References

1. Addario-Berry, L., Aldred, R. E. L., Dalal, K., & Reed, B. A. (2005). Vertex colouring edge partitions. *The Journal of Combinatorial Theory, 94*, 237–244.
2. Aigner, M., & Triesch, E. (1990). Irregular assignments and two problems á la Ringel. In R. Bodendiek & R. Henn (Eds.), *Topics in combinatorics and graph theory* (pp. 29–36). Heidelberg: Physica.
3. Aigner, M., & Triesch, E. (1990). Irregular assignments of trees and forests. *The SIAM Journal on Discrete Mathematics, 3*, 439–449.
4. Aigner, M., Triesch, E., & Tuza, Z. (1992). Irregular assignments and vertex-distinguishing edge-colorings of graphs. In *Combinatorics' 90* (pp. 1–9). New York: Elsevier Science.
5. Albertson, M., & Collins, K. (1996). Symmetric breaking in graphs. *The Electronic Journal of Combinatorics, 3*, R18.
6. Amar, D., & Togni, O. (1998). Irregularity strength of trees. *Discrete Mathematics, 190*, 15–38.
7. Andrews, E., Johnston, D., & Zhang, P. (2014). A twin edge coloring conjecture. *Bulletin of the Institute of Combinatorics and Its Applications, 70*, 28–44.
8. Andrews, E., Johnston, D., & Zhang, P., On twin edge colorings in trees. *Journal of Combinatorial Mathematics and Combinatorial Computing* (to appear).
9. Andrews, E., Helenius, L., Johnston, D., VerWys, J., & Zhang, P. (2014). On twin edge colorings of graphs. *The Discussiones Mathematicae Graph Theory, 34*, 613–627.
10. Balister, P. N., Györi, E., Lehel, J., & Schelp, R. H. (2007). Adjacent vertex distinguishing edge-colorings. *The SIAM Journal on Discrete Mathematics, 21*, 237–250.
11. Baril, J. L., Kheddouci, H., & Togni, O. (2005). The irregularity strength of circulant graphs. *Discrete Mathematics, 304*, 1–10.
12. Bazgan, C., Harkat-Benhamdine, A., Li, H., & Woźniak, M. (1999). On the vertex-distinguishing proper edge-colorings of graphs. *Journal of Combinatorial Theory, Series B, 75*, 288–301.
13. Bohman, T., & Kravitz, D. (2004). On the irregularity strength of trees. *Journal for Graph Theory, 45*, 241–254.
14. Bondy, J. A., & Chvátal, V. (1976). A method in graph theory. *Discrete Mathematics, 15*, 111–136.
15. Brooks, R. L. (1941). On coloring the nodes of a network. *Proceedings of the Cambridge Philosophical Society, 37*, 194–197.
16. Burris, A. C. (1994). On graphs with irregular coloring number 2. *Congressus Numerantium, 100*, 129–140.

