

Bibliography

- [1] B. Ahmad, Fuzzy BCI-algebras, *J. Fuzzy Math.*, **1**(2) (1993), 445-452.
- [2] K. T. Atanassov, Intuitionistic fuzzy sets, *Fuzzy Sets and Systems*, **20** (1986), 87-96.
- [3] K. T. Atanassov, New operations defined over the intuitionistic fuzzy sets, *Fuzzy Sets and Systems*, **61** (1994), 137-142.
- [4] K.T. Atanassov, Intuitionistic fuzzy sets, *Springer*, Heidelberg, 1999.
- [5] S. Abdullah, M. Aslam, M. Imran and M. Ibrar, Direct product of intuitionistic fuzzy ideals in LA-semigroups-II, *Ann. Fuzzy Math. Inform.*, **2** (2011), 151-160.
- [6] M. Aslam, S. Abdullah, M. Imran and N. Nasreen, Direct product of intuitionistic fuzzy ideals in LA-semigroup, *Fuzzy Sets, Rough Sets and Multivalued operations and Applications*, **3**(1) (2011), 1-9.
- [7] S. Abdullah, N. Yaqoob, B. Satyanarayana, S. M. Qurashi, Direct product of intuitionistic fuzzy H-ideals of *BCK*-algebras, *Int. J. of Algebra and Statistics*, **1** (2012), 8-16.
- [8] Bandaru R.K., Rafi N., B. Davvaz, Falling fuzzy filters in *BE*-algebras, *Journal of the Chungcheong Mathematical Society*, **30**(2) (2017), 201-211.
- [9] Bandaru R.K., Rafi N., B. Davvaz, Fuzzy implicative filters of *BE*-algebras based on the theory of falling shadows, *Facta Universitatis (NIS) Ser. Math. Inform.*, **33**(1) (2018), 31-40.
- [10] S. R. Barbhuiya, Doubt fuzzy ideals of *BF*-algebra, *IOSR journal of Mathematics*, **10**(2) (2014), 65-70.

- [11] T. Bej and M. Pal, Doubt intuitionistic fuzzy ideals in BCK/BCI -algebras, *Int. J. Fuzzy Logic Systems*, **5**(1) (2015), 1-13.
- [12] T. Bej and M. Pal, Doubt intuitionistic fuzzy H -ideals in BCK/BCI -algebras, *Ann. Fuzzy Math. Inform.*, **8**(4)(2014), 593-605.
- [13] T. Bej and M. Pal, Doubt Atanassov's intuitionistic fuzzy sub-implicative ideals in BCI -algebras, *Int. J. Computational Intelligence Systems*, **8**(2) (2015), 240-249. (SCI)
- [14] T. Bej and M. Pal, Direct product of doubt intuitionistic fuzzy H -ideals in BCK/BCI -algebras, *Int. J. Pure and Applied Researches*, **2**(1) (2016), 11-21.
- [15] T. Bej and M. Pal, Interval-valued doubt fuzzy ideals in BCK -algebras, *International Journal of Fuzzy System Applications*, **8**(4)(6), (IGI Global) (Scopus).
- [16] R. Biswas, Rosenfeld fuzzy subgroups with interval-valued membership function, *Fuzzy Sets and Systems*, **63** (1) (1994), 87-90.
- [17] R. Biswas, Fuzzy subgroups and anti fuzzy subgroups, *Fuzzy Sets and Systems*, **35** (1990), 121-124.
- [18] Borzooei RA, Jun YB. Intuitionistic fuzzy hyper BCK -ideals of hyper BCK -algebras, *Iranian j. fuzzy systems*, **1**(1) (2004), 61-73.
- [19] H. Bustince, F. Herrera and J. Montero, *Fuzzy sets and their extensions: Representation, Aggregation and Models*, Heidelberg: Physica-Verlag, 2007.
- [20] Cheng XY, Xin XL. Filter theory on hyper BE -algebras, *Italian Journal of pure and applied mathematics*, **35** (2015), 509-526.
- [21] D. Coker, An introduction to intuitionistic fuzzy topological spaces, *Fuzzy Sets and Systems*, **88** 81-89 (1997).
- [22] P. S. Das, Fuzzy groups and level subgroups, *J. Math. Anal. Appl.*, **84** (1981), 264-269.
- [23] M.S. Eroglu, The homomorphic image of a fuzzy subgroup is always a fuzzy subgroup, *Fuzzy Sets and Systems*, **33**(2) 255-256 (1989).

