2008**, 1-43
- 531 Binary tree data structure based on sequential storage model in DNA computer. **2008**, 28, 1591-1594
- 530 Application of DNA algorithm to face recognition. **2008**, 28, 1261-1262
- 529 General Remarks : History and Prospect for Simulation Technology. **2009**, 129, 792-795
- 528 New Challenges in the Application of Non-classical Formal Languages to Linguistics. **2009**, 464-471
- 527 DNA Electrophoresis Simulation. **2009**, 586-589
- 526 Operon Structure Optimization by Random Self-assembly. **2009**, 33-40
- 525 Creative Conceptual Design Based on Evolutionary DNA Computing Technique. **2009**, 231-241
- 524 DNA Computing Hardware Design and Application to Multiclass Cancer Data. **2009**, 1072-1079 1
- 523 An Extension of the Lyndon Schützenberger Result to Pseudoperiodic Words. **2009**, 183-194 2
- 522 Towards the Sequence Design Preventing Pseudoknot Formation. **2009**, 101-110
- 521 Determining Workstation Groups in a Fixed Factory Facility Based on Biological Computation. **2009**, 188-194
- 520 Encyclopedia of Complexity and Systems Science. **2009**, 326-344

- 519 Information Hypothesis: On Human Information Capability Study. **2009**, 25-35 1
- 518 Towards a New Medical Decision Support System with Bio-inspired Interpretive Structural Modelling. **2009**, 459-466
- 517 Encyclopedia of Complexity and Systems Science. **2009**, 5631-5655
- 516 Encyclopedia of Complexity and Systems Science. **2009**, 922-936 1
- 515 Encyclopedia of Complexity and Systems Science. **2009**, 2104-2113
- 514 A Fuzzy Density Analysis of Subgroups by Means of DNA Oligonucleotides. **2009**, 31-45
- 513 The Perils of Polynucleotides Revisited. **2009**, 205-214
- 512 Applying Symmetric Enumeration Method to One-Dimensional Assembly of Rotatable Tiles. **2009**, 159-183
- 511 Fast Parallel Molecular Solution for DNA-Based Computing: The 0-1 Knapsack Problem. **2009**, 416-427 0
- 510 Advancing the Deoxyribozyme-Based Logic Gate Design Process. **2009**, 45-54 1
- 509 Computing Natural Language with Biomolecules: Overview and Challenges. **2009**, 325-335
- 508 Multi-agent Simulation of Linguistic Processes: A NEPs Perspective. **2009**, 308-318
- 507 A Hybrid Method of Biological Computation and Genetic Algorithms for Resolving Process-Focused Scheduling Problems. **2009**, 159-165
- 506 A Biologically Intelligent Encoding Approach to a Hierarchical Classification of Relational Elements in a Digraph. **2009**, 174-180
- 505 Genesthetics: Molecular Biology and the Arts. **2009**, 97-119
- 504 Evidential Reasoning Based on DNA Computation. **2009**, 212-219
- 503 Natural Computing. **2009**, 745-814
- 502 The Nondeterministic Waiting Time Algorithm: A Review. **3**, 29-46

- 501 The Basic Algebraic Principles of DNA Computing (I). **2009**, 31, 353-371
- 500 Research Advances and Prospect of Biomolecular Computing Models in Vivo. **2009**, 31, 2103-2108
- 499 Classical Ramsey Number DNA Computing Model (I): Add-Bit-Sequence Model. **2009**, 31, 2073-2080 0
- 498 Breaking the Diffie-Hellman Key Exchange Algorithm in the Tile Assembly Model. **2009**, 31, 2116-2122 1
- 497 Design and Implementation of Generalized List in DNA Computer. **2009**, 31, 2215-2219 1
- 496 Research on Nucleic Acid Sequence Design Methods for DNA Computing. **2009**, 31, 2149-2154
- 495 Research on DNA Computing Methods of Optimization Problems on Weighted Graph. **2009**, 31, 2182-2192 0
- 494 A DNA Computation Model to Solve 0-1 Programming Problem. **2009**, 31, 2155-2159 0
- 493 DNA Computing Model with DNAzyme to Control Gene Expression. **2009**, 31, 2097-2102
- 492 Progress and Difficulty in DNA Self-Assembly Technology. **2009**, 31, 2138-2148 2
- 491 Classical Ramsey Number DNA Computing Model (II): Add-Bit-Sequence DNA computing Model. **2009**, 31, 2081-2089 0
- 490 Drip and Mate Operations Acting in Test Tube Systems and Tissue-like P systems. 11, 123-135
- 489 Deterministic Polynomial-Time Algorithms for Designing Short DNA Words. **2010**, 308-319
- 488 Incremental Building in Peptide Computing to Solve Hamiltonian Path Problem. **2010**, 549-560 1
- 487 Biosystems and Bioinspired Systems. **2010**, 141-211
- 486 Biomolecular Design of an Integrated Software and Hardware System for Cryptography. **2010**, 46, 730-732
- 485 On the Current State of the Research in Neural Network and Optimization Methods. **2010**, 130, 2-5
- 484 Molecule-Inspired Methods for Coarse-Grain Multi-System Optimization. **2010**, 255-267

- 483 Schema for Parallel Insertion and Deletion. **2010**, 267-278 1
- 482 Autonomous DNA-Molecule Computing. **2010**, 46, 700-705
- 481 Advances in Innovative Computing Paradigms. **2010**, 25-50
- 480 A Geometrical Allosteric DNA Switch. **2010**, 189-189
- 479 Sticker Model for Maximum Clique Problem and Maximum Independent Set. **2010**, 33, 305-310 3
- 478 Smart Biomaterials and Biosensors: Intelligent Properties of Biomolecules and Cells in Hybrid Devices. 1
- 477 Harnessing Molecular Biology to the Self-Assembly of Molecular-Scale Electronics.
- 476 Access Security and Personal Privacy in Public Cellular Communication Systems: The Past, the Present and Beyond 2020. **2011**, 71-89
- 475 Roots and Stimuli to a New Perception of Informatics. **2011**, 184-199
- 474 Alternative DNA Security Using BioJava. **2011**, 455-469
- 473 Organisation-Oriented Chemical Programming. **2011**, 207-220 1
- 472 Chapter 9:Processing and Communications. **2011**, 115-129
- 471 Plane-Filling Properties of Directed Figures. **2011**, 255-263
- 470 Robustness of DNA-Based Clustering. **2011**, 75-92
- 469 The Traveling Salesman Problem Base on Triple-Stranded DNA Structure Model. **2011**, 769-775
- 468 Correlation property and electronic transfer propertyof Cantor-styled artificial DNA sequence. **2011**, 60, 077201
- 467 Extended Watson-Crick L Systems with Regular Trigger Languages. **2011**, 212-223
- 466 Whole Cells. **2012**, 391-477

