No.	Co-authors	Article title	Keywords	Vol., No., pp.	DOI	Citation
1	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
2	Zaidi, S.Z.J., Hassan, S., Raza, M., Harito, C., Yuliarto, 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., Yuliarto, 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
3	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, MoO3	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
4	Kandasamy, S.K., Subramanian, B., Krishnamoorthy, H., Arumugam, C., Suganthi, V., Yuvasri, M., Shreelogesh, 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., Shreelogesh, 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
5	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
6	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. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 2, pp. 95-102. https://doi.org/10.14447/jnmes.v24i2.a06
7	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. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 2, pp. 103-110. https://doi.org/10.14447/jnmes.v24i2.a07
8	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. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 2, pp. 111-119. https://doi.org/10.14447/jnmes.v24i2.a08
9	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. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 2, pp. 120-128. https://doi.org/10.14447/jnmes.v24i2.a09
10	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. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 2, pp. 129-141. https://doi.org/10.14447/jnmes.v24i2.a10
11	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. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 1, pp. 1-8. https://doi.org/10.14447/jnmes.v24i1.a01
12	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. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 1, pp. 9-13. https://doi.org/10.14447/jnmes.v24i1.a02
13	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. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 1, pp. 14-20. https://doi.org/10.14447/jnmes.v24i1.a03
14	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.	Paradisiaca/Solanum Tuberosum Biowaste Composited with Graphene Oxide for Flexible Supercapacitor	Biowaste composite, Citrus Sinensis Flavedos, 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 composited with graphene oxide for flexible supercapacitor. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 1, pp. 21-28. https://doi.org/10.14447/jnmes.v24i1.a04
15	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. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 1, pp. 29-33. https://doi.org/10.14447/jnmes.v24i1.a05
16	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. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 1, pp. 34-37. https://doi.org/10.14447/jnmes.v24i1.a06
17	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. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 1, pp. 38-42. https://doi.org/10.14447/jnmes.v24i1.a07
18	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. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 1, pp. 43-48. https://doi.org/10.14447/jnmes.v24i1.a08
19	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. Journal of New Materials for Electrochemical Systems, Vol. 24, No. 1, pp. 49-54. https://doi.org/10.14447/jnmes.v24i1.a09

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21	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. Journal of New Materials for Electrochemical Systems, Vol. 23, No. 4, pp. 225-234. https://doi.org/10.14447/jnmes.v23i4.a02
22	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. Journal of New Materials for Electrochemical Systems, Vol. 23, No. 4, pp. 235-243. https://doi.org/10.14447/jnmes.v23i4.a03
23	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. Journal of New Materials for Electrochemical Systems, Vol. 23, No. 4, pp. 244-251. https://doi.org/10.14447/jnmes.v23i4.a04
24	Sankar, L.P., Kamalakannan, R., Aruna, G., Meera, M.R., Vijayan, V., Sivananthan, 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., Sivananthan, S. (2020). Mechanical behavior and microstructure evolution of Al-5%Cu/TiC metal matrix composite. Journal of New Materials for Electrochemical Systems, Vol. 23, No. 4, pp. 252-255. https://doi.org/10.14447/jnmes.v23i4.a05
25	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. Journal of New Materials for Electrochemical Systems, Vol. 23, No. 4, pp. 256-261. https://doi.org/10.14447/jnmes.v23i4.a06
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27	Yokeswaran, R., Vijayan, V., Karthikeyan, T., Loganathan, M., Antony, A.G.	Microstructure analysis of IS2062 plates cladded 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 cladded with SS2594 by TIG welding process. Journal of New Materials for Electrochemical Systems, Vol. 23, No. 4, pp. 269-273. https://doi.org/10.14447/jnmes.v23i4.a08
