

Chew-Kiat Heng

List of Publications by Year in descending order

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122
papers

5,379
citations

101496

36
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102432

66
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126
all docs

126
docs citations

126
times ranked

9596
citing authors

#	ARTICLE	IF	CITATIONS
1	A catalog of genetic loci associated with kidney function from analyses of a million individuals. <i>Nature Genetics</i> , 2019, 51, 957-972.	9.4	549
2	The power of genetic diversity in genome-wide association studies of lipids. <i>Nature</i> , 2021, 600, 675-679.	13.7	353
3	Impact of common genetic determinants of Hemoglobin A1c on type 2 diabetes risk and diagnosis in ancestrally diverse populations: A transethnic genome-wide meta-analysis. <i>PLoS Medicine</i> , 2017, 14, e1002383.	3.9	341
4	Trans-ancestry genome-wide association study identifies 12 genetic loci influencing blood pressure and implicates a role for DNA methylation. <i>Nature Genetics</i> , 2015, 47, 1282-1293.	9.4	294
5	Silicon-based microfilters for whole blood cell separation. <i>Biomedical Microdevices</i> , 2008, 10, 251-257.	1.4	235
6	Impact of dynamic online fed-batch strategies on metabolism, productivity and N-glycosylation quality in CHO cell cultures. <i>Biotechnology and Bioengineering</i> , 2005, 89, 164-177.	1.7	216
7	New loci and coding variants confer risk for age-related macular degeneration in East Asians. <i>Nature Communications</i> , 2015, 6, 6063.	5.8	147
8	Association analyses of East Asian individuals and trans-ancestry analyses with European individuals reveal new loci associated with cholesterol and triglyceride levels. <i>Human Molecular Genetics</i> , 2017, 26, 1770-1784.	1.4	135
9	A Large-Scale Multi-ancestry Genome-wide Study Accounting for Smoking Behavior Identifies Multiple Significant Loci for Blood Pressure. <i>American Journal of Human Genetics</i> , 2018, 102, 375-400.	2.6	123
10	<i>Schizosaccharomyces pombe</i> Cells Deficient in Triacylglycerols Synthesis Undergo Apoptosis upon Entry into the Stationary Phase. <i>Journal of Biological Chemistry</i> , 2003, 278, 47145-47155.	1.6	116
11	Genome-wide analysis identifies novel susceptibility loci for myocardial infarction. <i>European Heart Journal</i> , 2021, 42, 919-933.	1.0	113
12	Multi-ancestry genome-wide gene-smoking interaction study of 387,272 individuals identifies new loci associated with serum lipids. <i>Nature Genetics</i> , 2019, 51, 636-648.	9.4	112
13	Novel genetic associations for blood pressure identified via gene-alcohol interaction in up to 570K individuals across multiple ancestries. <i>PLoS ONE</i> , 2018, 13, e0198166.	1.1	94
14	Metabolomics-driven approach for the improvement of Chinese hamster ovary cell growth: Overexpression of malate dehydrogenase II. <i>Journal of Biotechnology</i> , 2010, 147, 116-121.	1.9	93
15	Detection of <i>Saccharomyces cerevisiae</i> immobilized on self-assembled monolayer (SAM) of alkanethiolate using electrochemical impedance spectroscopy. <i>Analytica Chimica Acta</i> , 2005, 554, 52-59.	2.6	91
16	Targeting early apoptotic genes in batch and fed-batch CHO cell cultures. <i>Biotechnology and Bioengineering</i> , 2006, 95, 350-361.	1.7	89
17	Association between serum amyloid A and obesity: a meta-analysis and systematic review. <i>Inflammation Research</i> , 2010, 59, 323-334.	1.6	87
18	Multiancestry Genome-Wide Association Study of Lipid Levels Incorporating Gene-Alcohol Interactions. <i>American Journal of Epidemiology</i> , 2019, 188, 1033-1054.	1.6	85

