

[网站首页](#)   [学院概况](#)   [学院动态](#)   [本科教育](#)   [研究生教育](#)   [师资队伍](#)   [学术科研](#)   [党建工作](#)   [思政工作](#)   [工会活动](#)   [校友工作](#)   [规章制度](#)   [文档资料](#)

[\(././index.htm\)](#)   [\(././xygk/xyjj.htm\)](#)   [\(././xydt.htm\)](#)   [\(././bkjy.htm\)](#)   [\(././yjsjy.htm\)](#)   [\(././szdw.htm\)](#)   [\(././xsky.htm\)](#)   [\(././djgz.htm\)](#)   [\(././szgz.htm\)](#)   [\(././ghhd.htm\)](#)   [\(././xygz.htm\)](#)   [\(././gzgd.htm\)](#)   [\(././wdzl.htm\)](#)



所在位置 [网站首页 \(././index.htm\)](#) > [师资队伍 \(././szdw.htm\)](#) > [专任教师 \(././szdw/zrjs.htm\)](#) > [教授 \(././szdw/zrjs/sxyyysxx/js.htm\)](#) > 正文



## 钱建国

职称：教授

职务：

学历：博士

电子邮件：jgqian@xmu.edu.cn

联系电话：0592-2580668

办公室：海韵数理大楼637

### 教育经历：

1979年-1983年：就读于青海师范大学数学系，获理学学士学位。

1987年-1990年：青海师范大学基础数学专业，获理学硕士学位。

1995年-1998年：四川大学应用数学专业，获理学博士学位。



## 工作经历:

厦门大学数学科学学院 教, 讲师。  
SCHOOL OF MATHEMATICAL SCIENCES XIAMEN UNIVERSITY

ENGLISH  
(http://math.xmu.edu.cn/en)

(././) 1998年- 今: 厦门大学数学科学院任教, 讲师、副教授、教授。



## 研究方向:

学院概况 学院动态 本科教育 研究生教育 师资队伍 学术科研 党建工作 思政工作 工会活动 校友工作 规章制度 文档资料

(图论 组合数学 (././xygk/xyjj.htm) (././xydt.htm) (././bkjy.htm) (././yjsjy.htm) (././szdw.htm) (././xsky.htm) (././djgz.htm) (././szgz.htm) (././ghhd.htm) (././xygz.htm) (././gzzd.htm) (././wdzl.htm)

### 社会兼职:

中国组合数学与图论专业委员会委员,

中国运筹学会图论分会常务理事,

福建省运筹学会副理事长。

## 授课情况:

主要讲授课程: 组合数学, 图论, 离散数学, 数理逻辑

## 获奖:

1. 《打造精品资源, 构建多元化、个性化数学人才培养模式》, 国家教学成果二等奖, 教育部高教司, 第四获奖人, 2018年9月

## 主持项目:

2020.1-2023.12: 容斥对消理论与图多项式, 国家自然科学基金面上项目.

2015.1-2018.12: 拓扑形变下标记图的计数及应用, 国家自然科学基金面上项目

## 论文:

- [1]. M.Q. Wang, J.G. Qian, Rainbow vertex-pancyclicity of strongly edge-colored graphs, Discrete Mathematics, 344 (2021) 112164
- [2]. M.Q. Wang, J.G. Qian, An Ore-type condition for the existence of two disjoint cycles, Information Processing Letters, 159-160 (2020) 105957
- [3]. W. Wang; J.G. Qian, A generalization of Noel-Reed-Wu theorem to signed graphs, Discrete Mathematics, 343 (2020) 111833
- [4]. W. Wang, J.G. Qian, Z.D. Yan, Colorings versus list colorings of uniform hypergraphs, Journal of Graph Theory. 95(2020) 384-397
- [5]. W. Wang, J.G. Qian, T. Abe; Alon-Tarsi number and modulo Alon-Tarsi Number of signed graphs, Graphs and Combinatorics, 35 (2019) 1051-1064
- [6]. X.Y. Ren, J.G. Qian, Flow polynomials of a signed graph, Electronic Journal of Combinatorics, 26(3) (2019), #P3.37



[7]. W. Wang, J.G. Qian, Chromatic-choosability of hypergraphs with high chromatic number, *Electronic Journal of Combinatorics*, 26 (1) (2019): 1-9.