28	Si, X.R., Ding, D., Zhou, J.H., Cao, Z.W.	Inhibitory effect of vanillin on biofilm formation by multi-species wastewater culture	vanillin, biofilms, multi-species, inhibition rate	23, 4, 274-279	https://doi.org/10.14447/jnmes.v23i4.a09	Si, X.R., Ding, D., Zhou, J.H., Cao, Z.W. (2020). Inhibitory effect of vanillin on biofilm formation by multi-species wastewater culture. Journal of New Materials for Electrochemical Systems, Vol. 23, No. 4, pp. 274-279. https://doi.org/10.14447/jnmes.v23i4.a09
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30	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. Journal of New Materials for Electrochemical Systems, Vol. 23, No. 3, pp. 151-163. https://doi.org/10.14447/jnmes.v23i3.a01
31	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. Journal of New Materials for Electrochemical Systems, Vol. 23, No. 3, pp. 164-166. https://doi.org/10.14447/jnmes.v23i3.a02
32	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. Journal of New Materials for Electrochemical Systems, Vol. 23, No. 3, pp. 167-176. https://doi.org/10.14447/jnmes.v23i3.a03
33	Natarajan, P., Jegan, A., Mohanraj, M.	Wear behavior of Ni-TiO2 nano-composite coating on AISI 1022 CS by pulse electrodeposition	AISI 1022 CS, Ni-TiO2 nano composite coating, wear rate, RSM, SEM, ANOVA	23, 3, 177-181	https://doi.org/10.14447/jnmes.v23i3.a04	Natarajan, P., Jegan, A., Mohanraj, M. (2020). Wear behavior of Ni-TiO2 nano-composite coating on AISI 1022 CS by pulse electrodeposition. Journal of New Materials for Electrochemical Systems, Vol. 23, No. 3, pp. 177-181. https://doi.org/10.14447/jnmes.v23i3.a04
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36	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. Journal of New Materials for Electrochemical Systems, Vol. 23, No. 3, pp. 198-203. https://doi.org/10.14447/jnmes.v23i3.a07
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38	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. Journal of New Materials for Electrochemical Systems, Vol. 23, No. 3, pp. 213-220. https://doi.org/10.14447/jnmes.v23i3.a09
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41	Deepa, H.A., Madhu, G.M., Kumara Swamy, B.E., Koteswararao, J.	Estimation of photovoltaic properties of ZnO nanoparticles and CeO2- ZnO composite and electrochemical determination of adrenaline employing voltammetry studies	Adrenaline (AD), CeO2 -ZnO composite, dye sensitized solar cells, photoanode, ZnO nano particles	23, 2, 71-77	https://doi.org/10.14447/jnmes.v23i2.a03	Deepa, H.A., Madhu, G.M., Kumara Swamy, B.E., Koteswararao, J. (2020). Estimation of photovoltaic properties of ZnO nanoparticles and CeO2- ZnO composite and electrochemical determination of adrenaline employing voltammetry studies. Journal of New Materials for Electrochemical Systems, Vol. 23, No. 2, pp. 71-77. https://doi.org/10.14447/jnmes.v23i2.a03
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44	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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75	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
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85	Kashina, S., Balleza, M., Jacobo-Azuara, A., Galindo, R.	Production of Carbonaceous Materials with High Capacitance by Electrochemical Technique	electrochemical synthesis, carbon material, electrochemical supercapacitor	22, 2, 107-111	https://doi.org/10.14447/jnmes.v22i2.a08	Kashina, S., Balleza, M., Jacobo-Azuara, A., Galindo, R. (2019). Production of carbonaceous materials with high capacitance by electrochemical technique. Journal of New Materials for Electrochemical Systems, Vol.22, No.2, pp. 107-111. https://doi.org/10.14447/jnmes.v22i2.a08
86	Tian, X.P., Zheng, Y.C., Wang, C.L., Cui, X.W.	Preparation and Hydration Mechanism of Low Shrinkage Railway Sleeper Concrete Containing Hot Steaming Steel Slag	hot steaming steel slag, railway sleepers concrete with iron ore tailings, autogenous shrinkage, ettringite	22, 2, 112-118	https://doi.org/10.14447/jnmes.v22i2.a09	Tian, X.P., Zheng, Y.C., Wang, C.L., Cui, X.W. (2019). Preparation and hydration mechanism of low shrinkage railway sleeper concrete containing hot steaming steel slag. Journal of New Materials for Electrochemical Systems, Vol. 22, No. 2, pp. 112-118. https://doi.org/10.14447/jnmes.v22i2.a09
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88	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
89	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
90	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
