1. "Crystal design, thermal and dielectric behavior of novel silver (Ag) co-ordinated thiourea single crystals"

N Sivakumar, G Anbalagan, **R. Jayavel** Materials Letters 280, (2020), 128674

2.Effect of Sb substitution on structural, morphological and electrical properties of BaSnO3 for thermoelectric application

P Rajasekaran, Y Kumaki, M Arivanandhan, R Jayavel, MMSI Khaleeullah, ...

Physica B: Condensed Matter 597, (2020), 412387

3. Precursor Dependent Tailoring of Morphology and Crystallite Size of Biogenic ZnO Nanostructures with Enhanced Antimicrobial Activity-a Novel Green Chemistry Approach S Pavithra, M Mani, B Mohana, **R Jayavel**, S Kumaresan

BioNanoScience, (2020), 1-9

4. Synthesis, structure and spectroscopic investigations of a metal-organic crystal: Thiourea silver nitrate for optical devices

J Venkatamuthukumar, N Sivakumar, **R. Jayavel**, G Anbalagan AIP Conference Proceedings 2265 (1), (2020), 030410

5. Bioengineered 2D Ultrathin Sharp-Edged MgO Nanosheets Using Achyranthes aspera Leaf Extract for Antimicrobial Applications

S Pavithra, B Mohana, M Mani, PE Saranya, **R Jayavel**, D Prabu, ... Journal of Inorganic and Organometallic Polymers and Materials, (2020), 1-14

6. Enhanced UV emission of solution processed highly transparent Alq3/ZnO hybrid thin films G Dasi, R Ramarajan, DP Joseph, S Vijayakumar, **R. Jayavel**, JJ Shim, ... Thin Solid Films 710, (2020), 138265

7. Effect of Gd and Nb co-substitution on enhancing the thermoelectric power factor of nanostructured SrTiO3

NY Devi, K Vijayakumar, **R. Jayavel**, P Rajasekaran, ASA Nedunchezhian, ... Ceramics International, (2020)

- 8. Anticorrosion Behavior of ZnO Nanoparticles Coated on Mild Steel in NaCl Solution S Subhasree, P Anitha, K Kannan, A Ramachandran, JJ Sheri, **R Jayavel** Journal of Nanoscience and Nanotechnology 20 (7), (2020), 4061-4068
- 9. Theoretical investigation on the crystal structure, spectral and optical properties of a novel organic optical material:(Acetoxy)(2-methylphenyl) methylacetate
 N Sivakumar, J Kanchanadevi, M Govindarajan, **R Jayavel**, G Anbalagan
 Journal of Molecular Structure, (2020), 128579
- 10. Effect of core size on the luminescence properties of cadmium telluride/zinc sulphide core-shell quantum dots

S Subramanian, S Ganapathy, R. Jayavel, M Rajaram, S Subramanian, ...

Materials Today: Proceedings, (2020)

11. Effect of photocatalytic activity on cobalt titanate (CoTiO3) nanostructures S Subramanian, S Ganapathy, S Subramanian, **R. Jayavel**, M Rajaram, R Thangaraj, ... Materials Today: Proceedings, (2020)

12. Facile Synthesis of Phase Tunable MoO3 Nanostructures and Their Electrochemical Sensing Properties

S Muthamizh, C Sengottaiyan, **R Jayavel**, V Narayanan Journal of nanoscience and nanotechnology 20 (5), (2020), 2823-2831

13. Crystal design, thermal and dielectric behavior of novel silver (Ag) co-ordinated thiourea single crystals

N Sivakumar, G Anbalagan, **R Jayavel** Materials Letters, (2020), 127899

14. Effect of sintering temperatures on mixed phases and thermoelectric properties of nanostructured copper telluride

R Rajkumar, ASA Nedunchezhian, **R. Jayavel**, D Sidharth, P Rajasekaran, ... Journal of Alloys and Compounds, (2020), 155276

15. Microstructural, optical, electrochemical and magnetic properties of hydrothermal synthesized zincite/carbon (ZnO/C) composite

N Sivakumar, J Gajendiran, R Jayavel

Chemical Physics Letters 745, (2020), 137262

16. Physicochemical and Morphological Properties of *Achyranthes aspera* Mediated CuO Nanoparticles for Inhibiting Cellular Adhesion

S Pavithra, B Mohana, M Mani, **R Jayavel**, S Kumaresan Journal of Cluster Science, (2020), 1-11

