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1	Golive, S.G., Paramasivam, B., Ravindra, J.	Impact of Electric Vehicle Charging Station in Distribution System: A Comprehensive Review	Electric Vehicle Charging Station, Distributed Generation, EV charging infrastructure, Electricity Distribution System	27, 2, 77-85	https://doi.org/10.14447/jnmes.v27i2.a01	Golive, S.G., Paramasivam, B., Ravindra, J. (2024). Impact of electric vehicle charging station in distribution system: A comprehensive review. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 27, No. 2, pp. 77-85. https://doi.org/10.14447/jnmes.v27i2.a01
2	Alexprabu, S.P., Sathiyasekar.	An Efficient Li-ion Battery Management System with Lossless Charge Balancer for RUL and SoH Prediction	battery management system, Adaptive Matrix Switch Algorithm, Unscented Kalman Filter, adaptive neuro-fuzzy inference network, Grey Wolf Optimizer	27, 2, 86-98	https://doi.org/10.14447/jnmes.v27i2.a02	Alexprabu, S.P., Sathiyasekar. (2024). An efficient Li-ion battery management system with lossless charge balancer for RUL and SoH prediction. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 27, No. 2, pp. 86-98. https://doi.org/10.14447/jnmes.v27i2.a02
3	Kumar, A.S., Rajan, G.T.S.	Modelling of Multifunctional Voltage Source Converter for Unbalanced Solar PV Sources during Non-linear Loads	multifunctional VSC, harmonic currents, non-linear loads, unbalanced sources, PI controller	27, 2, 99-106	https://doi.org/10.14447/jnmes.v27i2.a03	Kumar, A.S., Rajan, G.T.S. (2024). Modelling of multifunctional voltage source converter for unbalanced solar PV sources during non-linear loads. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 27, No. 2, pp. 99-106. https://doi.org/10.14447/jnmes.v27i2.a03
4	Shanian, S., Savadogo, O.	A Critical Review of the Techno-Economic Analysis of the Hydrogen Production from Water Electrolyzers Using Multi-Criteria Decision Making (MCDM)	Techno-economic analysis, water electrolyzers, Multi-Criteria Decision Making (MCDM), cost optimization, hydrogen production, green hydrogen, sustainable, energy future	27, 2, 107-134	https://doi.org/10.14447/jnmes.v27i2.a04	Shanian, S., Savadogo, O. (2024). A critical review of the techno-economic analysis of the hydrogen production from water electrolyzers using Multi-Criteria Decision Making (MCDM). <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 27, No. 2, pp. 107-134. https://doi.org/10.14447/jnmes.v27i2.a04
5	Bilal, H.M., Ahmad, A., Abahussain, A.A.M., Nazir, M.H., Zaidi, S.Z.J.	A Sustainable Green Ammonia Synthesis by Renewable Route: A Condensed Research with Design Aspects	green ammonia, green ammonia synthesis, sustainability, green ammonia plant design, tri-generation system, renewable energy	27, 2, 135-145	https://doi.org/10.14447/jnmes.v27i2.a05	Bilal, H.M., Ahmad, A., Abahussain, A.A.M., Nazir, M.H., Zaidi, S.Z.J. (2024). A sustainable green ammonia synthesis by renewable route: A condensed research with design aspects. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 27, No. 2, pp. 135-145. https://doi.org/10.14447/jnmes.v27i2.a05
6	Gu, Y., Sun, J.H., Fu, X.W.	Brain Emotional Learning-Based Intelligent Controller for Frequency Regulation of Uncertain Islanded Microgrid Considering Renewable Energy Sources	frequency control, islanded microgrid, secondary control, renewable sources, intelligent technique	27, 2, 146-155	https://doi.org/10.14447/jnmes.v27i2.a06	Gu, Y., Sun, J.H., Fu, X.W. (2024). Brain emotional learning-based intelligent controller for frequency regulation of uncertain islanded microgrid considering renewable energy sources. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 27, No. 2, pp. 146-155. https://doi.org/10.14447/jnmes.v27i2.a06
7	Gomathi, T., Maflin, S.	Performance Evaluation of Capacitive Accelerometer Piezoelectric Energy Harvester Using GaAs Material	accelerometer, energy harvesting, fabrication, Micro-Electro Mechanical System, fabrication	27, 2, 156-161	https://doi.org/10.14447/jnmes.v27i2.a07	Gomathi, T., Maflin, S. (2024). Performance evaluation of capacitive accelerometer piezoelectric energy harvester using GaAs material. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 27, No. 2, pp. 156-161. https://doi.org/10.14447/jnmes.v27i2.a07
8	G., G., Sundarapandi, A.M.S., A., H., Rajendran, S.	Sensors Based Optimized Closed Loop Control Algorithm to Minimize Hypoglycemia/Hyperglycemia using 4-Variate Time Series Data	sensors, low-power and lossy routing, optimized closed loop control, glycaemic, hypoglycemia, hyperglycemia	27, 1, 1-7	https://doi.org/10.14447/jnmes.v27i1.a01	G., G., Sundarapandi, A.M.S., A., H., Rajendran, S. (2024). Sensors based optimized closed loop control algorithm to minimize hypoglycemia/hyperglycemia using 4-variate time series data. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 27, No. 1, pp. 1-7. https://doi.org/10.14447/jnmes.v27i1.a01
9	Fu, L.	Improving the Performance of Uncertain Disturbed Two Population Microbial Fuel Cell Using Robust Adaptive Sliding Mode Control	microbial fuel cell, renewable energy, uncertainty, disturbances, nonlinear model, sliding mode, adaptive control, robust control	27, 1, 8-15	https://doi.org/10.14447/jnmes.v27i1.a02	Fu, L. (2024). Improving the performance of uncertain disturbed two population microbial fuel cell using robust adaptive sliding mode control. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 27, No. 1, pp. 8-15. https://doi.org/10.14447/jnmes.v27i1.a02
10	Subrahmanyam, K.V., Rosalina, K.M.	The Impact of Functionally Graded Material Insulator in a Three Phase Gas Insulated Busduct under Protrusion Defect	FGM, electric field stress, insulator, triple junction, metal insert, gas insulated busduct	27, 1, 16-24	https://doi.org/10.14447/jnmes.v27i1.a03	Subrahmanyam, K.V., Rosalina, K.M. (2024). The impact of functionally graded material insulator in a three phase gas insulated busduct under protrusion defect. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 27, No. 1, pp. 16-24. https://doi.org/10.14447/jnmes.v27i1.a03
11	Manivannan, R., Niranjan, T., Maniraj, S., Thanigaivelan, R.	Optimization of the Parameters of the Electrochemical Micromachining Process Using Artificial Neural Network (ANN) Models to establish a Simple Relationship Between Machining Rate (MR), Overcut (OC) and Input Data	machining rate, overcut, micromachining, artificial neural network	27, 1, 25-29	https://doi.org/10.14447/jnmes.v27i1.a04	Manivannan, R., Niranjan, T., Maniraj, S., Thanigaivelan, R. (2024). Optimization of the parameters of the electrochemical micromachining process using Artificial Neural Network (ANN) models to establish a simple relationship between Machining Rate (MR), Overcut (OC) and input data. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 27, No. 1, pp. 25-29. https://doi.org/10.14447/jnmes.v27i1.a04
12	Singh, M., Ralhan, S., Singh, M., Baghel, R.	The Experimental Study on Lead Acid Battery Driven E-Rickshaw Performance Using Capacitor Bank	electric auto rickshaw, battery, modes of discharge, battery life	27, 1, 30-37	https://doi.org/10.14447/jnmes.v27i1.a05	Singh, M., Ralhan, S., Singh, M., Baghel, R. (2024). The experimental study on lead acid battery driven E-Rickshaw performance using capacitor bank. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 27, No. 1, pp. 30-37. https://doi.org/10.14447/jnmes.v27i1.a05
13	Ahmad, A., Abahussain, A.A.M., Nazir, M.H., Zaidi, S.Z.J.	Templating Nanostructured Aromatic Based Materials as Possible Anode Electrodes for Na-ion Batteries: A Computational DFT Approach	2,4-Chloronitrotoluene, pyrazine, Na-ion batteries, DFT, energy storage, electrode materials	27, 1, 38-43	https://doi.org/10.14447/jnmes.v27i1.a06	Ahmad, A., Abahussain, A.A.M., Nazir, M.H., Zaidi, S.Z.J. (2024). Templating nanostructured aromatic based materials as possible anode electrodes for Na-ion batteries: A computational DFT approach. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 27, No. 1, pp. 38-43. https://doi.org/10.14447/jnmes.v27i1.a06
14	Kulkarni, K.G., Havaladar, S.N., Tamkhade, P.K., Desale, A.D., Nalavade, S.P.	Mathematical Modelling of Billboard Type Central Solar Receiver for Domestic Application	mathematical modeling, solar receiver, heliostats, solar irradiances, energy balance, central solar tower	27, 1, 44-51	https://doi.org/10.14447/jnmes.v27i1.a07	Kulkarni, K.G., Havaladar, S.N., Tamkhade, P.K., Desale, A.D., Nalavade, S.P. (2024). Mathematical modelling of billboard type central solar receiver for domestic application. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 27, No. 1, pp. 44-51. https://doi.org/10.14447/jnmes.v27i1.a07
15	Kumar, N.B., Rao, M.U.M., Veeranjanyulu, J., Chandra, B.M., Venkatesh, P.M.	An Optimized Superconducting Magnetic Energy Storage for Grid Connected Systems	SMES, PSO algorithm, PWM rectifier, grid synchronization, PI controller, single phase VSI	27, 1, 52-59	https://doi.org/10.14447/jnmes.v27i1.a08	Kumar, N.B., Rao, M.U.M., Veeranjanyulu, J., Chandra, B.M., Venkatesh, P.M. (2024). An optimized superconducting magnetic energy storage for grid connected systems. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 27, No. 1, pp. 52-59. https://doi.org/10.14447/jnmes.v27i1.a08
16	Sathvika, S.V., N., M., Kanchan, B.K.	Design and Thermal Analysis of Heat Exchangers Applicable to Energy Systems	heat exchanger, energy efficiency, shell and tube heat exchanger, heat transfer, transient thermal analysis, temperature gradient	27, 1, 60-66	https://doi.org/10.14447/jnmes.v27i1.a09	Sathvika, S.V., N., M., Kanchan, B.K. (2024). Design and thermal analysis of heat exchangers applicable to energy systems. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 27, No. 1, pp. 60-66. https://doi.org/10.14447/jnmes.v27i1.a09
17	battery, calendaring, athode, coating thickness, lithium-ion, NMC 811	Investigation on the Impact of Coating Thickness Setting and Calendaring on the NMC 811 Cathode Performances for Lithium-Ion Batteries	Dyartanti, E.R., Setyawati, R.B., Purwanto, A.	27, 1, 67-75	https://doi.org/10.14447/jnmes.v27i1.a10	Dyartanti, E.R., Setyawati, R.B., Purwanto, A. (2024). Investigation on the impact of coating thickness setting and calendaring on the NMC 811 cathode performances for lithium-ion batteries. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 27, No. 1, pp. 67-75. https://doi.org/10.14447/jnmes.v27i1.a10
18	Balram, G., Kumar, P.S.	Harmonics Reduction and Balanced Transition in Hybrid Renewable Energy Sources in a Micro Grid Power System	microgrids, sources of renewable energy, harmonics, high impedance, fault current	26, 4, 233-242	https://doi.org/10.14447/jnmes.v26i4.a01	Balram, G., Kumar, P.S. (2023). Harmonics reduction and balanced transition in hybrid renewable energy sources in a micro grid power system. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 26, No. 4, pp. 233-242. https://doi.org/10.14447/jnmes.v26i4.a01

19	Dharmasa, Ambikapathy, A., Rao, M.U.M., Rao, G.S.	Development of Matrix Based Single Equation to Compute OC-SC Tests Parameters for 1-Phase Transformer	OC-SC tests, 1-phase transformer, core components, winding parameters	26, 4, 243-247	https://doi.org/10.14447/jnmes.v26i4.a02	Dharmasa, Ambikapathy, A., Rao, M.U.M., Rao, G.S. (2023). Development of matrix based single equation to compute OC-SC tests parameters for 1-Phase transformer. Journal of New Materials for Electrochemical Systems, Vol. 26, No. 4, pp. 243-247. https://doi.org/10.14447/jnmes.v26i4.a02
20	Gatla, R.K., Ramesh, M., Rao, K.P., Shashavali, P., Garapati, D.P., Babu, P.C., Kumar, D.G.	Effect of Junction Temperature on System Level Reliability of Grid Connected PV Inverter	junction temperature, IGBT, lifetime assessment, thermal analysis, PV systems	26, 4, 248-256	https://doi.org/10.14447/jnmes.v26i4.a03	Gatla, R.K., Ramesh, M., Rao, K.P., Shashavali, P., Garapati, D.P., Babu, P.C., Kumar, D.G. (2023). Effect of junction temperature on system level reliability of Grid connected PV inverter. Journal of New Materials for Electrochemical Systems, Vol. 26, No. 4, pp. 248-256. https://doi.org/10.14447/jnmes.v26i4.a03
21	Sreenivasulu, A., Subramanian, S., Raju, P.S.	Hybrid Optimization Algorithms for Maximum Power Point Tracking based Incremental Conductance Techniques with Solar Cell	Maximum Power Point Tracking (MPPT), Photovoltaic, solar cell fuels, Luo converter Space Vector Pulse Width Modulation, Man of League Algorithm (MLA)	26, 4, 257-267	https://doi.org/10.14447/jnmes.v26i4.a04	Sreenivasulu, A., Subramanian, S., Raju, P.S. (2023). Hybrid optimization algorithms for maximum power point tracking based incremental conductance techniques with solar cell. Journal of New Materials for Electrochemical Systems, Vol. 26, No. 4, pp. 257-267. https://doi.org/10.14447/jnmes.v26i4.a04
22	Koley, I., Datta, A., Panda, G.K.	Load Frequency Control in Renewable Energy Penetrated Hybrid Power Systems	load frequency control, renewable energy source, differential controller, objective function, support vector regression, sigmoidal range function	26, 4, 268-276	https://doi.org/10.14447/jnmes.v26i4.a05	Koley, I., Datta, A., Panda, G.K. (2023). Load frequency control in renewable energy penetrated hybrid power systems. Journal of New Materials for Electrochemical Systems, Vol. 26, No. 4, pp. 268-276. https://doi.org/10.14447/jnmes.v26i4.a05
23	Mishra, P., Sharma, P., Singh, N.K.	Facile Synthesis of Perovskite-Type $\text{Sm}_{1-x}\text{Sr}_x\text{MnO}_3$ ($0 \leq x \leq 0.8$), a Non-Precious Metal Oxides and its Electrochemical Analysis Towards the Oxygen Evolution Reaction (OER)	perovskite oxide, sol-gel, SEM, XRD, water electrolysis, cyclic voltammetry, tafel, thermodynamic and kinetic study	26, 4, 277-283	https://doi.org/10.14447/jnmes.v26i4.a06	Mishra, P., Sharma, P., Singh, N.K. (2023). Facile synthesis of perovskite-type $\text{Sm}_{1-x}\text{Sr}_x\text{MnO}_3$ ($0 \leq x \leq 0.8$), a non-precious metal oxides and its electrochemical analysis towards the oxygen evolution reaction (OER). Journal of New Materials for Electrochemical Systems, Vol. 26, No. 4, pp. 277-283. https://doi.org/10.14447/jnmes.v26i4.a06
24	Rupesh, M., Vishwanath, T.S.	Empyreal Promulgation Network for Improving the Power Quality using Squat PV System and Redeem Circuit	power quality; Grid-connected PV system; MPPT technique; neural network; squat PV system; redeem circuit	26, 4, 284-297	https://doi.org/10.14447/jnmes.v26i4.a07	Rupesh, M., Vishwanath, T.S. (2023). Empyreal promulgation network for improving the power quality using squat PV system and redeem circuit. Journal of New Materials for Electrochemical Systems, Vol. 26, No. 4, pp. 284-297. https://doi.org/10.14447/jnmes.v26i4.a07
25	Yuvaraj, T., Anusha, P., Sri, M.N.S., Thanigaivelan, R.	Effect of Ceramic Coated Tool on Stray Cut in Electrochemical Micromachining	TOPSIS, ANOVA, voltage, electrolyte concentration, duty cycle, machining time, overcut	26, 4, 298-303	https://doi.org/10.14447/jnmes.v26i4.a08	Yuvaraj, T., Anusha, P., Sri, M.N.S., Thanigaivelan, R. (2023). Effect of ceramic coated tool on stray cut in electrochemical micromachining. Journal of New Materials for Electrochemical Systems, Vol. 26, No. 4, pp. 298-303. https://doi.org/10.14447/jnmes.v26i4.a08
