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## Bibliography

- Abd EI-Monsef M. E., EI-Deeb S. N. and Mahmood R.A., (1983)  $\beta$ -open sets and  $\beta$ -continuous mappings, *Bull. Fac. Sci. Assuit. Univ.*, 12(1), 1-18.
- Abdulla A. S., (1986) On some applications of special subsets in topology, Ph.D. Thesis, Tanta Univ.,
- Ahmed N. K., (1990) On some types of separation axioms, M.Sc. Thesis, College of Science, Salahaddin Univ.,
- Alias B. Khalaf, and Baravan A. Asaad, (2009)  $P_S$ -open sets and  $P_S$ -Continuity in Topological spaces, *J. Duhok Univ.*, 12(2), 183-192.
- Amir A. Mohammed and Sabih W Askandar (2018),  $i$ -Open sets in Bitopological Spaces, *AL-Rafidain Journal of Computer Sciences and Mathematics*, Volume 12, Issue 1, 13-23.
- Andrijevic D., Semi-preopen sets, *Math. Vesnik*, 38(1986), 24–36.
- Arya S.P. and Gupta R, (1974) On Strongly Continuous Mappings, *Kyungpook Math. J.*, 14,131-143.
- Balasubramanian, S. and Sandhya, C. (2012) Somewhat almost sg-continuous functions and Somewhat almost sg-open functions, *International Journal of Mathematical Engineering and Science*, 1(8), 26-37.
- Balasubramanian, S., Sandhya, C. and Aruna Swathi Vyjayanthi, P. (2012) Somewhat  $v$ -Continuity, *Gen. Math. Notes*, 11(2), 20-34.
- Baravan A.Asad and Alias B.Khalaf,(2016), On  $P_S$ -Compact Spaces, *International Journal of Scientific and Engineering Research*, Volume 7, Issue 8, 809-815.
- Benchalli S.S et al., (2017), Contra  $\delta_{gb}$ -Continuous Functions in Topological Spaces, *European Journal of Pure And Applied Mathematics* Vol. 10, No. 2, 312-322.
- Benchalli, S. S. and Priyanka M Bansali, (2010) Somewhat  $b$ -continuous and somewhat  $b$ -open functions in Topological spaces, *Int. Journal of Math. Analysis*, 4(46), 2287-2296.
- Caldas M., Fukutake T., Jafari S. and Noiri T., (2005) Some Applications of  $\delta$ -preopen Sets in Topological Spaces, *Bulletin of the Institute of Mathematics Academia Siniga* 33(3), 261-276.
- Cameron D E, (1978), Properties of S-Closed spaces, *Proc. Amer. Math. Soc.*, 72(3), 581-586.
- Carnahan D A., (1973) Some Properties related to Compactness in topological Spaces, Ph.D., Thesis, Univ. Arkansas.
- Choquet, G. (1947), Sur les notions de filtre et grille, *Comptes Rendus Acad. Sci. Paris* 224, 171 - 173
- Crossley S G and Hildebrand S K, (1971) Semi-closure, *Texas J.Sci.*, 22,99-112.

- 
- Crossley S G and Hilderbrand, (1972) Semi-Topological Properties, *Fund. Math.*, 74, 233-254.
- Di Maio G. and T. Noiri, (1987), On s-closed spaces, *Indian J. Pure Appl. Math.*, 18 (3), 226-233.
- Di Maio G., Ganster M. and Noiri T., (2000) On p-closed spaces, *Internat. J. Math. and Math. Sci.*, 24 (3), 203-212.
- Dlaska K. and Ganster M., (1992) S-sets and co-S-closed topologies, *Indian J. Pure Appl. Math.*, 23 (10), 731-739.
- Dontchev and T. Noiri, (1999) Contra-semicontinuous functions, *Math. Pannonica*, 10, 159-168.
- Dontchev J., (1996) Contra-continuous functions and strongly S-closed spaces, *Internat. J. Math. and Math. Sci.*, 19 (2), 303-310.