- 17. CuO/MoS2 nanocomposites for rapid and high sensitive non-enzymatic glucose sensors S Arunbalaji, R Vasudevan, **R. Jayavel**, M Arivanandhan, A Alsalme, A Alghamdi, ... Ceramics International, (2020)
- 18. Microwave-assisted synthesis of ZnO nanostructures for organic solar cell applications M Rajaram, S Subramanian, **R. Jayavel**, S Subramanian, J Krishnamoorthy, ... Materials Today: Proceedings, (2020)
- 19. 1D/2D Co 3 O 4/Graphene Composite Electrodes for High-Performance Supercapacitor Applications

V Venkatachalam, R Javavel

Journal of Electronic Materials, 1-8, (2020)

20. Investigation on ozone-sensing characteristics of surface sensitive hybrid rGO/WO 3 nanocomposite films at ambient temperature

J Jayachandiran, M Arivanandhan, O Padmaraj, **R Jayavel**, D Nedumaran

Advanced Composites and Hybrid Materials 3 (1), (2020), 16-30

21. CeO2-based heterostructure nanocomposite for electrochemical determination of L-cysteine biomolecule

G Manibalan, G Murugadoss, **R. Jayavel**, R Thangamuthu, MR Kumar, RM Kumar, ... Inorganic Chemistry Communications 113, (2020), 107793

22. Facile preparation of Mn 3 O 4/rGO hybrid nanocomposite by sol–gel in situ reduction method with enhanced energy storage performance for supercapacitor applications

MM Ismail, S Hemaanandhan, **R. Jayavel,** D Mani, M Arivanandhan, G Anbalagan, ... Journal of Sol-Gel Science and Technology 93 (3), (2020), 703-713

- 23. Investigations of rare earth doped CdTe QDs as sensitizers for quantum dots sensitized solar cells A Arivarasan, S Bharathi, SE Arasi, **R. Jayavel**, S Arunpandiyan, MS Revathy, ... Journal of Luminescence 219, (2020), 116881
- 24. Facile synthesis of pervoskite type BiYO3 embedded reduced graphene oxide (RGO) composite for supercapacitor applications

R Selvarajan, S Vadivel, M Arivanandhan, **R Jayavel** Ceramics International 46 (3), (2020), 3471-3478

25. Synthesis, structural and electrochemical properties of Mn-MoO4/graphene nanocomposite electrode material with improved performance for supercapacitor application R Thangappan, RD Kumar, **R Jayavel** Journal of Energy Storage 27, (2020), 101069

26. Enhancement of thermoelectric power factor of hydrothermally synthesised SrTiO3 nanostructures NY Devi, P Rajasekaran, K Vijayakumar, **R. Jayavel**, ASA Nedunchezhian, ... Materials Research Express 7 (1), (2020), 015094

27. Facile synthesis of CdS Quantum dots for QDSSC with high photo current density T Archana, K Vijayakumar, G Subashini, **R. Jayavel**, M Arivanandhan, ... Materials Research Express 7 (1), (2020), 015528

28. Antimonene nanosheets with enhanced electrochemical performance for energy storage applications MM Ismail, J Vigneshwaran, S Arunbalaji, D Mani, **R. Jayavel**, M Arivanandhan, ... Dalton Transactions 49 (39), (2020), 13717-13725

29. Facile synthesis of morphology-controlled La: BaSnO 3 for the enhancement of thermoelectric power factor

P Rajasekaran, M Arivanandhan, Y Kumaki, **R. Jayavel**, Y Hayakawa, ... CrystEngComm 22 (32), (2020), 5363-5374

30. High Sensitive Electrochemical nitrite sensor using Fe₂O₃/MoS₂ nanocomposites synthesized by facile method

S Arunbalaji, MM Ismail, M Arivanandhan, **R. Jayavel**, A Alsalme, A Alghamdi, ... Bulletin of the Chemical Society of Japan, (2020)

31. A facile synthesis of novel ε-Fe 2 O 3 grafted 2D h-BN nanostructures for enhanced visible active photocatalytic applications

D Mani, D Mathivanan, H Chang, K Sakthivel, E Elangovan, **R. Jayavel**, T Sivakumar, ... New Journal of Chemistry 44 (28), (2020), 12289-12298

32. Enhanced electrochemical performance of α -MoO 3/graphene nanocomposites prepared by an in situ microwave irradiation technique for energy storage applications

P Nagaraju, M Arivanandhan, A Alsalme, A Alghamdi, R Jayavel

RSC Advances 10 (38), (2020), 22836-22847

33. Enhancing the thermoelectric power factor of nanostructured ZnCo 2 O 4 by Bi substitution ASA Nedunchezhian, **R. Jayavel**, D Sidharth, R Rajkumar, NY Devi, K Maeda, ... RSC Advances 10 (32), (2020), 18769-18775