91	Roseline, S., Paramasivam, V., Parameswaran, P., Antony, A.G.	Evaluation of Mechanical Properties and Stability of Al 6061 with Addition of ZrO2 And Al2O3	Al6061, ZrO2 & Al2O3, 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 ZrO2 And Al2O3. Journal of New Materials for Electrochemical Systems, Vol. 22, No. 1, pp. 21-23. https://doi.org/10.14447/jnmes.v22i1.a05
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94	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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103	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 Journal of New	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. Journal of New Materials for Electrochemical Systems, Vol. 21, No. 4, pp. 233-237. https://doi.org/10.14447/jnmes.v21i4.a07
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105	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. Journal of New Materials for Electrochemical Systems, Vol. 21, No. 4, pp. 243-248. https://doi.org/10.14447/jnmes.v21i4.a09
106	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. Journal of New Materials for Electrochemical Systems, Vol. 21, No. 3, pp. 133-139. https://doi.org/10.14447/jnmes.v21i3.543
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109	Palisoc, S., Canquin, C., Natividad, M.	PVF-PPy Composite as Support Material for Facile Synthesis of Pt@PVF-PPy Catalyst and Its Electrocatalytic Activity Towards Formic Acid Oxidation	Pt particles, Poly(vinylferrocenium), Poly(pyyrole), 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. Journal of New Materials for Electrochemical Systems, Vol. 21, No. 3, pp. 157-162. https://doi.org/10.14447/jnmes.v21i3.502
110	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. Journal of New Materials for Electrochemical Systems, Vol. 21, No. 3, pp. 163-170. https://doi.org/10.14447/jnmes.v21i3.a06
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115	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. Journal of New Materials for Electrochemical Systems, Vol. 21, No. 2, pp. 77-80. https://doi.org/10.14447/jnmes.v21i2.492
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117	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. Journal of New Materials for Electrochemical Systems, Vol. 21, No. 2, pp. 63-70. https://doi.org/10.14447/jnmes.v21i2.470
118	Shin, J.W., Son, J.T.	Improvement of Electrochemical Performance and Thermal Stability by Reducing Residual Lithium Hydroxide on LiNi0.8Co0.1Mn0.1O2 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 LiNi0.8Co0.1Mn0.1O2 active material using amorphous carbon coating. Journal of New Materials for Electrochemical Systems, Vol. 21, No. 2, pp. 71-75. https://doi.org/10.14447/jnmes.v21i2.412
119	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. Journal of New Materials for Electrochemical Systems, Vol. 21, No. 2, pp. 81-89. https://doi.org/10.14447/jnmes.v21i2.486

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125	Dhanalakshmi, A., Thanikaikarasan, S., Natarajan, B., Ramadas, V., Mahalingam, T., Eapen, D., Sebastian, P.J.	Structural and Optical Characterization of ZnO and Glucose Capped ZnO Nanoparticles	Band gap, SEM, X-ray diffraction, ZnO	21, 1, 1-5	https://doi.org/10.14447/jnmes.v21i1.409	Dhanalakshmi, A., Thanikaikarasan, S., Natarajan, B., Ramadas, V., Mahalingam, T., Eapen, D., Sebastian, P.J. (2018). Structural and optical characterization of ZnO and Glucose capped ZnO nanoparticles. Journal of New Materials for Electrochemical Systems, Vol. 21, No. 1, pp. 1-5. https://doi.org/10.14447/jnmes.v21i1.409
126	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. Journal of New Materials for Electrochemical Systems, Vol. 21, No. 1, pp. 7-13. https://doi.org/10.14447/jnmes.v21i1.515
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129	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. Journal of New Materials for Electrochemical Systems, Vol. 21, No. 1, pp. 29-32. https://doi.org/10.14447/jnmes.v21i1.518
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133	Nichelson, A., Thanikaikarasan, S., Karuppasamy, K., Karthickprabhu, S., Mahalingam, T., Shajan, X.S., Valenzuela, E.	Synthesis and Characterization of Li(Li0.05Ni0.6Fe0.1Mn0.25)O2 Cathode Material for Lithim Ion Batteries	Sol-gel synthesis, Li(Li0.05Ni0.6Fe0.1Mn0.25)O2, 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(Li0.05Ni0.6Fe0.1Mn0.25)O2 cathode material for lithim ion batteries. Journal of New Materials for Electrochemical Systems, Vol. 21, No. 1, pp. 51-56. https://doi.org/10.14447/jnmes.v21i1.523
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136	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. Journal of New Materials for Electrochemical Systems, Vol. 20, No. 4, pp. 161-167. https://doi.org/10.14447/jnmes.v20i4.321
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