

## Published Research by the Faculty Members of the Mathematics Department for the Year 2021

impact factor or cite score of journal	Journal classification	ISSN for Journal	Full name of the Journal	Publication Year	Research title	Names of participating researchers	Name of the sole author or the first author
Cite score (2.7) IF (1.1)	Scopus Q2 & Clarivate Q1	09720502  2169-012X	Journal of Interdisciplinary Mathematics	2021	A new hybrid conjugate gradient algorithm as a convex combination of MMWU and RMIL nonlinear problems	Ghada Moayid Al-Naemi	Fanar N. Al-Namat
0.187	Scopus Q4	17426588	Ibn Al-Haitham International Conference for Pure and Applied Sciences (IHICPS)	2021	Global convergence condition for a new spectral conjugate gradient for large-scale optimization	Ghada Moayid Al-Naemi	Ahmed H. Sheekoo
0.187	Scopus Q4	17426588	Journal of Physics: Conference Series and International Conference on 2 Physics and Applied Sciences	2021	Good characteristics of the new spectral conjugate gradient method in unconstrained optimization	Ahmed H. Sheekoo	Ghada Moayid Al-Naemi
0.206	Scopus Q3	25024752	Indonesian Journal of Electrical Engineering and Computer Science	2021	New Scaled Algorithm for Non-Linear Conjugate Gradients in unconstrained Optimization	Ahmed H. Sheekoo	Ghada Moayid Al-Naemi
CiteScore )1.9(	Clarivate Scopus	0972-0529	Journal of Discrete Mathematical Sciences and Cryptography	2021	On weakly regular semi group	Raida Dawood Mahmood Shahla Moayad Khalil	Shaimaa Hatim Ahmed
/	Scopus	/	2021 7th International Engineering Conference "Research & Innovation amid Global Pandemic" (IEC), IEEE Xplore	2021	On $\alpha$ -Open Sets in Topological Spaces	Barah Mahmood Sulaiman Mohammed Thanoon Al-Neima	Beyda Suhail Abdullah
		ISSN: 2502-4752,	Indonesian Journal of Electrical	2021,	A new modification of the	Huda	Hamsa Th.

		DOI: 10.11591/ijeecs.v2 1.i3.pp1683-1691	Engineering and Computer Science		quasi-newton method for unconstrained optimization	I.Ahmed Eman T.Hamed Abbas Y.AL-Bayati	Saeed
			International Conference on Computer Science and Software Engineering (CSASE), Duhok, Kurdistan Region – Iraq	2021	A Numerical Study for Solving Unconstrained Optimization Problems Using Method of Three Term Conjugate Gradient	Hamsa Th. Saeed	Nasmah Jameel Hameed
	A Modified Sufficient Descent Spectral Conjugate Gradient Method for Minimization	Elaf Sulaiman Khalee Huda I.Ahmed Eman T.Hamed I	7th International Conference on Contemporary Information Technology and Mathematics (ICCITM-2021) , Mosul, Iraq	2021	A Modified Sufficient Descent Spectral Conjugate Gradient Method for Minimization	Elaf Sulaiman Khalee Huda I.Ahmed Eman T.Hamed	Hamsa Th. Saeed
1.5	Q3	2904-0067	Iraqi Journal of Science	2021	Mn-polynomials of some special graphs	Mustafa, Raghad A. Ali, Ahmed M Khidhir, AbdulSattar M	Mustafa, .Raghad A
1.2	Q3	6588-1742	Journal of Physics: Conference Series	2021	Mn- Polynomials of general thorn path graph	Mustafa, Raghad A Ali, Ahmed M Khidhir, Abdul Sattar M.	Mustafa, Raghad A
CiteScore: 2.9 IF: 2.592	Scopus & WoS	2227-7390	Mathematics	2021	Stable Optical Solitons for the Higher-Order Non-Kerr NLSE via the Modified Simple Equation Method	Mohammed O Al-Amr, Emad A Az- Zo'bi,	Noha M Rasheed

						Mohammad A Tashtoush, Lanre Akinyemi	
	Scopus	2008-6822	The International Journal of Nonlinear Analysis and Applications (IJNAA)	2021	Solving Benny-Lin Equation by Adomain Decomposition Method with Genetic Algorithm	Ekhlass S. Al-Rawi	Almutasim Abdulmuhsin Hamed
cite score 1.9	scopus	print (online) journal homepage:https://www.tandfonline.com/loi/tdmc20	journal of discrete mathematics sciences and cryptography	2021	On weakly regular semi group	Raida Dawood Mahmood-Shahla Moayad Khalil	Shaimaa Hatim Ahmed
2.9	Q3	2502-4752	Indonesian Journal of Electrical Engineering and Computer Science	2021	A new conjugate gradient algorithms using conjugacy condition for solving unconstrained optimization	Zinah F. Salih Basim A. Hassan	Aseel M. Qasim
1.2	Q3	1742-6588	Journal of Physics: Conference Series	2021	Solve differential equations via a hybrid method between homotopy analytical method and sine cosine optimization algorithm	Ahmed Entesar Omar Saber Qasim	Mostafa Raed Najeeb
3.1	Q1	2155-3289	Numerical Algebra, Control and Optimization	2021	SOLVING NONLINEAR DIFFERENTIAL EQUATIONS USING HYBRID METHOD BETWEEN LYAPUNOV'S ARTIFICIAL SMALL PARAMETER AND CONTINUOUS PARTICLE SWARM OPTIMIZATION	Ahmed Entesar	Omar Saber Qasim

1.2	Q3	1742-6588	Journal of Physics: Conference Series	2021	Improved variational iteration method with the trapezoidal rule to solve fractional ordinary differential equations	Ahmed Entesar Ekhlass S AL-Rawi	Almutasim Abdulmuhsin Hamed
1.3	Q3	1793-5571	Asian-European Journal of Mathematics	2021	Solve fractional differential equations via a hybrid method between variational iteration method and gray wolf optimization algorithm	Omar Saber Qasim	Ahmed Entesar