

**СПИСЪК НА ЦИТАТИТЕ**  
**ВКЛЮЧЕНИ В МИНИМАЛНИТЕ ИЗИСКВАНИЯ**

1. S. Sridevi, Uma S. Hiremath, C.V. Yelamaggad, S. Krishna Prasad, **Y.G. Marinov**, G.B. Hadjichristov, and A.G. Petrov, *Behaviour of photosensitive soft materials: Thermo-optical, dielectric and elastic constant studies on azo-dye doped nematic liquid crystals*, Materials Chemistry and Physics **130**, 1329– 1335 (2011), ISSN: 0254-0584, DOI: <https://doi.org/10.1016/j.matchemphys.2011.09.027>, IF = 2.234, Q1 (Scopus).

[1] Kocakülah, G., Yıldırım, M., Köysal, O., Ercan, İ. *Influence of UV light intensity on dielectric behaviours of pure and dye-doped cholesteric liquid crystals* (2020) Journal of Materials Science: Materials in Electronics, 31 (24), pp. 22385-22397, DOI: 10.1007/s10854-020-04740-6, ISSN: 09574522 (Scopus)

[2] Athianna Muthusamy, Balaji, K., Murugavel, S.C., Yuan, C., Dai, L. *Synthesis and Characterization of Liquid Crystalline Polyesters Containing  $\alpha,\beta$ -unsaturated Ketone Moiety in the Main Chain Derived from 2,6-bis(4-hydroxybenzylidene)cyclohexanone* (2020) Polymer Science - Series B, 62 (3), pp. 245-255, DOI: 10.1134/S1560090420030112, ISSN: 15600904 (Scopus)

[3] Okumuş, M. *Investigation of thermo-electro-optic properties of some mixed nematic liquid crystals* (2016) Molecular Crystals and Liquid Crystals, 625 (1), pp. 117-125, DOI: 10.1080/15421406.2015.1069440, ISSN: 15421406 (Scopus)

[4] Xie, H., Zhang, L., Zhang, W., He, B., Yuan, X., Song, P., Chen, Z., Yang, Z., Yang, H. *Electro-switchable characteristics of broadband absorptive films based on multi-dichroic dye-doped nematic liquid crystal* (2015) Liquid Crystals, 42 (3), pp. 309-315, DOI: 10.1080/02678292.2014.986231, ISSN: 02678292 (Scopus)

[5] Eren, T., Kose, M., Sayin, K., McKee, V., Kurtoglu, M. *A novel azo-aldehyde and its Ni(II) chelate; Synthesis, characterization, crystal structure and computational studies of 2-hydroxy-5-{(E)-[4-(propan-2-yl) phenyl]diazaryl}benzaldehyde* (2014) Journal of Molecular Structure, 1065-1066 (1), pp. 191-198, DOI: 10.1016/j.molstruc.2014.02.052, ISSN: 00222860 (Scopus)

[6] Akkurt, F. *Laser induced electro-optical characterization of anthraquinone dye and fullerene C60 doped guest-host liquid crystal systems* (2014) Journal of Molecular Liquids, 194, pp. 241-244, DOI: 10.1016/j.molliq.2014.02.040, ISSN: 01677322 (Scopus)

[7] Son, J.-H., Lee, S.-H., Hong, S.-H., Zin, W.-C., Song, J.-K. *Photo-controllable electro-optic response of liquid crystalline cells using photo-isomeric molecules* (2013) Liquid Crystals, 40 (5), pp. 646-655, DOI: 10.1080/02678292.2013.772255, ISSN: 02678292 (Scopus)

2. H. P. Hinov, L. K. Vistin', and **Y. G. Marinov**, *Observation of Transient Alignment-Inversion Walls in Nematics of Phenyl Benzoates in the Presence of a Magnetic Field*, J Phys Chem B **118** (15), pp 4220–4227 (2014). ISSN 1520-5207, DOI: <https://doi.org/10.1021/jp412685h>, IF = 3.146, Q1 (Scopus).

