

## List of Publications

1. Aadil Mushtaq, K. Moinuddin, N. Sharma and **Anita Tomar**, Asymptotic behaviour of G – Cr Iteration algorithm and application to common zeros of accretive Operators, Stud. Univ. Babes-Bolyai Math., 2023. *in press.*
2. Nihal Tas, **Anita Tomar**, Meena Joshi, On existence and applications of non-unique fixed points via interpolative type contractive conditions, 30 (4), 2023, Nonlinear Studies (NS), 1263-1279.
3. Meena Joshi, **Anita Tomar**, Single-valued and set-valued dualistic partial F-weak contraction and applications, 30 (4), 2023, Nonlinear Studies (NS), 1329-1345.
4. Meena Joshi, **Anita Tomar**, Izhar Uddin, Fixed point in  $M^b v$  –Metric space and applications, Acta Univ. Sapientiae, Math. 15 (1), 2023, 123–138, DOI: 10.2478/ausm-2023-0008.
5. **Anita Tomar**, Meena Joshi, S. K. Padaliya, On relation-theoretic F–Contractions and applications in F–Metric space, Acta Univ. Sapientiae, Math. 15(2 ), 2023 304-326. DOI: 10.2478/ausm-2023-0017
6. **Anita Tomar**, Nihal Tas, and Meena Joshi, On interpolative type non-unique fixed points, their geometry and applications on S-metric spaces, Applied Math. E-Notes., 23, 2023, 243-249.
7. **Anita Tomar**, Deepak Kumar, and Ritu Sharma, Meena Joshi, Results via Partial-b Metric and solution of a pair of elliptic boundary value problem, Sahand Commun. Math. Anal., 2023, 20(04), 205-223. <https://doi.org/10.22130/scma.2023.563638.1187>
8. Meena Joshi, Shivangi Upadhyay, **Anita Tomar**, Mohammad Sajid, Geometry and application in economics of fixed point, Symmetry, 2023, 15(03),704,19 pages. <https://doi.org/10.3390/sym15030704>
9. Amit Gangwar, **Anita Tomar**, Mohammad Sajid , Ramesh Chandra Dimri, Common fixed points and convergence results for  $\alpha$  –Krasnosel'skii mappings, AIMS Math., 8(4) 2023, 9911–9923. DOI:10.3934/math.2023501
10. **Anita Tomar**, Vipul Kumar, U. S. Rana, Mohammad Sajid, Fractals as Julia and Mandelbrot sets of complex cosine functions via fixed point iterations, Symmetry, 2023, 15, 478. <https://doi.org/10.3390/sym15020478>
11. Sudheer Petwal, **Anita Tomar**, Meena Joshi, Best proximant for set-valued maps via proximal relations, Int. J. Nonlinear Anal. Appl., 14 (1) 2023, 1237–1247. <http://dx.doi.org/10.22075/ijnaa.2022.25299.2983>
12. **Anita Tomar** and Meena Joshi, On existence of fixed points and applications to a boundary value problem and a Matrix equation in C\*-Algebra Valued Partial Metric Spaces, Acta Univ. Sapientiae, Math., 14, 2 (2022) 341-355. DOI: 10.2478/ausm-2022-0023
13. Sudheer Petwal, **Anita Tomar** and Meena Joshi, On unique and non-unique fixed point in parametric  $N_b$ -metric spaces with application, Acta Univ. Sapientiae, Math. 14(2), 2022, 278 - 307. DOI: 10.2478/ausm-2022-0019
14. Meena Joshi, **Anita Tomar**, Thabet Abdeljawad, On Fixed Point, its geometry and application to satellite web coupling problem in S-Metric Spaces, AIMS Math., 8(2), 2023, 4407-4441. doi: 10.3934/math.20232202023501
15. Santosh Kumar, **Anita Tomar**, Gopi Prasad, On solution of nonlinear integral and fractional differential equations via discontinuous nonlinear contractions, J. Math., 2022, Article ID 7257000, 11 pages, 2022. <https://doi.org/10.1155/2022/7257000>
16. **Anita Tomar**, U.S.Rana and Vipul Kumar, Fixed point, its geometry and application via  $\omega$ -interpolative contraction of Suzuki type mapping, Math. Meth. Appl. Sci. (Special Issue), 2022,1-22. DOI: <https://doi.org/10.1002/mma.8871>
17. **Anita Tomar**, Swati Antal, Darshana J. Prajapati, Parveen Agarwal, Mandelbrot fractals using fixed-point technique of sine function, Proc. Inst. Math. Mech. Natl. Acad. Sci. Azerb. 48(Special Issue) 2022,194–214. <https://doi.org/10.30546/2409-4994.48.2022.194214>.
