Mozhgan Hosseinnezhad

Associate Professor

Faculty: Dyes and Pigments Faculty

Department: Department of Organic Colorants

Employment Information

Faculty/Department	Position/Rank	Employment Type	Cooperation Type	Grade
(not set)	(not set)	Tenure Track	Full Time	14

Papers in Conferences

1. IMPACT OF MORDANTS ON DYEING OF SILK WITH SUSTAINABLE NATURAL COLORANT EXTRACTED FROM CASSIA FISTULA BROWN PODS ,5th International Anatolian Scientific Research Congress ,2023.
2. M. Hosseinnezhad, K. Gharanjig ,Synthesis and application of an organic dye in nanostructure solar cells device ,20th International Conference on Nanotechnology Materials and Application ,9 2018, رم 17.
3. M. Hosseinnezhad, S. Moradian, K. Gharanjig ,The Synthesis and Application of an Organic Dye for Solar Cell ,The 22nd Iranian Seminar of Organic Chemistry ,19 8 2018, تبریز.
4. 2 ,& M. Hosseinnezhad, K. Gharanjig, S. Moradian ,Synthesis of an organic dye for dye-sensitized solar cells ,20th Iranian Chemistry Congress ,17 7 2018, مشهد.
5. M. Hosseinnezhad, K. Gharanjig ,Preparation of dye-sensitized solar cells based on new organic dye ,20th Iranian Chemistry Congress ,17 7 2018, مشهد.
6. M. Hosseinnezhad, K. Gharanjig ,Synthesis and investigation of an organic dyes for dye-sensitized solar cells ,The 25th Iranian Seminar of Organic Chemistry ,2 9 2017, تهران.
7. M. Hosseinnezhad, K. Gharanjig ,Investigation of green dye-sensitized solar cells based on natural dyes ,19th International Conference on Chemical and Food Engineering ,21 6 2017, وین.
8. M. Hosseinnezhad, S. Rouhani ,Synthesis and investigation of new organic dyes in dye-sensitized solar cells ,19th Iranian Chemistry Congress ,20 2 2017, شیراز.
9. M. Hosseinnezhad, K. Gharanjig ,Fabrication and investigation of nanostructured dye-sensitized solar cells using ZnO and TiO2 nanoparticle ,International Biennial Conference on Ultrafine Grained and Nanostructured Materials ,12 11 2017, کیش.
10. M. Hosseinnezhad, K. Gharanjig ,Synthesis and application of organic dye in nanostructure dye solar cell ,3rd International Conference on Nanotechnology ,27 8 2015, استانبول.
11. M. Hosseinnezhad, S. Moradian, K. Gharanjig ,The synthesis of an organic dyes based on thioindigo for dye-sensitized solar cells ,The Energy and Materials Conference ,25 2 2015, مادرید.
12. M. Hosseinnezhad, S. Moradian, K. Gharanjig ,Investigation of photovoltaic properties of dye-

sensitized solar cells based on indigo dyes in the presence of an anti-aggregation agent ,The Energy and Materials Conference ,25 2 2015, مادرید.
13. M. Hosseinnezhad, S. Moradian, K. Gharanjig ,The Synthesis of Organic Dye for Nanostructure Dye Solar Cell ,The 22nd Iranian Seminar of Organic Chemistry ,19 8 2014, تبریز.