- [8] Parshin, A.M., Sutormin, V.S., Zyryanov, V.Y., Shabanov, V.F. *Polar anchoring energy and tilt angle measured by magneto-optical technique in nematic doped with ionic surfactant* (2020) Liquid Crystals, 47 (12), pp. 1825-1831, DOI: 10.1080/02678292.2020.1733683, ISSN: 02678292 (Scopus)
- [9] Chen, S., Zhou, X., Zhang, J., Zhang, Z. *Electric field-induced structural transition of domain walls in nanoconfined nematic liquid crystal systems* (2019) Liquid Crystals, 46 (1), pp. 67-75, DOI: 10.1080/02678292.2018.1468503, ISSN: 02678292 (Scopus)
3. **Y. G. Marinov**, G. B. Hadjichristov, and A. G. Petrov, *Single-layered microscale linear-gradient PDLC material for electro-optics*, Cryst. Res. Technol., 44, 870-878 (2009), ISSN 0232-1300, DOI: <https://doi.org/10.1002/crat.200900147>, IF = 0.896, Q2 (Scopus).
- [10] Hassanein, G.N., Kattan, N., Ellabban, M.A. *Electro-optic properties of aligned and non-aligned polymer dispersed liquid crystals driven by an amplitude-modulated electric signal* (2019) Optik, 186, pp. 137-146, DOI: 10.1016/j.ijleo.2019.04.069, ISSN: 00304026 (Scopus)
- [11] Koduru, H.K., Marino, L., Scaramuzza, N. *Electro-optics of PDLC films doped with WO<sub>3</sub> nanoparticles* (2019) AIP Conference Proceedings, 2075, art. no. 020018, DOI: 10.1063/1.5091135, ISSN: 0094243X, ISBN: 9780735418035 (Scopus)
- [12] Teng, H., Li, J., Hou, Z., Yan, X., Han, L., Xu, J., Li, T. *Preparation of compositional gradient polymeric films based on Gradient mesh template* (2018) Polymers, 10 (6), art. no. 677, DOI: 10.3390/polym10060677, ISSN: 20734360b (Scopus)
- [13] Koduru, H.K. *Electro-optical and dielectric characterization of submicrometer-sized PDLC films* (2017) Journal of Physics: Conference Series, 780 (1), art. no. 012007, DOI: 10.1088/1742-6596/780/1/012007, ISSN: 17426588 (Scopus)
- [14] Kim, Y., Kim, K., Kim, K.B., Park, J.-Y., Lee, N., Seo, Y. *Flexible polymer dispersed liquid crystal film with graphene transparent electrodes* (2016) Current Applied Physics, 16 (3), pp. 409-414, DOI: 10.1016/j.cap.2016.01.003, ISSN: 15671739 (Scopus)
- [15] Popova, L.T. *Flexo-dielectro-optical spectroscopy of PDLC films modified by nano-rubbed PTFE layers* (2016) Journal of Physics: Conference Series, 682 (1), art. no. 012027, DOI: 10.1088/1742-6596/682/1/012027, ISSN: 17426588 (Scopus)
- [16] Kim, Y., Jung, D., Jeong, S., Kim, K., Choi, W., Seo, Y. *Optical properties and optimized conditions for polymer dispersed liquid crystal containing UV curable polymer and nematic liquid crystal* (2015) Current Applied Physics, 15 (3), pp. 292-297, DOI: 10.1016/j.cap.2014.12.027, ISSN: 15671739 (Scopus)
- [17] Ma, Q.-L., Huang, Y.M. *Dependence of the morphology of polymer dispersed liquid crystal on temperature* (2011) Materials Science Forum, 663-665, pp. 804-807, DOI: 10.4028/www.scientific.net/MSF.663-665.804, ISSN: 02555476, ISBN: 0878492119; 9780878492114 (Scopus)
- [18] Ma, Q.-L., Huang, Y.M. *Phase separation in polymer dispersed liquid crystal device*

(2011) Materials Science Forum, 663-665, pp. 763-766, DOI: 10.4028/www.scientific.net/MSF.663-665.763, ISSN: 02555476, ISBN: 0878492119; 9780878492114 (Scopus)

[19] Ma, Q.-L., Huang, Y.M. *Transmittance of polymer dispersed liquid crystal device* (2011) Materials Science Forum, 663-665, pp. 795-799, DOI: 10.4028/www.scientific.net/MSF.663-665.795, ISSN: 02555476, ISBN: 0878492119; 9780878492114 (Scopus)

4. H. K. Koduru, F. Scarpelli, **Y. G. Marinov**, G. B. Hadjichristov, P. M. Rafailov, I. K. Miloushev, A. G. Petrov, N. Godbert, L. Bruno, and N. Scaramuzza, *Characterization of PEO/PVP/GO nanocomposite solid polymer electrolyte membranes: microstructural, thermo-mechanical, and conductivity properties*, Ionics **24**, 3459-3473 (2018), ISSN: 09477047, DOI: <https://doi.org/10.1007/s11581-018-2484-8>, IF= 2.347, Q1 (Scopus).

[20] Hashim, A. *Enhanced morphological, optical and electronic characteristics of WC NPs doped PVP/PEO for flexible and lightweight optoelectronics applications* (2021) Optical and Quantum Electronics, 53 (8), art. no. 478, DOI: 10.1007/s11082-021-03100-w, ISSN: 03068919 (Scopus)

[21] Gebert, F., Knott, J., Gorkin, R., III, Chou, S.-L., Dou, S.-X. *Polymer electrolytes for sodium-ion batteries* (2021) Energy Storage Materials, 36, pp. 10-30, DOI: 10.1016/j.ensm.2020.11.030, ISSN: 24058297 (Scopus)

[22] Yang, F., Wang, L., Ruan, W., Zhang, M., Rong, M. *Research progress on design, performance and application of graphene based polymer composite electrolytes [石墨烯基聚合物复合电解质的设计、性能及其应用研究进展]* (2021) Fuhe Cailiao Xuebao/Acta Materiae Compositae Sinica, 38 (3), pp. 680-697, DOI: 10.13801/j.cnki.fhclxb.20201126.002, ISSN: 10003851 (Scopus)

[23] Shi, Y., Li, B., Zhang, Y., Cui, Y., Cao, Z., Du, Z., Gu, J., Shen, K., Yang, S. *Tortuosity Modulation toward High-Energy and High-Power Lithium Metal Batteries* (2021) Advanced Energy Materials, 11 (12), art. no. 2003663, DOI: 10.1002/aenm.202003663, ISSN: 16146832 (Scopus)

[24] Hashim, A. *Fabrication and characteristics of flexible, lightweight, and low-cost pressure sensors based on PVA/SiO<sub>2</sub>/SiC nanostructures* (2021) Journal of Materials Science: Materials in Electronics, 32 (3), pp. 2796-2804, DOI: 10.1007/s10854-020-05032-9, ISSN: 09574522 (Scopus)

