

SRM Institute of Science and Technology
Department of Mathematics (Year: 2021)

Faculty Name	Journal Name	Title of the paper	Volume/ Issue/ Page number	Year	IF	SNIP	DOI	Quartile Status
Sudha,G., Ramesh, G., Datta, D., Ganesan,K	IFIP Advances in Information and Communication Technology	Fully Interval Integer Transshipment Problem- A Solution Approach	623, 196-206	2021		0.39		Q3
Vidhya, V., Uma Maheswari, P., Ganesan, K.	Soft Computing	An alternate method for finding more for less solution to fuzzy transportation problem with mixed constraints		2021	3.643	1.593	https://doi.org/10.1007/s00500-021-05664-x	Q2
Abirami, M.S., Vennila, B., Chilukalapelli, E.L., Kuriyedath, R.	Journal of Ambient Intelligence and Humanized Computing	A classification model to predict onset of smoking and drinking habits based on socio-economic and sociocultural factors	12(3), 4171-4179	2021		1.615	10.1007/s12652-020-01796-4	Q1
Karthik, P.C., Sasikumar, J., Baskar, M., Poovammal, E., Kalyanasundaram, P.	Journal of Supercomputing	Field equations for incompressible non-viscous fluids using artificial intelligence		2021	2.474			Q2
Orhan, H., Magesh, N., Abirami, C.	AIMS Mathematics	Erratum: Correction: Fekete-Szegő problem for Bi-Bazilevič functions related to Shell-like curves	6(3), 2722-2723	2021	1.427	0.61	10.3934/math.2021165	Q3
Magesh, N., Abirami, C., Altinkaya, Ş.	Turkish World Mathematical Society Journal of Applied and Engineering Mathematics	INITIAL BOUNDS FOR CERTAIN CLASSES OF BI-UNIVALENT FUNCTIONS DEFINED BY THE (p,q)-LUCAS POLYNOMIALS	11, 282-288	2021		0.453	https://hdl.handle.net/11729/3071	Q4
Magesh, N., Abirami, C., Balaji, V.K.	Afrika Matematika	Certain classes of bi-univalent functions related to Shell-like curves connected with Fibonacci numbers	32(2), 185-198	2021		0.252	10.1007/s13370-020-00819-9	Q3
Marimuthu, K., Mayilvaganan, S., Uma, J.	Advances in Mathematics: Scientific Journal	Certain subclass of multivalent functions with finitely many fixed coefficients by using salagean differential operator	10(2), 911-921	2021			https://doi.org/10.37418/amsj.10.2.20	Not yet assigned
Vijayalakshmi, T., Senthamarai, R.	Journal of Supercomputing	Application of homotopy perturbation and variational iteration methods for nonlinear imprecise prey-predator model with stability analysis	30-Jun-21	2021	2.474	2.474	https://doi.org/10.1007/s11227-021-03956-5	Q2
Kannan, M., Godhandaraman, P., Poongothai, V.	Advances in Mathematics: Scientific Journal	Algorithm approach for unrelated parallel machine with breakdown, repair and backup machine to diminish Makespan	10(1), 657-663	2021			https://doi.org/10.37418/amsj.10.1.66	Not yet assigned
Senthilkumar, L.S., Mahendran, R., Subburayan, V.	Journal of Mathematics and Computer Science	A second order convergent initial value method for singularly perturbed system of differential-difference equations of convection diffusion type	25(1), 73-83	2021		0.758	http://dx.doi.org/10.22436/jmcs.025.01.06	Q3
Senthil Kumar, L.S., Subburayan, V.	Advances in Mathematics: Scientific Journal	An improved initial value method for singularly perturbed convection diffusion delay differential equations	10(1), 991-1001	2021			10.37418/AMSJ.10.2.28	Not yet assigned
Subburayan, V., Ramanujam, N.	Differential Equations and Dynamical Systems	Uniformly Convergent Finite Difference Schemes for Singularly Perturbed Convection Diffusion Type Delay Differential Equations	29, 139-155	2021		0.279	10.1007/s12591-018-00451-x	Q3