Papers in Journals

1. Mozhgan Hosseinnezhad , Sohrab Nasiri , Javad Movahedi , Mehdi Ghahari،Improving the efficiency of organic sensitizers with various anchoring groups for solar energy application،Solar Energy،مجلد ۲۱۱،شماره صفحات ۲۲۸،۲۰۲۰.
2. S.A.R. Naqvia et al.,Modern ecofriendly approach for extraction of luteolin natural dye from weld for silk fabric and wool yarn dyeing,Sustainable Chemistry and Pharmacy,2024.
3. Introduction thioindigo as new high stability unit in Ru-complex for DSSCs: Theoretical and photovoltaic investigation,Optical Materials,Vol. 150,pp. 115273,2024.
4. S. Nasiri et al.,What is TADF (thermally activated delayed fluorescence) compared to the mechanisms of FL (fluorescence), PH (phosphorescence), and TTA (triplet-triplet annihilation) based on a novel naphthalimde sulfonylphenyl derivative as a host?,Journal of Photochemistry and Photobiology, A: Chemistry,Vol. 447,pp. 115289,2024.
5. M. Hosseinnezhad , K. Gharanjig , S. Adeel , A. Mahmoudi Nahavandi,In quest for improvement of dyeing properties using agriculture waste: utilization of oleaster as new bio-mordant for wool yarns,Environmental Science and Pollution Research,Vol. 30,pp. 122262,2023.
6. S. Nasiri et al.,Acceptor-phenyl-donor mechanochromic dyes based on 9-Bromoanthracene,Journal of Molecular Structure,Vol. 1278,pp. 134953,2023.
7. Environmentally dyeing of wool yarns using combination of Myrobalan and Walnut husk as bio-mordant,Prog. Color Colorants Coat.,pp. 197-205,2023.
8. S. Barkaat et al.,Sustainable microwave-assissted extraction of santalin from red sandal wood powder (ptrecarpus santalinus) for bio-coloration of mordanted silk fabric,Separation,Vol. 10,pp. 118,2023.
9. M. Hosseinnezhad ,& Z. Ranjbar,A review on flexible dye-sensitized solar cells as new sustainable energy resources,Pigment and Resin Technology,2023.
10. S. Nasiri et al.,Investigation of the influence of persulfurated benzene derivatives on optical and carrier mobility properties,Materials Letters,Vol. 342,pp. 134323,2023.
11. M. Hosseinnezhad , M. Ghahari , G. Mobarhan , S. Rouhani,Towards low cost and green photovoltaic devise: using natural photosensitizers and grapheme oxide composite counter electrode,Optical Materials,2023.
12. R. Jafari , K. Gharanjig , M. Hosseinnezhad,Sunstitution of metal ion mordant with biomordants: effect on color and fastness of reseda dyed on wool yarns,The Journal of The Textile Institute,2023.
13. P.P. Gawas et al.,Significance of Zn Complex Concentration on Microstrure Evolution and Corrosion Behavior Al/WS2,Molecules,Vol. 28,pp. 7290,2023.
14. 1 et al.,New insights into improving the photovoltaic performance of dye-sensitized solar cells by removing platinum from the counter electrode using a grapheme-MoS2 composite or hybrid,Micromachines,Vol. 14,pp. 2161,2023.
15. M. Hosseinnezhad , K. Gharanjig , S. Adeel , A. Mahmoudi Nahavandi,Clean dyeing of wool yarns using oleaster fruit components as new bio-mordant: a step toward reducing agricultural waste,Clean Technologies and Environmental Policy,2023.
16. R. Ghomashi et al.,Synthesis and invwstigation of the theoretical and experimental optical properties of some novel azo pyrazole sulfonamide hybrids,Materials Letters,pp. 132132,2022.
17. Enhanced thermal stability of anthocyanins through natural polysaccharides fromAngum gum and cress seed gum,Journal of Food Science,Vol. 87,pp. 585,2022.
18. Introduction of new configuration of dyes contain indigo group for dye-sensitized solar cells: DFT