[25] Wen, J., Zhang, R., Zhao, Q., Liu, W., Lu, G., Hu, X., Sun, J., Wang, R., Jiang, X., Hu, N., Liu, J., Liu, X., Xu, C. *Hydroxyapatite Nanowire-Reinforced Poly(ethylene oxide)-Based Polymer Solid Electrolyte for Application in High-Temperature Lithium Batteries* (2020) ACS Applied Materials and Interfaces, 12 (49), pp. 54637-54643, DOI: 10.1021/acsami.0c15692, ISSN: 19448244 (Scopus)

- [26] Jayanthi, S., Sundaresan, B. *Influence of nano SrTiO<sub>3</sub> and ultrasonic irradiation on the properties of polymer blend electrolytes* (2020) Polymer-Plastics Technology and Materials, pp. 2050-2067, DOI: 10.1080/25740881.2020.1784220, ISSN: 25740881 (Scopus)
- [27] Choudhary, S., Dhatarwal, P., Sengwa, R.J. *Probing the dielectric relaxation processes and their correlation with ions transportation in the complexes of plasticized nanocomposite solid polymer electrolyte* (2019) Indian Journal of Physics, 93 (12), pp. 1545-1558, DOI: 10.1007/s12648-019-01422-w, ISSN: 09731458 (Scopus)
- [28] Sengwa, R.J., Choudhary, S., Dhatarwal, P. *Nonlinear optical and dielectric properties of TiO<sub>2</sub> nanoparticles incorporated PEO/PVP blend matrix based multifunctional polymer nanocomposites* (2019) Journal of Materials Science: Materials in Electronics, 30 (13), pp. 12275-12294, DOI: 10.1007/s10854-019-01587-4, ISSN: 09574522 (Scopus)
- [29] Hu, J., Wang, W., Zhou, B., Feng, Y., Xie, X., Xue, Z. *Poly(ethylene oxide)-based composite polymer electrolytes embedding with ionic bond modified nanoparticles for all-solid-state lithium-ion battery* (2019) Journal of Membrane Science, 575, pp. 200-208, DOI: 10.1016/j.memsci.2019.01.025, ISSN: 03767388 (Scopus)
- [30] Chua, S., Fang, R., Sun, Z., Wu, M., Gu, Z., Wang, Y., Hart, J.N., Sharma, N., Li, F., Wang, D.-W. *Hybrid Solid Polymer Electrolytes with Two-Dimensional Inorganic Nanofillers* (2018) Chemistry - A European Journal, 24 (69), pp. 18180-18203, DOI: 10.1002/chem.201804781, ISSN: 09476539 (Scopus)
- [31] Morsi, M.A., Abdelaziz, M., Oraby, A.H., Mokhles, I. *Effect of lithium titanate nanoparticles on the structural, optical, thermal and electrical properties of polyethylene oxide/carboxymethyl cellulose blend* (2018) Journal of Materials Science: Materials in Electronics, 29 (18), pp. 15912-15925, DOI: 10.1007/s10854-018-9677-9, ISSN: 09574522 (Scopus)
5. H. K. Koduru, L. Marino, F. Scarpelli, A. G. Petrov, **Y. G. Marinov**, G. B. Hadjichristov, M. T. Iliev, and N. Scaramuzza, *Structural and dielectric properties of NaIO<sub>4</sub> - Complexed PEO/PVP blended solid polymer electrolytes*, Current Applied Physics **17**, 11, 1518-1531 (2017), ISSN: 1567-1739, DOI:10.1016/j.cap.2017.07.012, IF:1.971, Q2 (Scopus).
- [32] Devi, C., Gellanki, J., Pettersson, H., Kumar, S. *High sodium ionic conductivity in PEO/PVP solid polymer electrolytes with InAs nanowire fillers* (2021) Scientific Reports, 11 (1), art. no. 20180, DOI: 10.1038/s41598-021-99663-5, ISSN: 20452322 (Scopus)
- [33] Teo, L.P., Buraidah, M.H., Arof, A.K. *Development on solid polymer electrolytes for electrochemical devices* (2021) Molecules, 26 (21), art. no. 6499, DOI: 10.3390/molecules26216499, ISSN: 14203049 (Scopus)
- [34] Yin, H., Han, C., Liu, Q., Wu, F., Zhang, F., Tang, Y. *Recent Advances and Perspectives on the Polymer Electrolytes for Sodium/Potassium-Ion Batteries* (2021) Small, 17 (31), art. no. 2006627, DOI: 10.1002/smll.202006627, ISSN: 16136810 (Scopus)