- 465 Molecular Automata. **2012**, 1894-1918
- 464 DNA Memory. **2012**, 1281-1318
- 463 Computational Complexity. **2012**, 185-203
- 462 DNA Algorithm Based on K-Armed Molecule and Sticker Model for Shortest Path Problem. **2012**, 361-366
- 461 Optimization Technologies for Hard Problems. **2012**, 79-104 4
- 460 Breaking the Box: Simulated Protein Computing. **2012**, 452-468
- 459 Der DNA-Computer. **2012**, 423-470
- 458 Molecular Computing Machineries [Computing Models and Wet Implementations]. **2012**, 1129-1184
- 457 Applications of Biological Concepts to Designs of Computer Networks and Network Applications. 1012-1021 1
- 456 Computational Complexity. **2012**, 1998-2028 1
- 455 Computational Complexity. **2012**, 882-896 1
- 454 Introduction. **2012**, 1-20
- 453 CHAPTER 7:Double InputSingle Output Systems. **2012**, 114-194
- 452 CHAPTER 5:Single InputSingle Output Systems. **2012**, 50-108
- 451 CHAPTER 14:Applications. **2012**, 336-383
- 450 Closed Circle DNA Model to QoS Routing for Ad Hoc Networks. **2012**, 422-429
- 449 Modeling as the Essential Step in the Construction of Biological Computer Structures. **2012**, 556-560
- 448 Generating DNA Code Words Using Forbidding and Enforcing Systems. **2012**, 147-160 2

447 Iterated Hairpin Completions of Non-crossing Words. **2012**, 337-348

1

446 CHAPTER 1:A Little History. **2012**, 1-11

445 A Molecular Solution to the Three-Partition Problem. **2012**, 5, 14-29

444 Solving Application Oriented Graph Theoretical Problems with DNA Computing. **2013**, 75-85

443 Noncommutative Cryptography. **2012**, 251-332

442 Closed Circle DNA Algorithm of Maximum Weighted Independent Set Problem. **2013**, 113-121

441 A DCaaS Model of DNA Computing for Solving a Class of Nonlinear Problems. **2013**, 350-363

440 DNA: Molecular Recognition and Information Storage. **2013**, 11-28

439 Evolution in Materio. **2013**, 1-19

438 Research of ROM Based on Molecular Beacon DNA Computing. **2013**, 393-404

437 DNA Base-Code Generation for Bio-molecular Computing by Using a Multiobjective Approach Based on SPEA2. **2013**, 227-234

436 Based on DNA Self-Assembled Computing to Solve MH Knapsack Public Key Cryptosystems of the Knapsack Problem. **2013**, 975-983

1

435 A New Attempt for Satisfiability Problem: 3D DNA Self-Assembly to Solve SAT Problem. **2013**, 891-899

434 Trustful Population Protocols. **2013**, 447-461

433 Probabilistic Reasoning with an Enzyme-Driven DNA Device. **2013**, 160-173

432 Encyclopedia of Complexity and Systems Science. **2013**, 1-22

431 Biomedical Applications for Nucleic Acid Nanodevices. **2013**, 329-348

430 Encyclopedia of Complexity and Systems Science. **2013**, 1-30

- 429 Towards a Bio-Inspired Theoretical Linguistics to Model Man-Machine Communication. **2013**, 1, 14-28
- 428 Encyclopedia of Complexity and Systems Science. **2013**, 1-23
- 427 Extending DNA-Sticker Arithmetic to Arbitrary Size Using Staples. **2013**, 1-15 1
- 426 A DNA Computing System of Modular-Multiplication over Finite Field $GF(2n)$. **2013**, 301-311 0
- 425 Algorithmic Tile Self-Assembly for Solving the Maximal Matching Problem. **2013**, 845-854
- 424 Turing Computability and Membrane Computing. **2013**, 56-77
- 423 Graph Coloring Problems. 265-310
- 422 Solution to the 0-1 Knapsack Problem based on DNA Encoding and Computing Method. **2013**, 8,
- 421 Synthetic Biology and Dual Use. **2013**, 8, 698-704
- 420 Strong and Weak Molecular Interactions. **2013**, 131-146
- 419 Future Tactile Sense. **2014**, 35-37
- 418 Design Challenges and Considerations for Nanomedical Computation. **2013**, 303-336
- 417 Introduction to Modeling Problems. **2014**, 1-30 1
- 416 Smart Fold Architecture: A Nano Information System Based on a Hierarchical Structure. **2014**, 67-90
- 415 Photonic DNA Nano-Processor: A Photonics-Based Approach to Molecular Processing Mediated by DNA. **2014**, 91-113
- 414 Decimal Integer Multiplication based on Molecular Beacons. **2013**, 8,
- 413 Using Molecular Beacons as Paste Series Computing Model of a Logic Gate. **2014**, 03, 29-34
- 412 Theory and Background. **2014**, 5-9

411 The Modular Inversion in $GF(p)$ by Self-assembling and Its Application to Elliptic Curve Diffie-Hellman Key Exchange. **2014**, 57-62

410 Three-Input Molecular Logic Based on Light-Control System. **2014**, 483-488

409 Study and Application of DNA Cellular Automata Self-assembly. **2014**, 654-658

408 The Molecular Beacons Self-assembly Model of the Dislocation Permutation Problem. **2014**, 520-524

407 Formal and Computational Model for A. Smith's Invisible Hand Paradigm. **2014**, 3-12

406 Quantum and Biocomputing [Common Notions and Targets. **2014**, 1071-1082

405 Encyclopedia of Nanotechnology. **2014**, 1-7

404 Introduction. **2014**, 1-3

403 Prediction Nucleic Acid Secondary Structure with Planar Pseudoknots and Genetic Algorithm. **2014**, 571-577

402 A DNA Solution on Surface for Minimal Set Covering Problem. **2014**, 733-742

401 Multiplier System in the Tile Assembly Model with Reduced Tileset-Size. **2014**, 95-104

400 Nanomechanics of Single Biomacromolecules. **2014**, 1077-1123

399 Fuzzy Splicing Systems. **2014**, 20-29

1

398 Research of Conflict Detection in Access Control on Information Systems of the Sapiential City. **2014**, 03, 161-171

