Last update: May 21, 2017.

CURRICULUM VITAE

Prof. Dr. Zhi-Wei SUN

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Personal History

Family Name	Sun
First Name	Zhiwei
Name in the Passport	Sun Zhiwei
Date of Birth	October 16, 1965
Nationality	People's Republic of China

School Education

Senior One—Senior Three The Middle School attached to Nanjing Normal University, 1980–1983.

Undergraduate—Ph. D. Candidate Department of Mathematics, Nanjing University, 1983–1992.

Degrees Held

B. Sc. (Mathematics)	Nanjing University 1987;
Ph. D. (Mathematics)	Nanjing University 1992.

Academic Service

Reviewer for *Mathematical Reviews*, 1992–
Member of the American Mathematical Society, 1993–
Reviewer for *Zentralblatt Math.*, 2007–
Editor-in-Chief of *Journal of Combinatorics and Number Theory*, 2008–

Editorial Board Member of *International Journal of Number Theory*, 2009–2013.
Editor-in-Chief of *International Journal of Modern Mathematics*, 2007–2010.
Editorial Board Member of *Bulletin of Chinese Mathematical Society*, 2016–
Editorial Board Member of *Nanjing Univ. J. Math. Biquarterly (Nanjing Daxue Xuebao Shuxue Bannian Kan)*, 2017–.

Referee for *Adv. in Math., Proc. Amer. Math. Soc.*, *Acta Arith.*, *J. Number Theory*, *J. Combin. Theory Ser. A*, *European J. Combin.*, *Discrete Math.*, *Discrete Appl. Math.*, *Finite Fields Appl.*, *Ramanujan J.*, *Adv. in Appl. Math.*, *SIAM Review*, *Publ. Math. Debrecen*, *Aequationes Math.*, *Fibonacci Quart.* and some other journals.

Employment History

1992—Present	Department of Mathematics, Nanjing University.
1994—1997	Associate Professor in Math.
1998—Present	Full Professor in Math.
1999—Present	Supervisor of Ph. D. students.

Research Grants

(i) The Natural Science Foundation of Jiangsu Province, 1993—1995.
(ii) *Generalized Hilbert's Tenth Problem and Related Number-Theoretic Problems*, the National Natural Science Foundation of P. R. China, 1995—1997.
(iii) The Return-from-abroad Foundation of the Chinese Educational Committee, 1997–1998.
(iv) The Return-from-abroad Foundation of Nanjing City, 1998.
(v) *On Some Famous Problems Concerning Arithmetic Progressions*, the National Natural Science Foundation of P. R. China, 2000—2002.
(vi) The Teaching and Research Award Program for Outstanding Young Teachers in Higher Education Institutions of MOE of China, 2000—2004.
(vii) *Algebraic Methods in Combinatorics*, the Key Program of the National Natural Science Foundation of P. R. China, 2004—2007.
(viii) *On Some Number-theoretic Topics related to Combinatorics and Algebra*, the National Science Fund for Distinguished Young Scholars in P. R. China, 2005–2008.
(ix) *Combinatorial number theory and p-adic congruences*, The National Natural Science Foundation of P. R. China, 2009–2011.
(x) *Combinatorial number theory and representations of primes by quadratic forms*, The National Natural Science Foundation of P. R. China, 2012–2015.
(xi) *Additive combinatorics and combinatorial properties of primes*, The National Natural Science Foundation of P. R. China, 2016–2019.

Awards and Honors

(a) *Man-Ying Xu Award*, Department of Mathematics, Nanjing University, 1986.
(b) *Yingsong Award*, the First Prize, Nanjing University, 1989.

(c) *Guanghua Award*, the First Prize, Nanjing University, 1990 and 1991.
(d) *Award for New Scientific Stars*, Nanjing University, 1993.
(e) *An Excellent Young Backbone at Universities in Jiangsu Province*, Educational Committee of Jiangsu Province, 1994.
(f) The Second Prize of *Jiangsu Award for Advances on Science and Technology* (*Keji Jinbu Jiang*), Jiangsu Province, 1996.
(g) *Jia-Ji Chei Math. Award*, Dept. of Math., Nanjing University, 1996.
(h) Membership invited by *New York Academy of Sciences*, 1997.
(i) Award for *Young Promising Stars*, Nanjing University, 1997.
(j) *Award in Science and Technology for Youths in Jiangsu Province*, Jiangsu Scientific Association, 1998.
(k) Teaching and Research Award for *Outstanding Young Teachers in Universities*, Chinese Ministry of Education, 2000.
(l) *The Government Special Allowance (for Scientific Research)*, State Council of China, 2011.
(m) *Visiting Professor Position* at Institut Camille Jordan, Université Claude Bernard (Lyon-I), Jan. 11–March 10, 2005.
(n) *Visiting Professor Position* at University of California at Irvine, Oct. 1, 2005–March 31, 2006.
(o) *State Council Expert for Special Allowance*, Chinese Government, 2011.