- [35] Ganta, K.K., Jeedi, V.R., Katrapally, V.K., Yalla, M., Emmadi, L.N. *Effect of TiO<sub>2</sub> Nano-Filler on Electrical Properties of Na<sup>+</sup> Ion Conducting PEO/PVDF Based Blended Polymer Electrolyte* (2021) Journal of Inorganic and Organometallic Polymers and Materials, 31 (8), pp. 3430-3440, DOI: 10.1007/s10904-021-01947-w, ISSN: 15741443 (Scopus)
- [36] Barjola, A., Reyes-Rodríguez, J.L., Solorza-Feria, O., Giménez, E., Compañ, V. *Novel SPEEK-ZIF-67 Proton Exchange Nanocomposite Membrane for PEMFC Application at Intermediate Temperatures* (2021) Industrial and Engineering Chemistry Research, 60 (25), pp. 9107-9118, DOI: 10.1021/acs.iecr.1c01780, ISSN: 08885885 (Scopus)
- [37] Zhang, Z., Zhao, B., Zhang, S., Zhang, J., Han, P., Wang, X., Ma, F., Sun, D., Jin, Y., Kanamura, K., Cui, G. *A mixed electron/ion conducting interlayer enabling ultra-stable cycle performance for solid state lithium sulfur batteries* (2021) Journal of Power Sources, 487, art. no. 229428, DOI: 10.1016/j.jpowsour.2020.229428, ISSN: 03787753 (Scopus)
- [38] Tommalieh, M.J. *Gamma radiation assisted modification on electrical properties of Polyvinyl Pyrrolidone/Polyethylene Oxide blend doped by copper oxide nanoparticles* (2021) Radiation Physics and Chemistry, 179, art. no. 109236, DOI: 10.1016/j.radphyschem.2020.109236, ISSN: 0969806X (Scopus)
- [39] Sadiq, M., Raza, M.M.H., Murtaza, T., Zulfequar, M., Ali, J. *Sodium Ion-Conducting Polyvinylpyrrolidone (PVP)/Polyvinyl Alcohol (PVA) Blend Electrolyte Films* (2021) Journal of Electronic Materials, 50 (2), pp. 403-418, DOI: 10.1007/s11664-020-08581-1, ISSN: 03615235 (Scopus)
- [40] Ganta, K.K., Jeedi, V.R., Kumar, K.V., Narsaiah, E.L. *Preparation, characterization and impedance spectroscopic studies of Na<sup>+</sup> ion conducting PEO + PVDF-blended polymer electrolytes* (2021) International Journal of Polymer Analysis and Characterization, 26 (2), pp. 130-144, DOI: 10.1080/1023666X.2020.1860396, ISSN: 1023666X (Scopus)
- [41] Ganta, K.K., Jeedi, V.R., Kumar, K.V., Narsaiah, E.L. *Effect of NaClO<sub>4</sub> concentration on the ionic conductivity and dielectric properties of sodium ion-conducting PEO/PVDF solid polymer electrolytes for energy storage applications* (2020) Journal of Green Engineering, 10 (9), pp. 5589-5606, [link to paper](#), ISSN: 19044720 (Scopus)
- [42] Manatunga, D.C., Godakanda, V.U., Herath, H.M.L.P.B., De Silva, R.M., Yeh, C.-Y., Chen, J.-Y., Akshitha De Silva, A.A., Rajapaksha, S., Nilmini, R., Nalin De Silva, K.M. *Nanofibrous cosmetic face mask for transdermal delivery of nano gold: Synthesis, characterization, release and zebra fish employed toxicity studies: Nanofibrous mask for delivery of gold* (2020) Royal Society Open Science, 7 (9), art. no. 1266, DOI: 10.1098/rsos.201266rsos201266, ISSN: 20545703 (Scopus)
- [43] Liu, J., Khanam, Z., Muchakayala, R., Song, S. *Fabrication and characterization of Zn-ion-conducting solid polymer electrolyte films based on PVdF-HFP/Zn(Tf)<sub>2</sub> complex system* (2020) Journal of Materials Science: Materials in Electronics, 31 (8), pp. 6160-6173, DOI: 10.1007/s10854-020-03169-1, ISSN: 09574522 (Scopus)
- [44] El Sayed, A.M., Khabiri, G. *Spectroscopic, Optical and Dielectric Investigation of (Mg, Cu, Ni, or Cd) Acetates' Influence on Carboxymethyl Cellulose Sodium*

*Salt/Polyvinylpyrrolidone Polymer Electrolyte Films* (2020) Journal of Electronic Materials, 49 (4), pp. 2381-2392, DOI: 10.1007/s11664-020-07953-x, ISSN: 03615235 (Scopus)

[45] Hafiza, M.N., Isa, M.I.N. *Correlation between structural, ion transport and ionic conductivity of plasticized 2-hydroxyethyl cellulose based solid biopolymer electrolyte* (2020) Journal of Membrane Science, 597, art. no. 117176, DOI: 10.1016/j.memsci.2019.117176, ISSN: 03767388 (Scopus)

[46] Pritam, Arya, A., Sharma, A.L. *Selection of best composition of Na<sup>+</sup> ion conducting PEO-PEI blend solid polymer electrolyte based on structural, electrical, and dielectric spectroscopic analysis* (2020) Ionics, 26 (2), pp. 745-766, DOI: 10.1007/s11581-019-03245-5, ISSN: 09477047 (Scopus)

[47] Gohel, K., Kanchan, D.K., MacHhi, H.K., Soni, S.S., Maheshwaran, C. *Gel polymer electrolyte based on PVDF-HFP:PMMA incorporated with propylene carbonate (PC) and diethyl carbonate (DEC) plasticizers : electrical, morphology, structural and electrochemical properties* (2020) Materials Research Express, 7 (2), art. no. 025301, DOI: 10.1088/2053-1591/ab6c06, ISSN: 20531591 (Scopus)

[48] Mazuki, N.F., Abdul Majeed, A.P.P., Nagao, Y., Samsudin, A.S. *Studies on ionics conduction properties of modification CMC-PVA based polymer blend electrolytes via impedance approach* (2020) Polymer Testing, 81, art. no. 106234, DOI: 10.1016/j.polymertesting.2019.106234, ISSN: 01429418 (Scopus)

[49] Torğut, G., Biryan, F., Demirelli, K. *Effect of graphite particle fillers on dielectric and conductivity properties of poly(NIPAM-co-HEMA)* (2019) Bulletin of Materials Science, 42 (5), art. no. 244, DOI: 10.1007/s12034-019-1915-0, ISSN: 02504707 (Scopus)