397 Parallelism, Concurrency, and Alternative Models. **1987**, 291-335

396 Physics and the new computation. **1995**, 106-128

1

395 On the computing paradigm and computational complexity. **1995**, 82-92

394 Parallel processing in DNA analysis. **1995**, 171-185

- 393 Information-Processing Genes: Molecular Biology in the Computational Paradigm. **1996**, 323-332
- 392 What is computer-aided diagnosis?. **1996**, 11, 74-84
- 391 Models of Computation, Riemann Hypothesis, and Classical Mathematics. **1998**, 89-106 2
- 390 Molecular Computation for Genetic Algorithms. **1998**, 91-98 1
- 389 A Computational Architecture Based on Cellular Processing. **1998**, 261-271 1
- 388 MCR XI. Microreactors as Processors for Chemical Computers. **1998**, 195-202
- 387 A molecular quasi-random model of computations applied to evaluate collective intelligence. **1998**, 243-251
- 386 Sequentielle Komplexitätsklassen. **1999**, 275-339
- 385 Computational Molecular Biology: A Promising Application Using LP and its Extensions. **1999**, 281-311
- 384 Bioanaloge Ansätze für adaptive und autonome Systeme in der Informationstechnik. **1999**, 59-97
- 383 DNA Computing. **2014**, 1-42
- 382 General Bibliography. 707-765
- 381 Graph Coloring Problems. 265-310
- 380 An Advanced Data Security Algorithm Using cryptography and DNA-Based steganography. **2014**,
- 379 Synchronous Sequential Computations with Biomolecular Reactions. **2015**, 255-279
- 378 Molecular Computing Simulation of Cognitive Anagram Solving. **2014**, 20, 700-705
- 377 Formal and Computational Model for A. Smith's Invisible Hand Paradigm. **2015**, 433-442 1
- 376 Toehold DNA Languages are Regular (Extended Abstract). **2015**, 780-790

- 375 An Artificial Neural Network Classification Model Based on DNA Computing. **2015**, 880-889
- 374 Encyclopedia of Complexity and Systems Science. **2015**, 1-26
- 373 Encyclopedia of Complexity and Systems Science. **2015**, 1-22
- 372 Another Understanding of the Model of Genetic Code Theoretical Analysis. **2015**, 05, 92-109 3
- 371 The Design of Voting Device Based on DNA Strand Displacement Reaction. **2015**, 465-474
- 370 Application of DNA Self-assembly for Maximum Matching Problem. **2015**, 621-630
- 369 A Half-Subtractor Calculation Model Based on Stand Displacement Technology. **2015**, 225-231 1
- 368 Encyclopedia of Complexity and Systems Science. **2015**, 1-11
- 367 Natural models of parallel computations. **2015**, 7, 781-785
- 366 Bio-Inspired and Information-Theoretic Signal Processing. **2015**, 493-532
- 365 Model Checking Computational Tree Logic Using Sticker Automata. **2016**, 12-20 1
- 364 Bibliography. **2016**, 223-226
- 363 Applications of Digital Signature Certificates for Online Information Security. **2016**, 149-197
- 362 In Silico Assembly of Carbon-Based Nanodevices. **2016**, 207-232
- 361 DNA Cryptography. **2016**, 775-801
- 360 A Molecular Review of the Detection of Specific Nucleic Acids by Amplification and Hybridization Characterization of Microbial Diversity in the Food Chain: A Molecular Review. **2016**, 443-467
- 359 Logic Gates Designed with Domain Label Based on DNA Strand Displacement. **2016**, 244-255
- 358 DNA Sequence Based Cryptographic Solution for Secure Image Transmission. **2016**, 505-527

- 357 A Universal Platform for Building DNA Logic Circuits. **2016**, 64-71
- 356 Die Mathematik und andere Kurzsprachen. **2016**, 253-261
- 355 Introduction. **2016**, 1-28
- 354 A Double-Stage Strategy Based on DNA Computing to Search the Optimal Section of Active Splitting. **2016**, 549-558
- 353 One-Bit Full Adder-Full Subtractor Logical Operation Based on DNA Strand Displacement. **2016**, 30-38
- 352 Financial Markets in the Technology Era. **2016**, 21-24
- 351 Inceptive Findings. **2016**, 27-35
- 350 Overview of Cellular Computing-Basic Principles and Applications. **2016**, 637-662
- 349 Encyclopedia of Nanotechnology. **2016**, 2254-2259
- 348 Leben, Evolution und Information. **2016**, 223-347
- 347 Future Concepts in Nanomedicine. **2016**, 1015-1050
- 346 DNA COMPUTATION IN MEDICINE. 359-375
- 345 Discrete Biochemistry of DNA: Arithmetic DNA Molecules for Binary Additions, Naturally Found Genetic Logic Circuits for Plant Sensing, and DNA-Based Animation. **2016**, 20, 671-680 1
- 344 L'argument de la Simulation et le problème de la classe de référence : le point de vue du contextualisme dialectique. **2016**, 43, 371-389
- 343 Five-Input Square Root Logical Operation Based on DNA Strand Displacement. **2017**, 396-404
- 342 Role of Bioinformatics in Nanotechnology. **2017**, 293-317
- 341 The Logic Circuit Design of Fire Alarm System Device by DNA Strand Displacement. **2017**, 369-379
- 340 Encyclopedia of Complexity and Systems Science. **2017**, 1-41

- 339 Logic Calculation Based on Two-Domain DNA Strand Displacement. **2017**, 161-169 o
- 338 Model Checking for Computation Tree Logic with Past Based on DNA Computing. **2017**, 131-147 2
- 337 Bibliography. **2017**, 207-218
- 336 Secure Storage and Transmission of Healthcare Records. **2017**, 7-34
- 335 Membrane Computing. **2017**, 15-34
- 334 Encyclopedia of Complexity and Systems Science. **2017**, 1-21
- 333 Assembling and Configuring. **2017**, 81-97
- 332 Leben erfindet immer neue Ebenen der Sprache. **2017**, 177-201
- 331 Encyclopedia of Complexity and Systems Science. **2017**, 1-40
- 330 Logic Operation Model of the Complementer Based on Two-Domain DNA Strand Displacement. **2017**, 1-8
- 329 Comparator Logic Circuits Based on DNA Strand Displacement by DNA Hairpin. **2017**, 466-475
- 328 An 8 to 3 Priority Encoder Based on DNA Strand Displacement. **2018**, 454-472
- 327 Cellular Computing. **2018**, 393-410
- 326 An Implementation of Elementary Arithmetic with Virus Machine. **2018**, 304-317
- 325 A Novel Ammonic Conversion Algorithm for Securing Data in DNA Using Parabolic Encryption. **2018**, 846-855
- 324 Applications of Digital Signature Certificates for Online Information Security. **2018**, 756-803 o
- 323 Evolution in Materio. **2018**, 447-462
- 322 Solving NP Hard Problems in the Framework of Gene Assembly in Ciliates. **2018**, 107-119