- [24] I. Grattan-Guinness, Fuzzy membership mapped onto interval and many-valued quantities, *Zeitschrift für mathematische Logik und Grundlagen der Mathematik*, **22**(1) (1976), 149-160.
- [25] Hamidi M, Saeid AB. Relations and homomorphisms of fuzzy hyper *BE*-subalgebras, *J. Int. Fuzzy Systems*, **31** (2016), 1565-1578.
- [26] Q. P. Hu and K. Iseki, On *BCI*-algebra satisfying $(x * y) * z = x * (y * z)$, *Math. Sem. Notes* 8 (1980) 553-555.
- [27] F. Y. Huang, Another definition of fuzzy *BCI*-algebras, *Selected Papers on BCK/BCI-Algebras, China*, **1** (1992), 91-92.
- [28] Y. Huang and Z. Chen, On ideals in *BCK*-algebras, *Mathematica Japonica*, **50** (1999), 211-226.
- [29] Y. Huang, *BCI-algebra*, Science Press, Beijing, 2006.
- [30] K. Iseki, On ideals in *BCK*-algebras, *Math. Seminar Notes*, **3** (1975), 1-12.
- [31] Y. Imai and K. Iseki, On axiom systems of propositional calculi, *Proc. Japan Academy*, **42** (1966), 19-22.
- [32] K. Iseki, An algebra related with a propositional calculus, *Proc. Of Japan Academy*, **42** (1966), 26-29.
- [33] K. Iseki, On *BCI*-algebras, *Math. Seminar Notes*, **8** (1980), 125-130.
- [34] K. Iseki and S. Tanaka, An introduction to the theory of *BCK*-algebras, *Math. Japonica*, **23** (1978), 1-26.
- [35] C. Jana and T. Senapati, Cubic *G*-subalgebras of *G*-algebras, *Annals of Pure and Applied Mathematics*, **10**(1) (2015), 105-115.
- [36] K.U. Jahn, Intervall-wertige mengen, *Mathematische Nachrichten*, **68**(1) (1975), 115-132.
- [37] C. Jana, T. Senapati, M. Bhowmik and M. Pal, On intuitionistic fuzzy *G*-subalgebras of *G*-algebras, *Fuzzy Information and Engineering*, **7**(2) 195-209 (2015).

- [38] C. Jana, M. Pal, T. Senapati and M. Bhowmik, Atanassov's intuitionistic L -fuzzy G -subalgebras of G -algebras, *The Journal of Fuzzy Mathematics*, **23**(2) 195-209 (2015).
- [39] C. Jana, T. Senapati and M. Pal, $(\in, \in \vee q)$ -intuitionistic fuzzy BCI -subalgebras of BCI -algebra, *Journal of Intelligent and Fuzzy systems*, **31** 613-621 (2016).
- [40] Z. Jianming and T. Zhisong, Doubt fuzzy BCI -algebras, *Int. J. Math and Math. Sci.*, **30** (1) (2002) 49-56.
- [41] Y. B. Jun, Closed fuzzy ideals in BCI -algebras, *Math. Japonica* 38 (1993) 199-202.
- [42] Y. B. Jun and K. H. Kim, Intuitionistic fuzzy ideals of BCK -algebras, *Internat. J. Math and Math. Sci.*, **24** (2000), 839-849.
- [43] Y. B. Jun, Doubt fuzzy BCK/BCI -algebras, *Soochow J. Math.*, **20**(3) (1994), 351-358.
- [44] Y. B. Jun and J. Meng, Fuzzy P -ideals in BCI -algebras, *Math. Japonica*, **40** (2) (1994), 271-282.
- [45] Y. B. Jun, Traslations of fuzzy ideals in BCK/BCI -algebras, Hacettepe J. Math. and Stat. **38**(3) (2011) 349-358.
- [46] Y.B. Jun, Interval-valued fuzzy subalgebras/ideals in BCK -algebras, *Scientiae Mathematicae*, **3**(3) (2000), 435-444.
- [47] Y.B. Jun, Direct product and t -normed product of fuzzy subalgebras in BCK -algebras with respect to a t -norm, *Soochow J. Math.* , **27**(1) (2001), 83-88.
- [48] Y. B. Jun, Fuzzy sub-implicative ideals of BCI -algebras, *Bull. Korean Math*, **39** (2) (2002), 185-198.
- [49] M. Kawaguchi, and M. Miyakoshi, Generalized Extended t -Nomrs as t -Norms of Type 2, *IEEE Int. Symp. on Multiple-Valued Logic*, (2009) pp.292-297.
- [50] H.M. Khalid and B. Ahmad, Fuzzy H -ideals in BCI -algebras, *Fuzzy Sets and Systems*, **101**(1) (1999), 153-158.