Main Invited Talks on Research

1. *A survey of covering theory*, Hong Kong University, Oct. 6, 1993.
2. *A sketch of covering theory*, Trento University (Italy), Oct. 24, 1995.
3. *Simple ideas for famous problems*, Genova University (Italy), May 9, 1996.
4. *Coverings of the integers and groups*, Pisa University (Italy), June 11, 1996.
5. *Several topics in number theory*, the 7th Meeting of Representatives of Jiangsu Mathematical Society, Nanjing, Dec. 23–25, 1997.
6. *Connections between covers of the integers and the linear form* $\sum_{s=1}^{k} x_s/n_s$, the 1st International Conference on Number Theory of China and Japan, Beijing, Sept. 13–17, 1999.
7. *Restricted sums and Snevily's conjecture*, The Renaissance of Combinatorics '99 (in memory of Gian-Carlo Rota), Nankai University, Tianjin, October 12–14, 1999.
8. *On various number-theoretic quotients and related congruences*, Chinese University of Hong Kong, April 7, 2000.
9. *Recent progress on covers of the integers and their applications*, Hong Kong University, April 10, 2000.
10. *On Hilbert's tenth problem and related topics*, City University of Hong Kong, April 14, 2000.
11. *A generalization of the Baker-Lerch result concerning Euler's quotients*, An International Mathematics Conference Dedicated to the Memory of Professor Hua, Institute of Mathematics, the Chinese Academy of Sciences, Beijing, December 18–21, 2000.

12. *Recent progress on combinatorial number theory*, the 8th National Conference on Combinatorics and the 11th National Conference on Graph Theory, Dalian University of Technology, Dalian, July 11–15, 2001.
13. *Equalities and inequalities related to covers of $\mathbb{Z}$ or groups*, Institute of Mathematics, Academia Sinica (Taiwan), May 16, 2002.
14. *On zero-sum problems*, National Sun Yat-sen Univ. (Taiwan), May 28, 2002.
15. *On the structure of periodic arithmetical maps*, National Taiwan Univ., June 24, 2002.
16. *Problems and results in combinatorial number theory*, Plenary talk on the Combin. Satellite Confer. of ICM 2002 (Shijiazhuang), August 19, 2002.
17. *Sumsets with polynomial restrictions*, the International Congress of Mathematicians (Beijing, 2002), August 23, 2002.
18. *On the sum $\sum_{k\equiv r \pmod m}\binom{n}{k}$ and related results*, National Taiwan Univ., November 6, 2002.
19. *Snevily's conjecture on abelian groups and an algebraic method in combinatorics*, Institute of Mathematics, Academia Sinica (Taiwan), November 11, 2002.
20. *How to unify covering systems, restricted sumsets and zero-sum problems*, Plenary talk on the Second East Asian Conf. Algebra & Combin., Kyushu University (Fukuoka, Japan), Nov. 21, 2003.
21. *Covering systems and their connections to zero-sums*, Graz Univ. (Austria), June 14, 2004.
22. *On disjoint systems of residue classes or cosets of subgroups*, Vienna Univ. Tech., June 17, 2004.
23. *On the Erdős-Heilbronn conjecture and Snevily's conjecture*, Genova Univ., June 23, 2004.
24. *On various combinatorial sums and related identities*, Florence Univ., June 28, 2004.
25. *Two local-global theorems and a powerful formula*, Univ. Roma "Tor Vergata", June 30, 2004.
26. *Zero-sum problems and their connections to covers of $\mathbb{Z}$*, Combinatorics, Special Functions and Physics (Tianjin, 2004, in honor of the 75th birthday of J. D. Louck), August 2, 2004.
27. *A unified theorem related to number theory, combinatorics and graph theory*, Invited talk on the 1st Chinese Confer. on Combin. and Graph Theory (Urumchi, Xinjiang), August 7, 2004.
28. *Groups and combinatorial number theory*, Institute of Math. Science, Nanjing Univ., October 8, 2004.
29. *Identities and congruences for Bernoulli and Euler polynomials*, Institute of Camille Jordan, Univ. Lyon I (France), Jan. 13, 2005.
30. *Problems and results on covering systems*, Univ. Saint-Etienne (Feb. 1, 2005) and Univ. Lyon I (March 3, 2005).
31. *Some effective results related to covers of $\mathbb{Z}$ and zero-sum problems*, Univ.