26	Gu, H., Banki, T., Soleymani, A.	Robust Frequency Control of Additive Manufacturing Based Microgrid Considering Delayed Fuel Cell Dynamics	provisional microgrid, additive manufacturing, fuel cell, frequency control, brain emotional learning based intelligent controller, robust control, renewable energy	26, 4, 304-311	https://doi.org/10.14447/jnmes.v26i4.a09	Gu, H., Banki, T., Soleymani, A. (2023). Robust frequency control of additive manufacturing based microgrid considering delayed fuel cell dynamics. Journal of New Materials for Electrochemical Systems, Vol. 26, No. 4, pp. 304-311. https://doi.org/10.14447/jnmes.v26i4.a09
27	Kanchan, B.K., Randive, P.	Tuning the Particle Size Distribution at Cathode for Enhanced Li-Ion Battery Performance	Li-ion battery, functional electrode, cathode particle size distribution, ultrafast charging, specific power, loss characteristics	26, 4, 312-321	https://doi.org/10.14447/jnmes.v26i4.a10	Kanchan, B.K., Randive, P. (2023). Tuning the particle size distribution at cathode for enhanced Li-ion battery performance. Journal of New Materials for Electrochemical Systems, Vol. 26, No. 4, pp. 312-321. https://doi.org/10.14447/jnmes.v26i4.a10
28	Deepalakshmi, S., Revathy, M.S., Joshua, J.R., Saravanan, L., Thanikaikarasan, S., Jansi, R., Khan, M.A.M., Savadogo, O.	Synthesis of Graphene Oxide Coating on ZnCo_2S_4 Using Hydrothermal Method for Electrochemical Capacitors Applications	graphene oxide, hydrothermal method, supercapacitor, X-Ray diffraction & zinc cobalt sulfide	26, 4, 322-325	https://doi.org/10.14447/jnmes.v26i4.a11	Deepalakshmi, S., Revathy, M.S., Joshua, J.R., Saravanan, L., Thanikaikarasan, S., Jansi, R., Khan, M.A.M., Savadogo, O. (2023). Synthesis of graphene oxide coating on ZnCo_2S_4 using hydrothermal method for electrochemical capacitors applications. Journal of New Materials for Electrochemical Systems, Vol. 26, No. 4, pp. 322-325. https://doi.org/10.14447/jnmes.v26i4.a11
29	Meena, J., Warkar, S.G., Verma, D.K.	Carboxymethyl Tamarind Kernel Gum Nanoparticles; As an Antioxidant Activity	carboxymethyl tamarind kernel gum, antioxidant activity, scavenging activity, co-precipitation method	26, 3, 145-150	https://doi.org/10.14447/jnmes.v26i3.a01	Meena, J., Warkar, S.G., Verma, D.K. (2023). Carboxymethyl tamarind kernel gum nanoparticles; as an antioxidant activity. Journal of New Materials for Electrochemical Systems, Vol. 26, No. 3, pp. 145-150. https://doi.org/10.14447/jnmes.v26i3.a01
30	Moghadam, D.A., Marandi, R., Khoramnejadian, S., Zavareh, S.A., Dehaghi, S.M.	Effective Removal of Fe(III) Ions from Water Sample Using Activated Drinking Water Treatment Sludge: Isotherms and Kinetic Studies	activated sludge, removal, Fe(III), adsorption isotherm, kinetic study	26, 3, 151-154	https://doi.org/10.14447/jnmes.v26i3.a02	Moghadam, D.A., Marandi, R., Khoramnejadian, S., Zavareh, S.A., Dehaghi, S.M. (2023). Effective removal of Fe(III) ions from water sample using activated drinking water treatment sludge: Isotherms and kinetic studies. Journal of New Materials for Electrochemical Systems, Vol. 26, No. 3, pp. 151-154. https://doi.org/10.14447/jnmes.v26i3.a02
31	Myla, A.K., Gorantla, S.R.	Performance Analysis of Balanced Integrated Standalone Microgrid under Dynamic Load Conditions	dispersed generation (DPG), energy storage system (ESS), L filter, maximum power point tracking (MPPT), proportional-integral (PI) controller, solar photovoltaic generation (SPVG), standalone microgrid (SMG), wind turbine generation (WTG)	26, 3, 155-163	https://doi.org/10.14447/jnmes.v26i3.a03	Myla, A.K., Gorantla, S.R. (2023). Performance analysis of balanced integrated standalone microgrid under dynamic load conditions. Journal of New Materials for Electrochemical Systems, Vol. 26, No. 3, pp. 155-163. https://doi.org/10.14447/jnmes.v26i3.a03
32	Katuri, R., Kumar, S.L.V.S., Suresh, K.	Enhanced Battery Life with Supercapacitor Applied to Renewable Energy Based Electric Vehicles	solar power, hybrid energy storage system (HESS), math function-based (MFB) controller, proportional-integral (PI) controller, fuzzy logic controller (FLC), electric vehicles (EVs)	26, 3, 164-171	https://doi.org/10.14447/jnmes.v26i3.a04	Katuri, R., Kumar, S.L.V.S., Suresh, K. (2023). Enhanced battery life with supercapacitor applied to renewable energy based electric vehicles. Journal of New Materials for Electrochemical Systems, Vol. 26, No. 3, pp. 164-171. https://doi.org/10.14447/jnmes.v26i3.a04
33	Shakir, A.K., Hajidavalloo, E., Daneh-Dezfuli, A., Abdullhaleem, S.M., Obayes, O.K.	Assessment of the Performance of Different Photovoltaic Thermal Collectors with Nanotechnology: A Numerical Study	nano-technology, photovoltaic collector, PVT, electrical efficiency, thermal efficiency	26, 3, 172-183	https://doi.org/10.14447/jnmes.v26i3.a05	Shakir, A.K., Hajidavalloo, E., Daneh-Dezfuli, A., Abdullhaleem, S.M., Obayes, O.K. (2023). Assessment of the performance of different photovoltaic thermal collectors with nanotechnology: A numerical study. Journal of New Materials for Electrochemical Systems, Vol. 26, No. 3, pp. 172-183. https://doi.org/10.14447/jnmes.v26i3.a05
34	Sireesha, N.V., Kumar, D.G., Rao, D.S.N.M., Gatla, R.K., Kshatri, S.S., Babu, P.C., Neerudi, B.	Performance Analysis of Proton Exchange Membrane Fuel Cell During Transient Operations Using Artificial Intelligence		26, 3, 184-195	https://doi.org/10.14447/jnmes.v26i3.a06	Sireesha, N.V., Kumar, D.G., Rao, D.S.N.M., Gatla, R.K., Kshatri, S.S., Babu, P.C., Neerudi, B. (2023). Performance analysis of proton exchange membrane fuel cell during transient operations using Artificial Intelligence. Journal of New Materials for Electrochemical Systems, Vol. 26, No. 3, pp. 184-195. https://doi.org/10.14447/jnmes.v26i3.a06
35	Kulkarni, K.G., Havaladar, S.N.	Experimental and Numerical Analysis of Variable Tube Diameter Circular Central Solar Receiver	solar central receiver, computational fluid dynamics, mathematical modeling, mechanics of joint, joint elements	26, 3, 196-205	https://doi.org/10.14447/jnmes.v26i3.a07	Kulkarni, K.G., Havaladar, S.N. (2023). Experimental and numerical analysis of variable tube diameter circular central solar receiver. Journal of New Materials for Electrochemical Systems, Vol. 26, No. 3, pp. 196-205. https://doi.org/10.14447/jnmes.v26i3.a07
36	Tsacheva, I., Dimitrova, M., Gigova, A., Dimitrov, O., Uzun, D.	Natural Zeolite-Cellulose Phosphate Nanocomposites: Preparation and Advance Electrochemical Study	cellulose phosphate, electrocatalyst, microwave irradiation, nanocomposites, natural zeolite, purification of organic pollutants, seawater electrolysis	26, 3, 206-214	https://doi.org/10.14447/jnmes.v26i3.a08	Tsacheva, I., Dimitrova, M., Gigova, A., Dimitrov, O., Uzun, D. (2023). Natural zeolite-cellulose phosphate nanocomposites: Preparation and advance electrochemical study. Journal of New Materials for Electrochemical Systems, Vol. 26, No. 3, pp. 206-214. https://doi.org/10.14447/jnmes.v26i3.a08

37	Ding, K.Q., Di, M.Y., Yan, M.Y., Li, M.J., Li, W.J., Wang, H.	A Palladium based Composite Electrocatalyst of Pd/SnO ₂ -CSS Showing an Excellent Electrocatalytic Activity for Ethanol Oxidation Reaction (EOR)	SnO ₂ -CSS, Pd based composite catalyst, hydrothermal process assisted calcination, ethanol oxidation reaction	26, 3, 215-226	https://doi.org/10.14447/jnmes.v26i3.a09	Ding, K.Q., Di, M.Y., Yan, M.Y., Li, M.J., Li, W.J., Wang, H. (2023). A palladium based composite electrocatalyst of Pd/SnO ₂ -CSS showing an excellent electrocatalytic activity for ethanol oxidation reaction (EOR). <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 26, No. 3, pp. 215-226. https://doi.org/10.14447/jnmes.v26i3.a09
38	Mahdi, H.T., Rasheed, M.K.	Synthesis and Identification of Thiazines-4-on Derived from Sulfamethoxazole, and Testing of Some of Their Antibacterial Properties	2-Amino benzothiazol, thiazines, antibacterial, Sulfamethoxazole	26, 3, 227-231	https://doi.org/10.14447/jnmes.v26i3.a10	Mahdi, H.T., Rasheed, M.K. (2023). Synthesis and identification of thiazines-4-on derived from sulfamethoxazole, and testing of some of their antibacterial properties. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 26, No. 3, pp. 227-231. https://doi.org/10.14447/jnmes.v26i3.a10
39	Thanikaikarasan, S., Perumal, R., Thanikaivelan, E., Ahamad, T., Alshehri, S.M.	Thickness, Structure, Composition and Optical Properties of Electrochemically Grown Iron Selenide and Iron Diselenide Thin Films	band gap, electrodeposition, ferroselite, thin films, wurtzite	26, 2, 101-106	https://doi.org/10.14447/jnmes.v26i2.a01	Thanikaikarasan, S., Perumal, R., Thanikaivelan, E., Ahamad, T., Alshehri, S.M. (2023). Thickness, structure, composition and optical properties of electrochemically grown iron selenide and iron diselenide thin films. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 26, No. 2, pp. 101-106. https://doi.org/10.14447/jnmes.v26i2.a01
40	Rani, T., Suganya, S., Thanikaikarasan, S., Karpagavinayagam, P., Vedhi, C., Kanagavel, D.	Electrochemical Determination of Heavy Metals Present in Groundwater on Glassy Carbon Electrode	Heavy metals, Voltammetry, DPASV, GCE	26, 2, 107-110	https://doi.org/10.14447/jnmes.v26i2.a02	Rani, T., Suganya, S., Thanikaikarasan, S., Karpagavinayagam, P., Vedhi, C., Kanagavel, D. (2023). Electrochemical determination of heavy metals present in groundwater on glassy carbon electrode. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 26, No. 2, pp. 107-110. https://doi.org/10.14447/jnmes.v26i2.a02
41	Dhasarathan, R., Aejitha, S., Kavitha, B., Aswathaman, H., Senthilkumar, N., Rani, S.	Electrochemical Studies of Eosin Y Dye on Glassy Carbon Electrode in Different Five Electrolytes	Eosin Y dye, glassy carbon electrode, chronocoulometry, controlled potential coulometry	26, 2, 111-115	https://doi.org/10.14447/jnmes.v26i2.a03	Dhasarathan, R., Aejitha, S., Kavitha, B., Aswathaman, H., Senthilkumar, N., Rani, S. (2023). Electrochemical studies of eosin Y dye on glassy carbon electrode in different five electrolytes. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 26, No. 2, pp. 111-115. https://doi.org/10.14447/jnmes.v26i2.a03
42	Arulkumar, E., Thanikaikarasan, S., Ahamad, T., Alshehri, S.M.	Investigation of Structural, Compositional and Magnetic Properties of Copper-Nickel Alloy by Electrodeposition	Cu-Ni, Electrodeposition, X-ray diffraction, SEM, Coercivity	26, 2, 116-119	https://doi.org/10.14447/jnmes.v26i2.a04	Arulkumar, E., Thanikaikarasan, S., Ahamad, T., Alshehri, S.M. (2023). Investigation of structural, compositional and magnetic properties of copper-nickel alloy by electrodeposition. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 26, No. 2, pp. 116-119. https://doi.org/10.14447/jnmes.v26i2.a04
43	Arulkumar, E., Thanikaikarasan, S., Ahamad, T., Alshehri, S.M.	Structure Composition, Morphology and Optical Properties of Chemically Synthesized CuO Nanoparticle	copper oxide, nanoparticle, wet chemical precipitation, X-ray diffraction	26, 2, 120-123	https://doi.org/10.14447/jnmes.v26i2.a05	Arulkumar, E., Thanikaikarasan, S., Ahamad, T., Alshehri, S.M. (2023). Structure composition, morphology and optical properties of chemically synthesized CuO nanoparticle. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 26, No. 2, pp. 120-123. https://doi.org/10.14447/jnmes.v26i2.a05
44	Lakshmi, K., Vanitha, V., Kirupakaran, R., RajaRajeswari, V., MuthuChudarkodi, R.R., Thanikaikarasan, S.	Synthesis and Characterization of Multi Metal Oxide Nanocomposite (ZnO-SrO-MgO) and Its Applications	multimetaloxide, XRD, FESEM, UV, FTIR, antibacterial activity	26, 2, 124-127	https://doi.org/10.14447/jnmes.v26i2.a06	Lakshmi, K., Vanitha, V., Kirupakaran, R., RajaRajeswari, V., MuthuChudarkodi, R.R., Thanikaikarasan, S. (2023). Synthesis and characterization of multi metal oxide nanocomposite (ZnO-SrO-MgO) and its applications. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 26, No. 2, pp. 124-127. https://doi.org/10.14447/jnmes.v26i2.a06
45	Perumal, R., Thanikaikarasan, S., Kanimozhi, R., Saravanan, M., Sudharthini, S.	Influence of pH on the Growth of Tris-Allylthiourea Cadmium Chloride Single Crystals	ATCC, NLO, SHG, XRD FTIR, raman analysis	26, 2, 128-133	https://doi.org/10.14447/jnmes.v26i2.a07	Perumal, R., Thanikaikarasan, S., Kanimozhi, R., Saravanan, M., Sudharthini, S. (2023). Influence of pH on the growth of tris-allylthiourea cadmium chloride single crystals. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 26, No. 2, pp. 128-133. https://doi.org/10.14447/jnmes.v26i2.a07
46	RajaRajeswari, V., Kavitha, G., Lakshmi, K., Karpagavinayagam, P., MuthuChudarkodi, R.R., Thanikaikarasan, S.	Synthesis and Characterization of Zirconium Doped Nickel Oxide Nanoparticles Using Acalypha indica L Extract and Its Antimicrobial Activities	NiO Nps, Acalypha indica L, UV-Visible, SEM, FT-IR, XRD, AFM	26, 2, 134-138	https://doi.org/10.14447/jnmes.v26i2.a08	RajaRajeswari, V., Kavitha, G., Lakshmi, K., Karpagavinayagam, P., MuthuChudarkodi, R.R., Thanikaikarasan, S. (2023). Synthesis and characterization of zirconium doped Nickel Oxide Nanoparticles using Acalypha indica L extract and its antimicrobial activities. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 26, No. 2, pp. 134-138. https://doi.org/10.14447/jnmes.v26i2.a08
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50	Kumar, D.G., Sireesha, N.V., Rao, D.S.N.M., Kasireddy, I., Narukullapati, B.K., Gatla, R.K., Babu, P.C., Saravanan, S.	Modelling of Symmetric Switched Capacitor Multilevel Inverter for High Power Appliances	THD, SHEPWM, PSO, ACO, HHO, nine-level inverter	26, 1, 18-25	https://doi.org/10.14447/jnmes.v26i1.a03	Kumar, D.G., Sireesha, N.V., Rao, D.S.N.M., Kasireddy, I., Narukullapati, B.K., Gatla, R.K., Babu, P.C., Saravanan, S. (2023). Modelling of symmetric switched capacitor multilevel inverter for high power appliances. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 26, No. 1, pp. 18-25. https://doi.org/10.14447/jnmes.v26i1.a03
51	Gu, H., Gao, J., Yang, Y.W., Fu, X.W.	Fault Detection of Uncertain Nonlinear Additive Manufacturing Based Single Chamber Two-Population Microbial Fuel Cell Using Adaptive Observer Based on Linear Matrix Inequality	single chamber two-population microbial fuel cell, additive manufacturing, nonlinear model, fault detection, observer, LMI, uncertainty, adaptive approach	26, 1, 26-31	https://doi.org/10.14447/jnmes.v26i1.a04	Gu, H., Gao, J., Yang, Y.W., Fu, X.W. (2023). Fault detection of uncertain nonlinear additive manufacturing based single chamber two-population microbial fuel cell using adaptive observer based on linear matrix inequality. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 26, No. 1, pp. 26-31. https://doi.org/10.14447/jnmes.v26i1.a04
52	Kahia, H., Saadi, A., Herbadji, A., Herbadji, D., Ramadhan, H.M.	Accurate Estimation of PEMFC State of Health Using Modified Hybrid Artificial Neural Network Models	PEM fuel cells, (SOH), AI technology, neural network model, EIS	26, 1, 32-41	https://doi.org/10.14447/jnmes.v26i1.a05	Kahia, H., Saadi, A., Herbadji, A., Herbadji, D., Ramadhan, H.M. (2023). Accurate estimation of PEMFC state of health using modified hybrid artificial neural network models. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 26, No. 1, pp. 32-41. https://doi.org/10.14447/jnmes.v26i1.a05