P. Zhang, *Color-Induced Graph Colorings*, SpringerBriefs in Mathematics,
DOI 10.1007/978-3-319-20394-2

17. Burris, A. C. (1995). The irregular coloring number of a tree. *Discrete Mathematics, 141*, 279–283.
18. Burris, A. C., & Schelp, R. H. (1997). Vertex-distinguishing proper edge colorings. *Journal for Graph Theory, 26*, 73–82.
19. Chartrand, G., & Zhang, P. (2009). *Chromatic graph theory*. Boca Raton: Chapman & Hall/CRC.
20. Chartrand, G., & Zhang, P. (2011). *Discrete mathematics*, Waveland Press, Long Grove, IL.
21. Chartrand, G., English, S., & Zhang, P., Binomial colorings of graphs. Preprint.
22. Chartrand, G., Lesniak, L., & Zhang, P. (2010). *Graphs & digraphs* (5th ed.). Boca Raton, FL: Chapman & Hall/CRC.
23. Chartrand, G., Escuadro, H., Okamoto, F., & Zhang, P. (2006). Detectable colorings of graphs. *Utilitas Mathematica, 69*, 13–32.
24. Chartrand, G., Jacobson, M. S., Lehel, J., Oellermann, O. R., Ruiz, S., & Saba, F. (1988). Irregular networks. *Congressus Numerantium, 64*, 197–210.
25. Cuckler, B., & Lazebnik, F. (2008). Irregularity strength of dense graphs. *Journal for Graph Theory, 58*, 299–313.
26. Dinitz, J. H., Garnick, D. K., & Gyárfás, A. (1992). On the irregularity strength of the $m \times n$ grid. *Journal for Graph Theory, 16*, 355–374.
27. Dirac, G. A. (1952). Some theorems on abstract graphs. *Proceedings of the London Mathematical Society, 2*, 69–81.
28. Dong, A. J., Wang, G. H., & Zhang, J. H. (2014). Neighbor sum distinguishing edge colorings of graphs with bounded maximum average degree. *Discrete Applied Mathematics, 166*, 84–90.
29. Ebert, G., Hemmeter, J., Lazebnik, F., & Woldar, A. (1990). Irregularity strengths for certain graphs. *Congressus Numerantium, 71*, 39–52.
30. Ebert, G., Hemmeter, J., Lazebnik, F., & Woldar, A. (1991). On the number of irregular assignments on a graph. *Discrete Mathematics, 93*, 131–142.
31. Entringer, R. C., & Gassman, L. D. (1974). Line-critical point determining and point distinguishing graphs. *Discrete Mathematics, 10*, 43–55.
32. Escuadro, H. (2006). *Detectable colorings of graphs*. Ph.D. Dissertation, Western Michigan University.
33. Escuadro, H., & Zhang, P. (2005). On detectable colorings of graphs. *Mathematica Bohemica, 130*, 427–445.
34. Escuadro, H., & Zhang, P. (2005). Extremal problems on detectable colorings of connected graphs with cycle rank 2. *AKCE International Journal of Graphs and Combinatorics, 2*, 99–117.
35. Escuadro, H., & Zhang, P. (2008). Extremal problems on detectable colorings of trees. *Discrete Mathematics, 308*, 1951–1961.
36. Escuadro, H., Okamoto, F., & Zhang, P. (2006). On detectable factorizations of cubic graphs *Journal of Combinatorial Mathematics and Combinatorial Computing, 56*, 47–63.
37. Escuadro, H., Okamoto, F., & Zhang, P. (2008). A three-color problem in graph theory. *Bulletin of the Institute of Combinatorics and Its Applications, 52*, 65–82.
38. Faudree, R. J., & Lehel, J. (1987). Bound on the irregularity strength of regular graphs. In *Combinatorics*. *Colloq. Math. Soc. János Bolyai* (Vol. 52, pp. 247–256). Amsterdam: North Holland.
39. Faudree, R. J., Gyárfás, A., & Schelp, R. H. (1987). On graphs of irregularity strength 2. In *Combinatorics*. *Colloq. Math. Soc. János Bolyai* (Vol. 52, pp. 239–246). Amsterdam: North Holland.
40. Faudree, R. J., Jacobson, M. S., Kinch, L., & Lehel, J. (1991). Irregularity strength of dense graphs. *Discrete Mathematics, 91*, 45–59.
41. Faudree, R. J., Jacobson, M. S., Lehel, J., & Schelp, R. H. (1989). Irregular networks, regular graphs and integer matrices with distinct row and column sums. *Discrete Mathematics, 76*, 223–240.
42. Flandrin, E., Marczyk, A., Przybylo, J., Saclé, J. F., & Woźniak, M. (2013). Neighbor sum distinguishing index. *Graphs and Combinatorics, 29*, 1329–1336.