Bordeaux I (France), Feb. 17, 2005.

32. *On some conjectures of Erdos-Heilbronn, Lev and Snevily*, Univ. California at Irvine, Nov. 10, 2005.
33. *A survey of zero-sum problems on abelian groups*, Univ. California at Irvine, Jan. 19, 2006.
34. *Some curious results on Bernoulli and Euler polynomials*, Univ. Wisconsin at Madison, April 4, 2006.
35. *Recent progress on congruences involving binomial coefficients*, Univ. Wisconsin at Madison, April 6, 2006.
36. *Covering systems and periodic arithmetical functions*, Univ. Illinois at Urbana-Champaign, April 13, 2006.
37. *Combinatorial aspects of covers of groups by cosets or subgroups*, Massachusetts Institute of Technology (MIT, USA), April 21, 2006.
38. *Some congruences motivated by algebraic topology*, Zhejiang Univ., May 26, 2006.
39. *Some congruences concerning q-Euler numbers, q-Salie numbers and q-Carlitz numbers*, ECNU Workshop on q-Series (East-China Normal Univ.), June 21, 2006.
40. *p-adic orders of some sums involving binomial coefficients*, Internat. Workshop on Finite Fields and their Appl. (Chenxing Math. Center, July 3–7, 2006), July 7, 2006.
41. *Curious identities and congruences involving Bernoulli polynomials*, The Fourth China-Japan Conf. on Number Theory (Shandong Univ., Weihai, Aug. 30–Sept. 3, 2006), August 30, 2006.
42. *Combinatorial aspects of Szemeredi's theorem*, The Institute of Mathematics, Chinese Academy of Sciences (Beijing), Jan. 30, 2007.
43. *Additive combinatorics and Latin transversals*, Zhejiang University, April 6, 2007.
44. *An additive theorem and restricted sumsets*, The Fourth Cross-Strait Conf. on Graph Theory and Combin. (National Taiwan Univ., Taipei, June 24–27, 2007), June 24, 2007.
45. *Sums of squares and triangular numbers, and Rado numbers for linear equations*, National Cheng Kung University (Tainan), June 28, 2007.
46. *An additive theorem related to Latin transversals*, The 19th Annual Int. Conf. on Formal Power Series and Algebraic Combin. (Nankai Univ., Tianjin, July 2–6, 2007), July 4, 2007.
47. *Some famous problems and related results in combinatorial number theory*, The 2007 Annual. Conference of the Chinese Math. Soc. (Beijing, Nov. 1–4, 2007), Nov. 3, 2007.
48. *Groups in combinatorial number theory*, The 4th Int. Congress of the Chinese Mathematicians (Zhejiang Univ., Hangzhou, Dec. 17–22, 2007), Dec. 21, 2007.
49. *Recent problems and results involving binomial coefficients*, The 6th Shanghai Conference on Combinatorics (Shanghai Jiao Tong Univ., May 24–28,

2008), May 28, 2008.