Anji, M., Kavitha, N., Balamuralitharan, S.	Journal of Mathematical and Computational Science	Solutions of transmission dynamics model for HBV using HPM with residual errors	11(2), 13-23	2021			https://doi.org/10.28919/jmcs/5050	Q4
Shobana, L., Baskar Babujee, J., Cangul, I.N.	Proceedings of the Jangjeon Mathematical Society	A new cryptographic method by means of molecular graphs	23(4), 503-507	2021		0.479	http://dx.doi.org/10.17777/pjms2020.23.4.503	Q4
Janaki, K., Arulprakasam, R., Dare, V.R.	Journal of Mathematical and Computational Science	Generalized parikh matrices of picture array	11(2), pp. 1955-1969	2021			https://doi.org/10.28919/jmcs/5482	Q4
Krishna Kumari, R., Arulprakasam, R., Dare, V.R.	Journal of Discrete Mathematical Sciences and Cryptography	Combinatorial properties of Fibonacci partial words and arrays	05.01.2021	2021		0.501	https://doi.org/10.1080/09720529.2020.1794527	Q3
Kumar, S., Prakash, D., Prabakaran, K., Majhi, D., Mandal, B.K.	Journal of Mathematical and Computational Science	Effect of porosity on the reflection and refraction coefficients in a liquid saturated porous half-space beneath liquid layer	11(3), pp. 3300-3316	2021			https://doi.org/10.28919/jmcs/5690	Q4
Anusha, S., Athithan, S.	International Journal of Modern Physics C	Mathematical modeling of diabetes and its restrain		2021		0.48	https://doi.org/10.1142/S012918312150114X	Q3
Rathinasamy, A., Chinnadurai, M., Athithan, S.	Mathematics and Computers in Simulation	Analysis of exact solution of stochastic sex-structured HIV/AIDS epidemic model with effect of screening of infectives	2021, 179, pp. 213-237	2021	2.463	1.433	https://doi.org/10.1016/j.matcom.2020.08.017	Q1
Senthil Kumar, B.V., Dutta, H., Sabarinathan, S.	European Journal of Pure and Applied Mathematics	Modular stabilities of a reciprocal second power functional equation	13(5), pp. 1162-1175	2021			https://doi.org/10.29020/nyba.ejpm.v13i5.3709	Q3
Senthil Kumar, B.V., Al-Shaqsi, K., Sabarinathan, S.	Advances in Mathematics: Scientific Journal,	Approximate multiplicative inverse quadratic mappings	10(1), pp. 199-209	2021			DOI:10.37418/amsj.10.1.20	Not yet assigned
Kumar, B.V.S., Al-Shaqsi, K., Sabarinathan, S.	Journal of Mathematics and Computer Science,	Dislocated quasi-metric stability of a multiplicative inverse functional equation	24(2), pp. 140-146	2021			DOI:10.22436/jmcs.024.02.05	Q3
IsmatBeg, Gunaseelan Mani, and Arul Joseph Gnanaprakasam	Journal of Function Spaces	Fixed Point of Orthogonal F-Suzuki Contraction Mapping on O-Complete b-Metric Spaces with Applications	Article ID 6692112/ Page 1-12	2021		0.874	https://doi.org/10.1155/2021/6692112	Q2
Mahmoud Boulaaras, SenthilkumaranMurugiah, Arul Joseph Gnanaprakasam and	Journal of Function Spaces	Analysis of a Predator-Prey Model with Distributed Delay	Article ID 9954409/ Page 1-6	2021		0.874	https://doi.org/10.1155/2021/9954409	Q2
Mani, G., Gnanaprakasam, A.J., Kalaiichelvan, R., Gaba, Y.U.	Mathematical Problems in Engineering,	Results on Complex Partial b-Metric Space with an Application	5565470/Page1-10	2021		0.633	10.1155/2021/5565470	Q3
Devi, N.S.N.V.K.V., Jana, D.	Modeling Earth Systems and Environment	Impact of stochastic perturbation on the persistence and extinction risk of a multi-delayed prey-predator system in non-autonomous environment	7(2), pp. 1241-1267	2021			https://doi.org/10.1007/s40808-020-01027-x	Q2