- [51] Kim HS, Kim YH. On BE -algebras, *Sci. Math. Japo.*, **66**(1) (2007), 113-116.
- [52] K. J. Lee, Y. B. Jun. M. I. Doh, Fuzzy translation and fuzzy multiplication of BCK/BCI -algebras, *Commun. Korean Math. Soc.*, **24** (3) (2009), 353-360.
- [53] Y. L. Liu and J. Meng, Fuzzy ideals in BCI -algebras, *Fuzzy Sets and Systems*, **123** (2001), 227-237.
- [54] Y. L. Liu and J. Meng, Sub-implicative ideals and sub-commutative ideals of BCI -algebras, *Soochow J. Math*, **26** (4) (2000), 441-453.
- [55] Marty F. Sur une generalization de la notion de group, *8th Congress Mathematics Scandenaves*, Stockholm, (1934), 45-49.
- [56] J. Meng, On ideals in BCK -algebras, *Math. Japonica* , **40** (1994), 143-154.
- [57] J. Meng and Y.B. Jun, BCK -algebras, *Kyung Moon Sa Co.*, Seoul, (1994).
- [58] J. Meng and X. Guo, On Fuzzy ideals in BCK -algebras, *Fuzzy Sets and Systems*, **149**(3) (2005), 509-525.
- [59] S. M. Mostafa, R. A. K. Omar and A. I. Marie, Anti fuzzy sub-implicative ideals of BCI -algebras, *Journal of American Science*, **7** (11) (2011), 274-282.
- [60] N.Palaniappan, P.S. Veerappan and R. Devi, Intuitionistic fuzzy subimplicative ideals and intuitionistic fuzzy subcommutative ideals of BCI -algebras, *Asian Journal of Current Engineering and Maths*, **1** (6)(2012), 358-362.
- [61] Radfar A, Rezaei A, Saeid AB. Hyper BE -algebras, *Novi Sad J. Math.*, **44**(2) (2014), 137-147.
- [62] Rezaei A, Radfar A, Saeid AB. On Commutative Hyper BE -algebras, *Ser. Math. Inform.*, **30**(4) (2015), 389-399.
- [63] A. Rosenfeld, Fuzzy Groups, *J. Math. Anal. Appl.*, **35** (1971), 512-517.
- [64] A. B. Saeid and M. A. Rezvani, On fuzzy BF -algebras, *Int. Mathematical Forum*, **4**(1) (2009), 13-25.

- [65] A. B. Saeid, Some results in Doubt fuzzy BF -algebras, *Analele Universitatii de Vest, Timi soara Seria Mathematica Informatica*, **1** (2011), 125-134.
- [66] B. Satyanarayan, U. B. Madhavi and R. D. Prasad, On intuitionistic fuzzy H -ideals in BCK -algebras, *Int. J. Algebra*, **4**(15) (2010) 743-749.
- [67] B. Satyanarayan, U. B. Madhavi and R. D. Prasad, On foldness of intuitionistic fuzzy H -ideals in BCK -algebras, *Int. Mathematical Forum* **5**(45) (2010) 2205-2221.
- [68] T. Senapati, M. Bhowmik and M. Pal, Atanassov's intuitionistic fuzzy translations of intuitionistic fuzzy H -ideals in BCK/BCI -algebras, *Notes on Intuitionistic Fuzzy Sets*, **19** (1) (2013), 32-47.
- [69] T. Senapati, M. Bhowmik and M. Pal, Interval-valued intuitionistic fuzzy BG -subalgebras, *The Journal of Fuzzy Mathematics*, **20** (3) (2012), 707-720.
- [70] T. Senapati, M. Bhowmik and M. Pal, Interval-valued intuitionistic fuzzy closed ideals of BG -algebra and their products, *Int. J. Fuzzy Logic Systems*, **2** (2) (2012), 27-44.
- [71] T. Senapati, M. Bhowmik and M. Pal, Intuitionistic fuzzifications of ideals in BG -algebras, *Mathematica Aeterna*, **2** (9) (2012), 761-778.
- [72] T. Senapati, M. Bhowmik and M. Pal, Fuzzy closed ideals of B -algebras, *Int. J. Computer Science Engineering and Technology*, **1** (10) (2011), 669-673.
- [73] T. Senapati, M. Bhowmik and M. Pal, Cubic subalgebra and cubic closed ideals of B -algebras, *Fuzzy information and Engineering*, **7** (2) (2015), 129-149.
- [74] T. Senapati, M. Bhowmik and M. Pal, Triangular norm based fuzzy BG -algebras, *Africa Mathematica* , (2015), 1-13.
- [75] T. Senapati, M. Bhowmik and M. Pal, Intuitionistic L-fuzzy ideals of BG -algebras, *Africa Mathematica* , **25** (3) (2014), 577-590.
- [76] T. Senapati, M. Bhowmik, M. Pal and B. Davvaz, Atanassov's intuitionistic fuzzy translations of intuitionistic fuzzy subalgebras and ideals in BCK/BCI -algebras, *Eurasian Mathematical Journal*, **6** (1) (2015), 96-114.