34. Effect of co-sensitization of InSb quantum dots on enhancing the photoconversion efficiency of CdS based quantum dot sensitized solar cells

T Archana, K Vijayakumar, G Subashini, AN Grace, **R. Jayavel,** M Arivanandhan, ... RSC Advances 10 (25), (2020), 14837-14845

35. Surfactant-Free Synthesis of Nb2O5 Nanoparticles Anchored Graphene Nanocomposites with Enhanced Electrochemical Performance for Supercapacitor Electrodes

P Nagaraju, R Vasudevan, **R. Jayavel**, A Alsalme, A Alghamdi, M Arivanandhan, ... Nanomaterials 10 (1), (2020), 160

36. High-performance electrochemical capacitor based on cuprous oxide/graphene nanocomposite electrode material synthesized by microwave irradiation method

P Nagaraju, R Vasudevan, M Arivanandhan, A Alsalme, **R Jayavel** Emergent Materials 2 (4), (2019), 495-504

37. TiO2 nanostructures with controlled morphology for improved electrical properties of photoanodes and quantum dot sensitized solar cell characteristics

T Archana, K Vijayakumar, M Arivanandhan, **R Jayavel** Surfaces and Interfaces 17, (2019), 100350

38. A facile preparation, performance and emission analysis of pongamia oil based novel biodiesel in diesel engine with CeO2: Gd nanoparticles

K Dhanasekar, M Sridaran, M Arivanandhan, **R Jayavel** Fuel 255, (2019), 115756

39. High Electrochemical Performance and Enhanced Electrocatalytic Behavior of a Hydrothermally Synthesized Highly Crystalline Heterostructure CeO₂@NiO ...

G Manibalan, G Murugadoss, R Thangamuthu, **R. Jayavel**, MR Kumar, ... Inorganic Chemistry 58 (20), (2019), 13843-13861

40. Study on Photo-Catalytic and Antimicrobial Activity of Green Synthesized TiO₂ Nanoparticles Coated Vitrified Tiles

M Sivaraj, S Sudhakar, M Arivanandhan, S Ganesan, **R. Jayavel** Journal of Nanoscience and Technology, (2019), 836-839

41. Facile synthesis of Yb 2 O 3–graphene nanocomposites for enhanced energy and environmental applications

T Saravanan, P Anandan, M Shanmugam, M Azhagurajan, R. Jayavel, ...

Polymer Bulletin, (2019), 1-16

42. Preparation and thermal characteristics of caprylic acid based composite as phase change material for thermal energy storage

P Sivasamy, S Harikrishnan, R Jayavel, SI Hussain, S Kalaiselvam, L Lu

Materials Research Express 6 (10), (2019), 105051

43. Hydrogen evolution reaction with transition metal molybdate as cathode material

S Muthamizh, V Narayanan, R Jayavel

AIP Conference Proceedings 2115 (1), (2019), 030553

44. Freestanding flexible, pure and composite form of reduced graphene oxide paper for ammonia vapor sensing

D Selvakumar, H Sivaram, A Alsalme, A Alghamdi, R Jayavel

Scientific reports 9 (1), (2019), 1-8

45. Photovoltaic Performances of Yb Doped CdTe QDs Sensitized TiO₂ Photoanodes for Solar cell Applications

A Arivarasan, S Bharathi, S Ezhilarasi, S Arunpandiyan, R Jayavel

Journal of Inorganic and Organometallic Polymers and Materials 29 (3), (2019), 859-868

46. Effect of Bismuth substitution on the enhancement of thermoelectric power factor of nanostructured BixCo3-xO4

ASA Nedunchezhian, D Sidharth, NY Devi, R Rajkumar, R. Jayavel, ...

Ceramics International 45 (6), (2019), 6782-6787

47. Enhanced photocatalytic performance of heterostructure CeO2–SnO2 nanocomposite via hydrothermal route

G Manibalan, G Murugadoss, R Thangamuthu, RM Kumar, R Jayavel, ...

Materials Research Express 6 (7), (2019), 075032

48. Nanoscaled Biodegradable Metal–Polymeric Three-Dimensional Framework for Endothelial Cell Patterning and Sustained Angiogenesis

D Govindarajan, R Lakra, PS Korapatti, J Ramasamy, R. Jayavel

ACS Biomaterials Science & Engineering 5 (5), (2019), 2519-2531

49. Structural, Morphological and Photocatalytic Activity of YMnO3 Nanorods

RD Kumar, R Thangappan, R Javavel

Journal of nanoscience and nanotechnology 19 (4), (2019), 2385-2390

50. Indium oxide/carbon nanotube/reduced graphene oxide ternary nanocomposite with enhanced electrochemical supercapacitance

C Sengottaiyan, R Jayavel, RG Shrestha, T Subramani, S Maji, JH Kim, ...