Batabyal, S., Jana, D., Parshad, R.D., Basheer, A.A., Upadhyay, R.K.	European Physical Journal Plus,	Pattern formation in an explosive food chain model: the case of "apparent" mutualism	136(4), 448	2021	3.911		https://doi.org/10.1140/epjp/s13360-021-01384-1	Q2
Batabyal, A., Jana, D.	Communications in Nonlinear Science and Numerical Simulation	Significance of additional food to mutually interfering predator under herd behavior of prey on the stability of a spatio-temporal system	93, 105480	2021	4.115		DOI: 10.1016/j.cnsns.2020.10.5480	Q1
Devi, N.S.N.V.K.V., Jana, D.	International Journal of Dynamics and Control	The role of fear in a time-variant prey-predator model with multiple delays and alternative food source to predator		2021		0.926	10.1007/s40435-021-00809-0	Q2
Kundu, S., Jana, D., Maitra, S.	Differential Equations and Dynamical Systems	Study of a Multi-delayed SEIR Epidemic Model with Immunity Period and Treatment Function in Deterministic and Stochastic Environment	PP 1-31	2021		0.987	10.1007/s12591-021-00568-6	Q3
Batabyal, S., Jana, D., Upadhyay, R.K.	Chaos, Solitons and Fractals	Diffusion driven finite time blow-up and pattern formation in a mutualistic preys-sexually reproductive predator system: A comparative study	2021, 147, 110929	2021	5.944		10.1016/j.chaos.2021.11.0929	Q1
Gayathri, R., Behera, H.	Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment	Mitigation of wave force on a circular flexible plate by a surface-piercing flexible porous barrier	2/235/PP 586-599	2021	1.389	1.531	https://doi.org/10.1177/1475090220963991	Q2

Gayathri, R., Kar, P., Behera, H., Sahoo, T.	Journal of Offshore Mechanics and Arctic Engineering	Oblique Wave Scattering by a Floating Bridge in the Presence of a Vertical Permeable Flexible Barrier	2/143	2021	1.186	https://doi.org/10.1115/1.4047928	Q2	
Selvan, S.A., Gayathri, R., Behera, H., Meylan, M.H.	Physics of Fluids	Surface wave scattering by multiple flexible fishing cage system	1/29,	2021	3.514	https://doi.org/10.1063/5.0040662	Q1	
Sani, M., Ghosh, S., Behera, H.	ZAMM Zeitschrift für Angewandte Mathematik und Mechanik,	Effect of a floating elastic membrane for stabilizing the film flow down a porous inclined plane	101/2	2021	1.103	https://doi.org/10.1002/zamm.201900246	Q2	
Khan, M.B.M., Behera, H., Sahoo, T., Neelamani, S.	Meccanica	Boundary element method for wave trapping by a multi-layered trapezoidal breakwater near a sloping rigid wall		2021	2.153	1012-020-01286-z(0123456789).-volV(0123456789).-	Q2	
Behera, H.	Differential Equations and Dynamical Systems	Oblique Wave Scattering by a System of Semi-Infinite Floating and Submerged Elastic Plates	29(1), pp. 157–173	2021		https://doi.org/10.1007/s12591-018-0444-4	Q3	
Khan, M.B.M., Behera, H.	Renewable Energy ,	Impact of sloping porous seabed on the efficiency of an OWC against oblique waves	173, pp. 1027–1039,20+G39:G5621-	2021	8.001	10.1016/j.renene.2021.04.046	Q1	
Selvan, S.A., Ghosh, S., Behera, H., Meylan, M.H.	Wave Motion ,	Hydroelastic response of a floating plate on the falling film: A stability analysis	104, 102749	2021	2.02	10.1016/j.wavemoti.2021.102749	Q2	
Khan, M.B.M., Sani, M., Ghosh, S., Behera, H.	Physics of Fluids,	Poiseuille-Rayleigh-Bénard instability of a channel flow with uniform cross-flow and thermal slip	33(5), 053612	2021	3.521	10.1063/5.0050006	Q1	
Kumar, P., Bhurjee, A.K.	Soft Computing	An efficient solution of nonlinear enhanced interval optimization problems and its application to portfolio optimization	7/25/pp. 5423–5436	2021	3.643	https://doi.org/10.1007/s00500-020-05541-z	Q2	