- 321 The Relativity of Code, Energy, and Mass Versus the Relativity of Energy and Mass. **2018**, 1-18
- 320 Molecular Automata. **2018**, 327-353
- 319 Research on the Addition, Subtraction, Multiplication and Division Complex Logical Operations Based on the DNA Strand Displacement. **2018**, 162-177 1
- 318 DNA Cryptography. **2018**, 703-728
- 317 A NOVEL ENCRYPTION SCHEME TO SECURE THE DATA USING DNA BASED PLAY FAIR CIPHER TECHNIQUE. **2018**, 7, 1
- 316 Towards a bioelectronic computer: A theoretical study of a multi-layer biomolecular computing system that can process electronic inputs.
- 315 DNA Computing Algorithm. **2018**, 152-163
- 314 DNA Computing Modeling of HEMT transistor Noise Parameters. **2018**,
- 313 DNA Based Storage: Introduction, Characteristics, Applications and Challenges. **2019**, 2,
- 312 Single-Stranded Architectures for Computing. **2019**, 41-56
- 311 Category Theory and Quantum Mechanics. **2019**, 717-835
- 310 0-1 Integer Programming Based on DNA Tetrahedral Probe. **2019**, 91-100
- 309 Secure Storage and Transmission of Healthcare Records. **2019**, 220-247
- 308 A Computing Model for Four-Valued Logic AND Gate Based on DNA Origami and DNA Displacement. **2019**, 81-90 1
- 307 A New Communication P System Model Based on Hypergraph. **2019**, 130-142
- 306 Relating DNA Computing and Splitting/Fusion Grammars. **2019**, 159-174 1
- 305 Membrane Computing Aggregation (MCA): An Upgraded Framework for Transition P-Systems. **2019**, 195-207 0
- 304 Transformation of Petri Nets into Context-Dependent Fusion Grammars. **2019**, 246-258 2

303	Proteases as Biological Bits for Programmable Medicine.	
302	The Genetic Language: Natural Algorithms, Developmental Patterns, and Instinctive Behavior. 2020 , 173-182	
301	Some Wonders of a Bio-Computer-Scientist. 2019 , 57, 97-121	
300	Growable, Invisible, Connected Toys: Twitching Towards Ubiquitous Bacterial Computing. 2019 ,	2
299	Thoughts Raised by 3 Alpha. 2019 ,	0
298	DNA as a Nanoscale Building Material. 2020 , 25-61	
297	A Novel Encryption Using Genetic Algorithms and Quantum Computing with Roulette Wheel Algorithm for Secret Key Generation. 2020 , 263-271	1
296	Polyphenols Role in Autoimmune and Chronic Inflammatory Diseases and the Advent of Computer-Driven Plant Therapies. 2020 , 59-84	2
295	Probe Machine Based Computing Model for Solving Satisfiability Problem. 2020 , 79-92	
294	Research on the Application of DNA Cryptography in Electronic Bidding System. 2020 , 221-230	
293	Advanced Symmetric Key Cryptography Algorithm: Application of Pseudo Biotic DNA Method(ASKCA VER-1.0). 2020 , 884-895	
292	An antiviral self-replicating molecular heterotroph.	
291	CRISPR-Powered DNA Computing and Digital Display. 2021 , 10, 3148-3157	0
290	A Variety of Functional Devices Realized by Ionic Nanoarchitectonics, Complementing Electronics Components. 2100645	3
289	Computational Approaches in Drug Development and Phytocompound Analysis. 2020 , 529-548	2
288	A tile assembly model to calculate point-multiplication on conic curves over finite field $GF(2^n)$. 2020 ,	1
287	Accelerating DNA Computing via PLP-qPCR Answer Read out to Solve Traveling Salesman Problems.	
286	IMPROVEMENT OF TRANSPORTATION ROUTES IN MUNICIPALITIES BY DNA COMPUTATION METHOD. 2020 , 16,	

- 285 Demonstration of elementary functions DNA algorithmic self-assembly. **2021**, 13, 19376-19384 ○
- 284 DNA-Based Cryptographic Method for the Internet of Things. **2022**, 12, 1-12 ○
- 283 An Enhanced DNA Sequence Table for Improved Security and Reduced Computational Complexity of DNA Cryptography. **2020**, 106-120
- 282 Effects of Personal Characteristics and Preparation for Old Age in Middle and Older People on Reemployment Desire. **2019**, 30, 175-195
- 281 RETRACTED CHAPTER: Introduction to Digital Thinking. **2020**, 51-58
- 280 DNA Double-Helix and SQP Hybrid Genetic Algorithm. **2020**, 57-79
- 279 Introduction. **2020**, 1-24
- 278 Exploring Computation Tree Logic with Past-Time Operator Model Checking Using DNA Computing. **2020**, 115-133
- 277 A Novel Two Layer Encryption Algorithm Using One-Time Pad and DNA Cryptography. **2020**, 297-309 1
- 276 The Sudoku Puzzle Generator Using DNA Computing. **2020**, 3-14
- 275 DNA Sequence Based Cryptographic Solution for Secure Image Transmission. **2020**, 48-71
- 274 Base Conversion Model Based on DNA Strand Displacement. **2020**, 93-102
- 273 Solving Maximum Clique Problem Based on Adjacent Points. **2020**, 10, 1655-1662
- 272 Operation of Queue and Stack by DNA Tiles. **2020**, 218, 03051
- 271 A Survey on Cloud Computing Security Issues and Cryptographic Techniques. **2020**, 119-134 2
- 270 Overview of Cellular Computing-Basic Principles and Applications. **2020**, 1895-1920
- 269 Role of Bioinformatics in Nanotechnology. **2020**, 1875-1894 1
- 268 DNA Computing Based RNA Genetic Algorithm. **2020**, 25-55 ○