50. *Study covers of groups via characters and number theory*, The Institute of Mathematics, Chinese Academy of Sciences (Beijing), June 29, 2008
51. *Problems and results in additive combinatorics*, The Fifth Cross-Strait Conf. on Graph Theory and Combin. (Nankai Univ., Tianjin, July 28–August 1, 2009), July 31, 2009.
52. *Polygonal numbers, primes and ternary quadratic forms*, International Conference on Number Theory and Representations (Shandong Univ., Weihai, August 2–August 7, 2009), August 3, 2009.
53. *On the DKSS technique and the DKSS conjecture*, Harish-Chandra Research Institute (Jhusi, Allahabad, India), Feb. 4, 2010.
54. *Some sophisticated applications of the Combinatorial Nullstellensatz*, Harish-Chandra Research Institute (Jhusi, Allahabad, India), Feb. 6, 2010.
55. *Conjectures and results on super congruences*, Harish-Chandra Research Institute (Jhusi, Allahabad, India), Feb. 8, 2010.
56. *Conjectures for super congruences and series for and other constants*, Capital Normal University, Beijing, April 9, 2010.
57. *Super congruences involving binomial coefficients and new series for some famous constants* (invited talk), Pacific Rim Conference on Mathematics (Stanford University, June 28–July 2, 2010), July 2, 2010.
58. *Problems and results in additive combinatorics*, The National Center for Theoretical Sciences (Hsinchu, Taiwan; August 1–August 8, 2010), August 2, 1010.
59. *Arithmetic properties of combinatorial quantities*, The National Center for Theoretical Sciences (Hsinchu, Taiwan; August 1–August 8, 2010), August 4, 1010.
60. *On divisibility concerning binomial coefficients*, The National Chiao Tung University (Hsinchu, Taiwan), August 5, 1010.
61. *Correspondence between series and congruences*, The 5th National Conference on Number Theory (Zhaoqing, Guangdong, China; December 25-28, 2010), December. 27, 2010
62. *Number theory behind series for* $1/\pi$, Tsinghua University (Beijing), April 14, 2011.
63. *On the DKSS conjecture for finite abelian groups*, Institute of Mathematics, Chinese Academy of Sciences (Beijing), April 15, 2011.
64. *Number theory behind series for* $1/\pi$, Chern Institute of Mathematics, Nankai University (Tianjin, China; May 9-15, 2011), May 11, 2011.
65. *Conjectures and results on* $x^2 \bmod p$ *with* $4p = x^2 + dy^2$, Conference on Number Theory and related Fields (Hefei and Huangshan, China; June 7-12, 2011), June 8, 2011.
66. *Conjectures and results on generalized central trinomial coefficients and Motzkin numbers*, Institute of Mathematics, Academia Sinica (Taiwan; July 3-24, 2011), July 12, 2013.
67. *Some sophisticated congruences involving Fibonacci numbers*, The National

Center for Theoretical Sciences (Hsinchu, Taiwan; July 19-22, 2011), July 20, 2011.

68. *On functions taking only prime values and related new conjectures on primes*, The Morningside Center of Mathematics (Beijing; April 18–22, 2012), April 21, 2012.
69. *Primes from the viewpoint of combinatorics*, The 5th National Conference on Combinatorics and Graph Theory (Luoyang; July 16-19, 2011), Plenary talk, July 18, 2012.
70. *Various new observations about primes*, University of Illinois at Urbana-Champaign (USA; July 23-August 30, 2012), August 28, 2012.
71. *p-adic congruences motivated by series*, City University of New York (USA; August 23-24, 2012), August 23, 2012.
72. *The riddle of primes*, Center for Combinatorics, Nankai University (Tianjin; Nov. 30–Dec. 2, 2012), Dec. 1, 2012.
73. *Sums of consecutive primes and related conjectures*, The Morningside Center of Mathematics (Beijing; April 13–15, 2013), April 13, 2013.
74. *Apery numbers, Franel numbers and binary quadratic forms*, Hong Kong University of Science and Technology (April 26–May 5, 2013), May 2, 2013.
75. *Some new representation problems involving primes*, Hong Kong University, May 3, 2013.
76. *Combinatorial congruences via Zeilberger's algorithm and trees with prime vertices*, The 5th International Symposium on Graph Theory and Combin. Algorithms (National Inner Mongolia Univ; July 12-15, 2013), Plenary talk, July 14, 2013.
77. *Determinants, permutations and additive combinatorics*, Zhejiang Univ. (Nov. 14-17, 2013), Nov. 15, 2013.
78. *Write $n = k + m$ with $f(k, m)$ prime*, Xiamen Univ. (Dec. 19-22, 2013), Dec. 20, 2013.
79. *Congruences for Franel numbers*, Central China Normal Univ. (Jan. 2-5, 2014), Jan. 3, 2014.
80. *Problems on Combinatorial Properties of Primes*, Tsinghua Univ., April 18, 2017.
81. *Determinants, Permutations and Additive Combinatorics*, The 2nd Workshop on Combinatorics and Graph Theory (Changsha, June 1-2, 2014), June 2, 2014.
82. *On Some Arithmetic Functions*, The Workshop on Analytic Number Theory and Cryptology (Beijing, June 14-15, 2014), June 14, 2014.
83. *Determinants, Permutations and Additive Combinatorics*, Institute of Mathematics, Academia Sinica (Taiwan) (July 15–29, 2014), June 24, 2014.
84. *Problems on Combinatorial Properties of Primes*, Impact of Computation on Number Theory (National Center of Theoretical Science, Hsinchu, July 30–August 3, 2014), Plenary Talk, August 3, 2014.
85. *Towards the Twin Prime Conjecture*, Northwest Univ. (Xi'an, October 25–28, 2014), Oct. 16, 2014.