Bulletin of the Chemical Society of Japan 92 (3), (2019), 521-528

51. Role of hexamine in ZnO morphologies at different growth temperature with potential application in dye sensitized solar cell

A Saranya, T Devasena, H Sivaram, R Jayavel

Materials Science in Semiconductor Processing 92, (2019), 108-115

52. Studies on electrochemical properties of hetarolite (ZnMn2O4) nanostructure for supercapacitor application

N Senthilkumar, V Venkatachalam, M Kandiban, R. Jayavel, ...

Physica E: Low-dimensional Systems and Nanostructures 106, (2019), 121-126

- 53. Facile synthesis of heterostructure CeO2-TiO2 nanocomposites for enhanced electrochemical sensor and solar cell applications
- G Manibalan, G Murugadoss, R Thangamuthu, RM Kumar, **R Jayavel** Journal of Alloys and Compounds 773, (2019), 449-461
- 54. Enhancing effects of Te substitution on the thermoelectric power factor of nanostructured SnSe 1– x Te x

D Sidharth, ASA Nedunchezhian, R Rajkumar, NY Devi, **R. Jayavel**, P Rajasekaran, ... Physical Chemistry Chemical Physics 21 (28), (2019), 15725-15733

- 55. BiVO4/RGO hybrid nanostructure for high performance electrochemical supercapacitor C Sengottaiyan, NA Kalam, **R Jayavel**, RG Shrestha, T Subramani, ... Journal of Solid State Chemistry 269, (2019), 409-418
- 56. The theoretical and experimental vibrational studies of thiourea and silver nitrate (2: 1) complex N Sivakumar, N Kanagathara, MK Marchewka, M Drozd, **R Jayavel**, ... Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 204, (2018), 717-725
- 57. Sensitive electrochemical detection of glucose based on Au-CuO nanocomposites S Felix, AN Grace, **R Jayavel**Journal of Physics and Chemistry of Solids 122, 255-260
- 58. Vanadium sulfide/reduced graphene oxide composite with enhanced supercapacitance performance NA Kalam, C Sengottaiyan, **R Jayavel**, K Ariga, RG Shrestha, ... Journal of the Taiwan Institute of Chemical Engineers 92, (2018), 72-79
- 59. Enhanced electrochemical supercapacitor and excellent amperometric sensor performance of heterostructure CeO2-CuO nanocomposites via chemical route G Manibalan, G Murugadoss, R Thangamuthu, **P Ragupathy**, RM Kumar, ... Applied Surface Science 456, (2018), 104-113
- 60. Influence of Al doping on structural, luminescence and electrochemical properties of V2O5 nanostructures synthesized via non-hydrolytic sol-gel technique A Venkatesan, NRK Chandar, K Pradeeswari, P Pandi, A Kandasamy, **R. Jayavel,** ... Materials Research Express 6 (1), (2018), 015017

61. Facile synthesis of RuO2 nanoparticles anchored on graphene nanosheets for high performance composite electrode for supercapacitor applications

R Thangappan, M Arivanandhan, RD Kumar, R Jayavel

Journal of Physics and Chemistry of Solids 121, (2018), 339-349

62. Impact of graphene on the enhancement of electrochemical and photocatalytic performance of Gd2O3-Graphene nanocomposites

T Saravanan, P Anandan, M Shanmugam, T Jayakumari, **R. Jayavel,** ... Solid State Sciences 83, (2018), 171-180

- 63. Synthesis and electrochemical studies of rGO/ZnO nanocomposite for supercapacitor application J Jayachandiran, **R. Jayavel**, J Yesuraj, M Arivanandhan, A Raja, SA Suthanthiraraj, ... Journal of Inorganic and Organometallic Polymers and Materials 28 (5), (2018), 2046-2055
- 64. Film thickness effect and substrate dependent tribo-mechanical characteristics of titanium nitride films

DD Kumar, N Kumar, S Kalaiselvam, R Thangappan, **R. Jayavel** Surfaces and Interfaces 12, (2018), 78-85

65. Rapid synthesis of WO3/graphene nanocomposite via in-situ microwave method with improved electrochemical properties

P Nagaraju, A Alsalme, AM Alkathiri, **R. Jayavel** Journal of Physics and Chemistry of Solids 120, (2018), 250-260

