

Scientific Publications:

1. **Bachar, I.**, Eltayeb, H.: *Lyapunov-type inequalities for a conformable fractional boundary value problem of order $3 < \alpha \leq 4$* , [Journal of Function Spaces](#) Volume 2019 (2019), Article ID 4605076, 5 pages
2. **Bachar, I.**, Mâagli, H., Mesloub, S: *Positive solutions of semilinear problems in an exterior domain of \mathbb{R}^2* , [Boundary value problems](#), (2019) 2019:65 <https://doi.org/10.1186/s13661-019-1178-0> (ISI)
3. Eltayeb, H., **Bachar, I.**, Klicman, A.: *On Conformable Double Laplace Transform and One Dimensional Fractional Coupled Burgers' Equation*, [Symmetry](#) (2019), 11, 417; doi:10.3390/sym11010417
4. Eltayeb, H., Abdalla, Y.T., **Bachar, I.**, Khabir, M.K.: *Fractional Telegraph Equation and Its Solution by Natural Transform Decomposition Method*, [Symmetry](#) (2019), 11, 334; doi:10.3390/sym11030334
5. **Bachar, I.**, Mâagli, H., Mesloub, S.: *Existence and Global Asymptotic Behavior of Singular Positive Solutions for Radial Laplacian*, [Journal of Function Spaces](#) Volume 2019 (2019), Article ID 3572132, 9 pages
6. **Bachar, I.**, Mâagli, H.: *Singular solutions of a nonlinear equation in a punctured domain of \mathbb{R}^2* , [Discrete and Continuous Dynamical Systems Journal](#), Vol. 12 (2) (2019), pp. 171-188 (ISI)
7. Eltayeb, H., **Bachar, I.**: *A note on double laplace decomposition method for solving singular one dimensional pseudo thermo-elasticity coupled system*, [Journal of Nonlinear Sciences and Applications](#), Vol. 11 (6) (2018), pp. 864-876 (ISI)
8. **Bachar, I.**, Mâagli, H., V.D. Radulescu.: *Singular solutions of a nonlinear elliptic equation in a punctured domain*, [Electronic Journal of Qualitative Theory of Differential Equations](#) 2017, No. 94, pp. 1–19 (ISI)
9. Mesloub, S., **Bachar, I.**: *Nonlinear singular hyperbolic initial boundary value problems*, [Electronic Journal of Differential Equations](#), Vol. 2017 (2017), No. 277, pp. 1-11. (ISI)
10. **Bachar, I.**, Mâagli, H., V.D. Radulescu.: *Positive solutions for superlinear Riemann-Liouville fractional boundary value problems*, [Electronic Journal of Differential Equations](#), Vol. 2017 (2017), No. 240, pp. 1-16. (ISI)
11. Eltayeb, H., **Bachar, I.**: *On a nonlinear singular one-dimensional parabolic equation and double Laplace decomposition method*, [Advances in Mechanical Engineering](#), Vol. 9 (1) (2017), pp. 1-7 (ISI)
12. Mesloub, S., **Bachar, I.**: *On a singular time-fractional order wave equation with Bessel operator and Caputo derivative*, [Journal of Nonlinear Sciences and Applications](#), Vol. 10 (1) (2017), pp. 60-70 (ISI)
13. **Bachar, I.**, Mâagli, H.: *Positive solutions for some Riemann-Liouville fractional boundary value problems*, [Journal of Nonlinear Sciences and Applications](#), Vol. 9 (7) (2016), pp. 5093-5106 (ISI)
14. **Bachar, I.** Mâagli, H: *Existence and Global Asymptotic Behavior of Positive Solutions for Superlinear Fractional Dirichlet Problems on the Half-line*, [Fractional Calculus and Applied Analysis](#), Vol. 19 (4) (2016), pp. 1031-1049. (ISI)
15. **Bachar, I.**, Mâagli, H.: *Superlinear singular fractional boundary value problems*, [Electronic Journal of Differential Equations](#), Vol. 2016 (2016), No. 108, pp. 1-15. (ISI)
16. **Bachar, I.**, Mâagli, H.: *Existence and global asymptotic behavior of positive solutions for combined second-order differential equations on the half-line*, [Advances in Nonlinear Analysis](#). Vol. 5 (3) (2016), pp. 205–222 (ISI)