53	Compaore, U.L., Savadogo, O., Doumbia, M.L.	Development of Molten Carbonate Fuel Cell Based on Lignin Fuel Consumption (MC-LFC): Correlation Between Modeling and Experimental Results	direct carbon fuel cell (DCFC), lignin, consol, butler-volmer, porous electrode, transfer kinetic, molten carbonate lignin fuel cell (MC-LFC), performance	26, 1, 42-55	https://doi.org/10.14447/jnmes.v26i1.a06	Compaore, U.L., Savadogo, O., Doumbia, M.L. (2023). Development of molten carbonate fuel cell based on lignin fuel consumption (MC-LFC): Correlation between modeling and experimental results. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 26, No. 1, pp. 42-55. https://doi.org/10.14447/jnmes.v26i1.a06
54	Muthukuri, N.K., Mopidevi, S.	Experimental Validation and Efficiency Analysis of Sensorless PR based 15PUC (fifteen level Packed U Cell) MLI for Commercial & Residential Applications with Novel Switching Algorithm	PUC packed U cell, MLI multilevel inverter, SLPRC sensorless proportional resonant controller, PD phase disposition, THD total harmonic distortion, MI modulation index	26, 1, 56-65	https://doi.org/10.14447/jnmes.v26i1.a07	Muthukuri, N.K., Mopidevi, S. (2023). Experimental validation and efficiency analysis of sensorless PR Based 15PUC (Fifteen Level Packed U cell) MLI for commercial & residential applications with novel switching algorithm. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 26, No. 1, pp. 56-65. https://doi.org/10.14447/jnmes.v26i1.a07

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56	Faal, S.F., Sahab, A., Alizadeh, B.	Fuzzy-Reset Joint Controller Design for Robust Frequency Adjustment of Hybrid Microgrid Including Fossil Fuel Systems, Photovoltaic, Fuel Cell and Energy Storage Systems	microgrid, islanded microgrid, frequency control, robust method, fuzzy method, reset method, hybrid method, hybrid control, uncertainty, disturbance, frequency error	26, 1, 74-82	https://doi.org/10.14447/jnmes.v26i1.a09	Faal, S.F., Sahab, A., Alizadeh, B. (2023). Fuzzy-reset joint controller design for robust frequency adjustment of hybrid microgrid including fossil fuel systems, photovoltaic, fuel cell and energy storage systems. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 26, No.1, pp. 74-82. https://doi.org/10.14447/jnmes.v26i1.a09
57	Liu, X.P., Ma, L., Sun, M.Z., Guo, H., Qin, Q.	The Principle of Electro-Sorption Technology and Electrode Materials	electro-sorption, electrical double layer (EDL) theory, mathematical model, electrodes	26, 1, 83-93	https://doi.org/10.14447/jnmes.v26i1.a10	Liu, X.P., Ma, L., Sun, M.Z., Guo, H., Qin, Q. (2023). The principle of electro-sorption technology and electrode materials. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 26, No. 1, pp. 83-93. https://doi.org/10.14447/jnmes.v26i1.a10
58	Lv, Y., Yang, L., Bu, F.Y., Yang, J.X.	Optimization of Sensor Array for Detection of Abalone Freshness Based on Electronic Tongue	abalone, freshness, optimization of sensor arrays, analysis of variance, principal component analysis, support vector classification	26, 1, 94-100	https://doi.org/10.14447/jnmes.v26i1.a11	Lv, Y., Yang, L., Bu, F.Y., Yang, J.X. (2023). Optimization of sensor array for detection of abalone freshness based on electronic tongue. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 26, No. 1, pp. 94-100. https://doi.org/10.14447/jnmes.v26i1.a11
59	Gao, J., Yang, Y.W., Gu, H.	A FPGA Based PI Adaptive Sliding Mode Controller for PEM Fuel Cell with Boost Converter	FPGA, fuel cell, boost converter, PI adaptive sliding mode control, uncertainty	25, 4, 225-233	https://doi.org/10.14447/jnmes.v25i4.a01	Gao, J., Yang, Y.W., Gu, H. (2022). A FPGA based PI adaptive sliding mode controller for PEM fuel cell with boost converter. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 4, pp. 225-233. https://doi.org/10.14447/jnmes.v25i4.a01
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61	Alzahrani, A.I.A., Hassan, S.U., Nazir, M.H., Zafar, A., Zaidi, S.Z.J.	Water Oxidation for Anodic Generation of Hydrogen Peroxide by Using Transition Metal Oxide Based Catalyst	PV-15, hydrogen peroxide, Molybdenum oxide based electrodes, water splitting	25, 4, 240-243	https://doi.org/10.14447/jnmes.v25i4.a03	Alzahrani, A.I.A., Hassan, S.U., Nazir, M.H., Zafar, A., Zaidi, S.Z.J. (2022). Water oxidation for anodic generation of hydrogen peroxide by using transition metal oxide based catalyst. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 4, pp. 240-243. https://doi.org/10.14447/jnmes.v25i4.a03
62	El-Hallag, I.S., Ghanem, M.A., El-Mossalamy, E.S.H., Tartour, A.R.	Quantitative Determination of Catechol via Cyclic Voltammetry, Convolution-Deconvolution Voltammetry, and Differential Pulse Voltammetry at a Mesoporous Nanostructured Platinum Electrode	Catechol, Mesoporous platinum electrode, Quantification, Cyclic voltammetry, Convolution-deconvolution voltammetry	25, 4, 244-250	https://doi.org/10.14447/jnmes.v25i4.a04	El-Hallag, I.S., Ghanem, M.A., El-Mossalamy, E.S.H., Tartour, A.R. (2022). Quantitative determination of catechol via cyclic voltammetry, convolution-deconvolution voltammetry, and differential pulse voltammetry at a mesoporous nanostructured platinum electrode. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 4, pp. 244-250. https://doi.org/10.14447/jnmes.v25i4.a04
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64	Pešovski, B., Krstić, V., Dimitrijević, S.	Electrochemical Characteristics of the Anodized Titanium Oxide Films in Sulfuric Acid	dimensionally stable electrode, titanium oxides, cyclic voltammetry, polarization, open circuit potential, XRD, SEM-EDS	25, 4, 259-267	https://doi.org/10.14447/jnmes.v25i4.a06	Pešovski, B., Krstić, V., Dimitrijević, S. (2022). Electrochemical characteristics of the anodized titanium oxide films in sulfuric acid. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 4, pp. 259-267. https://doi.org/10.14447/jnmes.v25i4.a06
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67	N'Dri, S.R., Coulibaly, M., Yao, N.A., Bamba, D., Zoro, G.E.	Study of the Differential Capacitance of Space Charge at the Interface of the p-Silicon Paste Electrode /Carmin Indigo Electrolyte for Electrochemical Sensor Applications	carmin indigo, cyclic voltammetry, differential capacitance, flat band potential, junction, p-silicon	25, 4, 286-292	https://doi.org/10.14447/jnmes.v25i4.a09	N'Dri, S.R., Coulibaly, M., Yao, N.A., Bamba, D., Zoro, G.E. (2022). Study of the differential capacitance of space charge at the interface of the p-silicon paste electrode / carmin indigo electrolyte for electrochemical sensor applications. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 4, pp. 286-292. https://doi.org/10.14447/jnmes.v25i4.a09
68	Debbab, M., Ghellai, N., Ikumapayi, O.M., Gabouze, N., Lorenzini, G., Yaddadene, C., Berouaken, M., Menni, Y.	Behavior Study of Annealing Temperature on Microstructure and Wettability of Electrodeposited ZnO Thin Films for Microcapacitor Application	optoelectronics, sensing, energy storage, solar cells, microcapacitor, electrodes, superconductors, chemical vapor deposition, electrodeposition, ZnO elaborations	25, 4, 293-300	https://doi.org/10.14447/jnmes.v25i4.a10	Debbab, M., Ghellai, N., Ikumapayi, O.M., Gabouze, N., Lorenzini, G., Yaddadene, C., Berouaken, M., Menni, Y. (2022). Behavior study of annealing temperature on microstructure and wettability of electrodeposited ZnO thin films for Microcapacitor application. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 4, pp. 293-300. https://doi.org/10.14447/jnmes.v25i4.a10
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70	Pandey, A., Pattnaik, S.	Fuel Cell Application Oriented High-Boost Converter: Design and Analysis	Fuel Cell, High-boost DCDC Converter, Renewable Energy, Fuel Cell Powered Electric Vehicle	25, 3, 149-161	https://doi.org/10.14447/jnmes.v25i3.a01	Pandey, A., Pattnaik, S. (2022). Fuel cell application oriented high-boost converter: Design and analysis. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 3, pp. 149-161. https://doi.org/10.14447/jnmes.v25i3.a01
71	Dhananjaya, M., Potnuru, D., Chaitnya, B.K., Patnana, N., Bokam, J.K.	A Single-Input Dual-Output DC-DC Converter for Powertrain of PEM Fuel Cell Vehicle	Fuel cell EVs, PEM Fuel cell, multiport converters	25, 3, 162-171	https://doi.org/10.14447/jnmes.v25i3.a02	Dhananjaya, M., Potnuru, D., Chaitnya, B.K., Patnana, N., Bokam, J.K. (2022). A single-input dual-output DC-DC converter for powertrain of PEM fuel cell vehicle. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 3, pp. 162-171. https://doi.org/10.14447/jnmes.v25i3.a02
72	Agarwal, A.	Computational Investigation of Vertical Axis Wind Turbine in Hydrogen Gas Generation Using PEM Electrolysis	Wind turbine, hydrogen production, Polymer electrolyte membrane (PEM), CFD, hydrolysis	25, 3, 172-178	https://doi.org/10.14447/jnmes.v25i3.a03	Agarwal, A. (2022). Computational investigation of vertical axis wind turbine in hydrogen gas generation using PEM electrolysis. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 3, pp. 172-178. https://doi.org/10.14447/jnmes.v25i3.a03

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74	Shoba, A., Kavitha, B., Matheswaran, P., Jagadeeswari, N., Thanikaikarasan, S., Senthil Kumar, N.	Copper Nanoparticles Incorporated Manganese Dioxide Nanocomposites for Electrochemical Capacitance Application	manganese dioxide, copper, nanoparticles, voltammetry, capacitor	25, 3, 188-193	https://doi.org/10.14447/jnmes.v25i3.a05	Shoba, A., Kavitha, B., Matheswaran, P., Jagadeeswari, N., Thanikaikarasan, S., Senthil Kumar, N. (2022). Copper nanoparticles incorporated manganese dioxide nanocomposites for electrochemical capacitance application. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 3, pp. 188-193. https://doi.org/10.14447/jnmes.v25i3.a05
75	Deepa, V., Kavitha, B., Aejitha, S., Aswathaman, H., Thanikaikarasan, S., Senthil Kumar, N.	Fabrication of Copper Incorporated Graphene Oxide Nanocomposites Used for Electrochemical Determination of Methyl Parathion Contaminants	methylparathion, voltammetry, grapheneoxide, nanocomposites, copper, pesticide	25, 3, 194-199	https://doi.org/10.14447/jnmes.v25i3.a06	Deepa, V., Kavitha, B., Aejitha, S., Aswathaman, H., Thanikaikarasan, S., Senthil Kumar, N. (2022). Fabrication of copper incorporated graphene oxide nanocomposites used for electrochemical determination of methyl parathion contaminants. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 3, pp. 194-199. https://doi.org/10.14447/jnmes.v25i3.a06
76	Alimin, A., Kadidae, L.O., Agusu, L., Ahmad, L.O., Santosa, S.J., Asria, A.	Formation Mechanisms of Co-existence of α -Fe and Iron Oxides Nanoparticles Decorated on Carbon Nanofibers by a Simple Liquid Phase Adsorption-Thermal Oxidation	Redox mechanisms, Lewis Acid-base mechanisms, carbon nanofibers, α -Fe nanoparticles, iron oxides, liquid-phase adsorption	25, 3, 200-205	https://doi.org/10.14447/jnmes.v25i3.a07	Alimin, A., Kadidae, L.O., Agusu, L., Ahmad, L.O., Santosa, S.J., Asria, A. (2022). Formation mechanisms of co-existence of α -Fe and iron oxides nanoparticles decorated on carbon nanofibers by a simple liquid phase adsorption-thermal oxidation. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 3, pp. 200-205. https://doi.org/10.14447/jnmes.v25i3.a07
77	Meena, J., Chandra, H., Warkar, S.G.	Carboxymethyl Tamarind Kernel Gum /ZnO-Biocomposite: As an Antifungal and Hazardous Metal Removal Agent	Carboxymethyl tamarind kernel gum, zinc oxide NPs, antifungal, adsorption, chromium etc	25, 3, 206-213	https://doi.org/10.14447/jnmes.v25i3.a08	Meena, J., Chandra, H., Warkar, S.G. (2022). Carboxymethyl tamarind kernel gum /ZnO-biocomposite: As an antifungal and hazardous metal removal agent. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 3, pp. 206-213. https://doi.org/10.14447/jnmes.v25i3.a08
78	Zhang, Y.X., Li, Y., Yin, P.C., Hao, Y.X., Zhang, R.Z.	Synthesized Cobalt Tetroxide-Graphene Composite Film by Electrospinning and Modified Glassy Carbon Electrode for Ofloxacin Determination	electrospinning, Co3O4/GR, carbon paste modified electrode, ofloxacin determination	25, 3, 214-218	https://doi.org/10.14447/jnmes.v25i3.a09	Zhang, Y.X., Li, Y., Yin, P.C., Hao, Y.X., Zhang, R.Z. (2022). Synthesized cobalt tetroxide-graphene composite film by electrospinning and modified glassy carbon electrode for ofloxacin determination. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 3, pp. 214-218. https://doi.org/10.14447/jnmes.v25i3.a09
79	Liu, D.S., Wei, S.S., Wang, D.J.	Sensitivity Comparison between Monolayer Graphene and Multilayer Graphene	gauge factor, monolayer graphene, multilayer graphene, microelectromechanical system (MEMS), sensitivity	25, 3, 219-223	https://doi.org/10.14447/jnmes.v25i3.a10	Liu, D.S., Wei, S.S., Wang, D.J. (2022). Sensitivity comparison between monolayer graphene and multilayer graphene. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 3, pp. 219-223. https://doi.org/10.14447/jnmes.v25i3.a10
80	Kumar, D., Chhibber, V.K., Singh, A.	Nano Additives in Cashew Nut Shell Liquid Biodiesel and Environment Emissions of Diesel Engine	Cashew Nut Shell Liquid (CNSL), CO Emissions, CO2 Emissions, F11R, GCMS Analysis, Hydrocarbon Emissions, NOx Emissions	25, 2, 87-97	https://doi.org/10.14447/jnmes.v25i2.a01	Kumar, D., Chhibber, V.K., Singh, A. (2022). Nano additives in cashew nut shell liquid biodiesel and environment emissions of diesel engine. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 2, pp. 87-97. https://doi.org/10.14447/jnmes.v25i2.a01
81	Lee, S.J., Jang, H.J., Son, J.T.	Improving High-Temperature Cycle Stability and Rate Performance of LiNi _{0.82} Co _{0.11} Mn _{0.07} O ₂ Cathode Materials Using Hydrogen Peroxide Solution Washing System	Ni-rich materials, Li residuals, H ₂ O ₂ , washing process	25, 2, 98-102	https://doi.org/10.14447/jnmes.v25i2.a02	Lee, S.J., Jang, H.J., Son, J.T. (2022). Improving high-temperature cycle stability and rate performance of LiNi _{0.82} Co _{0.11} Mn _{0.07} O ₂ cathode materials using hydrogen peroxide solution washing system. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 2, pp. 98-102. https://doi.org/10.14447/jnmes.v25i2.a02
82	Thanikaikarasan, S., Perumal, R., Kanimozhi, R., Saravanan, M., Suja Ponmini, P.S.	Role of Transparent Nature Conducting Substrate on Physical, Chemical and Optical Properties of Electrochemically Grown CdSe and CdSe: Fe Thin Films	Band gap, CdSe: Fe, strain, dislocation density, X-ray diffraction	25, 2, 103-109	https://doi.org/10.14447/jnmes.v25i2.a03	Thanikaikarasan, S., Perumal, R., Kanimozhi, R., Saravanan, M., Suja Ponmini, P.S. (2022). Role of transparent nature conducting substrate on physical, chemical and optical properties of electrochemically grown CdSe and CdSe: Fe thin films. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 2, pp. 103-109. https://doi.org/10.14447/jnmes.v25i2.a03
83	Perumal, R., Thanikaikarasan, S., Saravanan, M., Kanimozhi, R., Sudharthini, S.	Influence of Halogens on the Growth Aspects of Allylthiourea Cadmium Complex Nonlinear Optical Single Crystals	Organometallic compounds, Crystal growth, Thermogravimetric analysis, Xray diffraction, ATCC & ATCB crystals	25, 2, 110-115	https://doi.org/10.14447/jnmes.v25i2.a04	Perumal, R., Thanikaikarasan, S., Saravanan, M., Kanimozhi, R., Sudharthini, S. (2022). Influence of halogens on the growth aspects of Allylthiourea cadmium complex nonlinear optical single crystals. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 2, pp. 110-115. https://doi.org/10.14447/jnmes.v25i2.a04