- Dontchev J., Popvassilev S. and Stavrova D., (1998) On the  $\eta$ -expansion topology for the co-semi-generalization and mildly Hausdorff spaces, *Acta Math. Hungar.*, 80(1-2), 9-19.
- Dontchev J., (1998) Survey on preopen sets, *The Proceedings of the Yatsushiro Topological Conference*, 1-18.
- Dunham W. (1977), Spaces, *Kyungpook Math. J.*, 17, 161-169.
- E. Ekici, (2009), On  $e^*$ -open sets and  $(D, S)^*$ -sets, *Mathematica Moravica*, 13, 29-36
- Ekici, (2004) Almost contra-precontinuous functions, *Bull. Malaysian Math. Sc. Soc.*, 27, 53-65.
- Ekici E., (2005) On  $\delta$ -semi-open sets and a generalization of functions, *Bol. Soc. Mat.*, 23(1-2), 73-84.
- Ekici E., (2008) New forms of contra-continuity, *Carpathian J. Math.* 24(1), 37-45.
- El-Deeb S. N. Hasanein I. A, Mashhour A.S. and Noiri T., (1983) On P-regular spaces, *Bull. Math. Soc. Sci. Math. R.S. Roum*, 27(4), 311-315.
- Fomin S., (1943) Extensions of topological spaces, *Ann. of Math.*, 44 (3), 471-480.
- Fukutake, T (1986), On generalised closed sets in bitopological spaces, *Bull. Fukuoka Univ. Ed. Part-III*, 35, 19-28.
- Futake, T., Sundaram, P., and Nagaveni, N., (1999) On weakly generalized closed sets, weakly generalized continuous maps and Twg spaces in bitopological spaces, *Bull. Fukuoka Univ. Ed. Part III*, 48, 33-40.
- Fukutake, T. Sundaram, P., and SheikJohn.M., (2002), w-closed sets, w-open sets and w-continuity in bitopological spaces, *Bull. Fukuoka Univ. Ed*, 51 Part-III, 1-9.
- Ganster M and Noiri T, (2000) On P-Closed Spaces, *Inter. J. Math and Math. Sci* 24(3), 203-212.
- Gentry, K. R. and Hoyle, H. B., (1971) Somewhat continuous functions, *Czechoslovak Math. J.*, 21(96), 5-12.

- 
- Guo T. Y., (1981) A characterization of extremally disconnected spaces, *J. Central China Normal Univ. Natur. Sci.*, 21(2),169-170.
- Jafari S. and Noiri T., (1999) Contra-super-continuous functions, *Annales Univ Sci Budapest*, 42, 27- 34.
- Jafari S. and Noiri T., (1998) Functions with preclosed graphs, *Univ. Bacau. Stud. Cerc. St. Ser. Mat.*, 8, 53-56.
- Jafari S. and Noiri T., (2002) On contra-precontinuous functions, *Bull. Malaysian Math. Sc. Soc.*, 25, 115-128.
- Jain R C., (1980) The role of regularly open sets in general topology spaces, Ph.D., Thesis, Meerut Univ. Inst. Advance Stud., Meerut, India.
- Jankovic, D.S. (1983), On Functions With  $\theta$ -Closed Graphs, *Glasnik Mathematicki*, 18(38), 141-148.
- Jankovic D. S., (1985) A note on mappings of externally disconnected spaces, *Acta math. Hungar.*, 46(1-2),83-92.
- Joseph J. E and M. H. Kwack, (1980) On  $S$ -closed spaces, *Proc. Amer. Math. Soc.*, 80 (2), 341-348.
- Kar A and Bhattacharya P, (1990) Some weak separation axioms, *Bull. Cal. Math. Soc.*, 82,415-422.
- Kelly J.C., (1963) Bitopological Spaces, *Proc. London Math. Soc.* 13, 71-89.
