

### List publications

#### أولاً: أبحاث من الدكتوراه

- 1 ZakiF.A.El-Raheem, on the trace formula for the Sturm-Liouville operator with sign-valued weight, Baku State University 1988, AzNEENTE28.11.88.,No.1142
- 2 ZakiF.A.El-Raheem, on the trace formula for the Sturm-Liouville operator with sign-valued weight, Baku State University 1989, Conference of Young Scientists of Az
- 3 ZakiF.A.El-Raheem, the Asymptotic formula for the eigenvalues of and normalizing numbers of for the Sturm-Liouville operator with sign-valued weight, Baku State University 1990, AzNEENTE 05.10.90.,No.1569
- 4 Gasymov, M. G.; Raheem, Zaki, On the theory of inverse Sturm-Liouville problems with discontinuous sign- alternating weight. (Russian) Dokl. Akad. Nauk Azerbaïdzhana 48/50 (1993/94), no. 1-12, 13--16 (1996).
- 5 ZakiF.A.El-Raheem, on the trace formula for the Sturm-Liouville operator with sign-valued weight, Baku State University 1990, AzNEENTE 05.10.90.,No.1570

#### ثانياً : أبحاث الاستاذ المساعد

- 6 ZakiF.A.El-Raheem, On the scattering problem for the Sturm-Liouville equation on the halfline with sign valued weight coefficient .Applicable Analysis vol. 57, pp. 333-339, (1995)
- 7 ZakiF.A.El-Raheem, On some trace formula for the Sturm-liouville operator , Applied mathematics and computation vol.7,pp. 61- 68, 1-2 (1996)
- 8 ZakiF.A.El-Raheem, The inverse scattering problem for some singular Sturm-Liouville operator, Pure Mathematics and application vol.8, No.2-4, pp. 233-246 (1997)
- 9 ZakiF.A.El-Raheem and Nasser A.H, On the numerical study for nonlinear initial –boundary value problem or initial- valueProblem, Applied mathematics and computation 119 (2001) 1-19
- 10 ZakiF.A.El-Raheem, Equiconvergence of eigenfunction expansion for some Sturm-Liouville operator .Applicable Analysis vol. 81, (3) pp. 513-527, (2002)

- 11 Zaki F.A.El-Raheem and Nasser A.H, On the spectral property of a Dirichlet problem with explosive factor, Applied mathematics and computation, 138 (2003) 355-374
- 12 Zaki F.A.El-Raheem, Modification of the application of a contraction mapping method on a class of fractional differential equation Applied mathematics and computation, 137 (2003) 371-374

ثالثاً: أبحاث الاستاذية

- 13 Zaki F.A.El-Raheem and Nasser A.H, The Eigenfunction Expansion for a Dirichlet problem with explosive factor, J. Abstract and Applied Analysis Volume 2011 (2011), Article ID 828176, 16 pages
- 14 Zaki F.A.El-Raheem and Nasser A.H The Equiconvergence of the Eigenfunction Expansion for a Singular Version of One-Dimensional Schrodinger Operator with Explosive, J. Boundary value problem (2011), DOI:10.1186/1687-2770-2011-45
- 15 Zaki F.A.El-Raheem and Nasser A.H, The Regularized Trace Formula of the Spectrum of a Dirichlet Boundary Value Problem with Turning Point, Abstract and Applied Analysis, Volume (2012), Article ID 492576, 12 pages, doi:10.1155/2012/492576
- 16 Zaki F.A.El-Raheem and S.M.Salman, On the discretization Process of fractional order Logistic differential equation, J. Egyptian Mathematical Society (2013), dx.doi.org/10.1016/j.joems.2013.09.001
- 17 Zaki F.A.El-Raheem and Nasser A.H, On the spectral investigation of the scattering problem for some version of one-dimensional Schrödinger equation with turning point, J. Boundary Value Problem DOI:10.1186/1687-2770-2014-97 (2014)
- 18 Zaki F.A El-Raheem, The inverse spectral problem of some singular version of one-dimensional Schrödinger operator with explosive factor in finite interval, J. Egyptian Mathematical Society (2014), dx.doi.org/10.1016/j.joems.2014.05.007
- 19 Ahmed M.A El-Sayed, Zaki F.A.El-Raheem and Sanaa.M.Salman, A new chaotic behavior of a general model of the Henon map. J. Advances in Difference

- Equations 2014, 2014:107 (2014)
- 20 Ahmed MA El-Sayed, Zaki FA El-Raheem and Sanaa M Salman, Discretization of forced Duffing system with fractional-order damping, Advances in Difference Equations 2014, 2014:66
- 21 Zaki F.A El-Raheem, The inverse scattering problem of one dimensional version of Schrodinger equation with turning point, J. Boundary value problem (2014)
- 22 Zaki F.A El-Raheem, Regularized trace formula for some singular Schrodinger type operator, J.proc.imm.az, Proceeding of institute of mathematics and mechanics, National Academy of Sciences of Azerbaijan. (2014)
- 23 El-Sayed, A. M. A., El-Raheem, Z. F., and Salman, S. M., On Some Dynamics of Duffing Dynamical System Generated by a Semi-Discretization Process with Two Different Delays, Math. Sci. Lett. 3, No. 2, 1-8 (2014).
- 24 Zaki F.A El-Raheem, The inverse scattering problem of some of Schrodinger type equation with turning point, J. Boundary value problem (2015)