84	Bahri, H., Harrag, A., Rezk, H.	Optimal Configuration and Techno-Economic Analysis of Hybrid Photovoltaic/PEM Fuel Cell Power System	Photovoltaic, Fuel cell, Hydrogen, Electrolyzer, Battery, TNPC, COE, HOMER	25, 2, 116-125	https://doi.org/10.14447/jnmes.v25i2.a05	Bahri, H., Harrag, A., Rezk, H. (2022). Optimal configuration and techno-economic analysis of hybrid photovoltaic/PEM fuel cell power system. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 2, pp. 116-125. https://doi.org/10.14447/jnmes.v25i2.a05
85	Dadvand, M., Savadogo, O.	Pitting Corrosion and Mechanical Properties of Direct Current and Pulsed Reverse Current Electrodeposited Nickel-Tungsten Coatings	Nickel-tungsten coating, direct current, pulsed reverse current, electrodeposition, cyclic polarization	25, 2, 126-134	https://doi.org/10.14447/jnmes.v25i2.a06	Dadvand, M., Savadogo, O. (2022). Pitting corrosion and mechanical properties of direct current and pulsed reverse current electrodeposited nickel-tungsten coatings. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 2, pp. 126-134. https://doi.org/10.14447/jnmes.v25i2.a06
86	Rao, C.N.N., Prasad, P.S., Sukumar, G.D., Rao, Y.S.	Voltage Analysis of Multilevel Diode Clamped Inverter with SVPWM Technique	SVM, NPC, Multilevel inverter	25, 2, 135-141	https://doi.org/10.14447/jnmes.v25i2.a07	Rao, C.N.N., Prasad, P.S., Sukumar, G.D., Rao, Y.S. (2022). Voltage analysis of multilevel diode clamped inverter with SVPWM technique. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 2, pp. 135-141. https://doi.org/10.14447/jnmes.v25i2.a07
87	Vigneshwaran, P., Padmavathi, N., Nirmala, G., Sowmiya, A.	An Intelligent Cooling System Based on Predictive Time Domain Algorithm with Thermoelectric Coolers for Wind Turbines	thermoelectric, wind turbine & time domain algorithm	25, 2, 142-144	https://doi.org/10.14447/jnmes.v25i2.a08	Vigneshwaran, P., Padmavathi, N., Nirmala, G., Sowmiya, A. (2022). An intelligent cooling system based on predictive time domain algorithm with thermoelectric coolers for wind turbines. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 2, pp. 142-144. https://doi.org/10.14447/jnmes.v25i2.a08
88	Guemache, A., Bouchelaghem, A., Drif, M., Kahoul, F., Hamzioui, L.	Properties and Characteristic of Perovskite Type Ca _{1-x} Sr _x MnO ₃	Perovskite, co precipitation; Thermal analysis, Electrochemical compartment	25, 2, 145-148	https://doi.org/10.14447/jnmes.v25i2.a09	Guemache, A., Bouchelaghem, A., Drif, M., Kahoul, F., Hamzioui, L. (2022). Properties and characteristic of perovskite type Ca _{1-x} Sr _x MnO ₃ . <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 2, pp. 145-148. https://doi.org/10.14447/jnmes.v25i2.a09
89	Bhoopal, N., Rao, D.S.M., Sireesha, N.V., Kasireddy, I., Gatla, R.K., Kumar, D.G.	Modelling and Performance Evaluation of 18w PEM Fuel Cell Considering H ₂ Pressure Variations		25, 1, 1-6	https://doi.org/10.14447/jnmes.v25i1.a01	Bhoopal, N., Rao, D.S.M., Sireesha, N.V., Kasireddy, I., Gatla, R.K., Kumar, D.G. (2022). Modelling and performance evaluation of 18w PEM fuel cell considering H ₂ pressure variations. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 1, pp. 1-6. https://doi.org/10.14447/jnmes.v25i1.a01
90	Warkar, S.G., Meena, J.	Synthesis and Applications of Biopolymer /FeO Nanocomposites: A Review	biopolymers, biopolymer magnetic nanoparticles, adsorptions, antimicrobial activity, antioxidant, catalyst activity	25, 1, 7-16	https://doi.org/10.14447/jnmes.v25i1.a02	Warkar, S.G., Meena, J. (2022). Synthesis and applications of biopolymer /FeO nanocomposites: A review. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 25, No. 1, pp. 7-16. https://doi.org/10.14447/jnmes.v25i1.a02

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92	Lee, S.J., Kim, H., Park, E.J., Son, J.T.	Synthesis of Honeycomb-Shaped LiNi _{0.5} Mn _{0.5} O ₂ Using a Sol-Gel Method with Polymethylmethacrylate (PMMA) and Organic Surfactant	cathode materials, sol-gel method, PMMA, organic surfactant, honeycomb	25, 1, 26-31	https://doi.org/10.14447/jnmes.v25i1.a04	Lee, S.J., Kim, H., Park, E.J., Son, J.T. (2022). Synthesis of honeycomb-shaped LiNi _{0.5} Mn _{0.5} O ₂ using a sol-gel method with polymethylmethacrylate (PMMA) and organic surfactant. Journal of New Materials for Electrochemical Systems, Vol. 25, No. 1, pp. 26-31. https://doi.org/10.14447/jnmes.v25i1.a04
93	Jafar, S.A., Aabid, A.A., Razzaq, G.H.A., Humadi, J.I.	Sodium Nitrate As a Corrosion Inhibitor of Carbon Steel in Various Concentrations of Hydrochloric Acid Solution	carbon steel, immersion method, sodium nitrate, inhibitor HCl solution, CPR	25, 1, 32-37	https://doi.org/10.14447/jnmes.v25i1.a05	Jafar, S.A., Aabid, A.A., Razzaq, G.H.A., Humadi, J.I. (2022). Sodium nitrate as a corrosion inhibitor of carbon steel in various concentrations of hydrochloric acid solution. Journal of New Materials for Electrochemical Systems, Vol. 25, No. 1, pp. 32-37. https://doi.org/10.14447/jnmes.v25i1.a05
94	Benabdellah, A., Negadi, K., Chaker, Y., Fetouhi, B., Belarbi, H., Hatti, M.	Investigation Photoluminescence Property of ZnO / PANI Nanocomposite Synthesized in [EtOHMIM ⁺] [HSO ₄ ⁻] Ionic Liquid and CTAB Surfactant	ionic liquid, polyaniline, zinc oxide, nanocomposites, photoluminescence property	25, 1, 38-45	https://doi.org/10.14447/jnmes.v25i1.a06	Benabdellah, A., Negadi, K., Chaker, Y., Fetouhi, B., Belarbi, H., Hatti, M. (2022). Investigation photoluminescence property of ZnO / PANI nanocomposite synthesized in [EtOHmim ⁺] [HSO ₄ ⁻] ionic liquid and CTAB surfactant. Journal of New Materials for Electrochemical Systems, Vol. 25, No. 1, pp. 38-45. https://doi.org/10.14447/jnmes.v25i1.a06
95	Kusumaningrum, I., Soenoko, R., Slsawanto, E., Gapsari, F.	Jackfruit Peel Extract as Environmentally Safe Inhibitor for Carbon Steel Protection in Acidic Solution	corrosion, inhibitor, adsorption, thermodynamic parameter	25, 1, 46-54	https://doi.org/10.14447/jnmes.v25i1.a07	Kusumaningrum, I., Soenoko, R., Slsawanto, E., Gapsari, F. (2022). Jackfruit peel extract as environmentally safe inhibitor for carbon steel protection in acidic solution. Journal of New Materials for Electrochemical Systems, Vol. 25, No.1, pp. 46-54. https://doi.org/10.14447/jnmes.v25i1.a07
96	Rahmani, Z., Belfar, A., Touahria, T., Bensaci, C., Rahmani, Z., Dekmouche, M., Saidi, M., Douadi, A.	Evaluation of Antioxidant Activity by Electrochemical and Chemical Methods, Kinetics and Thermodynamic Parameters of Superoxide Anion Radical towards Cupressus sempervirens L. Extracts	electrochemical behavior, pyrogallol, quasireversible, scavenging activity, anion superoxide	25, 1, 55-61	https://doi.org/10.14447/jnmes.v25i1.a08	Rahmani, Z., Belfar, A., Touahria, T., Bensaci, C., Rahmani, Z., Dekmouche, M., Saidi, M., Douadi, A. (2022). Evaluation of antioxidant activity by electrochemical and chemical methods, kinetics and thermodynamic parameters of superoxide anion radical towards Cupressus sempervirens L. extracts. Journal of New Materials for Electrochemical Systems, Vol. 25, No. 1, pp. 55-61. https://doi.org/10.14447/jnmes.v25i1.a08
97	Khan, A., Arya, R.	Towards the Design and Analysis of Multiplexer/Demultiplexer Using Quantum Dot Cellular Automata for Nano Systems	cost, energy estimation, demultiplexer, multiplexer, nano systems, qca, quantum dot cellular automata	25, 1, 62-71	https://doi.org/10.14447/jnmes.v25i1.a09	Khan, A., Arya, R. (2022). Towards the design and analysis of multiplexer/demultiplexer using Quantum dot Cellular Automata for nano systems. Journal of New Materials for Electrochemical Systems, Vol. 25, No. 1, pp. 62-71. https://doi.org/10.14447/jnmes.v25i1.a09
98	Gao, J., Gu, H., Yang, Y.W., Yuan, P., Poloei, H.	Improve Microbial Fuel Cell Efficiency Using Receding Horizon Predictive Control	microbial fuel cell, renewable energy, predictive control, receding horizon, stability, uncertainty, unknown parameters	25, 1, 72-78	https://doi.org/10.14447/jnmes.v25i1.a10	Gao, J., Gu, H., Yang, Y.W., Yuan, P., Poloei, H. (2022). Improve microbial fuel cell efficiency using receding horizon predictive control. Journal of New Materials for Electrochemical Systems, Vol. 25, No. 1, pp. 72-78. https://doi.org/10.14447/jnmes.v25i1.a10
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100	Abduljabbar, L.M., Hwidi, M.H., Alchalaby, A.A.	Study the Effect of Wavelengths and Energies of Laser on Zinc Telluride Thin Films Formed with Laser Technique	Zinc Telluride, Thin films, Nd: YAG laser, pulsed laser	24, 4, 225-228	https://doi.org/10.14447/jnmes.v24i4.a01	Abduljabbar, L.M., Hwidi, M.H., Alchalaby, A.A. (2021). Study the effect of wavelengths and energies of laser on zinc telluride thin films formed with laser technique. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 4, pp. 225-228. https://doi.org/10.14447/jnmes.v24i4.a01
101	Soge, A.O., Willoughby, A.A., Dairo, O.F., Onatoyinbo, O.O.	Cathode Materials for Lithium-ion Batteries: A Brief Review	Lithium-ion batteries, cathode materials, lithium storage, discharge capacity, energy density, cycling performance, lithiation, delithiation	24, 4, 229-246	https://doi.org/10.14447/jnmes.v24i4.a02	Soge, A.O., Willoughby, A.A., Dairo, O.F., Onatoyinbo, O.O. (2021). Cathode materials for lithium-ion batteries: A brief review. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 4, pp. 229-246. https://doi.org/10.14447/jnmes.v24i4.a02
102	Santhosh, M.S., Sasikumar, R., Khadar, S.D.A., Natrayan, L.	Ammonium Polyphosphate Reinforced E-Glass/Phenolic Hybrid Composites for Primary E-Vehicle Battery Casings –A Study on Fire Performance	E-Vehicle battery casing, Ammonium polyphosphate, Fire performance, E-Glass fiber, UL 94, Accelerated heat aging, Limiting oxygen index	24, 4, 247-253	https://doi.org/10.14447/jnmes.v24i4.a03	Santhosh, M.S., Sasikumar, R., Khadar, S.D.A., Natrayan, L. (2021). Ammonium polyphosphate reinforced E-Glass/Phenolic hybrid composites for primary E-Vehicle battery casings –A study on fire performance. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 4, pp. 247-253. https://doi.org/10.14447/jnmes.v24i4.a03
103	S, R., S, L., R, V., BS, M.P.D.	Investigate of Wear Behaviour and Mechanical Properties of Titanium Diboride Reinforced AMMC Composites	aluminum alloy, titanium boride, wear analysis, stir casting, scanning electron microscope	24, 4, 254-260	https://doi.org/10.14447/jnmes.v24i4.a04	S, R., S, L., R, V., BS, M.P.D. (2021). Investigate of wear behaviour and mechanical properties of titanium diboride reinforced AMMC composites. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 4, pp. 254-260. https://doi.org/10.14447/jnmes.v24i4.a04
104	Gao, J., Yang, Y.W., Gu, H.	Improving the Output Power of PEM Fuel Cell with PI + ASM Combined Controller Designed for Boost Converter	fuel cell; PEM fuel cell; boost converter; proportional-integral control; adaptive sliding mode control; uncertainty; Lyapunov; output power)	24, 4, 261-269	https://doi.org/10.14447/jnmes.v24i4.a05	Gao, J., Yang, Y.W., Gu, H. (2021). Improving the output power of PEM fuel cell with PI + ASM combined controller designed for boost converter. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 4, pp. 261-269. https://doi.org/10.14447/jnmes.v24i4.a05
105	Benabdellah, A., Negadi, K., Chaker, Y., Fetouhi, B., Debdab, M., Belarbi, H., Hatti, M.	Improving Performance of Dye Sensitized Solar Cells Based On Composite Quasi Solid-State Electrolytes of Poly (ionic liquid) / Ionic liquid / TiO ₂	poly (IL); Ionic liquid; DSSCs; conversion efficiency, long-term stability	24, 4, 270-277	https://doi.org/10.14447/jnmes.v24i4.a06	Benabdellah, A., Negadi, K., Chaker, Y., Fetouhi, B., Debdab, M., Belarbi, H., Hatti, M. (2021). Improving performance of dye sensitized solar cells based on composite quasi solid-state electrolytes of poly (ionic liquid) / ionic liquid/TiO ₂ . Journal of New Materials for Electrochemical Systems, Vol. 24, No. 4, pp. 270-277. https://doi.org/10.14447/jnmes.v24i4.a06
106	Rusdi, H., Mohamed, N.S., Subban, R.H.Y., Rusdi, R.	Di-metal Element Substitution of Al ³⁺ and Ti ⁴⁺ in Improving Electrochemical and Structural Behavior of Ceramic Solid Electrolytes	NASICON, mechanical milling, glass ceramic electrolyte, dielectric, electrochemical.	24, 4, 278-283	https://doi.org/10.14447/jnmes.v24i4.a07	Rusdi, H., Mohamed, N.S., Subban, R.H.Y., Rusdi, R. (2021). Di-metal element substitution of Al ³⁺ and Ti ⁴⁺ in improving electrochemical and structural behavior of ceramic solid electrolytes. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 4, pp. 278-283. https://doi.org/10.14447/jnmes.v24i4.a07
107	Sugila Devi, G., Sudalaimani, K.	Investigation on Strength, Shrinkage and Hydrogen Ion Concentration of Magnesium Binder Blended Cement Concrete	Magnesite, steatite, magnesium, shrinkage, strength, pH value, concrete	24, 4, 284-287	https://doi.org/10.14447/jnmes.v24i4.a08	Sugila Devi, G., Sudalaimani, K. (2021). Investigation on strength, shrinkage and hydrogen ion concentration of magnesium binder blended cement concrete. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 4, pp. 284-287. https://doi.org/10.14447/jnmes.v24i4.a08
108	Sathish, T.	Novel Investigation Trail on Bio-Fuel Cell by Various Fruits Waste in Domestic Juice Shops or Hotels	Biofuel cell, electricity, juice wastes, electrolyte, solid waste management.	24, 4, 288-292	https://doi.org/10.14447/jnmes.v24i4.a09	Sathish, T. (2021). Novel investigation trail on bio-fuel cell by various fruits waste in domestic juice shops or hotels. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 4, pp. 288-292. https://doi.org/10.14447/jnmes.v24i4.a09

109	Farmani, A.R., Swanson, R.J., Mahdavinzhad, F., Shoormeij, M.H., Mohammadi, S., Moeinzadeh, A., Ghazipour, F., Ai, J.	Potential Application of Picosecond Pulsed Electric Field (PPEF): Advanced Bioelectrical Technology for Potential COVID-19 Treatment	COVID-19, Picosecond Pulsed Electric Field (PPEF), Picotechnology, NAs, Subsidiary Treatment, Advanced Technology.	24, 4, 293-296	https://doi.org/10.14447/jnmes.v24i4.a10	Farmani, A.R., Swanson, R.J., Mahdavinzhad, F., Shoormeij, M.H., Mohammadi, S., Moeinzadeh, A., Ghazipour, F., Ai, J. (2021). Potential application of picosecond pulsed electric field (PPEF): Advanced Bioelectrical technology for potential COVID-19 treatment. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 4, pp. 293-296. https://doi.org/10.14447/jnmes.v24i4.a10
110	Zheng, L.H., Sun, Y.M., Jing, G.L., Wang, T.Y.	Advances on Structural Modification and Applications of Heptamethine Cyanine Dyes	Heptamethine cyanine dyes (HCDs), structure modification, spectral properties, functional materials	24, 4, 297-308	https://doi.org/10.14447/jnmes.v24i4.a11	Zheng, L.H., Sun, Y.M., Jing, G.L., Wang, T.Y. (2021). Advances on structural modification and applications of heptamethine cyanine dyes. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 4, pp. 297-308. https://doi.org/10.14447/jnmes.v24i4.a11