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19	Associations of autozygosity with a broad range of human phenotypes. <i>Nature Communications</i> , 2019, 10, 4957.	5.8	84
20	Transcriptional profiling of apoptotic pathways in batch and fed-batch CHO cell cultures. <i>Biotechnology and Bioengineering</i> , 2006, 94, 373-382.	1.7	78
21	Interethnic analyses of blood pressure loci in populations of East Asian and European descent. <i>Nature Communications</i> , 2018, 9, 5052.	5.8	75
22	Risk factors for steroid dependency in children with idiopathic nephrotic syndrome. <i>Pediatric Nephrology</i> , 2001, 16, 1049-1052.	0.9	67
23	Metabolomics profiling of extracellular metabolites in recombinant Chinese Hamster Ovary fed-batch culture. <i>Rapid Communications in Mass Spectrometry</i> , 2009, 23, 3763-3771.	0.7	67
24	Multi-ancestry study of blood lipid levels identifies four loci interacting with physical activity. <i>Nature Communications</i> , 2019, 10, 376.	5.8	64
25	Loci for human leukocyte telomere length in the Singaporean Chinese population and trans-ethnic genetic studies. <i>Nature Communications</i> , 2019, 10, 2491.	5.8	64
26	Metabolomics-based identification of apoptosis-inducing metabolites in recombinant fed-batch CHO culture media. <i>Journal of Biotechnology</i> , 2011, 151, 218-224.	1.9	62
27	Multiple Nonglycemic Genomic Loci Are Newly Associated With Blood Level of Glycated Hemoglobin in East Asians. <i>Diabetes</i> , 2014, 63, 2551-2562.	0.3	61
28	A polygenic risk score improves risk stratification of coronary artery disease: a large-scale prospective Chinese cohort study. <i>European Heart Journal</i> , 2022, 43, 1702-1711.	1.0	58
29	Thiopurine Methyltransferase Polymorphisms in a Multiracial Asian Population and Children With Acute Lymphoblastic Leukemia. <i>Journal of Pediatric Hematology/Oncology</i> , 2002, 24, 353-359.	0.3	56
30	Micro-assembled multi-chamber thermal cyler for low-cost reaction chip thermal multiplexing. <i>Sensors and Actuators A: Physical</i> , 2002, 102, 114-121.	2.0	54
31	ABCA1 gene polymorphisms and their associations with coronary artery disease and plasma lipids in males from three ethnic populations in Singapore. <i>Human Genetics</i> , 2003, 113, 106-117.	1.8	53
32	A genome-wide association study of n-3 and n-6 plasma fatty acids in a Singaporean Chinese population. <i>Genes and Nutrition</i> , 2015, 10, 53.	1.2	53
33	Reduced transcriptional activity in individuals with IL-18 gene variants detected from functional but not association study. <i>Biochemical and Biophysical Research Communications</i> , 2005, 338, 736-741.	1.0	50
34	Impact of Serum Amyloid A on Tissue Factor and Tissue Factor Pathway Inhibitor Expression and Activity in Endothelial Cells. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2007, 27, 1645-1650.	1.1	43
35	Association of factor VII genotype with plasma factor VII activity and antigen levels in healthy Indian adults and interaction with triglycerides. <i>Arteriosclerosis and Thrombosis: A Journal of Vascular Biology</i> , 1994, 14, 1923-1927.	3.8	38
36	Sequential Responses to High-fat and High-calorie Feeding in an Obese Mouse Model. <i>Obesity</i> , 2008, 16, 972-978.	1.5	38