18. Said Beloul, **Anita Tomar**, and Meena Joshi, On solutions to open problems and Volterra-Hammerstein non-linear integral equation, Applied Math. E-Notes,22, 2022. 692-711.
19. Darshana J. Prajapati, Shivam Rawat, **Anita Tomar**, R.C. Dimri, Mohammad Sajid, A brief study of dynamics of Julia sets for entire transcendental function using Mann iterative scheme, Fractals and Fract. 6(7):397, 2022. <https://doi.org/10.3390/fractfract6070397>.
20. Nihal Oğur, Swati Antal, **Anita Tomar**, Julia and Mandelbrot sets of transcendental function via Fibonacci-Mann iteration, J. Funct. Spaces, 2022, Article ID 2592573, 13 pages. <https://doi.org/10.1155/2022/2592573>
21. **Anita Tomar**, Darshana J. Prajapati, Swati Antal, Shivam Rawat, Variants of Mandelbrot and Julia fractals for higher-order complex polynomials, Math. Meth. Appl. Sci. 2022;1-13. DOI: 10.1002/mma.8262.

22. Swati Antal, **Anita Tomar**, Darshana J. Prajapati, Mohammad Sajid, Variants of Julia and Mandelbrot sets as fractals via Jungck-Ishikawa fixed point iteration system with s-convexity, AIMS Math., 7(6) 2022, 10939–10957. DOI: 10.3934/math.2022611.
23. **Anita Tomar** and Meena Joshi and Sanjay Kumar Padaliya, Relation theoretic contractions and its applications in b-metric like spaces, J. Appl. Anal., 28(2), 295-309, 2022. <https://doi.org/10.1515/jaa-2021-2083>.
24. Meena Joshi, **Anita Tomar**, Near fixed point, near fixed interval circle and their equivalence classes in a b-interval metric space, Int. J. Nonlinear Anal. Appl. 13(1) (2022). <http://dx.doi.org/10.22075/ijnaa.2021.21721.2291>.
25. H. Ansari, **Anita Tomar** and Meena Joshi, A survey of C-class and pair upper class functions in fixed point theory, Int. J. Nonlinear Anal. Appl., 13 (2022) 1, 1879-1896. <http://dx.doi.org/10.22075/ijnaa.2021.21162.2239>.
26. Swati Antal, **Anita Tomar**, U. C. Gairola, Relation theoretic results via simulation function with applications, Int. J. Nonlinear Anal. Appl. 13 (2022) 1, 1769-1783. <http://dx.doi.org/10.22075/ijnaa.2021.21036.2224>.
27. **Anita Tomar**, Meena Joshi and Sanjay Kumar Padaliya, Fixed point to fixed circle and activation function in partial metric space, J. Appl. Anal. 28 (1), 57-66, 2022. Article number: 000010151520212057. <https://doi.org/10.1515/jaa-2021-2057>.
28. **Anita Tomar**, Meena Joshi and Venkatesh Bhatt, Fixed point and a Cantilever Beam problem in a partial b-metric Space, Acta Univ. Sapientiae, Math. 13, 2 (2021) 506–518. DOI: 10.2478/ausm-2021-0032.