- 66. Enhanced photocatalytic activity of CeO₂@α-MoO₃ heterostructure G Manibalan, G Murugadoss, R Thangamuthu, RM Kumar, MR Kumar, R. Jayavel,... Journal of Materials Science: Materials in Electronics 29 (16), (2018), 13692-13702
- 67. Microwave-assisted synthesis of Ru and Ce doped tungsten oxide for supercapacitor electrodes S Paulraj, **R Jayavel**

Journal of Materials Science: Materials in Electronics 29 (16), (2018), 13794-13802

- 68. Synthesis and characterization of binary transition metal oxide/reduced graphene oxide nanocomposites and its enhanced electrochemical properties for supercapacitor applications S Nagarani, G Sasikala, K Satheesh, M Yuvaraj, **R Jayavel** Journal of Materials Science: Materials in Electronics 29 (14), (2018), 11738-11748
- 69. Enhanced visible light photocatalytic activity of LaMnO₃ nanostructures for water purification RD Kumar, R Thangappan, **R Jayavel**

Research on Chemical Intermediates 44 (7), (2018), 4323-4337

70. Enhancement of third-order nonlinear optical properties of HMTA stabilized pure and doped ZnS nanoparticles and their electronic structures

KV Anand, G Vinitha, S Gautam, KH Chae, R Mohan, K Asokan, **R. Jayavel,...** Journal of Nonlinear Optical Physics & Materials 27 (02), (2018), 1850016

71. Synthesis, growth, spectral, electrical, mechanical and thermal characterization of a potential optical material: γ-glycine single crystal

N Sivakumar, **R Jayavel**, G Anbalagan, RR Yadav

Optical Materials 80, (2018), 177-185

72. Effect of rare earth doping on the enhancement of photocatalytic performance of ceria nanocrystals under natural sunlight

MK Chinnu, P Anandan, M Arivanandhan, A Venkatesan, RM Kumar, **R. Jayavel,** ... Journal of Materials Science: Materials in Electronics 29 (11), (2018), 9564-9572

73. Synthesis of highly stable silver nanoparticles through a novel green method using Mirabillis jalapa for antibacterial, nonlinear optical applications

S Pugazhendhi, PK Palanisamy, R Jayavel

Optical Materials 79, (2018), 457-463

74. Evaluation of reaction parameters dependent optical properties and its photovoltaics performances of CdTe ODs

A Arivarasan, S Bharathi, V Vijayaraj, G Sasikala, **R Jayavel** Journal of Inorganic and Organometallic Polymers and Materials 28 (3), (2018), 1263-1275

75. Superior Photocatalytic Performance of CeO2 Nanoparticles and Reduced Graphene Oxide Nanocomposite Prepared by Low Cost Co-Precipitation Method M Jayanthi, T Lavanya, NA Saradha, K Satheesh, SR Chenthamarai, **R. Jayavel,...** Journal of nanoscience and nanotechnology 18 (5), (2018), 3257-3265

76. A facile synthesis of ferrocene functionalized graphene oxide nanocomposite for electrochemical sensing of lead

NA Karthick, R Thangappan, M Arivanandhan, A Gnanamani, **R Jayavel** Journal of Inorganic and Organometallic Polymers and Materials 28 (3), (2018), 1021-1028

77. Shape controlled synthesis of rod-like Co₃O₄ nanostructures as high-performance electrodes for supercapacitor applications

V Venkatachalam, A Alsalme, A Alswieleh, R. Jayavel

Journal of Materials Science: Materials in Electronics 29 (7), (2018), 6059-6067

78. Heteroatom doped reduced graphene oxide paper for large area perovskite solar cells D Selvakumar, G Murugadoss, A Alsalme, AM Alkathiri, **R. Jayavel** Solar Energy 163, (2018), 564-569

79. Enhanced Photocatalytic Degradation of Synthetic Dyes and Industrial Dye Wastewater by Hydrothermally Synthesized G–CuO–Co₃O₄ Hybrid Nanocomposites ...

S Mahalingam, J Ramasamy, YH Ahn

Journal of Cluster Science 29 (2), (2018), 235-250

80. Neuromorphic transistor achieved by redox reaction of WO3 thin film T Tsuchiya, M Jayabalan, K Kawamura, M Takayanagi, T Higuchi, **R. Jayavel,** ...