86. *On universal sums involving polygonal numbers*, Tsinghua Univ. (Beijing, May 8, 2015), May 8, 2015.
87. *Consecutive primes and Legendre symbols*, The Morningside Center of Mathematics (Beijing, May 7–11, 2015) May 10, 2015.
88. *On universal sums involving polygonal numbers*, Connections in Discrete Mathematics (Simon Fraser Univ., Burnaby, Vancouver, Canada, June 15–19, 2015), June 16, 2015.
89. *New divisibility results on certain sums of binomial coefficients*, The 8th Cross-Strait Conf. on Graph Theory and Comb.(National Sun Yat-sen Univ., Kaohsiung, June 26–July 2, 2015), June 28, 2015.
90. *On* $g_n(x)=\sum_{k=0}^n \binom{n}{k}^2\binom{2k}{k}x^k$ *and related topics*, Center for Combinatorics (Nankai Univ.) and Center for Applied Math. (Tianjin Univ.) (Dec. 2-6, 2015), Dec. 3, 2015.
91. *Some new problems and results in combinatorial and additive number theory*, Combinatorial and Additive Number Theory (Univ. of Graz, Austria, Jan. 4-8, 2016), Jan. 6, 2016.
92. *Some New Diophantine Problems*, Confer. on Diophantine Analysis and Related Topics (Wuhan, March 10-13, 2016), March 11, 2016.
93. *A new result in combinatorial number theory*, Workshop on Graph Theory and Comb. of Yangtze Delta (Nanjing Normal Univ., April 16, 2016), April 16, 2016.
94. *Combinatorial quantities and arithmetic means*, Int. Conf. Discrete Math. & Optimization (Fuzhou Univ., June 24-26, 2016), Invited Talk, March 25, 2016.
95. *Refining Lagrange's four-square theorem*, Workshop on Analytic and Number Theory (Xi'an Jiaotong Univ. August 18-20, 2016), August 19, 2016.
96. *The 1-3-5 conjecture and related topics*, Suzhou Univ. (January 10–12, 2017), Jan. 11, 2017.
97. *Restricted sums of three or four squares*, Jiangsu Normal Univ. (March 11–14, 2017), March 13, 2017.
98. *Further results on Hilbert's tenth problem*, Institute of Mathematics, Chinese Academy of Sciences (April 15–18, 2017), April 18, 2017.
99. *On three-square theorem and its applications*, Institute of Mathematics, Chinese Academy of Sciences (April 21–24, 2017), April 22, 2017.
100. *On Hilbert's tenth problem*, Hebei Normal Univ. (May 13–16, 2017), May 15, 2017.

Courses Taught

Basic Number Theory, Algebraic Number Theory, Additive Number Theory, p-adic Field; Combinatorics, Discrete Math.; Modern Algebra, Advanced Algebra; Mathematical Thoughts and Methods, College Math.; Mathematical Logic, Set Theory, Recursion Theory, Model Theory.

Main Interests in Mathematics

Number Theory, Combinatorics, Group Theory and *Mathematical Logic*.

See the next page for selected publications.