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37	Influence of polymorphisms for apolipoprotein B (ins/del,XbaI,EcoRI) and apolipoprotein E on serum lipids and apolipoproteins in a Javanese population. <i>Genetic Epidemiology</i> , 1994, 11, 19-27.	0.6	33
38	Microfluidic systems for extracting nucleic acids for DNA and RNA analysis. <i>Sensors and Actuators A: Physical</i> , 2007, 133, 335-339.	2.0	31
39	Association of CETP Taq1B and -629C>&A polymorphisms with coronary artery disease and lipid levels in the multi-ethnic Singaporean population. <i>Lipids in Health and Disease</i> , 2013, 12, 85.	1.2	31
40	A multi-ancestry genome-wide study incorporating gene-smoking interactions identifies multiple new loci for pulse pressure and mean arterial pressure. <i>Human Molecular Genetics</i> , 2019, 28, 2615-2633.	1.4	31
41	MEFV E148Q polymorphism is associated with Henoch-Schönlein purpura in Chinese children. <i>Pediatric Nephrology</i> , 2010, 25, 2077-2082.	0.9	30
42	DNA purification silicon chip. <i>Sensors and Actuators A: Physical</i> , 2007, 139, 139-144.	2.0	29
43	CD14 promoter polymorphisms have no functional significance and are not associated with atopic phenotypes. <i>Pharmacogenetics and Genomics</i> , 2006, 16, 229-236.	0.7	28
44	Genome-wide association study identifies a missense variant at APOA5 for coronary artery disease in Multi-Ethnic Cohorts from Southeast Asia. <i>Scientific Reports</i> , 2017, 7, 17921.	1.6	28
45	Variations in the Promoter Region of the Apolipoprotein A-1 Gene Influence Plasma Lipoprotein(a) Levels in Asian Indian Neonates from Singapore. <i>Pediatric Research</i> , 2001, 49, 514-518.	1.1	26
46	Interleukin-13 genetic polymorphisms in Singapore Chinese children correlate with long-term outcome of minimal-change disease. <i>Nephrology Dialysis Transplantation</i> , 2005, 20, 728-734.	0.4	26
47	Racial Variation of Cord Plasma Lipoprotein(a) Levels in Relation to Coronary Risk Level: A Study in Three Ethnic Groups in Singapore. <i>Pediatric Research</i> , 1996, 40, 718-722.	1.1	26
48	Association of single nucleotide polymorphism rs6903956 on chromosome 6p24.1 with coronary artery disease and lipid levels in different ethnic groups of the Singaporean population. <i>Clinical Biochemistry</i> , 2013, 46, 755-759.	0.8	24
49	Are C-Reactive Protein Associated Genetic Variants Associated with Serum Levels and Retinal Markers of Microvascular Pathology in Asian Populations from Singapore?. <i>PLoS ONE</i> , 2013, 8, e67650.	1.1	23
50	Racial variation of factor VII activity and antigen levels and their correlates in healthy Chinese and Indians at low and high risk for coronary artery disease. <i>Atherosclerosis</i> , 1995, 117, 33-42.	0.4	20
51	Arrayed Primer Extension: A Robust and Reliable Genotyping Platform for the Diagnosis of Single Gene Disorders: β -Thalassemia and Thiopurine Methyltransferase Deficiency. <i>Genetic Testing and Molecular Biomarkers</i> , 2005, 9, 212-219.	1.7	20
52	Sequential effects of a high-fiber diet with psyllium husks on the expression levels of hepatic genes and plasma lipids. <i>Nutrition</i> , 2008, 24, 57-66.	1.1	20
53	The role of NF- κ B in SAA-induced peroxisome proliferator-activated receptor β activation. <i>Atherosclerosis</i> , 2013, 227, 72-78.	0.4	20
54	Visfatin and its genetic variants are associated with obesity-related morbidities and cardiometabolic risk in severely obese children. <i>Pediatric Obesity</i> , 2014, 9, 81-91.	1.4	20