[50] Dinachandra Singh, M., Dalvi, A., Phase, D.M. *Electrical transport in PEO-NaI-NASICON nanocomposites: An assessment using impedance and X-Ray absorption spectroscopy* (2019) Materials Research Bulletin, 118, art. no. 110485, DOI: 10.1016/j.materresbull.2019.05.010, ISSN: 00255408 (Scopus)

[51] Arya, A., Sadiq, M., Sharma, A.L. *Structural, electrical and ion transport properties of free-standing blended solid polymeric thin films* (2019) Polymer Bulletin, 76 (10), pp. 5149-5172, DOI: 10.1007/s00289-018-2645-y, ISSN: 01700839 (Scopus)

[52] Saidi, N.M., Ming Ng, H., Omar, F.S., Bashir, S., Ramesh, K., Ramesh, S. *Polyacrylonitrile–poly(1-vinyl pyrrolidone-co-vinyl acetate) blend based gel polymer electrolytes incorporated with sodium iodide salt for dye-sensitized solar cell applications* (2019) Journal of Applied Polymer Science, 136 (32), art. no. 47810, DOI: 10.1002/app.47810, ISSN: 00218995 (Scopus)

[53] Pritam, Arya, A., Sharma, A.L. *Dielectric relaxations and transport properties parameter analysis of novel blended solid polymer electrolyte for sodium-ion rechargeable batteries* (2019) Journal of Materials Science, 54 (9), pp. 7131-7155, DOI: 10.1007/s10853-019-03381-3, ISSN: 00222461 (Scopus)

[54] Arya, A., Saykar, N.G., Sharma, A.L. *Impact of shape (nanofiller vs. nanorod) of TiO<sub>2</sub> nanoparticle on free-standing solid polymeric separator for energy storage/conversion devices*

(2019) Journal of Applied Polymer Science, 136 (16), art. no. 47361, DOI: 10.1002/app.47361, ISSN: 00218995 (Scopus)

[55] Arya, A., Sharma, A.L. Tailoring of the structural, morphological, electrochemical, and dielectric properties of solid polymer electrolyte (2019) *Ionics*, 25 (4), pp. 1617-1632, DOI: 10.1007/s11581-019-02916-7, ISSN: 09477047 (Scopus)

[56] Kumar, D., Kanchan, D.K. *Dielectric and electrochemical studies on carbonate free Na-ion conducting electrolytes for sodium-sulfur batteries* (2019) *Journal of Energy Storage*, 22, pp. 44-49, DOI: 10.1016/j.est.2019.01.020, ISSN: 2352152X (Scopus)

[57] Alhusaiki-Alghamdi, H.M. *Improve spectroscopic structural and AC electrical conductivity of PC/PEO blend using graphene* (2019) *Results in Physics*, 12, pp. 793-798, DOI: 10.1016/j.rinp.2018.12.044, ISSN: 22113797 (Scopus)

[58] Tan, C.Y., Omar, F.S., Saidi, N.M., Farhana, N.K., Ramesh, S., Ramesh, K. *Optimization of poly(vinyl alcohol-co-ethylene)-based gel polymer electrolyte containing nickel phosphate nanoparticles for dye-sensitized solar cell application* (2019) *Solar Energy*, 178, pp. 231-240, DOI: 10.1016/j.solener.2018.12.043, ISSN: 0038092X (Scopus)

[59] Sundaramahalingam, K., Nallamuthu, N., Manikandan, A., Vanitha, D., Muthuvinayagam, M. *Studies on sodium nitrate based polyethylene oxide / polyvinyl pyrrolidone polymer blend electrolytes* (2018) *Physica B: Condensed Matter*, 547, pp. 55-63, DOI: 10.1016/j.physb.2018.08.002, ISSN: 09214526 (Scopus)

[60] Morsi, M.A., Abdelaziz, M., Oraby, A.H., Mokhles, I. *Effect of lithium titanate nanoparticles on the structural, optical, thermal and electrical properties of polyethylene oxide/carboxymethyl cellulose blend* (2018) *Journal of Materials Science: Materials in Electronics*, 29 (18), pp. 15912-15925, DOI: 10.1007/s10854-018-9677-9, ISSN: 09574522 (Scopus)

[61] Arya, A., Sharma, A.L. *Optimization of salt concentration and explanation of two peak percolation in blend solid polymer nanocomposite films* (2018) *Journal of Solid State Electrochemistry*, 22 (9), pp. 2725-2745, DOI: 10.1007/s10008-018-3965-4, ISSN: 14328488 (Scopus)

[62] Elkalashy, O., Sheha, E. *Attempt to tune the dielectric and optical properties in PVA/ZnO composite using tetra ethylene glycol dimethyl ether for light emitting devices* (2018) *Applied Physics A: Materials Science and Processing*, 124 (8), art. no. 549, DOI: 10.1007/s00339-018-1970-1, ISSN: 09478396 (Scopus)

[63] Naghdi Sedeh, N., Entezam, M., Hassan Jafari, S., Khonakdar, H.-A., Abdouss, M. *Morphology, drug release behavior, thermal, and mechanical properties of poly(ethylene oxide) (PEO)/poly(vinyl pyrrolidone) (PVP) blends* (2018) *Journal of Applied Polymer Science*, 135 (26), art. no. 46403, DOI: 10.1002/app.46403, ISSN: 00218995 (Scopus)

[64] Alghunaim, N.S. *Structural, thermal, dielectric spectroscopic and AC impedance properties of SiC nanoparticles doped PVK/PVC blend* (2018) *Results in Physics*, 9, pp. 1136-1140, DOI: 10.1016/j.rinp.2018.04.023, ISSN: 22113797