111	Lechlech, A., Kalaidji, D., Hadjidi, M.S., Baili, J., Abu-Zinadah, H., Lorenzini, G., Ahmad, H., Menni, Y.	Study and Design of Nanostructures on Lithium Niobate for Dielectric Sensors: Application for the Detection of an Electrical Signal in Insulation Systems	optical electric-field sensor, optical waveguide sensor, dielectric sensors, electro-optic effect, signal propagation, wave behavior, wave propagation, transmittance of guides, Reflectance of guides, guide's length, detection, crystal, nanotechnology	24, 4, 309-317	https://doi.org/10.14447/jnmes.v24i4.a12	Lechlech, A., Kalaidji, D., Hadjidi, M.S., Baili, J., Abu-Zinadah, H., Lorenzini, G., Ahmad, H., Menni, Y. (2021). Study and design of nanostructures on lithium niobate for dielectric sensors: application for the detection of an electrical signal in insulation systems. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 4, pp. 309-317. https://doi.org/10.14447/jnmes.v24i4.a12
112	Antony Prabu, D., Subbaiah, K.	Microstructure and Mechanical Behavior of Sc Doped Filler Rod in TIG Welding Dissimilar Al Mg Alloys	Al-Mg alloys, Mechanical properties, Microstructures, Scandium, TIG Welding	24, 3, 143-150	https://doi.org/10.14447/jnmes.v24i3.a01	Antony Prabu, D., Subbaiah, K. (2021). Microstructure and mechanical behavior of Sc doped filler rod in TIG welding dissimilar Al Mg alloys. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 3, pp. 143-150. https://doi.org/10.14447/jnmes.v24i3.a01
113	Leila, A., Afek, M., Ahmed, I., Halima, Z.	Analysis and Optimization of the Performance of Hydrogenated Amorphous Silicon Solar Cell	a-Si:H, alloys, solar cell, numerical simulation	24, 3, 151-158	https://doi.org/10.14447/jnmes.v24i3.a02	Leila, A., Afek, M., Ahmed, I., Halima, Z. (2021). Analysis and optimization of the performance of hydrogenated amorphous silicon solar cell. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 3, pp. 151-158. https://doi.org/10.14447/jnmes.v24i3.a02
114	Ravindranath Tagore, Y., Vijay Babu, A.R., Srinivasarao, Y., Manoj Kumar, P., Anuradha, K.	Experimental Validation of Fuel Cell Powered Energy Efficient Gallium Nitride Multilevel Inverter for Industrial Applications		24, 3, 159-165	https://doi.org/10.14447/jnmes.v24i3.a03	Ravindranath Tagore, Y., Vijay Babu, A.R., Srinivasarao, Y., Manoj Kumar, P., Anuradha, K. (2021). Experimental validation of fuel cell powered energy efficient gallium nitride multilevel inverter for industrial applications. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 3, pp. 159-165. https://doi.org/10.14447/jnmes.v24i3.a03
115	Kotla, R.W., Yarlagadda, S.R.	Real-time Simulations on Ultracapacitor based UPQC for the Power Quality Improvement in the Microgrid	Ultracapacitor, Unified power quality conditioner, Microgrid, Active power filter (APF), Dynamic voltage restorer (DVR)	24, 3, 166-174	https://doi.org/10.14447/jnmes.v24i3.a04	Kotla, R.W., Yarlagadda, S.R. (2021). Real-time simulations on ultracapacitor based UPQC for the power quality improvement in the microgrid. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 3, pp. 166-174. https://doi.org/10.14447/jnmes.v24i3.a04
116	Sulaiman, M., Kadir, M.F.Z., Che Mat, A.N.	Sol-gel Synthesis and Characterization of MgCO ₃ – Al ₂ O ₃ Composite Solid Electrolytes		24, 3, 175-182	https://doi.org/10.14447/jnmes.v24i3.a05	Sulaiman, M., Kadir, M.F.Z., Che Mat, A.N. (2021). Sol-gel synthesis and characterization of MgCO ₃ – Al ₂ O ₃ composite solid electrolytes. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 3, pp. 175-182. https://doi.org/10.14447/jnmes.v24i3.a05
117	Ravipati, S., Mani, V., Yarlagadda, S.	Performance Evaluation of PI/RBFN ANN Controllers for Sensor Less BLDC Motor Control Based Fuel Cell/PV Hybrid Electric Vehicle	Electric Vehicle, Proportional Integral Controller, Radial Basis Function Neural Network, Sensor Less BLDC motor.	24, 3, 183-194	https://doi.org/10.14447/jnmes.v24i3.a06	Ravipati, S., Mani, V., Yarlagadda, S. (2021). Performance evaluation of PI/RBFN ANN controllers for sensor less BLDC motor control based fuel Cell/PV Hybrid electric vehicle. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 3, pp. 183-194. https://doi.org/10.14447/jnmes.v24i3.a06
118	Al-Owais, A.A., El-Hallag, I.S., El-Mossalamy, E.H.	Convulsive Deconvulsive Voltammetry of Charge Transfer Complexes of 4,4'-Bipyridine with Benzoquinone Derivatives	convulsive voltammetry, deconvulsive voltammetry, chronoamperometry, SEM, TEM	24, 3, 195-200	https://doi.org/10.14447/jnmes.v24i3.a07	Al-Owais, A.A., El-Hallag, I.S., El-Mossalamy, E.H. (2021). Convulsive deconvulsive voltammetry of charge transfer complexes of 4,4'-bipyridine with benzoquinone derivatives. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 3, pp. 195-200. https://doi.org/10.14447/jnmes.v24i3.a07
119	Parihar, R., Sharma, P., Chaddha, A.S., Singh, N.K.	Strontium Substituted SmNiO ₃ : Novel Electrode Materials for Alkaline Water Electrolysis	Samarium nickelates, sol-gel method, XRD, oxygen evolution, thermodynamic parameters	24, 3, 201-207	https://doi.org/10.14447/jnmes.v24i3.a08	Parihar, R., Sharma, P., Chaddha, A.S., Singh, N.K. (2021). Strontium substituted SmNiO ₃ : Novel electrode materials for alkaline water electrolysis. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 3, pp. 201-207. https://doi.org/10.14447/jnmes.v24i3.a08
120	Dasari, M.S., Mani, V., Mopidevi, S.	Fuel Cell-Based High-Gain Boost Converter Fed Single-Phase Multi-level Inverter Controlled by FPGA controller	Fuel Cell, High-Gain converter, MLI, MC PWM, FPGA, THD	24, 3, 208-217	https://doi.org/10.14447/jnmes.v24i3.a09	Dasari, M.S., Mani, V., Mopidevi, S. (2021). Fuel cell-based high-gain boost converter fed single-phase multi-level inverter controlled by FPGA controller. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 3, pp. 208-217. https://doi.org/10.14447/jnmes.v24i3.a09
121	Raja, S., Ananthamoorthy, N.P.	Evaluation of Newly Developed Liquid Level Process with PD and PID Controller without Altering Material Characteristics	Fuzzy Logic Controllers, Mamdani, Proportional derivative, Proportional integral derivative	24, 3, 218-223	https://doi.org/10.14447/jnmes.v24i3.a10	Raja, S., Ananthamoorthy, N.P. (2021). Evaluation of newly developed liquid level process with pd and PID controller without altering material characteristics. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 3, pp. 218-223. https://doi.org/10.14447/jnmes.v24i3.a10
122	Bahri, H., Harrag, A.	PEM Fuel Cell Hydrogen Support Using PV-Electrolyzer Generation System	Photovoltaic, PV, Fuel cell, PEMFC, Electrolyzer, MPPT	24, 2, 55-65	https://doi.org/10.14447/jnmes.v24i2.a01	Bahri, H., Harrag, A. (2021). PEM fuel cell hydrogen support using PV-electrolyzer generation system. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 2, pp. 55-65. https://doi.org/10.14447/jnmes.v24i2.a01
123	Zaidi, S.Z.J., Hassan, S., Raza, M., Harito, C., Yulianto, B., Walsh, F.C.	Conceptualized Simulation for Templating Carbon Based Nano Structures for Li-ion Batteries: A DFT Investigation	lithium-ion batteries, carbon nanotubes, graphene, chitosan	24, 2, 66-72	https://doi.org/10.14447/jnmes.v24i2.a02	Zaidi, S.Z.J., Hassan, S., Raza, M., Harito, C., Yulianto, B., Walsh, F.C. (2021). Conceptualized simulation for templating carbon based nano structures for Li-ion batteries: A DFT investigation. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 2, pp. 66-72. https://doi.org/10.14447/jnmes.v24i2.a02
124	Sun, J.Z., Dong, Y., Wang, X.F., Kong, C.Y., Hong, J.M., Li, C.H.	Molybdenum Trioxide Microrods synthesized with Corn Straw as Biological Templates and its Electrochemical Performance in Aqueous Battery	Biological Template, Corn Straw, Rechargeable aqueous battery, Aluminium-ion battery, MoO ₃	24, 2, 73-77	https://doi.org/10.14447/jnmes.v24i2.a03	Sun, J.Z., Dong, Y., Wang, X.F., Kong, C.Y., Hong, J.M., Li, C.H. (2021). Molybdenum trioxide microrods synthesized with corn straw as biological templates and its electrochemical performance in aqueous battery. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 2, pp. 73-77. https://doi.org/10.14447/jnmes.v24i2.a03
125	Kandasamy, S.K., Subramanian, B., Krishnamoorthy, H., Arumugam, C., Suganthi, V., Yuvasri, M., Shreegosh, D.	Chemically Treated Activated Carbon for Supercapacitor Electrode Derived from Starch of Solanum Tuberosum	Electrode, Energy density, Solanum tuberosum, Supercapacitor, Power density	24, 2, 78-83	https://doi.org/10.14447/jnmes.v24i2.a04	Kandasamy, S.K., Subramanian, B., Krishnamoorthy, H., Arumugam, C., Suganthi, V., Yuvasri, M., Shreegosh, D. (2021). Chemically treated activated carbon for supercapacitor electrode derived from starch of solanum tuberosum. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 2, pp. 78-83. https://doi.org/10.14447/jnmes.v24i2.a04
126	Subramanian, G.G., Padmanabhan, T.S., Chidambaram, I.A., Paramasivam, B.	Pseudo-Derivative Feedback Controller for Automatic Generation Control in a Deregulated Power System with Hydrogen Energy Storage	automatic generation control, flower pollination algorithm, hydrogen energy storage, PDF controller, power system restoration indices	24, 2, 84-94	https://doi.org/10.14447/jnmes.v24i2.a05	Subramanian, G.G., Padmanabhan, T.S., Chidambaram, I.A., Paramasivam, B. (2021). Pseudo-Derivative Feedback controller for automatic generation control in a deregulated power system with hydrogen energy storage. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 2, pp. 84-94. https://doi.org/10.14447/jnmes.v24i2.a05

127	Karthikeyan, M., Vijayachitra, S.	A Novel Experimental Study and Analysis of Electrocoagulation Process for Textile Wastewater Treatment using Various Sensors with Integration of IoT Monitoring System	electrocoagulation, electrode, colour, turbidity, pH, sensors and IoT	24, 2, 95-102	https://doi.org/10.14447/jnmes.v24i2.a06	Karthikeyan, M., Vijayachitra, S. (2021). A novel experimental study and analysis of electrocoagulation process for textile wastewater treatment using various sensors with integration of IoT monitoring system. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 24, No. 2, pp. 95-102. https://doi.org/10.14447/jnmes.v24i2.a06
128	Qazi, U.Y.	Influence of Surfactant Additives on Photochemical Synthesized Silver Nanoparticles using UV Pulsed Laser Irradiations in Aqueous Silver Nitrate Solution	Critical micelles concentration (CMC), Silver nanospheres (AgNSs), Laser irradiation, Nanotechnology, Critical growth concentration (CGC)	24, 2, 103-110	https://doi.org/10.14447/jnmes.v24i2.a07	Qazi, U.Y. (2021). Influence of surfactant additives on photochemical synthesized silver nanoparticles using UV pulsed laser irradiations in aqueous silver nitrate solution. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 24, No. 2, pp. 103-110. https://doi.org/10.14447/jnmes.v24i2.a07
129	Fu, L., Fu, X.W., Yang, P.	Maximum Power Point Tracking in Solar Cells with Power Quality Preservation Based on Impedance Matching Concept for Satellite Electrical Energy Supply	solar cell, maximum power point tracking, impedance matching concept, solar radiation, DC/DC converter	24, 2, 111-119	https://doi.org/10.14447/jnmes.v24i2.a08	Fu, L., Fu, X.W., Yang, P. (2021). Maximum power point tracking in solar cells with power quality preservation based on impedance matching concept for satellite electrical energy supply. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 24, No. 2, pp. 111-119. https://doi.org/10.14447/jnmes.v24i2.a08
130	Vijayakumar, M., Kumaresan, K., Gopal, R., Vetrivel, S.D., Vijayan, V.	Effect of Silicon Carbide on the Mechanical and Thermal Properties of Snake Grass/Sisal Fiber Reinforced Hybrid Epoxy Composites	hybrid composite, snake grass fiber, sisal fiber, SiC, mechanical properties, water absorption, thermal properties	24, 2, 120-128	https://doi.org/10.14447/jnmes.v24i2.a09	Vijayakumar, M., Kumaresan, K., Gopal, R., Vetrivel, S.D., Vijayan, V. (2021). Effect of silicon carbide on the mechanical and thermal properties of snake grass/sisal fiber reinforced hybrid epoxy composites. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 24, No. 2, pp. 120-128. https://doi.org/10.14447/jnmes.v24i2.a09
131	Chaudhury, P., Samantaray, S.	Thermal Modelling and Multi Decision Making Optimization of EDM of Non Conductive SiC-CNT Ceramic Composite Used for Li-ion Battery and Sensor	Thermal model, Ceramic matrix composite, Carbon nano tube, Electrical discharge machining, Heat flux, fraction of heat, material removal rate, desirability analysis	24, 2, 129-141	https://doi.org/10.14447/jnmes.v24i2.a10	Chaudhury, P., Samantaray, S. (2021). Thermal modelling and multi decision making optimization of EDM of non conductive SiC-CNT ceramic composite used for li-ion battery and sensor. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 24, No. 2, pp. 129-141. https://doi.org/10.14447/jnmes.v24i2.a10
132	Zaidi, S.Z.J., Raza, M., Hassan, S., Harito, C., Walsh, F.C.	A DFT Study of Heteroatom Doped-Pyrazine as an Anode in Sodium ion Batteries	DFT, bio-batteries, sodium ion batteries	24, 1, 1-8	https://doi.org/10.14447/jnmes.v24i1.a01	Zaidi, S.Z.J., Raza, M., Hassan, S., Harito, C., Walsh, F.C. (2021). A DFT study of heteroatom doped-pyrazine as an anode in sodium ion batteries. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 24, No. 1, pp. 1-8. https://doi.org/10.14447/jnmes.v24i1.a01
133	Ibn Shamsah, S.M.	Electrochemical Performance of Cupric Oxide Loaded Carbon Nanotubes as Electrode Material for CO2 Reduction	carbon nanotubes, cupric oxide, CO2 reduction, electrochemical cell, linear sweep voltammetry	24, 1, 9-13	https://doi.org/10.14447/jnmes.v24i1.a02	Ibn Shamsah, S.M. (2021). Electrochemical performance of cupric oxide loaded carbon nanotubes as electrode material for CO2 reduction. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 24, No. 1, pp. 9-13. https://doi.org/10.14447/jnmes.v24i1.a02
134	Fu, X.W., Fu, L., Marrani, H.I.	Stabilization of A Single Chamber Single Population Microbial Fuel Cell by Using of a Novel Nonlinear Adaptive Sliding Mode Control	microbial fuel cell, renewable energy, adaptive method, sliding mode control, stabilization	24, 1, 14-20	https://doi.org/10.14447/jnmes.v24i1.a03	Fu, X.W., Fu, L., Marrani, H.I. (2021). Stabilization of a single chamber single population microbial fuel cell by using of a novel nonlinear adaptive sliding mode control. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 24, No. 1, pp. 14-20. https://doi.org/10.14447/jnmes.v24i1.a03
135	Kandasamy, S.K., Arumugam, C., Sajitha, A.S., Rao, S.P., Selvaraj, S., Vetrivel, R., Selvarajan, R., Alosaimi, A.M., Khan, A., Hussein, M.A., Asiri, A.M.	Paradisaiaca/Solanum Tuberosum Biowaste Compositised with Graphene Oxide for Flexible Supercapacitor	Biowaste composite, Citrus Sinensis Flavados, Graphene Oxide, Flexible Supercapacitor, Musa Paradisiaca, Solanum Tuberosum	24, 1, 21-28	https://doi.org/10.14447/jnmes.v24i1.a04	Kandasamy, S.K., Arumugam, C., Sajitha, A.S., Rao, S.P., Selvaraj, S., Vetrivel, R., Selvarajan, R., Alosaimi, A.M., Khan, A., Hussein, M.A., Asiri, A.M. (2021). Paradisiaca/Solanum tuberosum biowaste compositised with graphene oxide for flexible supercapacitor. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 24, No. 1, pp. 21-28. https://doi.org/10.14447/jnmes.v24i1.a04