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55	Carbon nanotube-based labels for highly sensitive colorimetric and aggregation-based visual detection of nucleic acids. <i>Nanotechnology</i> , 2007, 18, 455102.	1.3	18
56	Prevalence and risk factors for retinopathy in persons without diabetes: the Singapore Indian Eye Study. <i>Acta Ophthalmologica</i> , 2014, 92, e602-9.	0.6	18
57	Genetic Interactions Between TRPC6 and NPHS1 Variants Affect Posttransplant Risk of Recurrent Focal Segmental Glomerulosclerosis. <i>American Journal of Transplantation</i> , 2015, 15, 3229-3238.	2.6	17
58	Interaction effects between Paraoxonase 1 variants and cigarette smoking on risk of coronary heart disease in a Singaporean Chinese population. <i>Atherosclerosis</i> , 2015, 240, 40-45.	0.4	17
59	Gene-educational attainment interactions in a multi-ancestry genome-wide meta-analysis identify novel blood pressure loci. <i>Molecular Psychiatry</i> , 2020, 26, 2111-2125.	4.1	17
60	Differential and shared genetic effects on kidney function between diabetic and non-diabetic individuals. <i>Communications Biology</i> , 2022, 5, .	2.0	17
61	Electrochemical detection of leukemia oncogenes using enzyme-loaded carbon nanotube labels. <i>Analyst</i> , 2014, 139, 4223-4230.	1.7	16
62	Effect of plasma polyunsaturated fatty acid levels on leukocyte telomere lengths in the Singaporean Chinese population. <i>Nutrition Journal</i> , 2020, 19, 119.	1.5	16
63	Evolution of the apolipoprotein B gene and coronary artery disease: a study in low and high risk Asians. <i>Annals of Human Genetics</i> , 1999, 63, 45-62.	0.3	15
64	Sensitive Electrochemical Detection of Horseradish Peroxidase at Disposable Screen-Printed Carbon Electrode. <i>Electroanalysis</i> , 2008, 20, 2040-2046.	1.5	15
65	Low frequency variants associated with leukocyte telomere length in the Singapore Chinese population. <i>Communications Biology</i> , 2021, 4, 519.	2.0	15
66	Childhood nephrotic syndrome in relapse is associated with down-regulation of monocyte CD14 expression and lipopolysaccharide-induced tumour necrosis factor- α production. <i>Clinical and Experimental Immunology</i> , 2003, 134, 111-119.	1.1	14
67	Variation of the platelet glycoprotein IIIa P1A1/A2 allele frequencies in the three ethnic groups of Singapore. <i>International Journal of Cardiology</i> , 2003, 90, 269-273.	0.8	14
68	Celecoxib Inhibits Serum Amyloid A-Induced Matrix Metalloproteinase-10 Expression in Human Endothelial Cells. <i>Journal of Vascular Research</i> , 2009, 46, 64-72.	0.6	14
69	Differences in AMY1 Gene Copy Numbers Derived from Blood, Buccal Cells and Saliva Using Quantitative and Droplet Digital PCR Methods: Flagging the Pitfall. <i>PLoS ONE</i> , 2017, 12, e0170767.	1.1	14
70	Variant screening of the serum amyloid A1 gene and functional study of the p.Gly90Asp variant for its role in atherosclerosis. <i>Atherosclerosis</i> , 2013, 227, 112-117.	0.4	13
71	Genotype associations of factor VII gene with plasma factor VII coagulant activity and antigen levels in healthy Chinese. <i>Blood Coagulation and Fibrinolysis</i> , 2002, 13, 217-224.	0.5	12
72	The impact of factor XIIIa V34L polymorphism on plasma factor XIII activity in the Chinese and Asian Indians from Singapore. <i>Human Genetics</i> , 2004, 114, 186-191.	1.8	12