and photovoltaic study,Optical Materials,pp. 111999,2022.
19. S. Nasiri et al.,Mochanochromic and thermally activated delayed fluorescence dyes obtained from D-A-D' type, consisted of xanthen and carbazole derivatives as an emitter layer in organic light emitting diodes,Chemical Engineering Journal,pp. 1311877,2022.
20. S. Nasiri et al.,New approach of mechanochromic, thermally activated delayed fluorescence' dyes consisting of "thioxanthenone derivative as an acceptor unit and two carbazole derivatives as the donor units,Optical Materials,Vol. 127,pp. 112320,2022.
21. Environmentally friendly dyeing of wool yarns using of combination of bio-mordants and natural dyes,Environmental Progress and Sustainable Energy,2022.
22. N. Habib et al.,Environmental-friendly extraction of Peepal (Ficus Religiosa) bark-based reddish brown tannin natural dye for silk coloration,Environmental Science and Pollution Research,pp. 35048,2022.
23. S. Adeel et al.,Eco-friendly bio-dyeing of bio-treated nylon fabric using Esfand (P. harmala) based yellow natural colorant,Journal of Engineered Fibers and Fabrics,pp. 1-15,2022.
24. M. Hosseinnezhad et al.,The effect of ultrasound on environmentally extraction and dyeing of wool yarns,Journal of Engineered Fibers and Fabrics,pp. 1-10,2022.
25. S. Nasiri et al.,Nanocomposite based on HA/PVTMS/Cl2FeH8O4 as gas and temperature sensor,Sensors,pp. 10012,2022.
26. Environmentally dyeing using dried walnut husk as bio-mordant: Investigation of creating new red and yellow shades on wool,Journal of Natural Fibers,Vol. 19,pp. 10953,2022.
27. Green miles in dyeing technology: metal-rich pumpkin extract in aid of natural dyes,Environmental Science and Pollution Research,2022.
28. M. Hosseinnezhad , S. Nasiri , M. Fathi , G. Janusas,New configuration of optical photosensitizers for dye-sensitized solar cells: Combination of carbazole and xantone,Journal of Materials Science: Materials in Electronics,Vol. 33,pp. 17711,2022.
29. Environmentally friendly dyeing of wool yarns using of combination of bio-mordant and natural dyes,Environmental Progress & Sustainable Energy,Vol. 41,pp. 13868,2022.
30. M. Hosseinnezhad , K. Gharanjig , H. Imani , N. Razani,Green dyeing of wool yarns with yellow and black myrobalan extract as bio-mordant with natural dyes,Journal of Natural Fibers,Vol. 19,pp. 3893-3915,2022.
31. H. Gharanjig , K. Gharanjig , M. Hosseinnezhad , S. M. Jafari,Development and optimization of complex coacervates based on zedo gum, cress seed gum and gelatin,International Journal of Biological Macromolecules,Vol. 148,pp. 31-40,2020.
32. M. Hosseinnezhad et al.,Dye-sensitized solar cells based on natural photosensitizers: a green view from Iran,Journal of Alloys and Compounds,Vol. 828,pp. 154329,2020.
33. M. Hosseinnezhad , K. Gharanjig , S. Moradian,New D-A-□-A organic photo-sensitizers with thioindoxyl group for efficient dye-sensitized solar cells,Chemical Paper,Vol. 74,pp. 1487,2020.
34. M. Hosseinnezhad , J. Movahedi , S. Nasiri,High stability photosensitizers for dye-sensitized solar cells: synthesis, characterization and optical performance,Optical Materials,Vol. 109,pp. 110198,2020.
35. Novel complex coacervates based on Zedo gum, cress seed gum and gelatin for loading of natural anthocyanins,International Journal of Biological Macromolecules,Vol. 164,pp. 3349,2020.
36. M. Hosseinnezhad , K. Gharanjig , N. Razani , H. Imani,Green dyeing of wool fibers with madder: study of combination of two biomordant on K/S and fastness,Fibers and Polymers,Vol. 21,pp. 2036,2020.
37. The effect of calcination temperature on the photophysical and mechanical properties of copper iodide (5 mol%)-doped hydroxyapatite,Optical Materials,Vol. 121,pp. 111559,2020.
38. M. Hosseinnezhad,Enhanced Performance of Dye-Sensitized Solar Cells Using Perovskite/DSSCs Tandem Design,Journal of Electronic Materials,Vol. 48,pp. 5403,2019.
39. J. Movahedi , H. Haratizadeh , N. Falah , M. Hosseinnezhad,Investigation of effect of thiophene-2-acetic acid as an electron anchoring group for a photovoltaic device,Opto-Electronic Review,Vol. 27,pp.