- 267 DNA Self-assembly Computing Model for the Course Timetabling Problem. **2020**, 245-253
- 266 Biocomputers: Problems They Solve, State of the Art, and Prospects. **2020**, 15, 3-12 ○
- 265 RNA secondary structured logic gates for profiling the microRNA cancer biomarkers. **2020**, 14, 181-190
- 264 Generation of DNA Strands Representing Handwritten Numbers Based on GAN. **2021**,
- 263 Using Threshold DNA Strand Displacement to Construct a Half Adder. **2021**, 13, 1565-1573
- 262 Current and emerging opportunities in biological medium-based computing and digital data storage. ○
- 261 Towards a Bio-Inspired Theoretical Linguistics to Model Man-Machine Communication. 1422-1437
- 260 Optimal DNA Codes for Computing and Self-Assembly. 1-14
- 259 DNA Hash Pooling and its Applications. 15-27
- 258 Organization-Oriented Chemical Programming of Distributed Artifacts. 240-258
- 257 Nature-Inspired Intelligence in Supply Chain Management. 1-31
- 256 Experimental and Simulation Design of an Engineering Scheduling Problem Based on Molecular Computing Approach. **2007**, 178-182
- 255 Towards Solving NP-Complete Problems by Using a Molecular Supercomputer Model. **2005**, 67-79
- 254 Genetic Code-Based DNA Computation for the Hamiltonian Path Problem. **2006**, 639-658
- 253 DNA-based Parallel Computation of Addition. **2005**, 419-424
- 252 DNA Computing Based on Actual Biological Sequences and Accurate Reaction Control. **2005**, 60-67
- 251 Semantic Model for Circular DNA-Based Memory. **2005**, 1249-1258
- 250 DNA-based Algorithm for 0/1 Planning Problem. **2005**, 1278-1287

- 249 Improving Initial Pool Generation of Direct-Proportional Length-Based DNA Computing by Parallel Overlap Assembly. **2005**, 349-358
- 248 Possibilistic Channels for DNA Word Design. **2006**, 327-335 1
- 247 Parallelisierung, Nebenläufigkeit und alternative Modelle. **2006**, 311-358
- 246 Biomolecular Computing and Programming. **1999**, 181-188
- 245 Introduction. **2008**, 1-7
- 244 Non-Autonomous DNA Models. **2008**, 123-179
- 243 Nanocomputing. **2008**, 215-265
- 242 Morphic Computing: Quantum and Fields. **2008**, 1-19 0
- 241 A Surface-Based DNA Computing for the Positive Integer Linear Programming Problem. **2007**, 1-9
- 240 Evolutionary Model for Sequence Generation. **2007**, 10-17
- 239 Fluorescence Model of 3-SAT in DNA Computing. **2007**, 442-449
- 238 Molecular Computation: Solving 3-Vertex-Colourability Problem. **2007**, 450-458
- 237 Optimal Design of TS Fuzzy Control System Based on DNA-GA and Its Application. **2007**, 326-334 2
- 236 DNA Computing Approach to Management Engineering. **2007**, 370-377
- 235 Combining Randomness and a High-Capacity DNA Memory. **2008**, 109-118 1
- 234 Modeling Non-specific Binding in Gel-Based DNA Computers. **2008**, 170-181
- 233 An Interface for a Computing Model Using Methylation to Allow Precise Population Control by Quantitative Monitoring. **2008**, 191-200
- 232 Hardware Acceleration for Thermodynamic Constrained DNA Code Generation. **2008**, 201-210 2

231	Towards a Robust Biocomputing Solution of Intractable Problems. 2008 , 221-230	
230	Solutions to Computational Problems Through Gene Assembly. 2008 , 36-45	2
229	A Framework for Designing Novel Magnetic Tiles Capable of Complex Self-assemblies. 2008 , 129-145	3
228	Biomedical Applications for Nucleic Acid Nanodevices. 2013 , 329-348	0
227	The inference via DNA computing.	3
226	Simulation analysis of hybridization process for DNA computing with concentration control.	0
225	DNA computing by competitive hybridization for maximum satisfiability problem.	
224	DNA Playfair Cryptosystem Based on 16 × 6 Key Matrix Using DNA ASCII Table. 2021 , 529-538	0
223	Modeling gene regulatory networks: Classical models, optimal perturbation for identification of network. 2020 , 17, 112-101	
222	Encoding scheme for data storage and retrieval on DNA computers. 2020 , 14, 635-641	1
221	Heuristics for Maximum Clique and Independent Set. 2001 , 951-963	1
220	DNA Media Storage. 2007 , 2007, 236-239	
219	Parallelizing Assignment Problem with DNA Strands. 2020 , 18, e2547	
218	The dynamicity of light-up aptamers in one-pot diagnostic assays. 2021 ,	1
217	DNA Cryptography using DNA Fragment Assembly and Fragment Key Expansion for Genomic Data. 2022 , 12, 0-0	
216	A Secured Quantum Key Exchange Algorithm using Fermat Numbers and DNA Encoding. 2021 ,	0
215	A Comparison Based Approach on Mutual Authentication and Key Agreement Using DNA Cryptography. 2021 ,	0
214	Concepts and Application of DNA Origami and DNA Self-Assembly: A Systematic Review. 2021 , 2021, 9112407	1

213	As good as it gets: A scaling comparison of DNA computing, network biocomputing, and electronic computing approaches to an NP-complete problem.	0
212	Correcting Errors in Color Image Encryption Algorithm Based on Fault Tolerance Technique. 2021 , 10, 2890	
211	Medical image encryption algorithm based on a new five-dimensional three-leaf chaotic system and genetic operation. 2021 , 16, e0260014	5
210	Appendices. 2021 , 469-470	
209	A new color image encryption technique using DNA computing and Chaos-based substitution box. 1	3
208	Reversible G -codes over the ring $\mathcal{F}_{j,k}$ with applications to DNA codes. 2021 ,	3
207	Advanced Technologies in Health and Neurodegenerative Diseases. 2021 , 1-25	
206	Quantum Speedup for Inferring the Value of Each Bit of a Solution State in Unsorted Databases Using a Bio-molecular Algorithm on IBM Quantum's Computers. 2021 , PP,	0
205	Ionic Nanoarchitectonics: Creation of Polymer-Based Atomic Switch and Decision-Making Device. 2022 , 113-126	
204	NoAS-DS: Neural optimal architecture search for detection of diverse DNA signals.. 2021 , 147, 63-71	1
203	Noise Resistant Full Adder Using DNA Strands. 2020 ,	
202	Die Mathematik und andere Kurzsprachen. 2021 , 279-287	
201	The Strategy of Constructing DNA Logic Circuits Based on DNA Origami Substrate. 2021 , 16, 534-545	1
200	A Survey of DNA-based Computing Devices and their Applications.	0
199	Design and Control for Four-Variable Chaotic Nanoelectronic Circuits Based on DNA Reaction Networks. 2021 , 16, 1248-1262	1
198	Generator of Nucleotide Sequences for Storage and Transmission of Non-Biological Information in DNA Molecules. 2021 ,	
197	Quantum Computing and Simulations for Energy Applications: Review and Perspective.	4
196	Synthetic DNA applications in information technology.. 2022 , 13, 352	2