Katiyar, S.K., Chand, A.K.B.	Advances in Intelligent Systems and Computing	A -Fractal Rational Functions and Their Positivity Aspects	1170/PP 205-215	2021			Not yet assigned	
Mandal, H., Bira, B., Zeidan, D	Soft Computing	Optimal algebra and power series solution of fractional Black-Scholes pricing model	8/25/ PP 6075–6082	2021	3.643	https://doi.org/10.1007/s00500-021-05600-z	Q2	
Kinkar Chandra Das, Suresh Elumalai, Selvaraj Balachandran	Discrete Applied Mathematics	Open problems on the exponential vertex-degree-based topological indices of graphs	293/PP 38-49	2021		https://doi.org/10.1016/j.dam.2021.01.018	Q2	
Bira B, Mandal H, Zeidan D	Applications of Mathematics	Exact Solution of the Time Fractional Variant Boussinesq-Burgers Equations	66(3), pp. 437–449	2021	0.881	0.691	10.21136/AM.2021.0269-19	Q4
B. Vennila	Wireless Personal Communications	Detection of Choroidal Neovascularization (CNV) in Retina OCT Images Using VGG16 and DenseNet CNN		2021	1.671	https://doi.org/10.1007/s11277-021-09086-8	Q3	
Gupta, V., Sahoo, S.K., Dubey, R.K.	Computational and Applied Mathematics	Robust higher order finite difference scheme for singularly perturbed turning point problem with two outflow boundary layers	40(5), 179	2021	2.621	https://doi.org/10.1007/s40314-021-01564-w	Q2	
Dubey, R.K., Gupta, A., Jayswal, V.K., Pandey, P.K.	Communications in Computer and Information Science	Learning Numerical Viscosity Using Artificial Neural Regression Network	1345, pp. 42–55	2021	0.476		Q4	
Revathi, A.N., Mohanaseelvi, S.	International Journal of Intelligent Engineering and Systems	Uncertain Multi Level Four Dimensional Multi Item Fractional Transportation Problem	14(6), pp. 629–641	2021	1.173	http://dx.doi.org/10.4108/eai.7-6-2021.2308686	Q3	
Biswal, A., Kumar, R., Nayak, C., Dhanalakshmi, S., Behera, H.	Journal of the Optical Society of America B: Optical Physics	Tunable properties of one-dimensional GaAs/AlAs-based photonic crystal containing two defect layers	38(7), pp. 2141–2147	2021	2.106	https://doi.org/10.1364/JOSAB.426333	Q2	
Madhumitha J,Vijayalakshmi, G.	Indonesian Journal of Electrical Engineering and Computer Science	Bayesian estimate of system availability for consecutive k-out-of-n:F system	24(3) 1692 - 1699	2021	-	0.635	-	
Melita Vinoliah, E., Ganesan, K	International Journal of Innovative Computing and Applications.	A novel approach for the solution of generalised fuzzy assignment problem	12(4), pp. 189–194	2021	0.218	DOI: 10.1504/IJICA.2021.116655	Q4	
Senthil Kumar, B.V., Dutta, H., Sabarinathan, S.	Mathematical Methods in the Applied Sciences,	Stabilities and instabilities of an advanced quartic functional equation in various normed space	44(14), pp. 11469–11481	2021	2.321	1.177	DOI: 10.1002/mma.7506	Q1
Sabarinathan, S., Dutta, H., Kumar, B.V.S.	Proceedings of the Indian National Science Academy	Approximation of a third root functional equation	87(1), pp. 48–56	2021		0.368	DOI: 10.1007/s43538-021-00004-x	Q4
Beg, I., Mani, G., Gnanaprakasam, A.J.	Journal of Fixed Point Theory and Applications	Best proximity point of generalized F-proximal non-self contractions	23(4), 49	2021	2		10.1007/s11784-021-00886-w	Q1
Gu, Z., Mani, G., Gnanaprakasam, A.J., Li, Y.	Mathematics	Solving a system of nonlinear integral equations via common fixed point theorems on bcomplex partial metric space	9(14), 1584	2021	2.592		10.3390/math9141584	Q1
Mani, G., Gnanaprakasam, A.J., Li, Y., Gu, Z.	Mathematics	The existence and uniqueness solution of nonlinear integral equations via common fixed point theorems	9(11), 1179	2021	2.592		10.3390/math9111179	Q1