[9]. G.L. Hao, J.G. Qian, Z.H. Xie, On the sum of the total domination numbers of a digraphs and its converse, *Quaestiones Mathematicae* 2018: 1-11

网站首页    学院概况    学院动态    本科教育    研究生教育    师资队伍    学术科研    党建工作    思政工作    工会活动    校友工作    规章制度    文档资料

[10]. G.L. Hao, J.G. Qian, Bounds on the domination number of a digraph, *Journal of Combinatorial Optimization*, 35(1) (2018) 64-74.  
([../index.htm](#)) ([../xygk/xyj.htm](#)) ([../xydt.htm](#)) ([../bkjy.htm](#)) ([../yjsjy.htm](#)) ([../szdw.htm](#)) ([../xsky.htm](#)) ([../djgz.htm](#)) ([../szgz.htm](#)) ([../ghhd.htm](#)) ([../xygz.htm](#)) ([../gzgzd.htm](#)) ([../wdzl.htm](#))

[11]. W. Wang; J.G. Qian ; Z.D. Yan, Towards a version of Ohba' s conjecture for improper colorings, *Graphs and Combinatorics*, 33 (2017) 489-501

[12]. X.D. Chen, Y.P. Hou, J.G. Qian, Sufficient conditions for Hamiltonian graphs in terms of (signless Laplacian) spectral radius, *Linear and Multilinear Algebra*, 66 (2018) 919-936

[13]. G.L. Hao; J.G. Qian, On the Rainbow Domination Number of Digraphs, *Graphs and Combinatorics*, 32 (2016) 1903-1913

[14]. W. Wang, ([http://apps.webofknowledge.com/DaisyOneClickSearch.do?product=WOS&search\\_mode=DaisyOneClickSearch&colName=WOS&SID=4FVZwGsYz41chanqQr5&author\\_name=Wang,%20W&dais\\_id=2007370548&excludeEventConfig=ExcludelfFromFullRecPage](http://apps.webofknowledge.com/DaisyOneClickSearch.do?product=WOS&search_mode=DaisyOneClickSearch&colName=WOS&SID=4FVZwGsYz41chanqQr5&author_name=Wang,%20W&dais_id=2007370548&excludeEventConfig=ExcludelfFromFullRecPage))  
J.G. Qian, Z.D. Yan, ([http://apps.webofknowledge.com/DaisyOneClickSearch.do?product=WOS&search\\_mode=DaisyOneClickSearch&colName=WOS&SID=4FVZwGsYz41chanqQr5&author\\_name=Qian,%20JG&dais\\_id=2007303832&excludeEventConfig=ExcludelfFromFullRecPage](http://apps.webofknowledge.com/DaisyOneClickSearch.do?product=WOS&search_mode=DaisyOneClickSearch&colName=WOS&SID=4FVZwGsYz41chanqQr5&author_name=Qian,%20JG&dais_id=2007303832&excludeEventConfig=ExcludelfFromFullRecPage)) Yan, ([http://apps.webofknowledge.com/DaisyOneClickSearch.do?product=WOS&search\\_mode=DaisyOneClickSearch&colName=WOS&SID=4FVZwGsYz41chanqQr5&author\\_name=Yan,%20ZD&dais\\_id=2007385123&excludeEventConfig=ExcludelfFromFullRecPage](http://apps.webofknowledge.com/DaisyOneClickSearch.do?product=WOS&search_mode=DaisyOneClickSearch&colName=WOS&SID=4FVZwGsYz41chanqQr5&author_name=Yan,%20ZD&dais_id=2007385123&excludeEventConfig=ExcludelfFromFullRecPage))  
When does the list-coloring function of a graph equal its chromatic polynomial, *Journal of Combinatorial Theory, Ser.B*, 122 (2017) 543-549

[15]. X.D. Chen, J.G. Qian; Bounds on the number of closed walks in a graph and its applications, *Journal of Inequalities and Applications*, 199, 2014

[16]. I. Gutman, B. Furtula, X.D. Chen, J.G. Qian, Graphs with Smallest resolvent Estrada indices, *MATCH-Communications in mathematical and in computer chemistry*, 73 (2015) 267-270

[17]. X.D. Chen, J.G. Qian; On Resolvent Estrada index, *MATCH-Communications in mathematical and in computer chemistry*, 73 (2015) 163-174

[18]. G.L. Hao, J.G. Qian; On the sum of out-domination number and in-domination number of digraphs, *Ars Combinatorial*, 119 (2015) 331 -337

[19]. I. Gutman, B. Furtula, X.D. Chen, J.G. Qian; Resolvent Estrada index - Computational and Mathematical Studies, *MATCH-Communications in mathematical and in computer chemistry*, 74 (2015) 431-440

[20]. J.G. Qian; Enumeration of unlabeled uniform hypergraphs, *Discrete Mathematics*, 326 (2014) 66-74.