29. Swati Antal, **Anita Tomar** and Darshana J. Prajapati, Mohammad Sajid , Fractals as Julia sets of complex sine function via fixed point iterations, Fractal and Fractional, 5(4), 272, 2021. <https://doi.org/10.3390/fractfrac5040272>
30. **Anita Tomar** and Meena Joshi, Results in strongly minihedral cone and scalar weighted cone metric spaces and applications, Ann. Math. Sil. ,35(2), 2021, 302-318. DOI: 10.2478/amsil-2021-0009.
31. Meena Joshi and **Anita Tomar**, A., On unique and nonunique fixed points in metric spaces and application to chemical sciences, J. Funct. Spaces, 2021, Article ID5525472, 11pages. <https://doi.org/10.1155/2021/5525472>.
32. Deepak Kumar, **Anita Tomar**, Sumit Chandok, and Ritu Sharma, Almost  $\alpha$ -F-contraction, fixed points and applications, Int. J. Nonlinear Anal. Appl., 12(2), 2021, 375-386. <http://dx.doi.org/10.22075/ijnaa.2021.21717.2290>
33. H. Ansari, **Anita Tomar**, C-class and pair upper class functions and other kind of contractions in fixed point theory, Scientific Publications of the State University of Novi Pazar Ser. A: Appl. Math. Inform. and Mech. 13(1) (2021), 43-60.
34. Manish Jain, **Anita Tomar**, Meena Joshi, and Kenan Tas, Ordered generalized  $\varphi$ -contraction in ordered fuzzy metric spaces with an application in dynamic programming, J. Math. Control Sci. Appl., 7(1) 2021, 57–68.
35. Meena Joshi, **Anita Tomar**, Hossam A Nabwey, and Reny George, On unique and nonunique fixed points and fixed circles in  $M_v^b$ -metric space and application to cantilever beam problem, J. Funct. Spaces 2021, Art. ID 6681044, 15 pages, 2021. <https://doi.org/10.1155/2021/6681044>
36. Said Beloul, **Anita Tomar**, Ritu Sharma, Weak subsequential continuity in fuzzy metric space and application, Int. J. Nonlinear Anal. Appl. 12(2) (2021) , 1485-1486.
37. Sudheer Petwal, **Anita Tomar** and Meena Joshi, Fixed point on complete m-metric spaces via  $f(\psi, \varphi)$ -contraction mappings and application to periodic differential equation, Azerbaijan J. Math., Spec. Iss., 2021, 29-48.
38. Meena Joshi, **Anita Tomar** and Sanjay Kumar Padaliya, Fixed point to fixed ellipse in metric spaces and discontinuous activation function, Appl. Math. E-Notes, 21(2021), 225-237.
39. **Anita Tomar**, Meena Joshi, Amar Deep, Fixed points and its applications in  $C^*$ -algebra valued partial metric space, TWMS J. App. and Eng. Math., 11(2) 2021, 329-340.
40. **Anita Tomar** and Meena Joshi, Relation-theoretic nonlinear contractions in an F-metric space and applications, Rend. Circ. Mat. Palermo II, 70(2) 2021, 835–852.<https://doi.org/10.1007/s12215-020-00528-z>.
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41. **Anita Tomar** and Meena Joshi, Note on results in  $C^*$ -algebra-valued metric spaces, Electron. J. Math. Anal. Appl. 9(2) 2021, 262-264. <https://doi.org/10.1007/s41478-019-00204-frac.org/Journals/EJMAA/>
42. **Anita Tomar**, Ritu Sharma, Said Beloul, Arslan Hojat Ansari, C-class functions in generalized metric spaces and Applications, J. Anal. 28(2), 573–590 (2020). <https://doi.org/10.1007/s41478-019-00204-1>.