195	Importance of Nanotechnology, Various Applications in Electronic Field. 2022 , 1-28	0
194	DNA Computing. 2022 , 116-135	
193	Review of Research Challenges and Future of in DNA Computing Applications. 2022 , 243-252	
192	Reservoir Computing Using DNA Oscillators.. 2022 ,	1
191	Recent advances in functional materials: Bioelectronics-integrated biosensor applications. 2022 , 221-239	
190	Effective decoders for DNA codes. 2021 , 104583	1
189	A Chaotic Encryption System Based on DNA Coding Using a Deep Neural Network.	1
188	Not Anytime Soon: The Clinical Translation of Nanorobots and Its Biocompatibility-Interdisciplinarity Critique. 2022 , 147-178	1
187	Security measurement of a medical communication scheme based on chaos and DNA coding. 2022 , 83, 103424	6
186	A least square support vector machine approach based on bvRNA-GA for modeling photovoltaic systems. 2022 , 117, 108357	0
185	An RNA-Based Theory of Natural Universal Computation.. 2021 , 537, 110984	4
184	Improved Particle Swarm Based on Elastic Collision for DNA Coding Optimization Design. 2022 , 1-1	1
183	End-to-End Security Scheme for E-Health Systems Using DNA-Based ECC. 2022 , 77-89	1
182	Creative DNA computing: splicing systems for music composition.	
181	Logical Analysis of Multiple Single-Nucleotide-Polymorphisms with Programmable DNA Molecular Computation for Clinical Diagnostics.. 2022 ,	
180	The Brain-Computer Metaphor Debate Is Useless: A Matter of Semantics. 2022 , 4,	0
179	Artificial Neural Networks in DNA Computing and Implementation of DNA Logic Gates. 2022 , 13-48	1
178	Logical Analysis of Multiple Single-Nucleotide-Polymorphisms with Programmable DNA Molecular Computation for Clinical Diagnostics.	

- 177 Oligonucleotides-transformers for molecular biology and nanoengineering.. **2022**, 820, 146277
- 176 How to Tackle Difficult to Understand Phenomena. Fuzziness, Cognition, Memory. **2022**, 113-168
- 175 Hyperchaos and MD5 Based Efficient Color Image Cipher. **2022**, 72, 1645-1670 0
- 174 A Novel Hybrid DNA Cryptographic System Using Symmetric Algorithm and Dynamic DNA Sequence Generator. **2022**, 413-423
- 173 Bio Inspired Multi Level Hybrid Crypto System. **2022**, 10, 0-0
- 172 Biocomputation Using Molecular Agents Moving in Microfluidic Channel Networks: An Alternative Platform for Information Technology. **2022**, 15-27
- 171 DNA codes over finite local Frobenius non-chain rings of length 5 and nilpotency index 4. **2022**, 30, 89-108
- 170 Autonomous and Programmable Strand Generator Implemented as DNA and Enzymatic Chemical Reaction Cascade. 1
- 169 Computing With Networks of Chemical Oscillators and its Application for Schizophrenia Diagnosis.. **2022**, 10, 848685 2
- 168 Integrating DNA Encapsulates and Digital Microfluidics for Automated Data Storage in DNA.. **2022**, e2107381 3
- 167 Dynamic analysis of a novel chaotic system with no linear terms and use for DNA-based image encryption. **2022**, 81, 10907-10934 0
- 166 Fully Dynamic Line Maintenance by a Simple Robot. **2022**, 1
- 165 Logic operations with active topological defects.. **2022**, 8, eabg9060 3
- 164 Design and Realization of Triple dsDNA Nanocomputing Circuits in Microfluidic Chips.. **2022**, 0
- 163 Catalytic DNA Polymerization Can Be Expedited by Active Product Release.. **2022**,
- 162 Probe Machine Based Computing Model for Maximum Clique Problem. **2022**, 31, 304-312
- 161 Visual Construction of Logical AND and NAND Gates. **2022**, 2022, 1-10
- 160 Image Encryption Schemes Based on a Class of Uniformly Distributed Chaotic Systems. **2022**, 10, 1027 0

159 Catalytic DNA Polymerization Can Be Expedited by Active Product Release.

158 Context-sensitive fusion grammars and fusion grammars with forbidden context are universal. **2022**, 104889

0

157 DNA Input Classification by a Riboregulator-Based Cell-Free Perceptron.. **2022**,

1

156 Encoding of non-biological information for its long-term storage in DNA.. **2022**, 104664

155 Deep Hashing Based Model for Image Similarity Retrieval in DNA Storage. **2021**,

154 A new image encryption scheme based on 3D Sine-adjusted-Logistic map and DNA coding. **2021**,

153 Hyperchaotic Image Encryption Algorithm Based on Dynamic DNA Coding. **2021**,

152 Enhanced Congestion Control in DTN using DNA Computing. **2021**,

151 An Image Encryption Method for Object Detection Based on Chaotic System and DNA Sequence. **2021**,

150 Engineering DNA logic systems with non-canonical DNA-nanostructures: basic principles, recent developments and bio-applications. **2022**, 65, 284-297

3

149 Tetrahedron-Based Constitutional Dynamic Network for COVID-19 or Other Coronaviruses Diagnostics and Its Logic Gate Applications.. **2021**,

4

148 Chemical Reaction Networks Programming for Solving Equations. **2022**, 44, 1725-1739

147 Multiple-image encryption algorithm based on genetic central dogma.

0

146 Content-Based Image Retrieval using DNA Transcription and Translation.. **2022**, PP,

145 DNA nanotechnology-empowered finite state machines.. **2022**,

2

144 DNABased E-voting System. **2022**, 14, 0-0

143 Medical Nanorobots: The Biocompatibility Constraints of Clinical Translation. **2022**, 228-232

142 Advancement of Computer-Aided Design Software and Simulation Tools for Nucleic Acid Nanostructures and DNA Origami. **2022**, 75-99