- Khalaf A. B. and Abdul-Jabbar A. M., (2001) Almost  $\theta_s$ -continuity and weak  $\theta_s$ -continuity in topological spaces, *J. Dohuk Univ.*, 4 (2), 171-177.
- Khalaf A. B. and Asaad B. A., (2012) Almost  $P_S$ -continuous functions, *Tamkang J. Math.*, 43 (1), 33-50.
- Khalaf A. B. and Easif F. H., (1999)  $\theta_s$ -continuous functions, *J. Dohuk Univ.*, (special issue) 2 (1), 1-7.
- Kheder F. H. and Alshibani A. M., (1991), On pairwise super continuous mappings in bitopological spaces, *Internat. J. Math. And Math. Sci.*, 4, 715-722.
- Khedr F. H. and T. Noiri, (1986), On  $\theta$ -irresolute functions, *Indian J. Math.*, 28 (3), 211-217.
- Levine N., (1961), A Decomposition of continuity in topological spaces, *Amer. Math. Monthly*, 68 (1), 44-46.
- Levine N., (1963) Semi-open sets and semi-continuity in topological spaces, *Amer. Math. Monthly*, 70(1), 36-41.
- Levine, N. (1970) Generalized closed sets in topology, *Rend. Circ. Mat. Palermo*, 19(2), 89-96.
- Maheshwari S. N. and R. Prasad, (1975) Some new separation axioms, *Ann. Soc. Sci. Bruxelles, Ser. I.*, 89, 395–402.
- Maheshwari S. N. and Prasad R., (1975) On  $s$ -regular spaces, *Glasmik Mat.* 10(30), 347-350.

- 
- Maheswari, S. N. and Tapi, U. (1978), Feebly  $T_1$ -spaces, An. Univ. Timisoara Ser. Stiint Mat., 16(2), 173-177.
- Mashhour A. S., I.A. Hasanein and S.N. El-Deeb, (1983)  $\alpha$ -continuous and  $\alpha$ -open mappings, Acta Math. Hungar, 41 (3-4), 213-218.
- Mashhour A. S., M. E. Abd El-Monsef and S. N. El-Deeb, (1982) On precontinuous and weak precontinuous mappings, Proc. Math. Phys. Soc. Egypt, 53, 47–53.
- Masshour A. S., El-Monsef M. E. A., Hasanein M. E. A., and Noiri T, (1984) Strongly Compact Spaces, Delta J.Sci.,8(1),30-46.
- Mrsevic M., (1986) On pariwise  $R_0$  and pairwise  $R_1$  bitopological spaces, Bull. Math. Soc. Sci. Math R.S. Roumanie, 30, 141-148.
- Munshi B. M. and D. S. Bassan, (1982) Super continuous functions, Indian J. Pure Appl. Math., 13, 229–236.
- Nasef A. A. and T. Noiri, (1997) Some weak forms of almost continuity, Acta Math. Hungar., 74, 211–219.
- Navalalagi G. B., (1998) Pre-neighbourhoods, The Mathematics Education, 32(4), 201-206.
- Njastad O, (1965) On some classes of nearly open sets, Pacific J. Math. 15, 961– 970
- Noiri T., (1973) Remarks on semi-open mappings, Bull. Calcutta. Math. Soc., 65, 197–201.
- Noiri T, (1978) A generalization of perfect functions, J. London Math. Soc., 2 (17), 540-544.
- Noiri T., (1980) On  $\delta$ -continuous functions, J. Korean Math. Soc., 16 (2), 161-166.
- Noiri T. and Kang S. M., (1984) On almost strongly  $\theta$ - continuous functions, Indian J. Pure Appl. Math., 15 (1), 1-8.
- Noiri T., (1984) Super continuity and some strong forms of continuity, Indian J. Pure Appl. Math., 15 (3), 241-250.
- Noiri T., (1987) Weakly  $\alpha$ -continuous functions, Internat. J. Math. and Math. Sci., 10 (3), 483-490.