81. A facile synthesis of hybrid nanocomposites of reduced graphene oxide/ZnO and its surface modification characteristics for ozone sensing

J Jayachandiran, A Raja, M Arivanandhan, **R Jayavel**, D Nedumaran Journal of Materials Science: Materials in Electronics 29 (4), (2018), 3074-3086

82. Enhanced performance of PbO nanoparticles and PbO-CdO and PbO-ZnO nanocomposites for supercapacitor application

H Sivaram, D Selvakumar, A Alsalme, A Alswieleh, **R Jayavel** Journal of Alloys and Compounds 731, (2018), 55-63

83. Formation of PbSe–ZnO thin film based heterostructure for solar cell applications D Selvakumar, R Vasudevan, **R Jayavel** Materials Today: Proceedings 5 (6), (2018), 14468-14472

- 84. Synthesis of metastable Au-Fe alloy using ordered nanoporous silica as a hard template PSM Kumar, T Sivakumar, T Fujita, **R Jayavel**, H Abe Metals 8 (1), 17, (2018)
- 85. Templated synthesis of atomically thin platy hematite nanoparticles within a layered silicate exhibiting efficient photocatalytic activity

D Mani, N Tsunoji, Y Yumauchi, M Arivanandhan, **R Jayavel**, Y Ide Journal of Materials Chemistry A 6 (12), (2018), 5166-5171

86. Hierarchical Flower Structured Bi₂S₃/Reduced Graphene Oxide Nanocomposite for High Electrochemical Performance

AK Noordeen, S Sambasivam, S Chinnasamy, **J Ramasamy**, ... Journal of Inorganic and Organometallic Polymers and Materials 28 (1), (2018), 73-83

87. Facile in-situ microwave irradiation synthesis of TiO2/graphene nanocomposite for high-performance supercapacitor applications

P Nagaraju, A Alsalme, A Alswieleh, **R Jayavel** Journal of Electroanalytical Chemistry 808, (2018), 90-100

88. Molybdenum oxide/graphene nanocomposite electrodes with enhanced capacitive performance for supercapacitor applications

R Thangappan, M Arivanandhan, S Kalaiselvam, **R Jayavel**, Y Hayakawa Journal of Inorganic and Organometallic Polymers and Materials 28 (1), (2018), 50-62

89. Simplified detection of the hybridized DNA using a graphene field effect transistor AK Manoharan, S Chinnathambi, **R Jayavel**, N Hanagata Science and Technology of advanced MaTerialS 18 (1), (2017), 43-50

90. Development of metal oxide arrester block using a rare earth element for very fast transient overvoltage applications

K Raju, V Prasad, J Ramasamy

Turkish Journal of Electrical Engineering & Computer Sciences 25 (6), (2017),4893-4900

91. The effect of rare earth ions on structural, morphological and thermoelectric properties of nanostructured tin oxide based perovskite materials

P Rajasekaran, ASA Nedunchezhian, NY Devi, R. Jayavel, D Sidharth, ...

Materials Research Express 4 (11), (2017),115024

92. Freestanding flexible nitrogen doped-reduced graphene oxide film as an efficient electrode material for solid-state supercapacitors

D Selvakumar, A Alsalme, A Alswieleh, R Jayavel

Journal of Alloys and Compounds 723, (2017),995-1000

93. Synthesis and application of graphene- α MoO3 nanocomposite for improving visible light irradiated photocatalytic decolorization of methylene blue dye

S Mahalingam, J Ramasamy, YH Ahn

Journal of the Taiwan Institute of Chemical Engineers 80, (2017),276-285

94. Tribo-mechanical properties of reactive magnetron sputtered transition metal carbide coatings DD Kumar, N Kumar, S Kalaiselvam, R Radhika, AM Rabel, **R Jayavel** Tribology International 114, (2017), 234-244

95. Cobalt oxide/reduced graphene oxide composite with enhanced electrochemical supercapacitance performance

C Sengottaiyan, **R Jayavel**, P Bairi, RG Shrestha, K Ariga, LK Shrestha Bulletin of the Chemical Society of Japan 90 (8), (2017), 955-962

96. Synthesis and property studies of molybdenum disulfide modified reduced graphene oxide (MoS2-rGO) nanocomposites for supercapacitor applications

M Murugan, MR Kumar, A Alsalme, A Alghamdi, R Javavel

Journal of Nanoscience and Nanotechnology 17 (8), (2017),5469-5474

97. Zinc oxide nanoparticles—Synthesis, characterization and antibacterial activity

G Krithika, R Saraswathy, M Muralidhar, D Thulasi, R. Jayavel, N Lalitha, ...