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73	The Association of Mitochondrial DNA 5178 C > A Polymorphism with Plasma Lipid Levels Among Three Ethnic Groups. <i>Annals of Human Genetics</i> , 2005, 69, 639-644.	0.3	12
74	Nucleic Acid Extraction, Amplification, and Detection on Si-Based Microfluidic Platforms. <i>IEEE Journal of Solid-State Circuits</i> , 2007, 42, 1803-1813.	3.5	12
75	Serum Amyloid A Activates Peroxisome Proliferator-Activated Receptor β through Extracellularly Regulated Kinase 1/2 and COX-2 Expression in Hepatocytes. <i>Biochemistry</i> , 2010, 49, 9508-9517.	1.2	12
76	The impacts of thiazolidinediones on circulating C-reactive protein levels in different diseases: A meta-analysis. <i>Diabetes Research and Clinical Practice</i> , 2010, 90, 279-287.	1.1	12
77	Association of <i>G6PD</i> variants with hemoglobin A1c and impact on diabetes diagnosis in East Asian individuals. <i>BMJ Open Diabetes Research and Care</i> , 2020, 8, e001091.	1.2	12
78	Cladistic Analysis of Human Apolipoprotein A4 Polymorphisms in Relation to Quantitative Plasma Lipid Risk Factors of Coronary Heart Disease. <i>Annals of Human Genetics</i> , 2003, 67, 107-124.	0.3	11
79	Acyl-CoA: cholesterol acyltransferase-2 gene polymorphisms and their association with plasma lipids and coronary artery disease risks. <i>Human Genetics</i> , 2005, 118, 393-403.	1.8	11
80	Utility of genetic and non-genetic risk factors in predicting coronary heart disease in Singaporean Chinese. <i>European Journal of Preventive Cardiology</i> , 2017, 24, 153-160.	0.8	11
81	Gene-diet interaction effects on BMI levels in the Singapore Chinese population. <i>Nutrition Journal</i> , 2018, 17, 31.	1.5	11
82	Lipoprotein(a) as predictor of coronary artery disease and myocardial infarction in a multi-ethnic Asian population. <i>Atherosclerosis</i> , 2022, 349, 160-165.	0.4	11
83	NAFLD polygenic risk score and risk of hepatocellular carcinoma in an East Asian population. <i>Hepatology Communications</i> , 2022, 6, 2310-2321.	2.0	11
84	Ethnic variations of a retinoblastoma susceptibility gene (<i>RB1</i>) polymorphism in eight Asian populations. <i>Journal of Genetics</i> , 2003, 82, 33-37.	0.4	10
85	The Effects of Three Factor VII Polymorphisms on Factor VII Coagulant Levels in Healthy Singaporean Chinese, Malay and Indian Newborns. <i>Annals of Human Genetics</i> , 2006, 70, 951-957.	0.3	10
86	Spectral characterization of yeast cells with an epitaxy-based UV-Vis optical sensor. <i>Biomedical Microdevices</i> , 2006, 8, 177-185.	1.4	10
87	A self-contained disposable cartridge microsystem for dengue viral ribonucleic acid extraction. <i>Sensors and Actuators B: Chemical</i> , 2011, 160, 1557-1564.	4.0	10
88	In-vitro function of upstream visfatin polymorphisms that are associated with adverse cardiometabolic parameters in obese children. <i>BMC Genomics</i> , 2016, 17, 974.	1.2	10
89	Effect of serum amyloid A1 treatment on global gene expression in THP-1-derived macrophages. <i>Inflammation Research</i> , 2012, 61, 391-398.	1.6	9
90	Detection of ADTRP in circulation and its role as a novel biomarker for coronary artery disease. <i>PLoS ONE</i> , 2020, 15, e0237074.	1.1	8

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91	Fibrinogen genotypes (alpha and beta) are associated with plasma fibrinogen levels in Chinese. <i>Journal of Medical Genetics</i> , 2001, 38, 31e-31.	1.5	7
92	Predicting Risk of Coronary Artery Disease from DNA Microarray-Based Genotyping Using Neural Networks and Other Statistical Analysis Tool. <i>Journal of Bioinformatics and Computational Biology</i> , 2003, 01, 521-539.	0.3	7
93	Tag/anti-tag liquid-phase primer extension array: A flexible and versatile genotyping platform. <i>Genomics</i> , 2006, 87, 151-157.	1.3	7
94	Functional Characterization of Variants in <i>MC4R</i> Gene Promoter Region Found in Obese Children. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2014, 99, E931-E935.	1.8	7
95	The Atherogenic Effects of Serum Amyloid A are Potentially Mediated via Inflammation and Apoptosis. <i>Journal of Atherosclerosis and Thrombosis</i> , 2014, 21, 854-867.	0.9	6
96	Microfluidic Chips for Viral RNA Extraction & Detection. , 0, , .		5
97	Association of intronic single-nucleotide polymorphisms in the <i>EMILIN1</i> gene with essential hypertension in a Chinese population. <i>Journal of Human Hypertension</i> , 2012, 26, 553-561.	1.0	5
98	Fish and marine fatty acids intakes, the <i>FADS</i> genotypes and long-term weight gain: a prospective cohort study. <i>BMJ Open</i> , 2019, 9, e022877.	0.8	5
99	Glass-based BioMEMS devices for optically excited cell impedance measurement. <i>Sensors and Actuators A: Physical</i> , 2007, 133, 301-310.	2.0	4
100	Design of MEMS devices with optical apertures for the detection of transparent biological cells. <i>Biomedical Microdevices</i> , 2008, 10, 639-652.	1.4	4
101	The genetic variation rs6903956 in the novel androgen-dependent tissue factor pathway inhibitor regulating protein (ADTRP) gene is not associated with levels of plasma coagulation factors in the Singaporean Chinese. <i>Thrombosis Journal</i> , 2017, 15, 1.	0.9	4
102	A novel model for predicting non-responsiveness to intravenous immunoglobulins in Kawasaki disease: The Singapore experience. <i>Journal of Paediatrics and Child Health</i> , 2019, 55, 962-967.	0.4	4
103	Analysis of 47 Non-MHC Ankylosing Spondylitis Susceptibility Loci Regarding Associated Variants across Whites and Han Chinese. <i>Journal of Rheumatology</i> , 2020, 47, 674-681.	1.0	4
104	Midlife Leukocyte Telomere Length as an Indicator for Handgrip Strength in Late Life. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2021, 76, 172-175.	1.7	4
105	The association of genetically determined serum glycine with cardiovascular risk in East Asians. <i>Nutrition, Metabolism and Cardiovascular Diseases</i> , 2021, 31, 1840-1844.	1.1	4
106	Androgen-dependent tissue factor pathway inhibitor regulating protein: a review of its peripheral actions and association with cardiometabolic diseases. <i>Journal of Molecular Medicine</i> , 2022, 100, 185-196.	1.7	4
107	Algorithm and simulation for analysis of bio-images obtained by aperture diffraction based optical MEMS. <i>Optics Express</i> , 2008, 16, 11937.	1.7	3
108	Association of Three Lipoprotein Lipase Polymorphisms with Coronary Artery Disease in Chinese and Asian Indians. <i>International Journal of Cardiology</i> , 2010, 144, 142-143.	0.8	3

