Publications

Nicolae Ciprian Bonciocat

1. *Irreducibility criteria for compositions of multivariate polynomials*, **Acta Math. Hungar.** (2018) (pp. 1–10) https://doi.org/10.1007/s10474-018-0818-7

2. *Irreducibility criteria for compositions of polynomials with integer coefficients*, **Monatsh. Math.** 182 (2017), no. 3, 499–512 (with Y. Bugeaud, M. Cipu and M. Mignotte)

3. *An irreducibility criterion for the sum of two relatively prime polynomials*, **Funct. Approx. Comment. Math.** 54 (2016), no. 2, 163–171.

4. *Irreducibility criteria for sums of two relatively prime multivariate polynomials*, **Publ. Math. Debrecen** 87 (2015), no. 3-4, 255–267 (with Y. Bugeaud, M. Cipu and M. Mignotte)

5. *Schönemann-Eisenstein-Dumas-type irreducibility conditions that use arbitrarily many prime numbers*, **Comm. Algebra** 43 (2015), no. 8, 3102–3122.

6. *Irreducibility criteria for compositions and multiplicative convolutions of polynomials with integer coefficients*, **An. Ştiinţ. Univ. "Ovidius" Constanţa Ser. Mat.** 22 (2014), no. 1, 73–84 (with A.I. Bonciocat and M. Cipu)

7. *Congruences characterizing the bicrossproduct of cyclic groups*, **Bull. Math. Soc. Sci. Math. Roumanie (N.S.)** 56(104) (2013), no. 3, 267–279 (with M. Cipu, M.-T. Tsai, A. Zaharescu)

8. *Irreducibility criteria for sums of two relatively prime polynomials*, **Int. J. Number Theory** 9 (2013), no. 6, 1529–1539 (with Y. Bugeaud, M. Cipu and M. Mignotte)

9. *Some Pólya-type irreducibility criteria for multivariate polynomials*, **Comm. Algebra** 40 (2012), no. 10, 3733–3744 (with Y. Bugeaud, M. Cipu and M. Mignotte)

10. *On $D(1)$-quadruples*, **Publ. Mat.** 56 (2012), no. 2, 279–304 (with M. Cipu and M. Mignotte)

11. *Irreducible multivariate polynomials obtained from polynomials in fewer variables, II*, **Proc. Indian Acad. Sci. Math. Sci.** 121 (2011), no. 2, 133–141 (with A. Zaharescu).

12. *Bounds for the multiplicities of the roots of a complex polynomial*, **Proc. Edinb. Math. Soc** (2) 54 (2011), no. 3, 587–598. (with A.I. Bonciocat and A. Zaharescu).

13. *Bounds for the multiplicities of the irreducible factors of multivariate polynomials*, **Comm. Algebra** 39 (2011), no. 3, 1131–1138 (with A.I. Bonciocat and A. Zaharescu).

14. *On the irreducibility of polynomials that take a prime power value*, **Bull. Math. Soc. Sci. Math. Roumanie (N.S.)** 54 (102) (2011), no. 1, 41–54 (with A.I. Bonciocat and A. Zaharescu).

15. *From prime numbers to irreducible multivariate polynomials*, **An. Ştiinţ. Univ. "Ovidius" Constanţa Ser. Mat.** 19 (2011), no. 2, 37–53.

16. *On an irreducibility criterion of Perron for multivariate polynomials*, **Bull. Math. Soc. Sci. Math. Roumanie** 53 (101) No. 3 (2010), 213–217.

17. *Strips and hyperbolas for zeros of polynomials in terms of their Hermite expansion*, **Math. Inequal. Appl.** 13, no. 2 (2010), 271–288 (with M. Cipu).

18. *On the irreducibility of polynomials with leading coefficient divisible by a large prime power*, **Amer. Math. Monthly** 116 (2009), no. 8, 743–745 (with A.I. Bonciocat).

19. *The irreducibility of polynomials that have one large coefficient and take a prime value*, **Canad. Math. Bull.** 52 (2009), no. 4, 511–520 (with A.I. Bonciocat).

20. *A Capelli type theorem for multiplicative convolutions of polynomials*, **Math. Nachr.** 281 (2008), no. 9, 1240–1253 (with A.I. Bonciocat).

21. *Congruences and Lehmer's problem*, **Int. J. Number Theory** 4 (2008), no. 4, 587–596.

22. *Irreducible multivariate polynomials obtained from polynomials in fewer variables*, **J. Pure Appl. Algebra** 212 (2008), no. 10, 2338-2343 (with A. Zaharescu).

23. *On the number of factors of convolutions of polynomials with integer coefficients*, **Rocky Mountain J. Math.** 38 (2008), no. 2, 417–431 (with A.I. Bonciocat and A. Zaharescu).

24. *Square-free criteria for polynomials using no derivatives*, **Proc. Amer. Math. Soc.** 135 (2007), no. 3, 677–687 (with E. Alkan, A.I. Bonciocat and A. Zaharescu).

25. *Some classes of irreducible polynomials*, **Acta Arith.** 123 (2006), no. 4, 349–360 (with A.I. Bonciocat).

26. *Bounds for the multiplicities of the roots for some classes of complex polynomials*, **Math. Inequal. Appl.** 9 (2006), no. 1, 11–22 (with A.I. Bonciocat and A. Zaharescu).

27. *Some elementary zero-free regions for Dirichlet series and power series*, **Acta Comment. Univ. Tartu. Math.** No. 9 (2005), 33–42 (with A. Zaharescu).

28. *Groups of periods for arbitrary maps on groups*, **Acta Math. Univ. Comenian. (N.S.)** 74 (2005), no. 2, 229–242 (with A. Zaharescu).

29. *Upper bounds for the number of factors for a class of polynomials with rational coefficients*, **Acta Arith.** 113 (2004), no. 2, 175–187.

30. *Congruences for the convolution of divisor sum function*, **Bull. Greek Math. Soc.** 47 (2003), 19–29.

31. *Déformations des groupes par systèmes rigides de facteurs.* (French) [Deformations of groups by rigid factor systems], **Bull. Math. Soc. Sci. Math. Roumanie (N.S.)** 46(94) (2003), no. 1-2, 11–23 (2004).

32. *Groups bicrossed product by automorphisms.* Memorial issue dedicated to Nicolae Radu, **Math. Rep.** 3(53) (2001), no. 2, 145–150.

33. *On the relative quasi-holomorphs of a finite group*, Proceedings of the Annual Meetings of the Faculty of Mathematics (Bucharest, 1999), **An. Univ. Bucuresti Mat. Inform.** 48 (1999), no. 2, 3–7.

34. *Isomorphism criteria for groups semidirect and wreath products*, Proceedings of the Annual Meetings of the Faculty of Mathematics (Bucharest, 1998), **An. Univ. Bucuresti Mat. Inform.** 47 (1998), Special Issue, 59-64 (1999).

35. *The groups semidirect cyclic product*, **An. Univ. Bucuresti Mat.** 47 (1998) no. 1, 17-24.

Papers in preparation

1. *Irreducibility criteria for polynomials with a large leading coefficient* (with A.I. Bonciocat, Y. Bugeaud and M. Cipu) - submitted