- 141 Eulerian Routing in Practice.
- 140 DNA Memristors and Their Application to Reservoir Computing.. **2022**,
- 139 Monotone Control of R Systems. 1
- 138 Computational DNA Droplets Recognizing miRNA Sequence Inputs Based on Liquid-Liquid Phase Separation. 2202322 3
- 137 Fundamentos de computaci3n con ADN. **1998**, 35-44
- 136 Text Encryption Approach Using DNA Computation and Hyperchaotic System. **2021**, 0
- 135 Scaling Up Multi-bit DNA Full Adder Circuits with Minimal Strand Displacement Reactions. 2
- 134 Perspectives: Designing Living Matter. **2022**, 329-417
- 133 Nondeterministic State Complexity of Site-Directed Deletion. **2022**, 189-199
- 132 Autonomous DNA Neuron Learning Algorithm Based on DNA Strand Displacement. **2022**,
- 131 DNA Origami Nanodevices for Therapeutic Delivery Applications. **2022**, 161-194
- 130 Unclonable Polymers and Their Cryptographic Applications. **2022**, 759-789
- 129 Different DNA Sequencing Using DNA Graphs: A Study. **2022**, 12, 5414 0
- 128 Image encryption based on fractional chaotic pseudo-random number generator and DNA encryption method. 0
- 127 Distributed information encoding and decoding using self-organized spatial patterns.
- 126 Exponential Function Computation Based on DNA Strand Displacement Circuits. **2022**, 1-10
- 125 Ionic Nanoarchitectonics for Artificial Intelligence Devices. **2022**, 191-218
- 124 Safeguard Algorithm by Conventional Security with DNA Cryptography Method. **2022**,

- 123 Genetic algorithm based hyper-parameters optimization for transfer convolutional neural network. **2022**, 0
- 122 Reversible SG^k -codes with applications to DNA codes. 2
- 121 Adaptive Color Image Encryption Scheme Based on Multiple Distinct Chaotic Maps and DNA Computing. **2022**, 10, 2004 1
- 120 Graph Computation Using Algorithmic Self-Assembly of DNA Molecules. 0
- 119 Enzymatic Boolean Logic Gates toward ON/OFF Sensing. **2022**,
- 118 Processing Natural Language with Biomolecules: Where Linguistics, Biology and Computation Meet. **2022**, 139-150
- 117 DNA Arithmetic with Error Correction. **2022**, 1-1
- 116 Region of Interest Encryption based on Novel 2D Hyperchaotic Signal and Bagua Coding Algorithm. **2022**, 1-1
- 115 Molecular Programming. **2022**, 1-7
- 114 Pattern Recognition of microRNA Expression in Body Fluids Using Nanopore Decoding at Subfemtomolar Concentrations. 3
- 113 Roadmap for network-based bio-computation. 3
- 112 Complexification of eukaryote phenotype: Adaptive immuno-cognitive systems as unique Gdelian block chain distributed ledger. **2022**, 104718 0
- 111 Parasitic Computing. 575-577
- 110 Fast DNA encoding algorithm inspired by the SPOOLing system. 0
- 109 Molecular convolutional neural networks with DNA regulatory circuits. 2
- 108 Trends in Computing and Memory Technologies. **2023**, 3-11
- 107 Multirule-Combined Algorithmic Assembly Demonstrated by DNA Tiles. 0
- 106 Demonstration of Big Bang-like patterns through logic-implemented DNA algorithmic assembly. **2022**, 12, 075213

105	Toggleing Between Two Limit Cycles in a Molecular Ecosystem.	
104	Enhanced discrete dragonfly algorithm for solving four-color map problems.	0
103	Multi-Image Encryption Method via Computational Integral Imaging Algorithm. 2022 , 24, 996	1
102	Intelligent Programmable DNA Nanomachines for the Spatially Controllable Imaging of Intracellular MicroRNA.	2
101	Controllable protein network based on DNA-origami and biomedical applications. 2022 , 1,	
100	Information Processing Using Networks of Chemical Oscillators. 2022 , 24, 1054	0
99	Modeling of Supercapacitors Utilizing Deoxyribonucleic Acid Neural Network. 2022 ,	
98	Generic and scalable DNA-based logic design methodology for massive parallel computation.	
97	Nonlinear manipulation and analysis of large DNA datasets. 2022 , 50, 8974-8985	
96	Parallel molecular computation on digital data stored in DNA.	
95	Medical image encryption algorithm based on hyper-chaotic system and DNA coding.	0
94	An Improved Arithmetic Optimization Algorithm and Its Application to Determine the Parameters of Support Vector Machine. 2022 , 10, 2875	2
93	Nematic bits and universal logic gates. 2022 , 8,	0
92	Image encryption algorithm based on hyperchaotic system and a new DNA sequence operation. 2022 , 162, 112456	2
91	Towards Intelligent Attack Detection Using DNA Computing.	0
90	Nanotechnology and Computer Science: Trends and advances. 2022 , 2, 100011	1
89	10 Years of Natural Data Storage. 2022 , 1-1	0
88	Tactile Resilience of Sensory Whisker by Adaptive Morphology. 2022 , 10, 101814-101824	1

87	DNA-mediated dynamic plasmonic nanostructures: assembly, actuation, optical properties, and biological applications.	0
86	Biological Computation and Compatibility Search in the Possibility Space as the Mechanism of Complexity Increase During Progressive Evolution. 2022 , 18, 117693432211106	0
85	Systemization Technology for Molecular Robots. 2022 , 59-115	0
84	DNA codes from skew dihedral group ring. 2022 , 0	0
83	What Cancer Is. 2022 , 1-18	0
82	Molecular Material for Molecular Robots. 2022 , 215-245	0
81	Molecular Computing Approaches. 2022 , 145-167	0
80	Image Encryption Algorithm Based on Combination Chaotic System and DNA Coding. 2022 ,	0
79	A Parallel DNA Algorithm for Solving the Quota Traveling Salesman Problem Based on Biocomputing Model. 2022 , 2022, 1-16	0
78	Quasi-deterministic 5' -> 3' Watson-Crick Automata. 367, 160-176	0
77	Distributed information encoding and decoding using self-organized spatial patterns. 2022 , 100590	0
76	Secure DNA-Coding Image Optical Communication Using Non-Degenerate Hyperchaos and Dynamic Secret-Key. 2022 , 10, 3180	3
75	Hybridization kinetics of out-of-equilibrium mixtures of short RNA oligonucleotides. 2022 , 50, 9647-9662	1
74	Development of the Right- and Left-Handed Gamma Peptide Nucleic Acid Building Blocks for On-Resin Chemical Functionalization.	0
73	The design of a S-box based on DNA computing and chaos theories. 2022 ,	0
72	Data Processing: Beyond Traditional Techniques. 2022 , 225-242	0
71	Morphological Computation and Control Complexity. 2022 , 1261, 012011	0
70	Not All Computational Methods Are Effective Methods. 2022 , 7, 113	0