[21]. K.C. Deng, J.G. Qian, Enumerating stereo-isomers of tree-like polyinositols, *Journal of Mathematical Chemistry*, 52 (6) (2014) 1581-1598.

[22]. X.L. Zhang, J.G. Qian, L(p, q)-labeling and integer tension of a graph embedded on torus, *Journal of Combinatorial Optimization*, 31 (1) (2016) 67-77.

[23]. H.Z. Ren, F.J. Zhang, J.G. Qian, Monomer-dimer problem on random planar honeycomb lattice, *Journal of Mathematical Physics*, 55 (2014) 023304.

[24]. J.G. Qian, Enumeration of unlabeled directed hypergraphs, *The Electronic Journal of Combinatorics*, 20 (1) (2013), #P46.

[25]. K.C. Deng, J.G. Qian, F.J. Zhang, Enumerating DNA polyhedral links, *Journal of Mathematical Chemistry*, 51 (5) (2013) 1329-1342.



[26]. K.C. Deng, J.G. Qian, F.J. Zhang, Enumerating tree-like polyphenyl isomers, Journal of Statistical Mechanics-Theory and Experiment (JSTAT),

(http://math.xmu.edu.cn/en) K.C. Deng, J.G. Qian, F.J. Zhang, L(p, q)-Labeling and Integer Flow on Planar Graphs, The Computer Journal, 56 (6) (2013) 785-792.

[28]. H.Z. Ren, F.J. Zhang, J.G. Qian, Dimer coverings on random multiple chains of planar honeycomb lattices, Journal of Statistical Mechanics-Theory and Experiment (JSTAT), (2012) P08002. (http://apps.webofknowledge.com/full\_record.do?product=WOS&search\_mode=GeneralSearch&qid=1&SID=1FEA10k1ijDea8DmLH4&page=1&doc=1&cacheurlFromRightClick=no)

网站首页 学院概况 学院动态 本科教育 研究生教育 师资队伍 学术科研 党建工作 工会活动 校友工作 规章制度 文档资料

(http://index.htm) (http://xygk/xvij.htm) (http://xydt.htm) (http://bkiv.htm) (http://yjsjy.htm) (http://szdw.htm) (http://xskv.htm) (http://digz.htm) (http://szgz.htm) (http://ghhd.htm) (http://xygz.htm) (http://gzgd.htm) (http://wdzl.htm)

[30]. K.C. Deng, J.G. Qian, F.J. Zhang; Enumerating the total colorings of a polyhedron and application to polyhedral links, Journal of Mathematical Chemistry, 50 (6) (2012) 1693-1705. (http://apps.webofknowledge.com/full\_record.do?product=WOS&search\_mode=GeneralSearch&qid=1&SID=1FEA10k1ijDea8DmLH4&page=1&doc=2&cacheurlFromRightClick=no)

[31]. X.D. Chen, J.G. Qian; Bounding the sum of powers of the Laplacian eigenvalues of graphs, Applied mathematics-a journal of Chinese universities, Ser. B, 26 (2) (2011) 142-150. (http://apps.webofknowledge.com/full\_record.do?product=WOS&search\_mode=GeneralSearch&qid=1&SID=1FEA10k1ijDea8DmLH4&page=1&doc=3&cacheurlFromRightClick=no)

[32]. J.G. Qian, F.J. Zhang; Counting the cycloized polyphenacenes, Journal of Computational Chemistry, 31 (14) (2010) 2577-2584

[33]. X.D. Chen, J.G. Qian; Conjugated trees with minimum general Randić index, Discrete Applied Mathematics, 157 (2009) 1379-1386

[34]. J.G. Qian, K. Engel, W. Xu; A generalization of Sperner's theorem and an application to graph orientations, Discrete Applied Mathematics, 157 (9) (2009) 2170-2176

[35]. M.R. Chen, J.G. Qian; On f-fault tolerant arc-forwarding and optical indices of all-optical folded hypercubes, Information Processing Letters, 109 (15) (2009) 828-831

[36]. S. Li, F.J. Zhang J.G. Qian, Multi-hop all-to-all optical routings in Cartesian product networks, Information Processing Letters, 107 (2008) 252-256