[65] dos Santos Junior, G.A., Nogueira, A.F. *Thermal and electrochemical characterization of a new poly (ethylene oxide) copolymer—gel electrolyte containing polyvalent ion pair of cobalt (CoII/III) or iron (FeII/III)* (2018) Journal of Solid State Electrochemistry, 22 (5), pp. 1591-1605, DOI: 10.1007/s10008-018-3889-z, ISSN: 14328488 (Scopus)

[66] Pal, P., Ghosh, A. *Influence of TiO<sub>2</sub> nano-particles on charge carrier transport and cell performance of PMMA-LiClO<sub>4</sub> based nano-composite electrolytes* (2018) *Electrochimica Acta*, 260, pp. 157-167, DOI: 10.1016/j.electacta.2017.11.070, ISSN: 00134686 (Scopus)

6. **Y. G. Marinov**, G. B. Hadjichristov, A. G. Petrov, and S. K. Prasad, *Thin films of silica nanoparticle doped nematic liquid crystal 7CB for electro-optic modulation.* PHOTONICS LETTERS OF POLAND, 7, 4, 94-96 (2015), ISSN 2080-2242, DOI: 10.4302/plp.2015.4.03, Q3, SJR: 0,279 (Scopus).

[67] Wang, Q., Chen, H., Xing, H., Deng, Y., Luo, Z.-W., Xie, H.-L. *Long rod-like liquid crystal containing azobenzene and the applications in phase-transition regulation and orientation of nematic liquid crystal* (2021) Crystals, 11 (4), art. no. 418, DOI: 10.3390/cryst11040418, ISSN: 20734352 (Scopus)

[68] Chaudhary, A., Malik, P., Shukla, R.K., Mehra, R., Raina, K.K. *Role of SiO<sub>2</sub> optically active mediators to tailor optical and electro-optical properties of ferroelectric liquid crystalline nanocomposites* (2020) Journal of Molecular Liquids, 314, art. no. 113580, DOI: 10.1016/j.molliq.2020.113580, ISSN: 01677322 (Scopus)

[69] Ertman, S., Rutkowska, K., Wolinski, T.R. *Recent progress in liquid-crystal optical fibers and their applications in photonics* (2019) Journal of Lightwave Technology, 37 (11), art. no. 8463517, pp. 2516-2526, DOI: 10.1109/JLT.2018.2869916, ISSN: 07338724 (Scopus)

[70] Koduru, H.K., Marino, L., Scaramuzza, N. *Electro-optics of PDLC films doped with WO<sub>3</sub> nanoparticles* (2019) AIP Conference Proceedings, 2075, art. no. 020018, DOI: 10.1063/1.5091135, ISSN: 0094243X, ISBN: 9780735418035 (Scopus)

[71] Yadav, G., Kumar, M., Srivastava, A., Manohar, R. *SiO<sub>2</sub> nanoparticles doped nematic liquid crystal system: An experimental investigation on optical and dielectric properties* (2019) Chinese Journal of Physics, 57, pp. 82-89, DOI: 10.1016/j.cjph.2018.12.008, ISSN: 05779073 (Scopus)

[72] Siarkowska, A., Chychlowski, M., Budaszewski, D., Jankiewicz, B., Bartosewicz, B., Wolinski, T.R. *Thermo- and electro-optical properties of photonic liquid crystal fibers doped with gold nanoparticles* (2017) Beilstein Journal of Nanotechnology, 8 (1), pp. 2790-2801, DOI: 10.3762/bjnano.8.278, ISSN: 21904286 (Scopus)

[73] Woliński, T.R., Siarkowska, A., Budaszewski, D., Chychłowski, M., Czapla, A., Ertman, S., Lesiak, P., Rutkowska, K.A., Orzechowski, K., Sala-Tefelska, M., Sierakowski, M., Dabrowski, R., Bartosewicz, B., Jankiewicz, B., Nowinowski-Kruszelnicki, E., Mergo, P. *Recent advances in liquid-crystal fiber optics and photonics* (2017) Proceedings of SPIE - The International Society for Optical Engineering, 10125, art. no. 101250W, DOI: 10.1117/12.2261115, ISSN: 0277786X, ISBN: 9781510606913 (Scopus)

7. **Y. G. Marinov**, G. B. Hadjichristov, A. G. Petrov, H. K. Koduru, L. Marino, and N. Scaramuzza, *Dielectric and electrical behaviours of polymeric (PEO/PVP):NaIO4 composite for solid electrolytes*. Journal of Physics: Conference Series, 794, 1, IOP Publishing Ltd., 012020 (2017), ISSN: 1742-6588, 1742-6596, DOI:10.1088/1742-6596/794/1/012020, Q4, SJR:0.24 (Scopus).

[74] Aziz, S.B., Hamsan, M.H., Kadir, M.F.Z., Woo, H.J. *Design of polymer blends based on chitosan:POZ with improved dielectric constant for application in polymer electrolytes and flexible electronics* (2020) Advances in Polymer Technology, 2020, art. no. 8586136, DOI: 10.1155/2020/8586136, ISSN: 07306679 (Scopus)

[75] Marx, P., Romano, A., Roppolo, I., Chemelli, A., Mühlbacher, I., Kern, W., Chaudhary, S., Andritsch, T., Sangermano, M., Wiesbrock, F. *3D-Printing of High- $\kappa$  Thiol-Ene Resins with Spiro-Orthoesters as Anti-Shrinkage Additive* (2019) Macromolecular Materials and Engineering, 304 (12), art. no. 1900515, DOI: 10.1002/mame.201900515, ISSN: 14387492 (Scopus)