43. Fournier, J.-C. (1973). Colorations des arétes d'un graphe. In *Colloque sur la Théorie des Graphes (Brussels, 1973)* (French). Cahiers Centre Études Recherche Opér (Vol. 15, pp. 311–314).
44. Frank, O., Harary, F., & Plantholt, M. (1982). The line-distinguishing chromatic number of a graph. *Ars Combinatoria, 14*, 241–252.
45. Frieze, A., Gould, R., Karoński, M., & Pfender, F. (2002). On graph irregularity strength. *Journal for Graph Theory, 41*, 120–137.
46. Fujie-Okamoto, F., & Will, T. G. (2012). Efficient computation of the modular chromatic numbers of trees. *Journal of Combinatorial Mathematics and Combinatorial Computing, 82*, 77–86.
47. Gallian, J. A. (2009). A dynamic survey of graph labeling. *The Electronic Journal of Combinatorics, 16*, #DS6.
48. Gnana Jothi, R. B. (1991). *Topics in graph theory*. Ph.D. Thesis, Madurai Kamaraj University.
49. Golomb, S. W. (1972). How to number a graph. In *Graph theory and computing* (pp. 23–37). New York: Academic.
50. Graham, R. L., & Sloane, N. J. A. (1980). On addition bases and harmonious graphs. *The SIAM Journal on Discrete Mathematics, 1*, 382–404.
51. Gyárfás, A. (1988). The irregularity strength of $K_{m,m}$ is 4 for odd m. *Discrete Mathematics, 71*, 273–274.
52. Gyárfás, A. (1989). The irregularity strength of $K_n - mK_2$. *Utilitas Mathematica, 35*, 111–113.
53. Gyárfás, A., Jacobson, M. S., Kinch, L., Lehel, J., & Schelp, R. H. (1992). Irregularity strength of uniform hypergraphs. *Journal of Combinatorial Mathematics and Combinatorial Computing, 11*, 161–172.
54. Györi, E., Horňàk, M., Palmer, C., & Woźniak, M. (2008). General neighbor-distinguishing index of a graph. *Discrete Mathematics, 308*, 827–831.
55. Harary, F., & Plantholt, M. (1983). Graphs with the line-distinguishing chromatic number equal to the usual one. *Utilitas Mathematica, 23*, 201–207.
56. Harary, F., & Plantholt, M. (1985). The point-distinguishing chromatic index. In *Graphs and applications* (pp. 147–162). New York: Wiley.
57. Hopcroft, J. E., & Krishnamoorthy, M. S. (1983). On the harmonious coloring of graphs. *SIAM Journal on Algebraic Discrete Methods, 4*, 306–311.
58. Johnston, D., & Zhang, P. (2014). An upper bound for the twin chromatic index of a graph. *Congressus Numerantium, 219*, 175–182.
59. Jones, R. (2011). *Modular and graceful edge colorings of graphs*. Ph.D. Dissertation, Western Michigan University.
60. Jones, R., & Zhang, P. (2012). Nowhere-zero modular edge-graceful graphs. *The Discussiones Mathematicae Graph Theory, 32*, 487–505.
61. Jones, R., Kolasinski, K., & Zhang, P. (2012). A proof of the modular edge-graceful trees conjecture. *Journal of Combinatorial Mathematics and Combinatorial Computing, 80*, 445–455.
62. Jones, R., Kolasinski, K., Okamoto, F., & Zhang, P. (2011). Modular neighbor-distinguishing edge colorings of graphs. *Journal of Combinatorial Mathematics and Combinatorial Computing, 76*, 159–175.
63. Jones, R., Kolasinski, K., Okamoto, F., & Zhang, P. (2012). On modular chromatic indexes of graphs. *Journal of Combinatorial Mathematics and Combinatorial Computing, 82*, 295–306.
64. Jones, R., Kolasinski, K., Okamoto, F., & Zhang, P. (2013). On modular edge-graceful graphs. *Graphs and Combinatorics, 29*, 901–912.
65. Kalkowski, M., Karoński, M., & Pfender, F. (2010). Vertex-coloring edge-weightings: towards the 1-2-3 Conjecture. *Journal of Combinatorial Theory, Series B, 100*, 347–349.
66. Kalkowski, M., Karoński, M., & Pfender, F. (2011). A new upper bound for the irregularity strength of graphs. *The SIAM Journal on Discrete Mathematics, 25*, 1319–1321.
67. Karoński, M., Łuczak, T., & Thomason, A. (2004). Edge weights and vertex colours. *The Journal of Combinatorial Theory, 91*, 151–157.

68. Kinch, L., & Lehel, J. (1991). The irregularity strength of tP_3. *Discrete Mathematics, 94*, 75–79.
69. König, D. (1916). Über Graphen und ihre Anwendung auf Determinantentheorie und Mengenlehre. *Mathematische Annalen, 77*, 453–465
70. Mahéo, M., & Saclé, J. F. (2008). Some results on $(\sum, p, g)$-valuation of connected graphs. Report de Recherche 1497. Université de Paris-Sud, Center d'Orsay.
71. Nierhoff, T. (2000). A tight bound on the irregularity strength of graphs. *The SIAM Journal on Discrete Mathematics, 13*, 313–323.
72. Petersen, J. (1891). Die Theorie der regulären Graphen. *Acta Mathematica, 15*, 193–220.
73. Przybylo, J. (2008). Irregularity strength of regular graphs. *The Electronic Journal of Combinatorics, 15*, #R82.
74. Przybylo, J., & Woźniak, M. (2010). On a 1, 2 Conjecture. *Discrete Mathematics & Theoretical Computer Science, 12*, 101–108.
75. Rosa, A. (1967). On certain valuations of the vertices of a graph. In *Theory of Graphs, Proceedings of International Symposium, Rome 1966* (pp. 349–355). New York: Gordon and Breach.
76. Tait, P. G. (1880). Remarks on the colouring of maps. *Proceedings of the Royal Society of Edinburgh, 10*, 501–503, 729.
77. Togni, O. (2000). Irregularity strength and compound graphs. *Discrete Mathematics, 218*, 235–243.
78. Vizing, V. G. (1964). On an estimate of the chromatic class of a *p*-graph. *Diskret Analiz, 3* (Russian), 25–30.
79. Wang, G. H., & Yan, G. Y. (2014). An improved upper bound for the neighbor sum distinguishing index of graphs. *Discrete Applied Mathematics, 175*, 126–128.
80. Wang, G. H., Chen, Z. M., & Wang, J. H. (2014). Neighbor sum distinguishing index of planar graphs. *Discrete Mathematics, 334*, 70–73.
81. Zhang, Z., Liu, L., & Wang, J. (2002). Adjacent strong edge coloring of graphs. *Applied Mathematics Letters, 15*, 623–626.

Index

P. Zhang, *Color-Induced Graph Colorings*, SpringerBriefs in Mathematics,
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