- [77] T. Senapati, M. Bhowmik, M. Pal and B. Davvaz, Fuzzy translations of fuzzy H -ideals in BCK/BCI-algebras, *J. Indones. Math. Soc.*, **21** (1) (2015), 45-58.
- [78] Shabir M, Khan A. Intuitionistic fuzzy filters of ordered semigroups, Selected Papers on *BCK/BCI-Algebras*, *NIFS*, **15** (2009), 3, 1-13.
- [79] A. Solairaju and R. Begam, Intuitionistic fuzzifications of P -ideals in BCI-algebras, *Internat. J. Math Research*, **4**(2) (2000), 133-144.
- [80] T. Srinivas, T. Nagaiah and P. Narasimha Swamy, Anti fuzzy ideals of Γ -near-rings, *Annals of Fuzzy Mathematics and Informatics*, **3**(2) (2012) 255- 266.
- [81] E. Szmidt, J. Kacprzyk, Intuitionistic fuzzy sets in some medical applications, *Note on IFS*, **7** (4) (2001), 58-64.
- [82] Tang J, Davvaz B, Luo Y. Hyperfilters and fuzzy hyperfilters of ordered semihypergroups, *Journal of intelligent and fuzzy Systems*, **29** (2015), 75-84.
- [83] A. Walendziak, On *BF*-algebras, *Math. Slovaca*. **57** (2) (2007), 119-128.
- [84] O. G. Xi, Fuzzy BCK-algebras, *Math. Japon.* **24**(36) (1991), 935-942.
- [85] R. R. Yager, On a general class of fuzzy connectives, *Fuzzy Sets and Systems*, **4**(3) 235-242 (1980).
- [86] L. A. Zadeh, Fuzzy sets, *Inform. and Control*, **8** (1965), 338-353.
- [87] L. A. Zadeh, Toward a generalized theory of uncertainty (GTU)-an outline, *Inform. Sci.*, **172** (2005), 1-40.
- [88] L. A. Zadeh, Is there a need for fuzzy logic?, *Inform. Sci.*, **178** (2008), 2751-2779.
- [89] L. A. Zadeh, The concept of a linguistic variable and its application to approximate reasoning-I, *Inform. Sci.*, **8** (1975), 199-249.
- [90] A. Zarandi and A. B. Saeid, Interval-valued fuzzy *BF*-algebras, *Int. J. Contemp. Math. Sciences*, **4** (17) (2009), 803-814.
- [91] J. Zhan and Z. Tan, Fuzzy H -ideals in *BCK*-algebras, *SEA Bull. Math.*, **29** (2005), 1165-1173.

-
- [92] J. Zhan and Z. Tan, characterization of doubt fuzzy H-ideals in *BCK*-algebras, *Soochow J. Math.*, **29** (3) (2003), 293-298.
- [93] M. Zhou, D. Xiang and J. Zhan, On anti fuzzy ideals of Γ -rings, *Annals of Fuzzy Mathematics and Informatics* 1(2) (2011) 197-205.
- [94] H.J. Zimmermann, *Fuzzy Set Theory and its Applications*, Kluwer Academic Publishers, 1991.