69	A GRU and chaos-based novel image encryption approach for transport images.	1
68	A tape-reading molecular ratchet.	6
67	Emerging Approaches to DNA Data Storage: Challenges and Prospects.	2
66	Performance optimization of water cycle algorithm for multilevel lupus nephritis image segmentation. 2023 , 80, 104139	0
65	History of Adam Smith's Invisible Hand Hypothesis: Circumstances of Its Origin and Further Development. 2022 , 3-25	0
64	Construction of DNA Codes from Composite Matrices and a Bio-Inspired Optimization Algorithm. 2022 , 1-1	0
63	Toward Understanding Invisible Hand as Hidden Computational Process. 2022 , 181-263	0
62	Toward Understanding of Adam Smith's Invisible Hand for Human Social Structures/Markets. 2022 , 295-382	0
61	A novel image encryption scheme based on 2D SILM and improved permutation-confusion-diffusion operations.	0
60	Programming Non-Nucleic Acid Molecules into Computational Nucleic Acid Systems.	0
59	An Encrypted Proposal Method in Membrane Computing Aggregation (MCA).	0
58	Programming Non-Nucleic Acid Molecules into Computational Nucleic Acid Systems.	0
57	Quantum Correlation Effects in Biopolymer Structures. 2022 , 233-262	0
56	Construction of a scalable DNA computing nano-system for large-scale and complex logical operations.	0
55	Distributed transformations of Hamiltonian shapes based on line moves. 2023 , 942, 142-168	0
54	Variable-position centrifugal platform achieves droplets manipulation and logic circuitries on-chip.	0
53	Hiding information in an image using DNA cryptography. 2022 ,	0
52	Research challenges and future work directions in DNA computing. 2022 ,	0

51	Introduction to DNA computing. 2022,	0
50	DNA computing-based Big Data storage. 2022,	0
49	Large-scale coherent Ising machine based on optoelectronic parametric oscillator. 2022, 11,	0
48	An automated DNA computing platform for rapid etiological diagnostics. 2022, 8,	0
47	Electrochemical and Photoelectrochemical Water Splitting: Operando -Raman and FTIR Spectroscopy as Useful Probing Techniques.	0
46	DNA Droplets: Intelligent, Dynamic Fluid. 2200180	0
45	A novel chaos map based medical image encryption scheme. 1-20	0
44	A novel conservative chaos driven dynamic DNA coding for image encryption. 8,	0
43	Image Encryption Scheme Based on Newly Designed Chaotic Map and Parallel DNA Coding. 2023, 11, 231	2
42	What is a related work? A typology of relationships in research literature. 2023, 201,	0
41	Dynamic Line Maintenance by Hybrid Programmable Matter. 2023, 13, 18-47	0
40	Non-complementary strand commutation as a fundamental alternative for information processing by DNA and gene regulation. 2023, 15, 70-82	2
39	Wavelength-Dependent, Orthogonal Photoregulation of DNA Liberation for Logic Operations. 2023, 15, 1944-1957	0
38	An Encryption Method of Multiple Images and Multiple Region of Interest Based on DNA Sequence and Chaotic System. 2022,	0
37	DNA Code from Cyclic and Skew Cyclic Codes over $F_4[v]/\langle v^3 \rangle$. 2023, 25, 239	0
36	Molecular Computation for Molecular Classification. 2200203	0
35	Fundamental energy cost of finite-time parallelizable computing. 2023, 14,	0
34	DNA storage from natural biology to synthetic biology. 2023, 21, 1227-1235	0

- 33 Medical Data Security in IOT Using DNA Cryptography and Insertion Method. **2023**, 3, 21-25 ○
- 32 The Properties of Bounded-Addition Fuzzy Semi-simple Splicing Systems. **2023**, 354-363 ○
- 31 A molecular assessment of the practical potential of DNA-based computation. **2023**, 81, 102940 ○
- 30 Improved Multi-Strategy Matrix Particle Swarm Optimization for DNA Sequence Design. **2023**, 12, 547 ○
- 29 Pattern Formation and Information Processing Based on Phase-separated DNA Droplets. **2022**, 62, 345-347 ○
- 28 A novel image encryption scheme based on Logistic cosine cascade maps. **2023**, 98, 035225 ○
- 27 A Comprehensive Literature of Genetics Cryptographic Algorithms for Data Security in Cloud Computing. 1-35 ○
- 26 Design of Sixteen-Input Priority Encoder with DNA Nano Switches. **2022**, 17, 1354-1365 ○
- 25 Novel medical image cryptogram technology based on segmentation and DNA encoding. ○
- 24 Magnetite-Based Biosensors and Molecular Logic Gates: From Magnetite Synthesis to Application. **2023**, 13, 304 ○
- 23 DNA strand displacement based computational systems and their applications. 14, 1 ○
- 22 HAIE: a hybrid adaptive image encryption algorithm using Chaos and DNA computing. ○
- 21 Integrated Photonic Computing beyond the von Neumann Architecture. ○
- 20 Design and Development of Protected Services in Cloud Computing Environment. **2023**, ○
- 19 Life Invents Ever New Levels of Language. **2023**, 171-195 ○
- 18 Artificial awareness, as an innovative learning method and its application in science and technology. **2023**, 7, 012-019 ○
- 17 Generation of DNA Oligomers with Similar Chemical Kinetics via In-Silico Optimization. ○
- 16 Securing and managing healthcare data generated by intelligent blockchain systems on cloud networks through DNA cryptography. ○

- 15 Learning Without Neurons in Physical Systems. **2023**, 14, 417-441
- 14 A DNA Based Framework for Securing Information Using Asymmetric Encryption. **2023**, 129, 1717-1733
- 13 Biomolecular and quantum algorithms for the dominating set problem in arbitrary networks. **2023**, 13,
- 12 DNA Sequence Optimization Design of Arithmetic Optimization Algorithm Based on Billiard Hitting Strategy.
- 11 Construction of Quantum Codes over the Class of Commutative Rings and Their Applications to DNA Codes. **2023**, 11, 1430
- 10 A Dual-Channel Speech Encryption Scheme Based on Silicon Photonic Microcavity (SPM) Chaos and Dynamic DNA Encoding. **2022**,
- 9 Prime factorization via localized tile assembly in a DNA origami framework. **2023**, 9,
- 8 Data security techniques in cloud computing based on machine learning algorithms and cryptographic algorithms: Lightweight algorithms and genetics algorithms.
- 7 A survey on molecular-scale learning systems with relevance to DNA computing.
- 6 Hexagonal picture generation in DNA computing.
- 5 Colour Image Encryption Using Chaotic Trigonometric Map and DNA Coding. **2022**,
- 4 M-State and N-Color ($M \geq 1$, 2 , and 1) Turing Algorithms Demonstrated via DNA Self-Assembly.
- 3 Trumpet is an operating system for simple and robust cell-free biocomputing. **2023**, 14,
- 2 A Novel Image Encryption Algorithm Using DNA Cryptography. **2023**, 388-392
- 1 Programmable active matter across scales. **2023**, 1,