43. Gopi Prasad, **Anita Tomar**, Ramesh Chandra Dimri and Ayush Bartwal, Coincidence theorems via contractive mappings in ordered non-Archimedean fuzzy metric spaces, *J. Korea. Soc. Math. Educ., Ser. B: Pure Appl. Math.*, 27(4) 2020, 187–205. <https://doi.org/10.7468/JKSMEB.2020.27.4.187>
44. **Anita Tomar**, Ritu Sharma and Arslan Hojat Ansari, Strict coincidence and common strict fixed point of a faintly compatible hybrid pair of maps via C-class function and applications, *Palestine J. Math.* 9 (1) 2020, 274-288.
45. Deepak Kumar, **Anita Tomar** and Ritu Sharma, Well-posedness and data dependence of strict fixed point for  $\delta$ -Hardy Roger type contraction and applications, *Appl. Math. E- Notes.* 20(2020), 46-54.
46. **Anita Tomar**, Meena Joshi, S. K. Padaliya, Bharti Joshi, Akhilesh Diwedi , Fixed Point under set-valued relation-theoretic nonlinear contractions and application, *Filomat* 33(14) (2019), 4655–4664. <https://doi.org/10.2298/FIL1914655T>.
47. **Anita Tomar** and Ritu Sharma, Almost alpha-Hardy-Rogers-F-contractions and applications , *Armen. J. Math.* 11(11), 2019, 1–19. <https://doi.org/10.52737/18291163-2019.11.11-1-19>.
48. Said Beloul and **Anita Tomar**, Integral type common fixed point theorems in modified intuitionistic fuzzy metric spaces, *Afr. Mat.* 30(3-4)2019, 581–596. <https://doi.org/10.1007/s13370-019-00668-1>
49. **Anita Tomar**, Shivangi Upadhyay and Ritu Sharma, Existence of common fixed point in symmetric space with application, *Electron. J. Math. Anal. Appl.* 7(1)2019, 116-129.
50. **Anita Tomar**, Ritu Sharma and Shivangi Upadhyay, Some applications of existence of common fixed and common stationary point of a hybrid pair, *Bull. Int. Math. Virtual Inst.* 9(1)(2019), 73-84. DOI: [10.7251/BIMVII901073T](https://doi.org/10.7251/BIMVII901073T).
51. **Anita Tomar**, Said Beloul, Shivangi Upadhyay and Ritu Sharma, Strict coincidence and strict common fixed point via strongly tangential property with an application, *Electron. J. Math. Anal. Appl.* 7(1) 2019, 82-94.
52. **Anita Tomar**, Ritu Sharma, Shivangi Upadhyay, and Said Beloul, Common fixed point theorems in GP-metric space and applications, *Bull. Int. Math. Virtual Inst.* 8(3)(2018), 561-574. DOI: [10.7251/BIMVII803561T](https://doi.org/10.7251/BIMVII803561T)
53. Saurabh Manro and **Anita Tomar**, Coincidence and common fixed point of weakly compatible maps in intuitionistic fuzzy metric space, *Math. Sci. Lett.*7(2)(2018),97-105.
54. **Anita Tomar** and Ritu Sharma, Some coincidence and common fixed point theorems concerning F-contraction and applications, *J. Int. Math. Virtual Inst.*, 8(2018), 181-198.
55. **Anita Tomar**, Said Beloul, Ritu Sharma and Shivangi Upadhyay, Common fixed point theorems via generalized condition (B) in quasi-partial metric space and applications, *Demonstr. Math.* 50 (2017), 278-298.
56. Said Beloul and **Anita Tomar**, A coincidence and common fixed point theorem for subsequentially continuous hybrid pairs of maps satisfying an implicit relation, *Math. Morav.* 21(2) (2017), 15-25.
57. **Anita Tomar**, Shivangi Upadhyay and Ritu Sharma, Strict coincidence and common strict fixed point of hybrid pairs of self-mappings with application, *Math. Sci. Appl. E-notes* 5 (2) (2017), 51-59.
58. **Anita Tomar**, Shivangi Upadhyay, Coincidence and common fixed point theorems for faintly compatible maps, *TWMS J. App. Eng. Math.*, 7(1) 2017, 25-32.