[76] Dave, G., Kanchan, D., Singh, F. *Conductivity and dielectric behavior of PEO-PAM-NaCF3SO3 blend electrolyte system irradiated with swift heavy O6+ion beam* (2019) Radiation Physics and Chemistry, 161, pp. 87-94, DOI: 10.1016/j.radphyschem.2019.03.019, ISSN: 0969806X (Scopus)

[77] Yap, Y.L., You, A.H., Teo, L.L. *Preparation and characterization studies of PMMA-PEO-blend solid polymer electrolytes with SiO2 filler and plasticizer for lithium ion battery* (2019) Ionics, 25 (7), pp. 3087-3098, DOI: 10.1007/s11581-019-02842-8, ISSN: 09477047 (Scopus)

[78] Dave, G., Kanchan, D.K. *Dielectric relaxation and modulus studies of PEO-PAM blend based sodium salt electrolyte system* (2018) Indian Journal of Pure and Applied Physics, 56 (12), pp. 978-988, [link to paper](#) ISSN: 00195596 (Scopus)

8. **Y. G. Marinov**, G. B. Hadjichristov, A. G. Petrov, S. Marino, C. Versace, and N. Scaramuzza: *Electro-optical response of PDLC single layers of large nematic droplets oriented by rubbed teflon nanolayers*, J. Appl. Phys. 113(6) 064301 (1–11) (2013), ISSN: 0021-8979, 1089-7550, DOI: <https://doi.org/10.1063/1.4789897>, IF: 2.168, Q1, SJR: 1.155 (Scopus).

[79] Mysliwiec, J., Szukalska, A., Szukalski, A., Sznitko, L. *Liquid crystal lasers: The last decade and the future* (2021) Nanophotonics, 10 (9), pp. 2309-2346, DOI: 10.1515/nanoph-2021-0096, ISSN: 21928614 (Scopus)

[80] He, T., Yang, B., Zhang, L., Shi, Z., Gong, X., Geng, P., Gao, Z., Wang, Y. *A study on electro-optical properties of polymer dispersed liquid crystal films with thiol-isocyanate-ene ternary network prepared by nucleophile-initiated thiol-ene click reaction and thiol-isocyanate coupling reaction* (2020) Liquid Crystals, 47 (11), pp. 1624-1637, DOI: 10.1080/02678292.2020.1754941, ISSN: 02678292 (Scopus)

- [81] Hassanein, G.N., Kattan, N., Ellabban, M.A. *Electro-optic properties of aligned and non-aligned polymer dispersed liquid crystals driven by an amplitude-modulated electric signal* (2019) Optik, 186, pp. 137-146, DOI: 10.1016/j.ijleo.2019.04.069, ISSN: 00304026 (Scopus)
- [82] Koduru, H.K., Marino, L., Scaramuzza, N. *Electro-optics of PDLC films doped with WO<sub>3</sub> nanoparticles* (2019) AIP Conference Proceedings, 2075, art. no. 020018, DOI: 10.1063/1.5091135, ISSN: 0094243X, ISBN: 9780735418035 (Scopus)
- [83] Bae, J.-H., Jung, E.D., Nam, Y.S., Kim, B.-C., Choi, H.-J., Kim, H.G., Song, M.H., Choi, S.-W. *Micro-segregated liquid crystal haze films for photovoltaic applications: A novel strategy to fabricate haze films employing liquid crystal technology* (2018) Materials, 11 (11), art. no. 2188, DOI: 10.3390/ma11112188, ISSN: 19961944 (Scopus)
- [84] Bouriche, A., Bedjaoui Alachaher, L., Maschke, U. *Phase behaviour and electro-optical response of systems composed of nematic liquid crystals and poly (2-ethylhexylacrylate)* (2018) Liquid Crystals, 45 (5), pp. 656-665, DOI: 10.1080/02678292.2017.1370562, ISSN: 02678292 (Scopus)
- [85] Ye, L., Lv, C., Li, F., Wang, Y., Liu, B., Cui, Y. *Effect of alignment layer on polymer-dispersed liquid crystal random laser* (2017) Journal of Modern Optics, 64 (14), pp. 1429-1434, DOI: 10.1080/09500340.2017.1291864, ISSN: 09500340 (Scopus)
- [86] Wu, S.-K., Mo, T.-S., Lin, J.-D., Huang, S.-Y., Huang, C.-Y., Yeh, H.-C., Chen, L.-J., Lee, C.-R. *Electrohydrodynamics-induced abnormal electro-optic characteristics in a polymer-dispersed liquid crystal film* (2017) Crystals, 7 (7), art. no. 227, DOI: 10.3390/crust7070227, ISSN: 20734352 (Scopus)
- [87] Koduru, H.K. *Electro-optical and dielectric characterization of submicrometer-sized PDLC films* (2017) Journal of Physics: Conference Series, 780 (1), art. no. 012007, DOI: 10.1088/1742-6596/780/1/012007, ISSN: 17426588 (Scopus)
- [88] Tanaka, T., Ishitobi, M., Aoyama, T., Matsumoto, S. *Highly Oriented J-Aggregates of Nitroazo Dye and Its Surface-Induced Chromism* (2016) Langmuir, 32 (19), pp. 4710-4718, DOI: 10.1021/acs.langmuir.6b00289, ISSN: 07437463 (Scopus)
- [89] Popova, L.T. *Flexo-dielectro-optical spectroscopy of PDLC films modified by nano-rubbed PTFE layers* (2016) Journal of Physics: Conference Series, 682 (1), art. no. 012027, DOI: 10.1088/1742-6596/682/1/012027, ISSN: 17426588 (Scopus)
- [90] Kim, G.H., Lee, W.-J., Kim, S., Kim, Y.-H. *Color filter/polarizer-free liquid crystal composite display having color dyes* (2016) 23rd International Display Workshops in conjunction with Asia Display, IDW/AD 2016, 2, pp. 728-731, [link to paper](#) ISBN: 9781510845510 (Scopus)
- [91] Perju, E., Paslaru, E., Marin, L. *Polymer-dispersed liquid crystal composites for bio-applications: thermotropic, surface and optical properties* (2015) Liquid Crystals, 42 (3), pp. 370-382, DOI: 10.1080/02678292.2014.992055, ISSN: 02678292 (Scopus)