136	Mainier, F.B., da Silva, T.T., de Araujo, F.P.D.	Performance of Propargyl Alcohol as Corrosion Inhibitor for Electroless Nickel-Phosphorus (NiP) Coating in Hydrochloric Acid Solution	Electroless NiP coating, propargyl alcohol, corrosion inhibitor, hydrochloric acid, acid stimulation	24, 1, 29-33	https://doi.org/10.14447/jnmes.v24i1.a05	Mainier, F.B., da Silva, T.T., de Araujo, F.P.D. (2021). Performance of propargyl alcohol as corrosion inhibitor for electroless nickel-phosphorus (NiP) coating in hydrochloric acid solution. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 24, No. 1, pp. 29-33. https://doi.org/10.14447/jnmes.v24i1.a05
137	Sathish, T., Sabarirajan, N.	Synthesis and Optimization of AA 7175 – Zirconium Carbide (ZrC) Composites Machining Parameters	AA7175, zirconium carbide, milling, reinforcement, minitab, CNC, stir casting	24, 1, 34-37	https://doi.org/10.14447/jnmes.v24i1.a06	Sathish, T., Sabarirajan, N. (2021). Synthesis and optimization of AA 7175 – zirconium carbide (ZrC) composites machining parameters. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 24, No. 1, pp. 34-37. https://doi.org/10.14447/jnmes.v24i1.a06
138	Qazi, U.Y.	Silver Nanoparticles Formation by Nanosecond Pulsed Laser Irradiation in an Aqueous Solution of Silver Nitrate; Effect of Sodium bis (2-ethyl hexyl) Sulfosuccinate	Critical micelles concentration (CMC), Silver nanospheres (AgNSs), Laser irradiation, Nanotechnology, sodium-bis (2-ethylhexyl) sulfosuccinate (AOT)	24, 1, 38-42	https://doi.org/10.14447/jnmes.v24i1.a07	Qazi, U.Y. (2021). Silver nanoparticles formation by nanosecond pulsed laser irradiation in an aqueous solution of silver nitrate; effect of Sodium bis (2-ethyl hexyl) sulfosuccinate. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 24, No. 1, pp. 38-42. https://doi.org/10.14447/jnmes.v24i1.a07
139	Harrag, A.	Novel Neural network single sensor MPPT for Proton Exchange Membrane Fuel Cell	PEM Fuel Cell, MPPT, Single Sensor, Neural Network, NN	24, 1, 43-48	https://doi.org/10.14447/jnmes.v24i1.a08	Harrag, A. (2021). Novel neural network single sensor MPPT for proton exchange membrane fuel cell. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 24, No. 1, pp. 43-48. https://doi.org/10.14447/jnmes.v24i1.a08
140	Gunasekaran, K., Pradeep Kumar, G., Thanigaivelan, R., Arunachalam, R., Shanmugam, V.	Optimization of Turning Parameters of Cryogenic Soaked AZ91 Magnesium Alloy using TOPSIS coupled Taguchi Technique	Magnesium alloys, Cryogenic soaking Duration, TOPSIS, Cutting temperature, Surface roughness, Cutting force	24, 1, 49-54	https://doi.org/10.14447/jnmes.v24i1.a09	Gunasekaran, K., Pradeep Kumar, G., Thanigaivelan, R., Arunachalam, R., Shanmugam, V. (2021). Optimization of turning parameters of cryogenic soaked AZ91 magnesium alloy using TOPSIS coupled Taguchi technique. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 24, No. 1, pp. 49-54. https://doi.org/10.14447/jnmes.v24i1.a09
141	Savado, O.	Will the future of electric vehicles be powered by accumulators or fuel cells		23, 4, 221-224	https://doi.org/10.14447/jnmes.v23i4.a01	Savado, O. (2020). Will the future of electric vehicles be powered by accumulators or fuel cells? <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 4, pp. 221-224. https://doi.org/10.14447/jnmes.v23i4.a01
142	Kahia, H., Aicha, S., Herbadji, D., Herbadji, A., Bedda, S.	Neural network based diagnostic of PEM fuel cell	PEMFC, neural network, EIS	23, 4, 225-234	https://doi.org/10.14447/jnmes.v23i4.a02	Kahia, H., Aicha, S., Herbadji, D., Herbadji, A., Bedda, S. (2020). Neural network based diagnostic of PEM fuel cell. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 4, pp. 225-234. https://doi.org/10.14447/jnmes.v23i4.a02
143	Sathish, T.	Performance improvement of base fluid heat transfer medium using nano fluid particles	heat transfer coefficient, CFX simulation, ansys simulation, nano fluid and base fluid	23, 4, 235-243	https://doi.org/10.14447/jnmes.v23i4.a03	Sathish, T. (2020). Performance improvement of base fluid heat transfer medium using nano fluid particles. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 4, pp. 235-243. https://doi.org/10.14447/jnmes.v23i4.a03
144	Wang, G.W., Chen, H.Z., Wu, Y.H.	Influence of heat disturbance on the performance of YSZ based CO2 sensor with compound of Li2CO3-BaCO3-Nd2O3 as auxiliary sensing electrode	heat disturbance, YSZ, CO2 sensor, water vapor	23, 4, 244-251	https://doi.org/10.14447/jnmes.v23i4.a04	Wang, G.W., Chen, H.Z., Wu, Y.H. (2020). Influence of heat disturbance on the performance of YSZ based CO2 sensor with compound of Li2CO3-BaCO3-Nd2O3 as auxiliary sensing electrode. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 4, pp. 244-251. https://doi.org/10.14447/jnmes.v23i4.a04

145	Sankar, L.P., Kamalakannan, R., Aruna, G., Meera, M.R., Vijayan, V., Sivanathan, S.	Mechanical behavior and microstructure evolution of Al-5%Cu/TiC metal matrix composite	metal matrix composite, build-up edge, machinability, hardness, SEM analysis	23, 4, 252-255	https://doi.org/10.14447/jnmes.v23i4.a05	Sankar, L.P., Kamalakannan, R., Aruna, G., Meera, M.R., Vijayan, V., Sivanathan, S. (2020). Mechanical behavior and microstructure evolution of Al-5%Cu/TiC metal matrix composite. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 4, pp. 252-255. https://doi.org/10.14447/jnmes.v23i4.a05
146	He, Y., Wang, K., Ji, Y.H., Wu, G.Y., Zhao, M.J.	Evaluation of cumulative damage of sandstone under cyclic wetting and drying through acoustic wave parameters and resistivity testing	sandstone, cyclic wetting and drying, P-wave velocity, acoustic wave parameters and resistivity (AWPR) testing, cumulative damage	23, 4, 256-261	https://doi.org/10.14447/jnmes.v23i4.a06	He, Y., Wang, K., Ji, Y.H., Wu, G.Y., Zhao, M.J. (2020). Evaluation of cumulative damage of sandstone under cyclic wetting and drying through acoustic wave parameters and resistivity testing. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 4, pp. 256-261. https://doi.org/10.14447/jnmes.v23i4.a06
147	Lian, Y.T., Xie, Q.Z., Zheng, M.G.	Investigation on the optimal angle of a flow-field design based on the leaf-vein structure for PEMFC	PEMFC, bio-inspired flow field, angle, fuel cell performance, mass transfer	23, 4, 262-268	https://doi.org/10.14447/jnmes.v23i4.a07	Lian, Y.T., Xie, Q.Z., Zheng, M.G. (2020). Investigation on the optimal angle of a flow-field design based on the leaf-vein structure for PEMFC. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 4, pp. 262-268. https://doi.org/10.14447/jnmes.v23i4.a07
148	Yokeswaran, R., Vijayan, V., Karthikeyan, T., Loganathan, M., Antony, A.G.	Microstructure analysis of IS2062 plates clad with SS2594 by TIG welding process	cladding, IS2062 steel, super duplex stainless steel, SS2594, gas metal arc welding, microstructural characteristics, mechanical behaviour	23, 4, 269-273	https://doi.org/10.14447/jnmes.v23i4.a08	Yokeswaran, R., Vijayan, V., Karthikeyan, T., Loganathan, M., Antony, A.G. (2020). Microstructure analysis of IS2062 plates clad with SS2594 by TIG welding process. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 4, pp. 269-273. https://doi.org/10.14447/jnmes.v23i4.a08
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151	Amna, R., Ali, K., Malik, M.I., Shamsah, S.I.	A brief review of electrospinning of polymer nanofibers: History and main applications	electrospinning, taylor cone, electrical jet trajectory, ultrafine fibers, electrostatic force, fiber assembly, sub-micron fibers	23, 3, 151-163	https://doi.org/10.14447/jnmes.v23i3.a01	Amna, R., Ali, K., Malik, M.I., Shamsah, S.I. (2020). A brief review of electrospinning of polymer nanofibers: History and main applications. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 3, pp. 151-163. https://doi.org/10.14447/jnmes.v23i3.a01
152	Narayana, V.L., Gopi, A.P.	Enterotoxigenic Escherichia coli detection using the design of a biosensor	food Industry, biological environment, enterotoxigenic, microelectrode array, vapor deposition	23, 3, 164-166	https://doi.org/10.14447/jnmes.v23i3.a02	Narayana, V.L., Gopi, A.P. (2020). Enterotoxigenic Escherichia coli detection using the design of a biosensor. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 3, pp. 164-166. https://doi.org/10.14447/jnmes.v23i3.a02
153	Zhu, J., Zheng, W.Z., Xie, L.L., Ren, N., Zhang, Y.X., Zhang, Y.X.	Alkali-activated slag cement: Alternative adhesives for CFRP sheets bonded to concrete at elevated temperatures	Alkali-activated slag, CFRP, high temperature, mechanical properties, microstructure	23, 3, 167-176	https://doi.org/10.14447/jnmes.v23i3.a03	Zhu, J., Zheng, W.Z., Xie, L.L., Ren, N., Zhang, Y.X., Zhang, Y.X. (2020). Alkali-activated slag cement: Alternative adhesives for CFRP sheets bonded to concrete at elevated temperatures. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 3, pp. 167-176. https://doi.org/10.14447/jnmes.v23i3.a03
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157	Tian, W., Qian, Y.M., Wang, R.Z., Wang, Y.M.	Tensile performance of a novel glue-laminated cornstalk scrimber	cornstalks, scrimber, glulam, tensile strength, mechanical performance	23, 3, 198-203	https://doi.org/10.14447/jnmes.v23i3.a07	Tian, W., Qian, Y.M., Wang, R.Z., Wang, Y.M. (2020). Tensile performance of a novel glue-laminated cornstalk scrimber. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 3, pp. 198-203. https://doi.org/10.14447/jnmes.v23i3.a07
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159	Prakash, R., Meenakshipriya, B., Vijayan, S., Kumaravelan, R.	Performance evaluation of a solar PV/T water heater integrated with inorganic salt based energy storage medium	PV/T hybrid module, phase change materials, salt mixture, differential scanning calorimetry	23, 3, 213-220	https://doi.org/10.14447/jnmes.v23i3.a09	Prakash, R., Meenakshipriya, B., Vijayan, S., Kumaravelan, R. (2020). Performance evaluation of a solar PV/T water heater integrated with inorganic salt based energy storage medium. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 23, No. 3, pp. 213-220. https://doi.org/10.14447/jnmes.v23i3.a09
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165	Babu, B., Sabarinathan, C., Dharmalingam, S.	Production of aluminum 6063 metal matrix composite with 12% magnesium oxide and 5% graphite and its machinability studies using micro electrochemical machining	Metal Matrix Composites, Mechanical properties, micro ECM, ANOVA, Material removal rate, overcut	23, 2, 94-100	https://doi.org/10.14447/jnmes.v23i2.a06	Babu, B., Sabarinathan, C., Dharmalingam, S. (2020). Production of aluminum 6063 metal matrix composite with 12% magnesium oxide and 5% graphite and its machinability studies using micro electrochemical machining. Journal of New Materials for Electrochemical Systems, Vol. 23, No. 2, pp. 94-100. https://doi.org/10.14447/jnmes.v23i2.a06
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179	Thiyagarajan, K., Jayaraman, M., Vijayan, V., Ramkumar, R.	Cluster analysis of lost foam casted Al-Zn-Mg-Cu alloy with K-Mean algorithm	AA7075, foam casting, ANSYS, SEM, tensile strength.	23, 1, 45-51	https://doi.org/10.14447/jnmes.v23i1.a09	Thiyagarajan, K., Jayaraman, M., Vijayan, V., Ramkumar, R. (2020). Cluster analysis of lost foam casted Al-Zn-Mg-Cu alloy with K-Mean algorithm. Journal of New Materials for Electrochemical Systems, Vol. 23, No. 1, pp. 45-51. https://doi.org/10.14447/jnmes.v23i1.a09
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184	Lee, S.J., Kim, S.J., Hong, T.W.	Evaluations of discharge capacity and cycle stability on graphene-added Li1.9Ni0.35Mn0.65O2 cathode by carbonate co-precipitation	Mn-rich cathode, Carbonate co-precipitation, Graphene	22, 4, 191-194	https://doi.org/10.14447/jnmes.v22i4.a04	Lee, S.J., Kim, S.J., Hong, T.W. (2019). Evaluations of discharge capacity and cycle stability on graphene-added Li1.9Ni0.35Mn0.65O2 cathode by carbonate co-precipitation. Journal of New Materials for Electrochemical Systems, Vol. 22, No. 4, pp. 191-194. https://doi.org/10.14447/jnmes.v22i4.a04
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186	Myles, A.S., Savadogo, O., Oishi, K.	Development of a new building integrated PV-thermal solar module		22, 4, 200-216	https://doi.org/10.14447/jnmes.v22i4.a06	Myles, A.S., Savadogo, O., Oishi, K. (2019). Development of a new building integrated PV-thermal solar module. Journal of New Materials for Electrochemical Systems, Vol. 22, No. 4, pp. 200-216. https://doi.org/10.14447/jnmes.v22i4.a06
187	Wang, C.L., Zhao, G.F., Zheng, Y.C., Zhang, K.F., Ye, P.Y., Cui, X.W.	Study on the preparation of high performance concrete using steel slag and iron ore tail-ings	steel slag, iron ore tailings, high performance concrete, ettringite, pore size distribution	22, 4, 217-223	https://doi.org/10.14447/jnmes.v22i4.a07	Wang, C.L., Zhao, G.F., Zheng, Y.C., Zhang, K.F., Ye, P.Y., Cui, X.W. (2019). Study on the preparation of high performance concrete using steel slag and iron ore tail-ings. Journal of New Materials for Electrochemical Systems, Vol. 22, No. 4, pp. 217-223. https://doi.org/10.14447/jnmes.v22i4.a07
188	Liang, X.Y., Wang, C.L., Zhan, J.Y., Cui, X.W., Ren, Z.Z.	Study on preparation of eco-friendly autoclaved aerated concrete from low silicon and high iron ore tailings	iron ore tailings, autoclaved aerated concrete, fineness, content, tobermorite	22, 4, 224-230	https://doi.org/10.14447/jnmes.v22i4.a08	Liang, X.Y., Wang, C.L., Zhan, J.Y., Cui, X.W., Ren, Z.Z. (2019). Study on preparation of eco-friendly autoclaved aerated concrete from low silicon and high iron ore tailings. Journal of New Materials for Electrochemical Systems, Vol. 22, No. 4, pp. 224-230. https://doi.org/10.14447/jnmes.v22i4.a08
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192	Sulaiman, M., Che Su, N., Mohamed, N.S.	Sol-gel Synthesis and Characterization of MgSO4:Mg(NO3)2 – Al2O3 Composite Solid Electrolytes	magnesium sulphate, magnesium nitrate, composite solid electrolyte, XRD, DSC	22, 3, 132-138	https://doi.org/10.14447/jnmes.v22i3.a03	Sulaiman, M., Che Su, N., Mohamed, N.S. (2019). Sol-gel synthesis and characterization of MgSO4:Mg(NO3)2 – Al2O3 composite solid electrolytes. Journal of New Materials for Electrochemical Systems, Vol. 22, No. 3, pp. 132-138. https://doi.org/10.14447/jnmes.v22i3.a03
193	Siburian, R., Ratih, D., Andriyani, Perangin-Angin, S., Sembiring, H., Supeno, M., Simanjuntak, C., Pratiwi, S.	Facile Method to Synthesize of N-Graphene Nano Sheets	N-graphene nano sheets, graphene nano sheets, amonia, room temperature	22, 3, 139-142	https://doi.org/10.14447/jnmes.v22i3.a04	Siburian, R., Ratih, D., Andriyani, Perangin-Angin, S., Sembiring, H., Supeno, M., Simanjuntak, C., Pratiwi, S. (2019). Facile method to synthesize of N-graphene nano sheets. Journal of New Materials for Electrochemical Systems, Vol. 22, No. 3, pp. 139-142. https://doi.org/10.14447/jnmes.v22i3.a04
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196	Srinivasan, V.P., Palani, P.K.	Experimental Investigation on Wire-Electro Discharge Machining of Tungsten Carbide (WC) using Response Surface Methodology (RSM)	WEDM, Tungsten Carbide, Material Removal Rate, surface roughness, RSM, DOE	22, 3, 155-158	https://doi.org/10.14447/jnmes.v22i3.a07	Srinivasan, V.P., Palani, P.K. (2019). Experimental investigation on Wire-Electro Discharge Machining of Tungsten Carbide (WC) using Response Surface Methodology (RSM). Journal of New Materials for Electrochemical Systems, Vol. 22, No. 3, pp. 155-158. https://doi.org/10.14447/jnmes.v22i3.a07