59. **Anita Tomar**, Shivangi Upadhyay and Ritu Sharma, On existence of strict coincidence and common strict fixed point of a faintly compatible hybrid pair of maps, *Electron. J. Math. Analysis Appl.* , 5(2) 2017, 298-305.
60. **Anita Tomar**, Giniswamy, C. Jeyanthi and P.G. Maheshwari, On coincidence and common fixed point of six maps satisfying F-contractions, *TWMS J. App. Eng. Math.*, 6 (2)2016, 224-231.
61. **Anita Tomar** and Erdal Karapinar, On variants of continuity and existence of fixed point via Meir-Keeler contractions in MC-spaces, *J. Adv. Math. Stud.*, 9(2) 2016, 348-359 .
62. **Anita Tomar**, Giniswamy, C. Jeyanthi, P.G. Maheshwari, Coincidence and common fixed point of F-contractions via CLR<sub>ST</sub> property, *Surv. Math. Appl.*, 11 (2016), 21-31.
63. **Anita Tomar** and Saurabh Manro, Coincidence and common fixed point in Normed Boolean Vector space, *J. Adv. Res. Pure Math.* 7(2) 2015, 106-116.
64. Saurabh Manro, **Anita Tomar** and S.M. Kang, Existence of coincidence and common fixed points for weakly compatible mappings in symmetric spaces, *Bangmod Int. J. Math. & Comp. Sci.* 1(1) 2015, 19-31.
65. Saurabh Manro and **Anita Tomar**, Fixed point theorems for quadruple of self maps in Normed Boolean Vector space, *Math. Sci. Lett.* 4(2) (2015), 181-186.
66. Saurabh Manro and **Anita Tomar**, On existence of coincidence and common fixed points for weakly compatible self maps in Normed Boolean Vector space, *J. Inform. Eng. and Appl.*5 (2) 2015, 55-60.
67. Saurabh Manro and **Anita Tomar**, Common fixed point theorems for R-weakly commuting maps satisfying common property (E.A.) in intuitionistic fuzzy metric spaces using implicit relation, *J. Indian Math. Soc., New Ser.* 82 (1-2) 2015, 79-95.

68. Saurabh Manro and **Anita Tomar**, Common fixed point theorems for single valued weakly compatible maps in metric space, Gazi Univ. J. Sci 27(4) (2014), 1053-1062.
69. Saurabh Manro and **Anita Tomar**, Faintly compatible maps and existence of common fixed points in fuzzy metric space, Ann. Fuzzy Math. Inform.8 (2) (2014), 223–230.
70. Saurabh Manro and **Anita Tomar**, Common fixed point theorems using property (E.A.) and its variants involving quadratic terms, Ann. Fuzzy Math. Inform. 7(3) (2014), 473-484.
71. Saurabh Manro, **Anita Tomar**, B.E. Rhoades, Coincidence and common fixed point theorems in fuzzy metric spaces using a Meir-Keeler Type contractive condition, Gazi Univ. J. Sci., 27(1) (2014), 669-678.
72. S. Chauhan, B.D. Pant, S. Kumar and **Anita Tomar**, A common fixed point theorem in Non-Archimedean Menger PM-Space, An. Univ. Oradea, Fasc. Mat., 20 (2) 2013, 75-84.
73. Rajeshree Rana, R.C. Dimri and **Anita Tomar**, Remarks on convergence among Picard, Mann and Ishikawa iteration for complex space. Int. J. Comp. Appl., 21(9) 2011, 20-29.
74. Rajeshree Rana and **Anita Tomar**, Fixed point theorems for two pair of maps satisfying a new contractive condition of integral type, Acta Cienc. Indica Math., 36(04) 2011, 499-510.
75. Rajeshree Rana, R.C. Dimri and **Anita Tomar**, Some fixed point theorems on Meir Keeler type under strict contractions, Int. J. Comp. Appl., 17(3) 2011, 24-30.