Selected Publications of Zhi-Wei Sun

1. *Reduction of unknowns in Diophantine representations*, Sci. China Ser. A **35** (1992), no. 3, 257–269 (Chinese Edition, 1991, no. 10, 1030–1040).
2. *A new relation-combining theorem and its application*, Z. Math. Logik Grundlag. Math. **38** (1992), no. 3, 209–212.
3. *Fibonacci numbers and Fermat's last theorem* (with Z. H. Sun), Acta Arith. **60** (1992), no. 4, 371–388.
4. *On disjoint residue classes*, Discrete Math. **104** (1992), no. 3, 321–326.
5. *On exactly m times covers*, Israel J. Math. **77** (1992), no. 3, 345–348.
6. *A congruence for primes*, Proc. Amer. Math. Soc. **123** (1995), no. 5, 1341–1346.
7. *Covering the integers by arithmetic sequences*, Acta Arith. **72** (1995), 109–129.
8. *Covering the integers by arithmetic sequences* II, Trans. Amer. Math.Soc. **348** (1996), 4279–4320.
9. *Values of Bernoulli polynomials* (with A. Granville), Pacific J. Math. **172** (1996), 117–138.
10. *Exact m-covers and the linear form* $\sum_{s=1}^k x_s/n_s$, Acta Arith. **81** (1997), no. 2, 175–198.
11. *On sums of distinct representatives* (with H.-Q. Cao), Acta Arith. **87** (1998), no. 2, 159–169.
12. *On covering multiplicity*, Proc. Amer. Math. Soc. **127** (1999), no. 5, 1293–1300.
13. *On integers not of the form* $\pm p^a \pm q^b$, Proc. Amer. Math. Soc. **128** (2000), no. 4, 997–1002.
14. *Products of binomial coefficients modulo* p^2, Acta Arith. **97** (2001), no. 1, 87–98.
15. *Exact m-covers of groups by cosets*, European J. Combin. **22** (2001), no. 3, 415–429.
16. *Algebraic approaches to periodic arithmetical maps*, J. Algebra **240** (2001), no. 2, 723–743.
17. *Restricted sums of subsets of* $\mathbb{Z}$, Acta Arith. **99** (2001), no. 1, 41–60.
18. *Integers not of the form* $c(2^a + 2^b) + p^\alpha$ (with M.-H. Le), Acta Arith. **99** (2001), no. 2, 183–190.
19. *Hall's theorem revisited*, Proc. Amer. Math. Soc. **129** (2001), no. 10, 3129–3131.
20. *An extension of Lucas' theorem* (with H. Hu), Proc. Amer. Math. Soc. **129** (2001), no. 12, 3471–3478.
21. *A note on integers of the form* $2^n + cp$ (with S. M. Yang), Proc. Edinburgh Math. Soc. **45** (2002), no. 1, 155–160.
22. *Restricted sums in a field* (with Q. H. Hou), Acta Arith. **102** (2002), no. 3, 239–249.
23. *On the sum* $\sum_{k\equiv r \pmod m} \binom{n}{k}$ *and related congruences*, Israel J. Math. **128** (2002), 135–156.
24. *Sums of minima and maxima*, Discrete Math. **257** (2002), no. 1, 143–159.
25. *A lower bound for* $|\{a+b:\ a\in A,\ b\in B,\ P(a,b)\neq 0\}|$ (with H. Pan), J. Combin. Theory Ser. A **100** (2002), 387–393.
26. *Generalizations of Knopp's identities* (with B.F. Chen), J. Number Theory **97** (2002), 186–198.
27. *Sums of subsets with polynomial restrictions* (with J.X. Liu), J. Number Theory **97** (2002), 301–304.
28. *General congruences for Bernoulli polynomials*, Discrete Math **262** (2003), 253–276.
29. *Combinatorial identities in dual sequences*, European J. Combin. **24** (2003), 709–718.
30. *On Snevily's conjecture and restricted sumsets*, J. Combin. Theory Ser. A **103** (2003), 291–304.
31. *Unification of zero sum problems, subset sums and covers of* $\mathbb{Z}$, Electron. Res. Announc. Amer. Math. Soc. **9** (2003), 51–60.
32. *On the function* $w(x) = |\{1 \leqslant s \leqslant k: x \equiv a_s \pmod{n_s}\}|$, Combinatorica **23** (2003), 681–691.
33. *On the Herzog-Schönheim conjecture for uniform covers of groups*, J. Algebra **273** (2004), 153–175.
34. *Arithmetic properties of periodic maps*, Math. Res. Lett. **11** (2004), 187–196.
35. *On the range of a covering function*, J. Number Theory **111** (2005), 190–196.
36. *On odd covering systems with distinct moduli* (with S. Guo), Adv. in Appl. Math. **35** (2005), 182–187.