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109	Interaction between a haptoglobin genetic variant and coronary artery disease (CAD) risk factors on CAD severity in Singaporean Chinese population. <i>Molecular Genetics & Genomic Medicine</i> , 2020, 8, e1450.	0.6	3
110	Interaction between cigarette smoking and genetic polymorphisms on the associations with age of natural menopause and reproductive lifespan: the Singapore Chinese Health Study. <i>Human Reproduction</i> , 2022, 37, 1351-1359.	0.4	3
111	The association of genetic susceptibility to smoking with cardiovascular disease mortality and the benefits of adhering to a DASH diet: The Singapore Chinese Health Study. <i>American Journal of Clinical Nutrition</i> , 2022, 116, 386-393.	2.2	3
112	Cladogramer: incorporating haplotype frequency into cladogram analysis. <i>Bioinformatics</i> , 2001, 17, 481-482.	1.8	1
113	LOW COST MICRO-PCR ARRAY AND MICRO-FLUIDIC INTEGRATION ON SINGLE SILICON CHIP. <i>International Journal of Computational Engineering Science</i> , 2003, 04, 231-234.	0.1	1
114	Potentiostatic deposition and detection of DNA on conductive nitrogen doped diamond-like carbon film electrode. , 0, , .		1
115	Genome-wide association studies of coronary artery disease: have the results of replication studies been replicable?. <i>European Heart Journal</i> , 2008, 29, 2189-2190.	1.0	1
116	Design of a fully-enclosed disposable bio-micro fluidic cartridge with self-contained reagents for infectious diseases diagnostic applications. , 2009, , .		1
117	Functional characterization of two single nucleotide polymorphisms of acyl-coenzyme A:cholesterol acyltransferase 2. <i>Gene</i> , 2015, 566, 236-241.	1.0	1
118	Interaction Between Peroxisome Proliferator Activated Receptor γ and Epithelial Membrane Protein 2 Polymorphisms Influences HDL Levels in the Chinese Population. <i>Annals of Human Genetics</i> , 2016, 80, 282-293.	0.3	1
119	Genetic associations with healthy ageing among Chinese adults. , 2022, 8, , .		1
120	FLIP-CHIP PACKAGED MICRO-PLATE FOR LOW COST THERMAL MULTIPLEXING. <i>International Journal of Computational Engineering Science</i> , 2003, 04, 235-238.	0.1	0
121	Nucleic Acid Extraction, Amplification, and Detection on Si-based Microfluidic Platforms. , 2006, , .		0
122	Genes in FSGS: Diagnostic and Management Strategies in Children. <i>Current Pediatrics Reports</i> , 2015, 3, 78-90.	1.7	0