- Noiri T., (1988) Almost  $\alpha$ -continuous functions, Kyungpook Math. J., 28, 71-77.
- Noiri T. and Popa V., (1998) On Almost  $\beta$ -continuous functions, Acta Math. Hungar., 79, 329–339.
- Park J.H., Lee B.Y. and Son M.J., (1997) On  $\delta$ -semi-open sets in topological spaces, J. Indian Acad. Math., 19, No 1, 59-67.
- Porter J., and Thomas J., (1969) On H-Closed and minimal Hausdorff spaces, Trans. Amer. Math. Soc., 138, 159-170.
- Raja Mohammad Latif, (2014) Characterizations of Delta-Open Sets and Mappings in Topological Spaces, May 12, 1-29

- 
- Ramprasad Paul and Bhattacharyya P, (1999) On Pre-Urysohn Spaces, Bulletin of the Malaysian Mathematical Society, 22, 23-24.
- Raychaudhuri S. and Mukherjee M. N., (1993) On  $\delta$ -almost continuity and  $\delta$ -preopen sets, Bull. Inst. Math. Acad. Sinica, 21, 357-366.
- Reilly I. L. and Vamanmurthy M. K., (1985) On  $\alpha$ -continuity in topological spaces, Acta Math. Hungar., 45 (1-2), 27-32.
- Rodyna A. Hosny (2012),  $\delta$ -Sets with Grill, International Mathematical Forum, 7(43), 2107-2113.
- Rose D. A., (1984) Weak continuity and almost continuity, Internat. J. Math. and Math. Sci., 7 (2), 311- 318.
- Roy, B. and Mukherjee, M. N. (2007), On a typical topology induced by a grill, Soochow J. Math., 33(4), 771- 786
- Roy, B. and Mukherjee, M. N. (2009), Concerning topologies induces by principal grills, An. stiint. Univ. AL. I. Cuza Iasi. Mat. (N. S.), 55(2), 285-294.
- Singal M. K. and Singal A. R., (1968) Almost continuous mappings, Yokohama Math. J., 16, 63-73.
- Singal M.K. and Mathur A., (1969) On nearly compact spaces, Boll. Un. Mat. Ital., 4 (2), 702-710.
- Singal M.K., and Arya S P., (1969) On almost regular spaces, Glasnik. Matematicki, Series III, 4, 89 – 99.
- Steen L A., and Seebach J A., (1978) Counter examples in Topology, Springer Verlag New York Heidelberg Berlin.
- Stone M. H., (1937), Applications of the theory of Boolean rings to topology, Trans. Amer. Math. Soc., 41, 375-481.
- Tadros S. F. and Khalaf A. B., (1992) On regular semi-open sets and  $S^*$ -closed spaces, Tamkang J. of Math. 23(4), 337-348.
- Thron, W.J.(1973), Proximity structure and grills, Math. Ann 206, 35 – 62.
- Velicko N. V., (1968) H-closed topological spaces, Amer. Math. Soc. Transl., 78, 103-118.
- Wang G. H., (1981) On S-closed spaces, Acta Math. Sinica, 24, 55-63
- Willard, Stephen (2004), "14E. Semiregular spaces", General Topology, Dover, ISBN 978-0-486-43479-7. p. 98.
- Youngblood, A. L. (1965), Weakly Equivalent Topologies, Master's Thesis, University of Georgia, Athens, Georgia.
- Yunis R. H., (2001) Properties of  $\theta$ -semi-open sets, Zanco J. Of Pure and Applied Sciences, 19(1), 116-122.
- Zanyar A. Ameen, Baravan A. Asaad and Ramadhan A. Muhammed, (2019), On superclasses of  $\delta$ -open sets in topological spaces, Int. J. of Applied Mathematics, 32(2), 259-277.
- Zdenek Frolik (1961) Remarks concerning the invariance of baire spaces under mappings, Czechoslovak Mathematical Journal, 11(86), 381-385.