37. *On various restricted sumsets* (with Y. N. Yeh), J. Number Theory **114** (2005), 209–220.
38. *On Euler numbers modulo powers of two*, J. Number Theory **115** (2005), 371–380.
39. *A local-global theorem on periodic maps*, J. Algebra **293** (2005), 506–512.
40. *New identities involving Bernoulli and Euler polynomials* (with H. Pan), J. Combin. Theory Ser. A **113** (2006), 156–175.
41. *Polynomial extension of Fleck's congruence*, Acta Arith. **122** (2006), 91–100.
42. *Restricted sumsets and a conjecture of Lev* (with H. Pan), Israel J. Math. **154** (2006), 21–28.
43. *Binomial coefficients and quadratic fields*, Proc. Amer. Math. Soc. **134** (2006), 2213–2222.
44. *On q-Euler numbers, q-Salié numbers and q-Carlitz numbers* (with H. Pan), Acta Arith. **124** (2006), 41–57.
45. *A combinatorial identity with application to Catalan numbers* (with H. Pan), Discrete Math. **306** (2006), 1921–1940.
46. *Finite covers of groups by cosets or subgroups*, Internat. J. Math. **17** (2006), 1047–1064.
47. *Identities concerning Bernoulli and Euler polynomials* (with H. Pan), Acta Arith. **125** (2006), 21–39.
48. *Simple arguments on consecutive power residues*, J. Number Theory **124** (2007), 57–61.
49. *A connection between covers of the integers and unit fractions*, Adv. in Appl. Math. **38** (2007), 267–274.
50. *A number-theoretic approach to homotopy exponents of SU(n) (with D. M. Davis)*, J. Pure Appl. Algebra **209** (2007), 57–69.
51. *Mixed sums of squares and triangular numbers,*, Acta Arith. **127** (2007), 103–113.
52. *Combinatorial congruences modulo prime powers* (with D. M. Davis), Trans. Amer. Math. Soc. **359** (2007), 5525–5553.
53. *Combinatorial congruences and Stirling numbers*, Acta Arith. **126** (2007), 387–398.
54. *A sharp result on m-covers* (with H. Pan), Proc. Amer. Math. Soc. **135** (2007), 3515–3520.
55. *On Fleck quotients* (with D. Wan), Acta Arith. **127** (2007), 337–363.
56. *Congruences for sums of binomial coefficients* (with R. Tauraso), J. Number Theory **126** (2007), 287–296.
57. *A characterization of covering equivalence* (with H. Pan), Acta Arith. **129** (2007), 397-402.
58. *Determination of the two-color Rado number for* $a_1x_1 + \cdots + a_mx_m = x_0$ (with S. Guo), J. Combin. Theory Ser. A **115** (2008), 345–353.
59. *On value sets of polynomials over a field*, Finite Fields Appl. **14** (2008), 470–481.
60. *On sums of binomial coefficients and their applications*, Discrete Math. **308** (2008), 4231–4245.
61. *On covers of abelian groups by cosets* (with G. Lettl),, Acta Arith. **131** (2008), 341–350.
62. *Lucas-type congruences for cyclotomic* ψ*-coefficients* (with D. Wan), Int. J. Number Theory (2008), 155–170.
63. *An additive theorem and restricted sumsets*, Math. Res. Lett. **15** (2008), 1263–1276.
64. *A variant of Tao's method with application to restricted sumsets (with S. Guo)*, J. Number Theory **129** (2009), 434-438.
65. *Zero-sum problems for abelian p-groups and covers of the integers by residue classes*, Israel J. Math. **170** (2009), 235–252.
66. *On Bialostocki's conjecture for zero-sum sequences* (with S. Guo), Acta Arith. **140** (2009), 329–334.
67. *Mixed sums of squares and triangular number (III)* (with B. K. Oh), J. Number Theory **129** (2009), 964–969.
68. *A new extension of the Erdos-Heilbronn conjecture* (with H. Pan), J. Combin. Theory Ser. A **116** (2009), 1374–1381.
69. *Covers of the integers with odd moduli and their applications to the forms* $x^m - 2^n$ *and* $x^2 - F_{3n}/2$ (with K.-J. Wu), Math. Comp. **78** (2009), 1853–1866.
70. *On m-covers and m-systems*, Bull. Austral. Math. Soc. **81** (2010), 223–235.

71. *Some congruences for the second-order Catalan numbers* (with L. L. Zhao and H. Pan), Proc. Amer. Math. Soc. **138** (2010), 37–46.
72. *New congruences for central binomial coefficients* (with R. Tauraso), Adv. in Appl. Math. **45** (2010), 125–148.
73. *Binomial coefficients, Catalan numbers and Lucas quotients*, Sci. China Math. **53** (2010), 2473–2488.
74. *Some curious congruences modulo primes* (with L.-L. Zhao), J. Number Theory **130** (2010), 930–935.
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