17. **Bachar, I.**, Mâagli, H., V.D. Radulescu: *Fractional Navier boundary value problems*, [Boundary value problems](#), (2016) 2016:79 DOI 10.1186/s13661-016-0586-7 (ISI)
18. **Bachar, I.**, Mâagli, H.: *Global Asymptotic Behavior of Positive Solutions with Blow-up at the Boundary for Fractional Nonlinear Problems*, [Proceedings of the Romanian Academy, Series A](#), Vol. 17 (1) (2016), pp. 16-23. (ISI)
19. **Bachar, I.**, Mâagli, H.: *Sharp estimates on the solution of combine fractional boundary value problems on the half-line*, [Journal of Nonlinear Sciences and Applications](#), Vol. 9 (5) (2016), pp. 2331-2346. (ISI)
20. **Bachar, I.** Mâagli, H, Toumi, F, Zine el Abidine, Z: *Existence and Global Asymptotic Behavior of Positive Solutions for Sublinear and Superlinear Fractional Boundary Value Problems*, [Chinese Annals of Mathematics, Series B](#), Vol. 37 (1) (2016), pp. 1-28. (ISI)
21. Eltayeb, H., Klicman, A., **Bachar, I.**: *Modified Sumudo Decomposition Method for Lane-Emden Type Differential Equations*, [Advances in Mechanical Engineering](#), Vol. 7 (12) (2015), pp. 1-6. (ISI)
22. **Bachar, I.**: *Combined effects in nonlinear singular second-order differential equations on the half-line*, [Electronic Journal of Differential Equations](#), Vol. 2015 (2015), No. 235, pp. 1-12. (ISI)
23. **Bachar, I.**, Mâagli, H.: *Exact boundary behavior of the unique positive solution for singular second-order differential equations*, [Electronic Journal of Qualitative Theory of Differential Equations](#) 2015, No. 37, 1–15; doi: 10.14232/ejqtde.2015.1.37 (ISI)
24. **Bachar, I.**, Mâagli, H.: *Existence and Uniqueness for Superlinear Second-Order Differential Equations on the Half-Line*, [Electronic Journal of Differential Equations](#), Vol. 2015 (2015), No. 08, pp. 1-14. (ISI)
25. **Bachar, I.**: *On some fractional Dirichlet problems in bounded domains*, [Mathematical Reports](#) .Vol. 17 No. 1, (2015), (ISI)
26. **Bachar, I.**, Mâagli, H.: *Positive solutions for superlinear fractional boundary value problems* [Advances in Differences Equations](#) (2014), 2014:240 (ISI)
27. **Bachar, I.**, Mâagli, H.: *Existence of Positive Solutions for Some Superlinear Fourth-Order Boundary Value Problems* [Journal of Function Spaces](#) Volume 2014, Article ID 384958, 9 pages (2014), (<http://dx.doi.org/10.1155/2014/384958>) (ISI)
28. **Bachar, I.**, Mâagli, H.: *Existence and global asymptotic behavior of positive solutions for nonlinear fractional Dirichlet problems on the half-line* [Abstr. Appl. Anal.](#) Volume 2014, Article ID 537971, 9 pages (2014) (<http://dx.doi.org/10.1155/2014/537971>) (ISI)
29. **Bachar, I.**: *Time-independent Schrödinger Polyharmonic Equation and Applications* [Bull. Math. Soc. Sci. Math. Roumanie](#). Tome 57 (105) No. 2, (2014), 163-179.
30. **Bachar, I.**, Mâagli, H.: *Existence and global asymptotic behavior of positive solutions for nonlinear problems on the half-line* [J. Math. Anal. Appl.](#) Volume 416, (2014), 181-194. (ISI)
31. **Bachar, I.**, Mâagli, H.: *Positive bounded solutions for semilinear elliptic equations in smooth domains* [Bulletin of the Belgian Mathematical Society -- Simon Stevin](#), Vol. 20, no. 4 (2013), 707-714. (ISI)
32. **Bachar, I.**, Mâagli, H.: *Combined effects in nonlinear singular fractional Dirichlet problem in bounded domains* [Differential and Integral Equations](#), Volume 26, Nb 11-12 (2013), 1361-1378. (ISI)
33. **Bachar, I.**, Mâagli, H.: *Existence and uniqueness of positive solution for a fractional Dirichlet problem with combined nonlinear effects in bounded domains*, [Abstr. Appl. Anal.](#) Volume 2013, (2013), Article ID 295480, 9 pages (<http://dx.doi.org/10.1155/2013/295480>) (ISI)
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doi:10.1155/2009/167403 (ISI)
37. **Bachar, I.,** Ben Othman, S., Mâagli, H.: *Radial solutions for the p -Laplacian equation*, [Nonlinear Anal.](#) **70** (2009), 2198-2205. (ISI)
38. **Bachar, I.,** Ben Othman, S., Mâagli, H.: *Existence results of positive solutions for the radial p -Laplacian*, [Nonlinear Stud.](#) **15** no. 2, (2008), 177-189.
39. **Bachar, I.,** Mâagli, H., Zeddini, N.: *Estimates on the Green Function and Existence of Positive Solutions for Some Nonlinear Polyharmonic Problems Outside the Unit Ball*, [Analysis and Applications](#) vol. **6**, no. 2 (2008), 121-150. (ISI)
40. **Bachar, I.:** *Estimates for the Green function and Existence of positive solutions for higher order elliptic equations*, [Abstr. Appl. Anal.](#), vol. **2006**, Article ID 89491, 22 pages, 2006.
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41. **Bachar, I.:** *Existence of positive solutions for higher order singular sublinear elliptic equations*, [Electron. J. Differential. Equations.](#) **2006** (102), (2006), 1-9 (ISI)
42. **Bachar, I.,** Zribi, M.: *Existence results for some polyharmonic problems in the half space*, [J. Math. Anal. Appl.](#) **322**, (2006), 610-620 (ISI)
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45. **Bachar, I.:** *Positive solutions blowing up at infinity for singular nonlinear problem*, [Nonlinear Stud.](#) **12** (2005), no. 4, 343-359
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54. **Bachar, I.:** *Sur les lois de sortie des semi-groupes de convolution*, [Annales Mathematicae Silesianae](#) **15** (2001), 7-15