334-338,2019.
40. M. Hosseinnezhad ,& H. Shaki,Investigation of photovoltaic properties of dye-sensitized solar cells based on azo dyes contain various anchoring groups,Pigment and Resin Technology,Vol. 46,pp. 481,2019.
41. M. Hosseinnezhad, K. Gharanjig, S. Belbasi, S.H. Seied Saadati, M.R. Saeb,The use of sumac as a natural mordant in green production of Iranian carpet,Fibers and Polymers,Vol. 19,pp. 1908-1912,2018 6 21.
42. M. Hosseinnezhad, A. Shadman , B. Rezaee , M. Y. Mohammadi , M.R. Saeb,Tandem organic dye-sensitized solar cells: Looking for higher performance and durability,Photonics and nanostructures-fundamentals and applications,Vol. 31,pp. 34-43,2018 4 17.
43. M. Hosseinnezhad , S. Rouhani , K. Gharanjig,Extraction and application of natural pigments for fabrication of green dye-sensitized solar cells,Opto-Electronic Review,Vol. 26,pp. 165-171,2018 3 12.
44. M. Hosseinnezhad ,& S. Rouhani,Synthesis and application of new fluorescent dyes in dye-sensitized solar cells,Applied Physic A,Vol. 123,pp. 694,2017 11 20.
45. 8M. Hosseinnezhad , K. Gharanjig , S. Moradian , M. R. Saeb,In quest of power conversion efficiency in natural-inspired dye-sensitized solar cells: Individual, co-sensitized or tandem configuration?,Energy,Vol. 134,pp. 864,2017 10 23.
46. M. Hosseinnezhad , R. Jafari , K. Gharanjig,Characterization of a green and environmentally friendly sensitizer for low cost dye-sensitized solar cells,Opto-Electronic Review,Vol. 25,pp. 93,2017 06 15.
47. 6M. Hosseinnezhad , A. Shadman , M. R. Saeb , Y. Mohammadi,A new direction in design and manufacture of co-sensitized dye solar cells: toward concurrent optimization of power conversion efficiency,Opto-Electronic Review,Vol. 25,pp. 229,2017.
48. M. Hosseinnezhad , A. Khosravi , K. Gharanjig , S. Moradian,The comparison of spectra and dyeing properties of new azonaphthalimide with analogues azobenzene dyes on natural and synthetic polymers,Arabian Journal of Chemistry,Vol. 10,pp. S3284,2017.
49. M. Hosseinnezhad,Cosensitization with vat-based organic dyes for enhanced spectral response of dye-sensitized solar cells,Journal of Electronic Materials,Vol. 46,pp. 2290,2017.
50. M. Hosseinnezhad , M. R. Saeb , S. Garshasbi , Y. Mohammadi,Realization of manufacturing dye-sensitized solar cells with possible maximum power conversion efficiency and durability,Solar Energy,Vol. 149,pp. 314,2017.
51. M. Hosseinnezhad ,& K. Gharanjig,Investigation of photovoltaic properties of nanostructure indoline dye-sensitized solar cells using changes in assembling materials,Pigment and Resin Technology,Vol. 46,pp. 393,2017.
52. M. Hosseinnezhad,A series of new organic sensitisers for dye-sensitised solar cells,Pigment and Resin Technology,Vol. 45,pp. 234,2016.
53. M. Hosseinnezhad ,& S. Rouhani,Charactristics of nanostructure dye-sensitized solar cells using food dyes,Opto-Electronic Review,Vol. 24,pp. 34,2016.
54. M. Hosseinnezhad,Investigation of photocurrent generation in dye sensitized solar cells based on nanostructured ZnO electrodes,Materials Technology,Vol. 31,pp. 24,2016.
55. M. Hosseinnezhad,Improvement performance of dye sensitized solar cells from co-sensitization of TiO2 electrode with organic dyes based on indigo and thioindigo,Materials Technology,Vol. 31,pp. 348,2016.
56. M. Hosseinnezhad , S. Moradian , K. Gharanjig,Investigation of effect of anti-aggregation agent on the performance of nanostructure dye-sensitized solar cells,Opto-Electronic Review,Vol. 23,pp. 126,2015.
57. M. Hosseinnezhad , K. Gharanjig , S. Moradian,Effect of anti-aggregation agent on photovoltaic performance of indoline sensitized solar cells,Materials Technology,Vol. 30,pp. 189,2015.
58. K. Gharanjig ,& M. Hosseinnezhad,Effect of substituents moiety in organic sensitiser based on carbazole on the performance of nanostructure dye-sensitised solar cells,Pigment and Resin Technology,Vol. 44,pp. 292,2015.

59. M. Hosseinnezhad , S. Moradian , K. Gharanjig,Novel organic dyes based on thioindigo for dye-sensitized solar cells,Dyes and Pigments,Vol. 123,pp. 147,2015.
60. M. Hosseinnezhad , S. Moradian , K. Gharanjig,Fruit extract dyes as photosensitizers in solar cells,Current Science,Vol. 109,pp. 953,2015.
61. M. Hosseinnezhad , S. Moradian , K. Gharanjig,Synthesis and Characterization of Two New Organic Dyes for Dye-Sensitized Solar Cells,Synthetic Communications,Vol. 44,pp. 1,2014.
62. S. Rouhani , K. Gharanjig , M. Hosseinnezhad,Facile synthesis of 4-nitro-N-substituted-1,8-naphthalimide derivatives using ultrasound in aqueous media,Green Chemistry Letters and Reviews,Vol. 7,pp. 174,2014.
63. M. Hosseinnezhad , S. Moradian , K. Gharanjig , F. Afshar Taromi,Synthesis and Characterization of Eight Organic Dyes for Dye-Sensitized Solar Cells,Materials Technology,Vol. 29,pp. 112,2014.
64. M. Hosseinnezhad , A. Khosravi , K. Gharanjig , S. Moradian,Synthesis of some monoazo acid dyes based on naphthalimides,Asian Journal of Chemistry,Vol. 21,pp. 4812,2009.
65. Investigation of the effect of rGo/TiO2 on photovoltaic performance of DSSCs devices,Prog. Color Colorants Coat.,Vol. 15,pp. 121,2021.
66. M. Hosseinnezhad , M. Ghahari , H. Shaki , J. Movahedi,Investigation of DSSCs performance: the effect of 1,8-naphthalimide dyes and Na-doped TiO2,Prog. Color Colorants Coat.,Vol. 13,pp. 177-185,2020.