76. Rajeshree Rana, R.C. Dimri and **Anita Tomar**, Fixed point theorems in symmetric spaces and invariant approximations, Int. J. Comp. Appl., 9(1) 2010, 14–18.
77. Rajeshree Rana, R.C. Dimri and **Anita Tomar**, Fixed point theorems in Fuzzy Metric spaces using implicit relations, Int. J. Comp. Appl., 8(1) 2010, 16–21.
78. S.L. Singh and **Anita Tomar**, Fixed point theorems in FM-spaces, J. Fuzzy Math. 12(04)(2004), 845-859.
79. S.L. Singh and **Anita Tomar**, Weaker forms of commuting maps and existence of fixed points, J. Korea. Soc. Math. Educ., Ser. B: Pure Appl. Math. 10 (03) (2003), 145-161.

#### **Chapter in Books:**

1. Shivangi Upadhyay, Meenakshi Rana & **Anita Tomar**, Contribution of Aryabhat in Ancient Mathematics, Chapter in proceedings of the National Conference of Mathematics and its Application in Science Uttarakhand Open University, Haldwani, Nainital, December 22-23, 2022, Pacific Books International, ISBN 978-93-92469-16-9.
2. **Anita Tomar**, Meena Joshi, Dhananjay Kumar, Fermat's Contribution in Mathematics, Chapter in a book, Understanding Values and Ethics in Shrinking World, Bloomsbury Publishing India Pvt. Ltd., March 2022, 60-72. ISBN 978-93-54358-94-4.
3. **Anita Tomar** and M.C. Joshi, "Fixed Point Theory & its Applications to Real World Problem", Nova Science Publishers, New York, USA.2021. (*indexed in Scopus*). ISBN 978-1- 53619-336-7.
4. Meena Joshi, **Anita Tomar** and S. K. Padaliya, On geometric properties of non-unique fixed points in b-metric spaces, Chapter in a book, Fixed Point Theory & its Applications to Real World Problem, Nova Science Publishers, New York, USA, 2021, 33-50. (*indexed in Scopus*) ISBN 978-1-53619-336-7.
5. **Anita Tomar** and Meena Joshi, Near fixed point, near fixed interval circle and near fixed interval disc in metric interval space, Chapter in a book, Fixed Point Theory & its Applications to Real World Problem, Nova Science Publishers, New York, USA, 2021, 131-150. (*indexed in Scopus*) ISBN 978-1-53619-336-7.
6. **Anita Tomar**, Meena Joshi, Venkatesh Bhatt and Giniswamy, Applications of generalized  $\alpha$ -C'iric and  $\alpha$ -Browder contractions in Partial Metric Spaces, Chapter in a book, Fixed Point Theory & its Applications to Real World Problem, Nova Science Publishers, New York, USA, 2021, 151-170. (*indexed in Scopus*) ISBN 978-1- 53619-336-7.
7. Shivangi Upadhyay, **Anita Tomar**, Ritu Sharma and Meena Joshi, Existence of common fixed point in quasi-partial metric with applications, Chapter in a book, Fixed Point Theory & its Applications to Real World Problem, Nova Science Publishers, New York, USA, 2021, 185-216. (*indexed in Scopus*) ISBN 978-1-53619- 336-7.
8. Meena Joshi, **Anita Tomar** and S. K. Padaliya, Fixed point to fixed disc and application in partial metric spaces, Chapter in a book, Fixed Point Theory & its Applications to Real World Problem, Nova Science Publishers, New York, USA, 2021, 391-406. (*indexed in Scopus*) ISBN 978-1-53619-336-7.
9. **Anita Tomar**, Shivangi Upadhyay and Ritu Sharma, Common Fixed Point Theorems with an Application, Chapter in a book, **Recent Advances in Fixed Point Theory and Applications**, Nova Science Publishers, New York, USA. 2017, 157-169. ISBN:978- 1-53612- 085-1. (*indexed in Scopus*).

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