Mani, G., Gnanaprakasam, A.J., Kausar, N., Munir, M., Salahuddin,	International Journal of Fuzzy Logic and Intelligent Systems	Orthogonal F-Contraction Mapping on O-Complete Metric Space with Applications	21(3), pp. 243–250	2021		0.872	10.5391/IJFIS.2021.21.3.243	Q3
Gnanaprakasam, A.J., Mani, G., Parvaneh, V., Aydi, H.	Advances in Mathematical Physics	Solving a Nonlinear Fredholm Integral Equation via an Orthogonal Metric	-	2021	1.364	0.594	10.1155/2021/1202527	Q1
Gnanaprakasam, A.J., Boulaaras, S.M., Mani, G., Abdalla, M., Alharbi, A.	Journal of Function Spaces	Solving Integral Equations by Common Fixed Point Theorems on Complex Partial b-Metric Spaces	-	2021	1.281	0.874	10.1155/2021/3856468	Q2
Mani, G., Gnanaprakasam, A.J., Park, C., Yun, S.	AIMS Mathematics	Orthogonal F-contractions on O-complete b-metric space	6(8), pp. 8315–8330	2021	2.739	0.588	10.3934/math.2021481	Q3
Prakash, D., Ragupathi, E., Muthumiselvan, M., Abdalla, B., Mdallal, Q.M.A.	Case Studies in Thermal Engineering	Impact of boundary conditions of third kind on nanofluid flow and Radiative heat transfer through asymmetrical channel	Vol 28	2021	6.268	1.817	10.1016/j.csite.2021.101488	Q1
Sadham Hussain, I., Prakash, D., Kumar, S., Muthumiselvan, M.	Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering	Bioconvection of nanofluid flow in a thin moving needle in the presence of activation energy with surface temperature boundary conditions		2021	1.822		10.1177/09544089211053969	Q2
Katiyar, S.K., B. Chand, A.K., Jha, S.	Numerical Analysis and Applications	Parameter Identification for Constrained Data Using a New Class of Rational Fractal Functions	14(3), pp. 225–237	2021		0.613	10.1134/S1995423921030034	Q3
Srivastava, H.M., Mandal, H., Bira, B.	Russian Journal of Mathematical Physics	Lie Symmetry and Exact Solution of the Time-Fractional Hirota-Satsuma Korteweg-de Vries System	28(3), pp. 284–292	2021	1.52		10.1134/S106192082103002X	Q1
Balachandran, S., Deng, H., Elumalai, S., Mansour, T.	International Journal of Quantum Chemistry	Extremal graphs on geometric-arithmetic index of tetracyclic chemical graphs	121(5), e26516	2021	2.437		10.1002/qua.26516	Q2
Das, K.C., Elumalai, S., Ghosh, A., Mansour, T.	Discrete Applied Mathematics	On conjecture of Merrifield–Simmons index	288, pp. 211–217	2021	1.254		10.1016/j.dam.2020.09.004	Q2

Deng, H., Balachandran, S., Elumalai, S.	Ars Combinatoria.	Sharp bounds for the harmonic index and variation of randic index of graphs with given minimum and maximum degree	155, pp. 247–259	2021	0.961	-		Q4
Balachandran, S., Elumalai, S., Mansour, T.	Asian-European Journal of Mathematics.	A short note on inverse sum indeg index of graphs	14(1)	2021	0.822	10.1142/S1793557120501521		Q3
Kumar, S., Yadav, A.S., Sharma, v., Ahlawat, N., Arunachalam, G.	Journal of Management Information and Decision sciences	An Inventory model with Price Dependent Demand Rates as power law form using ANT colony Optimization.		2021	0.752			Q2
Suresh kumar, R., Senthil kumar, S., Murugan, K., Balamuralitharan, S., Venkatesa Prabhu, S.	Advances in Material Sciences and Engineering	Optimization of CNC End Milling Process Parameters of Low-Carbon Mold Steel Using Response Surface Methodology and Grey Relational Analysis	Article ID 4005728	2021	2.098	https://doi.org/10.1155/2021/4005728		Q2