**[37]. 林启法, 钱建国, 给定最大匹配数的树的零阶广义Randic指标, 《纯粹数学与应用数学》**

**(http://xueshu.baidu.com/usercenter/data/journal?cmd=jump&wd=journaluri%3A%281ce1c0e6de692d2%29%20%E3%80%8A%E7%BA%AF%E7%B2%B9%E6%95%B0%E5%AD%A6%E4%B8%8E%E5%BA%98&sc\_f\_para=sc\_hilight%3Dpublish&sort=sc\_cited), 26 (2) (2010) 000339-344**

[38] S. Li, C.L. Zhou, J.G. Qian; The load of kautz networks with shortest paths, International Symposium on Distributed Computing and Applications to Business, Engineering and Science, AUG 14-17, 2007 Yichang, PEOPLES R CHINA, DCABES 2007 Proceedings, Vols I and II: 332-333, 2007

[39]. J.G. Qian, A. Dress, Y. Wang; On the dependence polynomial of a graph, European Journal of Combinatorics, 28 (1): 337-346 JAN 2007

[40]. M.R. Chen, J.G. Qian, Fault Tolerant Routings in Complete Multipartite Graph, Applied Mathematical Sciences, 2 (1) (2007) 89-95.

[41]. J.G. Qian, Induced matching extendable graph powers, Graphs and Combinatorics, 22 (3) (2006) 391-398.

[42]. J.G. Qian, H. Lin; Graph colourings and solutions of systems of equations over finite fields, Discrete Mathematics, 306 (18) (2006) 2257-2262.







[43]. 冯惠英, 钱建国, Minimum trees with respect to Hosoya-Wiener index, 数学研究, 39 (2006) 117-123.  
 [44]. J.G. Qian, F.J. Zhang, Discrete mathematics, 306 (5) (2006) 533-537.  
 [45]. J.G. Qian, F.J. Zhang; On the number of Kekule structures in capped zigzag nanotubes, Journal of Mathematical Chemistry, 38 (2) (2005) 233-246.

网站首页 学院概况 学院动态 本科教育 研究生教育 师资队伍 学术科研 党建工作 思政工作 工会活动 校友工作 规章制度 文档资料

[46]. J.G. Qian, F.J. Zhang; Kekule count in capped armchair nanotubes, Journal of Molecular Structure: THEOCHEM, 725 (2005) 223-230. (../index.htm) (../zhongwen.htm) (../xyyz.htm) (../gzzd.htm) (../wdzl.htm)

[47]. J.G. Qian, F.J. Zhang; On the number of Kekule structures of zigzag nanotubes, Northeast. Math. J. (2005) 18-24. (../szgz.htm) (../ghhd.htm) (../xygz.htm) (../gzzd.htm) (../wdzl.htm)

[48]. J.G. Qian, F.J. Zhang, Expanding and forwarding parameters of product graphs, Discrete Applied Mathematics. 136 (2004) 63-82.

[49]. The diameter of interchange graphs and the Brualdi's conjecture, 数学学报, 45 (2) (2002) 411-416.

[50]. 钱建国, 苗胜军, The S2NS digraphs and the cycle linear system of a digraph, 应用数学学报 (英文版), 18 (2) (2002) 333-340.

[51]. 王艳, 钱建国, 线团-收敛图(英文), 数学研究, 4 (2002) 376-381

[52]. 钱建国, 张福基, How to move the discs on the Tower of Hanoi, 运筹学学报 (英文版), 5 (2) (2001) 21-32.

[53]. 苏敏邦, 钱建国, On the number of perfect matchings in polygonal chains, 数学研究, 33 (1) (2000) 9-16.

[54]. J.G. Qian, On the upper bound of the diameter of interchange graph, Discrete Mathematics, 195 (1999) 277-285.

[55]. J.G. Qian, Two classes of extreme graphs related to the maximum degree of an interchange graph, Austral. J. Combinatorics, 19 (1999) 3-10.

[56]. 钱建国, 向菊敏, Some properties of a class of interchange graphs, 高校应用数学学报 (英文版), 13 (4) (1998) 455-462.

## 学生培养:

指导博士研究生10余人, 硕士研究生20余人。

地址: 厦门大学数学科学学院 邮编: 361005 电话: 2580605 传真: 2580608

Copyright © 2020 厦门大学数学科学学院所有 管理员信箱: helpmath@xmu.edu.cn

旧版网站 (http://121.192.180.132/)



厦门大学数学科学学院微信公众号

扫一扫关注, 获取最新信息