[92] Boussoualem, M., Ismaili, M., Roussel, F. *Influence of surface anchoring conditions on the dielectric and electro-optical properties of nematic droplets dispersed in a polymer network* (2014) Soft Matter, 10 (2), pp. 367-373, DOI: 10.1039/c3sm52573b, ISSN: 1744683X (Scopus)

9. H. K. Koduru, **Y. G. Marinov**, G. B. Hadjichristov, A. G. Petrov, N. Godbert, and N. Scaramuzza, *Polyethylene oxide (PEO) – Liquid crystal (E8) composite electrolyte membranes: Microstructural, electrical conductivity and dielectric studies*, Journal of Non-Crystalline Solids **499**, 107–116 (2018), ISSN: 2590-1591, DOI: <https://doi.org/10.1016/j.jnoncrysol.2018.07.006>, IF= 2.488, Q1 (Scopus)

[93] Fu, J., Xu, Y., Dong, L., Chen, L., Lu, Q., Li, M., Zeng, X., Dai, S., Chen, G., Shi, L. *Multiclaw-shaped octasilsesquioxanes functionalized ionic liquids toward organic-inorganic composite electrolytes for lithium-ion batteries* (2021) Chemical Engineering Journal, 405, art. no. 126942, DOI: 10.1016/j.cej.2020.126942, ISSN: 13858947

[94] Hatakeyama-Sato, K., Umeki, M., Tezuka, T., Oyaizu, K. *Charge-Transfer Complexes for Solid-State Li<sup>+</sup>-Conduction* (2020) ACS Applied Electronic Materials, 2 (7), pp. 2211-2217, DOI: 10.1021/acsaelm.0c00393, ISSN: 26376113

[95] Pritam, Arya, A., Sharma, A.L. *Selection of best composition of Na<sup>+</sup> ion conducting PEO-PEI blend solid polymer electrolyte based on structural, electrical, and dielectric spectroscopic analysis* (2020) Ionics, 26 (2), pp. 745-766, DOI: 10.1007/s11581-019-03245-5, ISSN: 09477047

[96] Liu, Y., Zheng, J., Zhu, Q., Shen, T., Chen, Q. *Impedance Spectroscopy Investigation of ZnO Nanorod Doped Polymer-Dispersed Liquid Crystal for Ethanol Gas Sensing* (2020) ECS Journal of Solid State Science and Technology, 9 (6), art. no. 063007, DOI: 10.1149/2162-8777/abab1a, ISSN: 21628769

10. H. K. Koduru, **Y. G. Marinov**, G. B. Hadjichristov, N. Scaramuzza *Characterization of polymer/liquid crystal composite based electrolyte membranes for sodium ion battery applications* (2019) Solid State Ionics, 335 , pp. 86-96, DOI: 10.1016/j.ssi.2019.02.021, ISSN: 01672738

[97] Ganta, K.K., Jeedi, V.R., Katrapally, V.K., Yalla, M., Emmadi, L.N. *Effect of TiO<sub>2</sub> Nano-Filler on Electrical Properties of Na<sup>+</sup> Ion Conducting PEO/PVDF Based Blended Polymer Electrolyte* (2021) Journal of Inorganic and Organometallic Polymers and Materials, 31 (8), pp. 3430-3440, DOI: 10.1007/s10904-021-01947-w, ISSN: 15741443

[98] Nam, J.-Y., Kim, H.-K., Song, Y.-S. *Fabrication and analysis of sepiolite/glass microcapsules/liquid crystal polymer composites* (2021) Molecules, 26 (9), art. no. 2522, DOI: 10.3390/molecules26092522, ISSN: 14203049

[99] Yu, W., Zhai, Y., Yang, G., Yao, J., Song, S., Li, S., Tang, W., Hu, N., Lu, L. *A composite electrolyte with Na<sub>3</sub>Zr<sub>2</sub>Si<sub>2</sub>PO<sub>12</sub> microtube for solid-state sodium-metal batteries* (2021) Ceramics International, 47 (8), pp. 11156-11168, DOI: 10.1016/j.ceramint.2020.12.239, ISSN: 02728842

[100] Alauddin, S.M., Aripin, N.F.K., Velayutham, T.S., Martinez-Felipe, A. *Liquid crystalline copolymers containing sulfonic and light-responsive groups: From molecular design to conductivity* (2020) Molecules, 25 (11), art. no. 2579, DOI: 10.3390/molecules25112579, ISSN: 14203049

[101] Piana, G., Ricciardi, M., Bella, F., Cucciniello, R., Proto, A., Gerbaldi, C. *Poly(glycidyl ether)s recycling from industrial waste and feasibility study of reuse as electrolytes in sodium-based batteries* (2020) Chemical Engineering Journal, 382, art. no. 122934, DOI: 10.1016/j.cej.2019.122934, ISSN: 13858947

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