197	Yang, F.H., Liang, X.Y., Zhu, Y., Wang, C.L., Zhao, G.F., Cui, X.W.	Preparation of Environmentally Friendly and Energy-saving Autoclaved Aerated Concrete using Gold Tailings	gold tailings, autoclaved aerated concrete, calcium materials, tobermorite	22, 3, 159-164	https://doi.org/10.14447/jnmes.v22i3.a08	Yang, F.H., Liang, X.Y., Zhu, Y., Wang, C.L., Zhao, G.F., Cui, X.W. (2019). Preparation of environmentally friendly and energy-saving autoclaved aerated concrete using gold tailings. Journal of New Materials for Electrochemical Systems, Vol. 22, No. 3, pp. 159-164. https://doi.org/10.14447/jnmes.v22i3.a08
198	Samson Myles, A., Savadogo, O., Oishi, K.	Concept and Simulation Study of a Novel Building Integrated Photovoltaic Thermal (BIPV-T) Solar Module		22, 3, 165-172	https://doi.org/10.14447/jnmes.v22i3.a09	Samson Myles, A., Savadogo, O., Oishi, K. (2019). Concept and simulation study of a novel building integrated photovoltaic thermal (BIPV-T) solar module. Journal of New Materials for Electrochemical Systems, Vol. 22, No. 3, pp. 165-172. https://doi.org/10.14447/jnmes.v22i3.a09

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200	Wang, C.L., Ren, Z.Z., Zheng, Y.C., Ye, P.F., Zhang, K.F., Cui, X.W.	Effects of Heat Treatment System on Mechanical Strength and Crystallinity of CaO-MgO- Al ₂ O ₃ -SiO ₂ Glass-Ceramics Containing Coal Gangue and Iron Ore Tailings	coal gangue, iron ore tailings, glass-ceramics, mechanical strength, crystallinity	22, 2, 70-78	https://doi.org/10.14447/jnmes.v22i2.a02	Wang, C.L., Ren, Z.Z., Zheng, Y.C., Ye, P.F., Zhang, K.F., Cui, X.W. (2019). Effects of heat treatment system on mechanical strength and crystallinity of CaO-MgO- Al ₂ O ₃ -SiO ₂ glass-ceramics containing coal gangue and iron ore tailings. Journal of New Materials for Electrochemical Systems, Vol. 22, No. 2, pp. 70-78. https://doi.org/10.14447/jnmes.v22i2.a02
201	Zhang, X.P., Chen, L.X., Zheng, Y.F., Tang, H.D., Liu, Z.J.	Electrocatalytic Reduction and Detection of 4-Nitrophenol in Water at Free-Standing Cu Nanowire Electrode	Cu nanowires, Electrochemical sensor, Free-standing electrode, 4-Nitrophenol	22, 2, 79-84	https://doi.org/10.14447/jnmes.v22i2.a03	Zhang, X.P., Chen, L.X., Zheng, Y.F., Tang, H.D., Liu, Z.J. (2019). Electrocatalytic reduction and detection of 4-nitrophenol in water at free-standing Cu nanowire electrode. Journal of New Materials for Electrochemical Systems, Vol. 22, No. 2, pp. 79-84. https://doi.org/10.14447/jnmes.v22i2.a03
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204	Deng, J.W., Cao, L.	Research on Human Motion Test Based on Biomechanical Sensors Using Electromyography and Pressure Detection Systems	PVDF biomechanical sensor, motion test	22, 2, 98-101	https://doi.org/10.14447/jnmes.v22i2.a06	Deng, J.W., Cao, L. (2019). Research on human motion test based on biomechanical sensors using electromyography and pressure detection systems. Journal of New Materials for Electrochemical Systems, Vol. 22, No. 2, pp. 98-101. https://doi.org/10.14447/jnmes.v22i2.a06
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209	Sathish, T., Chandramohan, D., Vijayan, V., Sebastian, P.J.	Investigation on Microstructural and Mechanical Properties of Cu Reinforced with Sic Composites Prepared by Microwave Sintering Process	Copper, silicon carbide, graphite, hardness test, compressive test, microstructure test	22, 1, 5-9	https://doi.org/10.14447/jnmes.v22i1.a02	Sathish, T., Chandramohan, D., Vijayan, V., Sebastian, P.J. (2019). Investigation on microstructural and mechanical properties of Cu reinforced with Sic composites prepared by microwave sintering process. Journal of New Materials for Electrochemical Systems, Vol. 22, No. 1, pp. 5-9. https://doi.org/10.14447/jnmes.v22i1.a02
210	Dinesh, S., Parameswaran, P., Vijayan, V., Thanikaikarasan, S., Rajaguru, K.	Study on Microstructure and Properties of Al-Cu-Li Alloys for Electrochemical Applications	Aluminium alloy, stir casting, microstructure, scanning electron microscope, intermetallics, structural applications	22, 1, 11-14	https://doi.org/10.14447/jnmes.v22i1.a03	Dinesh, S., Parameswaran, P., Vijayan, V., Thanikaikarasan, S., Rajaguru, K. (2019). Study on microstructure and properties of Al-Cu-Li alloys for electrochemical applications. Journal of New Materials for Electrochemical Systems, Vol. 22, No. 1, pp. 11-14. https://doi.org/10.14447/jnmes.v22i1.a03
211	Sundaraj, M., Subramani, V.	Corrosion Investigation on Magnesium AZ91D alloy coated with EN-Phosphate and Nano additives (ZnO) and its Feasibility in Engine Applications	magnesium AZ91D, electroless nickel coating, neutral salt spray test, corrosion, engines	22, 1, 15-19	https://doi.org/10.14447/jnmes.v22i1.a04	Sundaraj, M., Subramani, V. (2019). Corrosion investigation on magnesium AZ91D alloy coated with EN-Phosphate and nano additives (ZnO) and its feasibility in engine applications. Journal of New Materials for Electrochemical Systems, Vol. 22, No. 1, pp. 15-19. https://doi.org/10.14447/jnmes.v22i1.a04
212	Roseline, S., Paramasivam, V., Parameswaran, P., Antony, A.G.	Evaluation of Mechanical Properties and Stability of Al 6061 with Addition of ZrO ₂ And Al ₂ O ₃	Al6061, ZrO ₂ & Al ₂ O ₃ , mechanical behavior, fracture toughness, thermal stability	22, 1, 21-23	https://doi.org/10.14447/jnmes.v22i1.a05	Roseline, S., Paramasivam, V., Parameswaran, P., Antony, A.G. (2019). Evaluation of mechanical properties and stability of Al 6061 with addition of ZrO ₂ And Al ₂ O ₃ . Journal of New Materials for Electrochemical Systems, Vol. 22, No. 1, pp. 21-23. https://doi.org/10.14447/jnmes.v22i1.a05
213	Vasanthkumar, P., Senthikumar, N., Palanikumar, K., Rathinam, N.	Influence of Seashell Addition on Thermo-Mechanical Properties of Nylon 66 Polymer Matrix Composite	sea shell particulate, reinforcement, nylon 66, differential scanning calorimetry (DSC), dynamic mechanical analysis (DMA) and thermal gravimetric analysis (TGA)	22, 1, 25-31	https://doi.org/10.14447/jnmes.v22i1.a06	Vasanthkumar, P., Senthikumar, N., Palanikumar, K., Rathinam, N. (2019). Influence of seashell addition on thermo-mechanical properties of nylon 66 polymer matrix composite. Journal of New Materials for Electrochemical Systems, Vol. 22, No. 1, pp. 25-31. https://doi.org/10.14447/jnmes.v22i1.a06
214	Dinesh, S., Vijayan, V., Thanikaikarasan, S., Sebastian, P.J.	Productivity and Quality Enhancement in Powder Mixed Electrical Discharge Machining for OHNS Die Steel by Utilization of ANN and RSM Modeling	powder mixed electrical discharge machining (PMEDM), material removal rate (MRR), surface roughness (SR), re-sponse surface methodology (RSM), artificial neural network (ANN), powder concentration	22, 1, 33-43	https://doi.org/10.14447/jnmes.v22i1.a07	Dinesh, S., Vijayan, V., Thanikaikarasan, S., Sebastian, P.J. (2019). Productivity and quality enhancement in powder mixed electrical discharge machining for OHNS die steel by utilization of ANN and RSM modeling. Journal of New Materials for Electrochemical Systems, Vol. 22, No. 1, pp. 33-43. https://doi.org/10.14447/jnmes.v22i1.a07
215	Yokeswaran, R., Vijayan, V., Karthikeyan, T., Kumar, B.S., Kumar, G.S.	Comprehensive Analysis of Surface Modification Process Parameters by Using Tungsten Inert Gas Welding Process	duplex stainless steel, rockwell C hardness tester, scanning electron microscope, microstructure	22, 1, 45-49	https://doi.org/10.14447/jnmes.v22i1.a08	Yokeswaran, R., Vijayan, V., Karthikeyan, T., Kumar, B.S., Kumar, G.S. (2019). Comprehensive analysis of surface modification process parameters by using tungsten inert gas welding process. Journal of New Materials for Electrochemical Systems, Vol. 22, No. 1, pp. 45-49. https://doi.org/10.14447/jnmes.v22i1.a08
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219	Chen, H., Chang, Y.C., Chen, Y.Y., Lo, W.C.	Comparison of ZnO Nanoflakes on Copper and Brass Substrates	ZnO nanoflakes, hydrothermal method, copper substrate, brass substrate	21, 4, 205-209	https://doi.org/10.14447/jnmes.v21i4.a02	Chen, H., Chang, Y.C., Chen, Y.Y., Lo, W.C. (2018). Comparison of ZnO nanoflakes on copper and brass substrates. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 4, pp. 205-209. https://doi.org/10.14447/jnmes.v21i4.a02
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221	Yan, X.Y., Wang, Y.S., Ma, Z.L.	Preparation and Electrochemical Performance of Cobalt Oxides	cobalt oxides, calcination temperature, electrochemical properties, preparation	21, 4, 217-220	https://doi.org/10.14447/jnmes.v21i4.a04	Yan, X.Y., Wang, Y.S., Ma, Z.L. (2018). Preparation and electrochemical performance of cobalt oxides. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 4, pp. 217-220. https://doi.org/10.14447/jnmes.v21i4.a04
222	Wang, J.J., Li, C.Y., Weng, W.C., Chiu, J.L., Chen, Y.Y., Su, C.H., Tsai, Y.S., Chen, H.	Sulfurization and Antibacterial Properties of ZnS/ZnO Coreshell Structures on Glass Fibers		21, 4, 221-226	https://doi.org/10.14447/jnmes.v21i4.a05	Wang, J.J., Li, C.Y., Weng, W.C., Chiu, J.L., Chen, Y.Y., Su, C.H., Tsai, Y.S., Chen, H. (2018). Sulfurization and antibacterial properties of ZnS/ZnO coreshell structures on glass fibers. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 4, pp. 221-226. https://doi.org/10.14447/jnmes.v21i4.a05
223	Ozel, K., Kosalay, I., Atilgan, A., Atli, A., Yildiz, Z.K., Yildiz, A.	Performance Improvement of Dye-Sensitized Solar Cells with AZO and BZO Blocking Layers	blocking layer, dopant, natural dye, dye-sensitized solar cell	21, 4, 227-331	https://doi.org/10.14447/jnmes.v21i4.a06	Ozel, K., Kosalay, I., Atilgan, A., Atli, A., Yildiz, Z.K., Yildiz, A. (2018). Performance improvement of Dye-Sensitized solar cells with AZO and BZO blocking layers. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 4, pp. 227-231. https://doi.org/10.14447/jnmes.v21i4.a06
224	Rahman, M.Y.A., Samsuri, S.A.M., Umar, A.A.	Dye-sensitized Solar Cell Utilizing TiO2-sulphur Composite Photoanode: Influence of Sulphur Content	Dye-sensitized solar cells, photoanode, TiO2-sulphur composite <i>Journal of New</i>	21, 4, 233-237	https://doi.org/10.14447/jnmes.v21i4.a07	Rahman, M.Y.A., Samsuri, S.A.M., Umar, A.A. (2018). Dye-sensitized solar cell utilizing TiO2-sulphur composite photoanode: influence of sulphur content. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 4, pp. 233-237. https://doi.org/10.14447/jnmes.v21i4.a07
225	Rajan, N., Thanigaivelan R.R., Muthurajan, K.G.	Effect of Electrochemical Machining Process Parameters on Anisotropic Property of Metal Matrix Composites Al7075	electrochemical machining, acidified electrolyte, anisotropic, metal matrix composites, blind holes	21, 4, 239-242	https://doi.org/10.14447/jnmes.v21i4.a08	Rajan, N., Thanigaivelan R.R., Muthurajan, K.G. (2018). Effect of electrochemical machining process parameters on anisotropic property of metal matrix composites Al7075. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 4, pp. 239-242. https://doi.org/10.14447/jnmes.v21i4.a08
226	Kharal, H.S., Kamran, M., Qureshi, S.A., Ahmad, W.	Dichlorodifluoromethane (R12)/CO2/Air Gas Mixtures a Competent Gaseous Insulator as Surrogate of SF6	R12/CO2 mixtures, insulating material, dielectric properties, environment friendly	21, 4, 243-248	https://doi.org/10.14447/jnmes.v21i4.a09	Kharal, H.S., Kamran, M., Qureshi, S.A., Ahmad, W. (2018). Dichlorodifluoromethane (R12)/CO2/Air Gas mixtures a competent gaseous insulator as surrogate of SF6. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 4, pp. 243-248. https://doi.org/10.14447/jnmes.v21i4.a09
227	Palisoc, S., Canquin, C., Natividad, M.	Heavy Metals in Philippine Rice (Oryza Sativa) using Nafion- [Ru(bpy)3]2+-Gold Nanoparticles Modified Glassy Carbon Electrodes	differential pulse voltammetry, heavy metals, nafion, ruthenium bipyridyl, gold nanoparticles	21, 3, 133-139	https://doi.org/10.14447/jnmes.v21i3.543	Palisoc, S., Canquin, C., Natividad, M. (2018). Heavy metals in philippine rice (oryza sativa) using nafion- [ru(bpy)3]2+-gold nanoparticles modified glassy carbon electrodes. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 3, pp. 133-139. https://doi.org/10.14447/jnmes.v21i3.543
228	Navaneethkrishnan, B., Nithyanandan, N., Adalarasan, R., Santhanakumar, M., Kumar, P.S.M.	Optimal Performance Evaluation of Energy Efficient Residential Air Conditioning System with Nanofluid-based Intercooler using Taguchi-based Response Surface Methodology	optimal performance, nanofluid, intercooler, air conditioner, coefficient of performance, energy conservation	21, 3, 141-150	https://doi.org/10.14447/jnmes.v21i3.455	Navaneethkrishnan, B., Nithyanandan, N., Adalarasan, R., Santhanakumar, M., Kumar, P.S.M. (2018). Optimal performance evaluation of energy efficient residential air conditioning system with nanofluid-based intercooler using taguchi-based response surface methodology. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 3, pp. 141-150. https://doi.org/10.14447/jnmes.v21i3.455
229	Aghazadeh, M.	Surfactant-assisted Pulse Electrodeposition of Hausmannite Nano-rods/particles with Improved Pseudocapacitive Performance	pulse electrodeposition, hausmannite, nano-rods/particles, pseudocapacitive performance	21, 3, 151-156	https://doi.org/10.14447/jnmes.v21i3.406	Aghazadeh, M. (2018). Surfactant-assisted pulse electrodeposition of hausmannite nano-rods/particles with improved pseudocapacitive performance. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 3, pp. 151-156. https://doi.org/10.14447/jnmes.v21i3.406
230	Palisoc, S., Canquin, C., Natividad, M.	PVF-PPy Composite as Support Material for Facile Synthesis of Pt@PVF-PPy Catalyst and Its Electrochemical Activity Towards Formic Acid Oxidation	Pt particles, Poly(vinylferrocenium), Poly(pyryrole), formic acid electrooxidation, supported catalyst	21, 3, 157-162	https://doi.org/10.14447/jnmes.v21i3.502	Palisoc, S., Canquin, C., Natividad, M. (2018). PVF-PPy composite as support material for facile synthesis of Pt@PVF-PPy catalyst and its electrocatalytic activity towards formic acid oxidation. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 3, pp. 157-162. https://doi.org/10.14447/jnmes.v21i3.502
231	Lal, B., Singh, R.N., Singh, N.K.	Synthesis and Electrocatalytic Properties of Ni-substituted Co3O4 for Oxygen Evolution in Alkaline Medium	oxygen evolution reaction, spinel type oxide, electrocatalysis, tafel slope, roughness factor	21, 3, 163-170	https://doi.org/10.14447/jnmes.v21i3.a06	Lal, B., Singh, R.N., Singh, N.K. (2018). Synthesis and electrocatalytic properties of ni-substituted Co3O4 for oxygen evolution in alkaline medium. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 3, pp. 163-170. https://doi.org/10.14447/jnmes.v21i3.a06
232	Thangadurai, V.	Meta Heuristic Based Simulated Annealing Approach for Design of U-shaped Manufacturing Assembly Line Balancing	u-shaped assembly line, line balancing, sharing, multi-objective, simulated annealing algorithm	21, 3, 171-178	https://doi.org/10.14447/jnmes.v21i3.a07	Thangadurai, V. (2018). Meta heuristic based simulated annealing approach for design of u-shaped manufacturing assembly line balancing. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 3, pp. 171-178. https://doi.org/10.14447/jnmes.v21i3.a07