Journal of Nanoscience and Nanotechnology 17 (8), (2017), 5209-5216

98. Double hydroxide mediated synthesis of nanostructured ZnCo2O4 as high performance electrode material for supercapacitor applications

V Venkatachalam, A Alsalme, A Alswieleh, R. Jayavel

Chemical Engineering Journal 321, (2017), 474-483

99. Facile Preparation of LaFeO₃/rGO Nanocomposites with Enhanced Visible Light Photocatalytic Activity

RD Kumar, R Thangappan, R Jayavel

Journal of Inorganic and Organometallic Polymers and Materials 27 (4), (2017),892-900

100. Influence of calcium hexaboride reinforced magnesium composite for the mechanical and tribological behviour

P Seenuvasaperumal, A Elayaperumal, R Jayavel

Tribology International 111, (2017),18-25

101. Study on the effect of annealing temperature and photocatalytic properties of TbMnO3 nanoparticles

RD Kumar, R Thangappan, R Jayavel

Optik 138, (2017),365-371

102. Wear resistant super-hard multilayer transition metal-nitride coatings

DD Kumar, N Kumar, S Kalaiselvam, S Dash, R Jayavel

Surfaces and Interfaces 7, (2017),74-82

103. Fabrication of hybrid collagen aerogels reinforced with wheat grass bioactives as instructive scaffolds for collagen turnover and angiogenesis for wound healing applications

D Govindarajan, N Duraipandy, KV Srivatsan, R Lakra, PS Korapatti, R. Jayavel, ...

ACS applied materials & interfaces 9 (20), (2017), 16939-16950

104. Improved electroluminescence in organic light emitting diodes by thermal annealing of indium tin oxide anode

G Dasi, R Ramarajan, R Thangappan, R Jayavel, K Thangaraju

AIP Conference Proceedings 1832 (1), (2017),060017

105. Zinc Oxide (ZnO) Nanoparticles for Enhancement of Fastness Properties in Cationic Finishing R Kothandam, **R Jayavel**, S Gupta

Journal of the American Leather Chemists Association 112 (05), (2017), 162-167

106. Hexagonal-like NiCo₂O₄ nanostructure based high-performance supercapacitor electrodes V Venkatachalam, A Alsalme, A Alghamdi, **R Jayavel** Ionics 23 (4), 977-984

107. Reduced graphene oxide paper as bimorphic electrical actuators

D Selvakumar, A Alsalme, A Alghamdi, R Javavel

Materials Letters 191, (2017),182-185

108. Electrochemical Supercapacitance Properties of Reduced Graphene

Oxide/Mn₂O₃:Co₃O₄ Nanocomposite

C Sengottaiyan, R Jayavel, RG Shrestha, JP Hill, K Ariga, LK Shrestha

Journal of Inorganic and Organometallic Polymers and Materials 27 (2), (2017),576-585

109. Synthesis and characterization of LaFeO3/TiO2 nanocomposites for visible light photocatalytic activity

RD Kumar, R Thangappan, R Jayavel

Journal of Physics and Chemistry of Solids 101, (2017),25-33

110. Performance improvement of metal–oxide arrester for VFTs

R Kannadasan, P Valsalal, R Jayavel

IET Science, Measurement & Technology 11 (4), (2017), 438-444

111. Synthesis and characterization of graphene-zinc oxide nanocomposite electrode material for supercapacitor applications

V Rajeswari, R Jayavel, AC Dhanemozhi

Materials Today: Proceedings 4 (2), (2017), 645-652

112. The fabrication of natural dye sensitized solar cell (Dssc) based on TiO2 using henna and beetroot dye extracts

S Sathvajothi, **R Javavel**, AC Dhanemozhi

Materials Today: Proceedings 4 (2), (2017), 668-676

113. Silver nanoparticles for melamine detection in milk based on transmitted light intensity

K Ramalingam, T Devasena, B Senthil, R Kalpana, R Jayavel

IET Science, Measurement & Technology 11 (2), (2016),171-178

114. In-situ microwave synthesis of graphene—TiO2 nanocomposites with enhanced photocatalytic properties for the degradation of organic pollutants

M Shanmugam, A Alsalme, A Alghamdi, R Jayavel

Journal of Photochemistry and Photobiology B: Biology 163, (2016), 216-223

115. Synthesis and characterization of boron doped graphene nanosheets for supercapacitor applications V Thirumal, A Pandurangan, **R. Jayavel**, R Ilangovan

Synthetic Metals 220, (2016), 524-532

116. Optical Characterization and Electrochemical Properties of Cd (1– x) Cu (x) S/rGO Composites Synthesized Through Reflux Method

S Dorothy, T Lavanya, K Punithamurthy, R. Jayavel, K Satheesh

Journal of Nanoscience and Nanotechnology 16 (9), (2016), 9716-9721

117. Curcumin cross-linked collagen aerogels with controlled anti-proteolytic and pro-angiogenic efficacy

G Dharunya, N Duraipandy, R Lakra, PS Korapatti, R Jayavel, MS Kiran

Biomedical Materials 11 (4), (2016), 045011

118. Synthesis of nitrogen doped coiled double walled carbon nanotubes by chemical vapor deposition method for supercapacitor applications

V Thirumal, A Pandurangan, R Jayavel, SR Krishnamoorthi, R Ilangovan

Current Applied Physics 16 (8), (2016), 816-825

119. Synthesis and characterization of Y2O3-reduced graphene oxide nanocomposites for photocatalytic applications

T Saravanan, P Anandan, M Azhagurajan, M Arivanandhan, K Pazhanivel, ...