Raghunath, S., Shankar, A.N., Meena, K., Balamuralitharan, S., Daniel, N.	Advances in Material Sciences and Engineering	Multiojective Optimization of Mechanical Properties on Sisal-Glass Fiber-Reinforced Hybrid Composites Using Response Surface Methodology and LINGO Analysis	Article ID 2376148	2021	2.098	https://doi.org/10.1155/2021/2376148		Q2
Pangrabi, S., Chand, S., Balamuralitharan, S.	Mathematical methods in the applied sciences	Stability and Hopf bifurcation analysis of fractional-order nonlinear financial system with time delay	Article ID 301235	2021	2.321	https://doi.org/10.1155/2021/301235		Q1
Devi, N.S.N.V.K.V., Jana, D., Lakshmanan, M.	Proceedings of the National Academy of Sciences India Section A- Physical Sciences	Age-Structured Growth in Prey and Predation of Beddington-DeAngelis Type with Reliance on Alternative Food		2021	1.544	https://doi.org/10.1007/s40010-021-00752-x		Q3
Tiwari, P.K., Singh, R.K., Jana, D., Kang, Y., Misra, A.K.	International Journal of Bio Mathematics	A nonautonomous mathematical model to assess the impact of algae on the abatement of atmospheric carbon dioxide	Article No: 07, 2150059	2021	1.085	https://doi.org/10.1142/S1793524521500595		Q3
Sheeba Juliet, S., Vidhya, M., Govindarajan, A., Priyadarshini, E.	Journal of Physics: Conference Series	permeable plate and a warmth source through permeable material underneath oscillatory pull	1770(1)	2021	0.227	10.1088/1742-6596/1770/1/012053		Q4
Lawanya, T., Vidhya, M., Govindarajan, A.	Journal of Physics: Conference Series	Soret effects of mass transfer and radiation with heat source on MHD oscillatory viscoelastic fluid in a channel with porous medium	1770(1)	2021	0.227	10.1088/1742-6596/1770/1/012051		Q4
Niranjana, N., Vidhya, M., Govindarajan, A., Priyadarshini, E.	Journal of Physics: Conference Series	Heat and mass transfer effect between vertical plates through porous medium and chemical reaction effect on free convective MHD flow with soret effect	1770(1)	2021	0.227	10.1088/1742-6596/1770/1/012054		Q4
Priyadarshini, E., Jayalakshmi, K., Shalini, M., ...Vidhya, M., Govindarajan, A.	Journal of Physics: Conference Series	Analysis of onion prices at wholesale level in India - An application of Rescaled Range Analysis	1770(1)	2021	0.227	10.1088/1742-6596/1770/1/012107		Q4
Yovan, I., Pullepu, B.	Journal of Physics: Conference Series	Network simulation model for free convective flow from a vertical cone	1779(1)	2021	0.227	10.1088/1742-6596/1770/1/012053		Q4
Subashini, N., Anusheela, N	Journal of Physics: Conference Series	Analysis of fuzzy priority queues using heptagonal fuzzy numbers	1831(1),012005	2021	0.464	doi:10.1088/1742-6596/1831/1/012005		Q4
N. Parvathi	Journal of Physics: Conference Series	b-COLORING ON GRAPH OPERATORS	1850(1):012080	2021	0.464	doi:10.1088/1742-6596/1850/1/012080		Q4
Manikandan, G., Perumal, R.	Journal of Physics: Conference Series	Mid-units in duo seminearrings	1850(1), 012037	2021	0.464	doi:10.1088/1742-6596/1850/1/01203712		Q4
Senthil, S., Perumal, R.	Journal of Physics: Conference Series	Minimal prime ideals in seminearrings	1850(1), 012100	2021	0.464	doi:10.1088/1742-6596/1850/1/012100		Q4
Krishna Kumari, R., Arulprakasam, R., Dare, V.R.	Journal of Physics: Conference Series.	Compatibility and Binary Correlations of Fibonacci Partial Words	1850(1), 012073	2021	0.227	doi:10.1088/1742-6596/1850/1/012073		Q4
Janaki, K., Arulprakasam, R., Dare, V.R.	Journal of Physics: Conference Series	2D Words and Generalized Parikh Matrices	1850(1), 012004	2021	0.227	DOI: 10.1088/1742-6596/1850/1/012004		Q4