233	Sathish, T.	Performance Measurement On Diesel and Cerium Oxide In Diesel On CI Engine	brake thermal efficiency, nanoparticles, cerium oxide, diesel blends, gases, reduced emission	21, 3, 179-185	https://doi.org/10.14447/jnmes.v21i3.a08	Sathish, T. (2018). Performance measurement on diesel and cerium oxide in diesel on CI engine. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 3, pp. 179-185. https://doi.org/10.14447/jnmes.v21i3.a08
234	Wang, J.J., Weng, W.C., Chiu, J.L., Chen, Y.Y., Su, C.H., Tsai, Y.S., Chen, H.	Synthesis of ZnS/ZnO Core-shell Nanostructures on Kevlar® Fiber	kevlar® fiber, ZnO, ZnS, antibacterial, core-shell structure	21, 3, 187-191	https://doi.org/10.14447/jnmes.v21i3.a09	Wang, J.J., Weng, W.C., Chiu, J.L., Chen, Y.Y., Su, C.H., Tsai, Y.S., Chen, H. (2018). Synthesis of ZnS/ZnO core-shell nanostructures on kevlar® fiber. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 3, pp. 187-191. https://doi.org/10.14447/jnmes.v21i3.a09

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236	Liu, B., Liu, G., Xiao, B., Yan, J.	Molecularly Imprinted Electrochemical Sensor for the Determination of Sulfamethoxazole	molecularly imprinted polymers, sulfamethoxazole, carbon nanotubes	21, 2, 77-80	https://doi.org/10.14447/jnmes.v21i2.492	Liu, B., Liu, G., Xiao, B., Yan, J. (2018). Molecularly imprinted electrochemical sensor for the determination of sulfamethoxazole. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 2, pp. 77-80. https://doi.org/10.14447/jnmes.v21i2.492
237	Nadirov, R., Sabirov, Y.	The New Approach to Enhance the Activity of Fe/N/C Catalyst for Oxygen Reduction Reaction by Electrochemical Treatment	Fe/N/C catalyst, synthesis, oxygen reduction reaction, electrochemical treatment	21, 2, 91-95	https://doi.org/10.14447/jnmes.v21i2.458	Nadirov, R., Sabirov, Y. (2018). The new approach to enhance the activity of Fe/N/C catalyst for oxygen reduction reaction by electrochemical treatment. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 2, pp. 91-95. https://doi.org/10.14447/jnmes.v21i2.458
238	Lin, H., Jiang, T.Y., Sun, Q.Y., Zhao, G.Z., Shi, J.Y.	The Research Progress of Zinc Bromine Flow Battery	zinc bromine redox flow battery, electrolyte, membrane, electrode	21, 2, 63-70	https://doi.org/10.14447/jnmes.v21i2.470	Lin, H., Jiang, T.Y., Sun, Q.Y., Zhao, G.Z., Shi, J.Y. (2018). The research progress of zinc bromine flow battery. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 2, pp. 63-70. https://doi.org/10.14447/jnmes.v21i2.470
239	Shin, J.W., Son, J.T.	Improvement of Electrochemical Performance and Thermal Stability by Reducing Residual Lithium Hydroxide on LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ Active Material using Amorphous Carbon Coating	lithium secondary battery, cathode material, carbon coating, C12H22O11	21, 2, 71-75	https://doi.org/10.14447/jnmes.v21i2.412	Shin, J.W., Son, J.T. (2018). Improvement of electrochemical performance and thermal stability by reducing residual lithium hydroxide on LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ active material using amorphous carbon coating. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 2, pp. 71-75. https://doi.org/10.14447/jnmes.v21i2.412
240	Karimi, K.G., Ebrahimi, M., Mozaffari, S.A.	ZnO-carbon active nanostructured thin film fabrication by spin coating technique for enzymatic urea biosensing	ZnO-carbon active thin film, urea biosensor, spin coating, electrochemical impedance spectroscopy	21, 2, 81-89	https://doi.org/10.14447/jnmes.v21i2.486	Karimi, K.G., Ebrahimi, M., Mozaffari, S.A. (2018). ZnO-carbon active nanostructured thin film fabrication by spin coating technique for enzymatic urea biosensing. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 2, pp. 81-89. https://doi.org/10.14447/jnmes.v21i2.486
241	Pang, S., Chen, W., Yang, Z., Liu, Z., Fan, X., Xu, X.	Nanocomposite Sheets Composed of Polyaniline Nanoparticles and Graphene Oxide as Electrode Materials for High-performance Supercapacitor	nanocomposite, polyaniline, graphene oxide sheets, electrode materials, high-performance	21, 2, 97-102	https://doi.org/10.14447/jnmes.v21i2.469	Pang, S., Chen, W., Yang, Z., Liu, Z., Fan, X., Xu, X. (2018). Nanocomposite sheets composed of polyaniline nanoparticles and graphene oxide as electrode materials for high-performance supercapacitor. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 2, pp. 97-102. https://doi.org/10.14447/jnmes.v21i2.469
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243	Rahman, M.Y.A., Sulaiman, A.S., Umar, A.A.	Dye-sensitized Solar Cell utilizing Gold Doped Reduced Graphene Oxide Films Counter Electrode	counter electrode, dye-sensitized solar cell, doping, gold, graphene oxide	21, 2, 113-117	https://doi.org/10.14447/jnmes.v21i2.466	Rahman, M.Y.A., Sulaiman, A.S., Umar, A.A. (2018). Dye-sensitized solar cell utilizing gold doped reduced graphene oxide films counter electrode. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 2, pp. 113-117. https://doi.org/10.14447/jnmes.v21i2.466
244	Özütok, F., Yakar, E.	Optical and Electrochemical Properties of PB-ZnO and PB-ZnO/MWCNT Nanocomposite Films Deposited by Chemical Bath	Prussian blue films, ZnO structure, multi-walled carbon nanotubes, optical properties, electrochemical properties, chemical bath deposition	21, 2, 119-126	https://doi.org/10.14447/jnmes.v21i2.462	Özütok, F., Yakar, E. (2018). Optical and electrochemical properties of PB-ZnO and PB-ZnO/MWCNT nanocomposite films deposited by chemical bath. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 2, pp. 119-126. https://doi.org/10.14447/jnmes.v21i2.462
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247	Riquelme, J.A., Sebastian, P.J., Gamboa, S.A., Campos, J.	Design and Development of a Real-time Characterization System for Energy Conversion Devices	data acquisition system, energy conversion device, I-V curve tracer, E-I curve tracer	21, 1, 7-13	https://doi.org/10.14447/jnmes.v21i1.515	Riquelme, J.A., Sebastian, P.J., Gamboa, S.A., Campos, J. (2018). Design and development of a real-time characterization system for energy conversion devices. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 1, pp. 7-13. https://doi.org/10.14447/jnmes.v21i1.515
248	Jeyakumar, P., Thanikaikarasan, S., Natarajan, B., Mahalingam, T., Ixtlilco, L.	Growth of Copper Telluride Thin Films using Electrodeposition	copper telluride, cyclic voltammetry, SnO ₂ , optical absorption analysis	21, 1, 15-19	https://doi.org/10.14447/jnmes.v21i1.516	Jeyakumar, P., Thanikaikarasan, S., Natarajan, B., Mahalingam, T., Ixtlilco, L. (2018). Growth of copper telluride thin films using electrodeposition. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 1, pp. 15-19. https://doi.org/10.14447/jnmes.v21i1.516
249	Sandoval-González, A., Gamboa, S.A.	Analysis of Redox Reactions on Pt-Sn based Nano-catalysts for Direct Methanol Fuel Cell Applications	catalysts, methanol oxidation, oxygen reduction, Pt-SnO ₂ /C, Pt1Sn1/C, direct methanol fuel cell	21, 1, 21-28	https://doi.org/10.14447/jnmes.v21i1.517	Sandoval-González, A., Gamboa, S.A. (2018). Analysis of redox reactions on Pt-Sn based nano-catalysts for direct methanol fuel cell applications. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 1, pp. 21-28. https://doi.org/10.14447/jnmes.v21i1.517
250	Nagajothi, A.J., Karman, R., Thanikaikarasan, S., Sebastian, P.J.	Electrochemical and Thermal Properties of PEO-LITFSI based Gel Polymer Electrolytes with the Effect of Plasticizer and Filler for Lithium-sulfur Batteries	PEO, composite gel polymer electrolyte, ceramic filler, interfacial stability, transport properties	21, 1, 29-32	https://doi.org/10.14447/jnmes.v21i1.518	Nagajothi, A.J., Karman, R., Thanikaikarasan, S., Sebastian, P.J. (2018). Electrochemical and thermal properties of PEO-LITFSI based gel polymer electrolytes with the effect of plasticizer and filler for lithium-sulfur batteries. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 1, pp. 29-32. https://doi.org/10.14447/jnmes.v21i1.518
251	Hernández, Y., Moreira, J., Galindo, J.Y., Fanera, N., Ibañez, G., Eapen, D., Sebastian, P.J.	Development and Characterization of an Ecological Hydrogen Stove	ecological stove, food cooking, hydrogen, hydrogen stove	21, 1, 33-36	https://doi.org/10.14447/jnmes.v21i1.519	Hernández, Y., Moreira, J., Galindo, J.Y., Fanera, N., Ibañez, G., Eapen, D., Sebastian, P.J. (2018). Development and characterization of an ecological hydrogen stove. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 1, pp. 33-36. https://doi.org/10.14447/jnmes.v21i1.519
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253	Carbajal, F.G., Garcia, M.A., Gamboa, S.A.	Study of Ethanol Electrooxidation Reaction at Room Temperature on Nanometric Pt-Ru, Pt-Sn and Pt-Ru-Sn in Direct Alcohol Fuel Cells	nanostructured electrocatalyst, Pt-Ru-Sn/C, ethanol electrooxidation, direct ethanol fuel cell	21, 1, 43-49	https://doi.org/10.14447/jnmes.v21i1.522	Carbajal, F.G., Garcia, M.A., Gamboa, S.A. (2018). Study of Ethanol electrooxidation reaction at room temperature on nanometric Pt-Ru, Pt-Sn and Pt-Ru-Sn in direct alcohol fuel cells. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 1, pp. 43-49. https://doi.org/10.14447/jnmes.v21i1.522
254	Nichelson, A., Thanikaikarasan, S., Karuppasamy, K., Karthickprabhu, S., Mahalingam, T., Shajan, X.S., Valenzuela, E.	Synthesis and Characterization of Li(Li _{0.05} Ni _{0.6} Fe _{0.1} Mn _{0.25})O ₂ Cathode Material for Lithium Ion Batteries	Sol-gel synthesis, Li(Li _{0.05} Ni _{0.6} Fe _{0.1} Mn _{0.25})O ₂ , nanoparticles, lithium ion batteries	21, 1, 51-56	https://doi.org/10.14447/jnmes.v21i1.523	Nichelson, A., Thanikaikarasan, S., Karuppasamy, K., Karthickprabhu, S., Mahalingam, T., Shajan, X.S., Valenzuela, E. (2018). Synthesis and characterization of Li(Li _{0.05} Ni _{0.6} Fe _{0.1} Mn _{0.25})O ₂ cathode material for lithium ion batteries. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 1, pp. 51-56. https://doi.org/10.14447/jnmes.v21i1.523
255	Garcia, M.A., Ginez, F., Gamboa, S.A.	Oxygen Reduction Reaction on Pt-ZrO ₂ /C during the Alcohol Crossover in Experimental Direct Alcohol Fuel Cells	oxygen reduction reaction, alcohol fuel cell, Pt-ZrO ₂ , nanoparticles	21, 1, 57-62	https://doi.org/10.14447/jnmes.v21i1.524	Garcia, M.A., Ginez, F., Gamboa, S.A. (2018). Oxygen reduction reaction on Pt-ZrO ₂ /C during the alcohol crossover in experimental direct alcohol fuel cells. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 21, No. 1, pp. 57-62. https://doi.org/10.14447/jnmes.v21i1.524
256	Yao D., Song Y., Zhang S., Tian Y., Lan X.	Effect of voltage on the treatment of cyanide wastewater by three-dimensional electrode	applied voltage, carbon particle electrode, coal-based electrode, cyanide wastewater, three-dimensional electrode	20, 4, 151-159	https://doi.org/10.14447/jnmes.v20i4.318	Yao D., Song Y., Zhang S., Tian Y., Lan X. (2017). Effect of voltage on the treatment of cyanide wastewater by three-dimensional electrode. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 20, No. 4, pp. 151-159. https://doi.org/10.14447/jnmes.v20i4.318
257	Sathish T.	Heat transfer analysis of nano-fluid flow in a converging nozzle with different aspect ratios	converging nozzle, flow rate, heat transfer, nanofluid	20, 4, 161-167	https://doi.org/10.14447/jnmes.v20i4.321	Sathish T. (2017). Heat transfer analysis of nano-fluid flow in a converging nozzle with different aspect ratios. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 20, No. 4, pp. 161-167. https://doi.org/10.14447/jnmes.v20i4.321
258	Zhang H., Yuan J., Zhu M.	Preparation and characterization of TiN-SBR coating on metallic bipolar plates for polymer electrolyte membrane fuel cell	Bipolar Plates, Coating, Proton Exchange Membrane Fuel Cell, Stainless Steel, TiN-SBR	20, 4, 169-173	https://doi.org/10.14447/jnmes.v20i4.314	Zhang H., Yuan J., Zhu M. (2017). Preparation and characterization of TiN-SBR coating on metallic bipolar plates for polymer electrolyte membrane fuel cell. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 20, No. 4, pp. 169-173. https://doi.org/10.14447/jnmes.v20i4.314
259	Xi X., Yang C., Liu L., Zhu S., Chao H., Zhao L.	Controlled synthesis of ZnO nanostructures by electrodeposition without any pretreatment and additive reagent	electrodeposition, nanostructure, ZnO	20, 4, 175-181	https://doi.org/10.14447/jnmes.v20i4.270	Xi X., Yang C., Liu L., Zhu S., Chao H., Zhao L. (2017). Controlled synthesis of ZnO nanostructures by electrodeposition without any pretreatment and additive reagent. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 20, No. 4, pp. 175-181. https://doi.org/10.14447/jnmes.v20i4.270
260	Wang J., Song K., Tong C., Tian G., Wu J., Gao H., Xu J.M.	TiO ₂ -B/Ag nanocomposite wires enhanced electrochemical performance for Li-ion batteries	hydrothermal, nanowires, TiO ₂ -B/Ag	20, 4, 183-188	https://doi.org/10.14447/jnmes.v20i4.319	Wang J., Song K., Tong C., Tian G., Wu J., Gao H., Xu J. (2017). TiO ₂ -B/Ag nanocomposite wires enhanced electrochemical performance for Li-ion batteries. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 20, No. 4, pp. 183-188. https://doi.org/10.14447/jnmes.v20i4.319
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263	Chen W., Weimin H., Li D., Chen S., Dai Z.	The preparation approaches of polymer/graphene nanocomposites and their application research progress as electrochemical sensors	electrochemical sensors, graphene, nanocomposites, performance, polymer	20, 4, 205-221	https://doi.org/10.14447/jnmes.v20i4.356	Chen W., Weimin H., Li D., Chen S., Dai Z. (2017). The preparation approaches of polymer/graphene nanocomposites and their application research progress as electrochemical sensors. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 20, No. 4, pp. 205-221. https://doi.org/10.14447/jnmes.v20i4.356
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270	Ma X., Zhao S., Zhang S.	Study on the performance of the ionic liquids [Emim]CH ₃ SO ₃ and [Emim]PF ₆ to prepare the biosensor of the detection of heavy metals in seawater	heavy metal ions, ionic liquid, conductivity, electrochemistry, sea water	20, 1, 13-20	https://doi.org/10.14447/jnmes.v20i1.288	Ma X., Zhao S., Zhang S. (2017). Study on the performance of the ionic liquids [Emim]CH ₃ SO ₃ and [Emim]PF ₆ to prepare the biosensor of the detection of heavy metals in seawater. <i>Journal of New Materials for Electrochemical Systems</i> , Vol. 20, No. 1, pp. 13-20. https://doi.org/10.14447/jnmes.v20i1.288

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272	Ghanem M.A., El-Hallag I.S., Al-Mayouf A.M.	Electrochemical behavior and convoluted voltammetry of carbon nanotubes modified with anthraquinone	convolution voltammetry, diffusion coefficient, digital simulation, heterogeneous rate constant	20, 1, 25-30	https://doi.org/10.14447/jnmes.v20i1.291	Ghanem M.A., El-Hallag I.S., Al-Mayouf A.M. (2017). Electrochemical behavior and convoluted voltammetry of carbon nanotubes modified with anthraquinone. Journal of New Materials for Electrochemical Systems, Vol. 20, No. 1, pp. 25-30. https://doi.org/10.14447/jnmes.v20i1.291
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