Materials Research Express 3 (7), (2016), 075502

120. Synthesis, growth, structural, optical, thermal and mechanical properties of an organic Urea maleic

acid single crystals for nonlinear optical applications P Vinothkumar, RM Kumar, **R Jayavel**, A Bhaskaran Optics & Laser Technology 81, 145-152

121. A novel nano-finish formulations for enhancing performance properties in leather finishing applications

R Kothandam, M Pandurangan, **R Jayavel**, S Gupta Journal of Cluster Science 27 (4), (2016), 1263-1272

122. Facile synthesize of free standing highly conducting flexible reduced graphene oxide paper D Selvakumar, H Sivaram, A Alsalme, A Alghamdi, **R. Jayavel** Journal of Materials Science: Materials in Electronics 27 (6), (2016), 6232-6241

123. A study on the synthesis and characterization of CoMn₂O₄ electrode material for supercapacitor applications

P Vigneshwaran, M Kandiban, NS Kumar, V Venkatachalam, **R Jayavel**, ... Journal of Materials Science: Materials in Electronics 27 (5), (2016), 4653-4658

124. Facile hydrothermal preparation of niobium pentaoxide decorated reduced graphene oxide nanocomposites for supercapacitor applications

M Murugan, RM Kumar, A Alsalme, A Alghamdi, **R Jayavel** Chemical Physics Letters 650, (2016), 35-40

125. Synthesis, optical, photocatalytic, and electrochemical studies on Ag_2S/ZnS and ZnS/Ag_2S nanocomposites

G Murugadoss, **R Jayavel**, MR Kumar, R Thangamuthu Applied Nanoscience 6 (4), (2016), 503-510

126. Influence of Fe-doping on the structural, morphological, optical, magnetic and antibacterial effect of ZnO nanostructures

N Mohamed Basith, J Judith Vijaya, L John Kennedy, M Bououdina, **R. Jayavel** ... Journal of nanoscience and nanotechnology 16 (2), (2016), 1567-1577

127. PbO/CdO/ZnO and PbS/CdS/ZnS nanocomposites: Studies on optical, electrochemical and thermal properties

G Murugadoss, **R Jayavel**, R Thangamuthu, MR Kumar Journal of Luminescence 170, (2016), 78-89

128. Structural, optical and thermal properties of CdS/Bi_2S_3 nanocomposites

G Murugadoss, **R Jayavel**, MR Kumar

Indian Journal of Physics 90 (2), (2016), 173-178

129. Preparation and characterization of carbon nanotubes for supercapacitor applications V Thirumal, A Pandurangan, **R Jayavel**, R Ilangovan Synth. Metals 220, (2016),524-532

130. Band alignment and depletion zone at ZnO/CdS and ZnO/CdSe hetero-structures for temperature independent ammonia vapor sensing

NR Yogamalar, K Sadhanandham, AC Bose, **R Jayavel** Physical Chemistry Chemical Physics 18 (47), (2016), 32057-32071

131. Facile one-pot hydrothermal synthesis and structural characterization of transition metals (Cu, Co and Mn) doped ZnS nanoparticles in HMTA matrix

KV Anand, R Mohan, R Jayavel(2016)

132. Synthesis of Pristine Cobalt oxide (Co3O4) Nanostructured Electrode Material for Supercapacitor Applications

V Venkatachalam, R Jayavel

Invertis Journal of Science & Technology 9 (1), (2016), 6-10

133. In Situ Hydrothermal Synthesis of Graphene–CuO Nanocomposites for Lithium Battery Applications

M Muruga, R Mohan Kumar, A Alsalme, A Alghamdi, **R Jayavel** Journal of nanoscience and nanotechnology 16 (1), (2016), 317-320

134. Graphene decorated with MoS 2 nanosheets: a synergetic energy storage composite electrode for supercapacitor applications

R Thangappan, S Kalaiselvam, A Elayaperumal, R Jayavel, ...

Dalton transactions 45 (6), (2016), 2637-2646