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Publication Highlights

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- 1- A.H. Saa'di, A.A. Akl, **A.S. Hassanien**, Effective role of Rb doping in controlling crystallization, crystal imperfections, microstructural, and morphological features of ZnO-NPs synthesized by Sol-Gel way, , **CrystEngComm**, (2022), <https://doi.org/10.1039/D2CE00483F>
- 2- Sharma, P. Sharma, **A.S. Hassanien**, Optical properties and optoelectrical parameters of the quaternary chalcogenide amorphous $\text{Ge}_{15}\text{Sn}_x\text{S}_{35-x}\text{Te}_{50}$ films, **Journal of Non-Crystalline Solids** 590 (2022) 121673, <https://doi.org/10.1016/j.jnoncrysol.2022.121673>
- 3- Adel El-Denglawey, Kamal A. Aly, A. Dahshan, **A.S. Hassanien**, Optical characteristics of thermally evaporated thin $\alpha\text{-(Cu}_2\text{ZnGe)}_{50-x}\text{Se}_{50+x}$ films, **ECS Journal of Solid State Science and Technology**, (2022) <https://doi.org/10.1149/2162-8777/ac627b>
- 4- **A.S. Hassanien**, Intensive linear and nonlinear optical studies of thermally evaporated amorphous thin Cu-Ge-Se-Te films, **J. Non-Crystalline Solids** 586 (2022), 121563, <https://doi.org/10.1016/j.jnoncrysol.2022.121563>
- 5- B. MERABET, O.M. OZKENDIR, **A.S. HASSANIEN**, M.A. MALEQUE, Optical and structural characterization of (Mn, Fe) co-doped lead chalcogenides for optoelectronics

applications, **J. OPTOELECTRONICS AND ADVANCED MATERIALS** 23, 11-12, (2021) 564 – 573.

- 6- **A.S. Hassanien**, Ishu Sharma, Dielectric properties, Optoelectrical parameters and electronic polarizability of thermally evaporated a-Pb-Se-Ge thin films, **Physica B** 622 (2021) 413330, <https://doi.org/10.1016/j.physb.2021.413330>
- 7- A.A. Akl, **A.S. Hassanien**, Comparative microstructural studies using different methods: Effect of Cd-addition on crystallography, microstructural properties, and crystal imperfections of annealed nano-structural thin $Cd_xZn_{1-x}Se$ films, **Physica B** 620 (2021) 413267, <https://doi.org/10.1016/j.physb.2021.413267>
- 8- **A.S. Hassanien**, Ishu Sharma, K.A. Aly, Linear and nonlinear optical studies of thermally evaporated chalcogenide a-Pb-Se-Ge thin films, **Physica B**, 613 (2021) 412985, <https://doi.org/10.1016/j.physb.2021.412985>
- 9- Alaa Ahmed Akl, I.M. El Radaf, **Ahmed Saeed Hassanien**, An extensive comparative study for microstructural properties and crystal imperfections of Novel sprayed Cu_3SbSe_3 Nanoparticle-thin films of different thicknesses, **Optik**, 227 (2021) 165837, <https://doi.org/10.1016/j.ijleo.2020.165837>
- 10- B. Merabet, O.M. Ozkendir, **A.S. Hassanien**, M. A. Maleque, Spin-orbit coupling effect on the electronic structure of Sr_2FeHfO_6 alloy for spintronics device application, **J. Magnetism and Magnetic Materials**, 518 (2021) 167374, <https://doi.org/10.1016/j.jmmm.2020.167374>
- 11- **A.S. Hassanien**, I.M. El Radaf, Alaa. A.S. Akl, Physical and optical studies of the novel non-crystalline $Cu_xGe_{20-x}Se_{40}Te_{40}$ bulk glasses and thin films, **J. Alloys and Compounds**, 849 (2020) 156718, <https://doi.org/10.1016/j.jallcom.2020.156718>
- 12- I. Sharma, **A.S. Hassanien**, Effect of Ge-addition on physical and optical properties of chalcogenide $Pb_{10}Se_{90-x}Ge_x$ bulk glasses and thin films, **J. Non-Crystalline Solids**, 548 (2020) 120326, <https://doi.org/10.1016/j.jnoncrysol.2020.120326>
- 13- **A.S. Hassanien**, Hatem R. Alamri, I.M. El Radaf, Impact of film thickness on optical properties and optoelectrical parameters of novel $CuGaGeSe_4$ thin films synthesized by electron beam deposition, **Optical and Quantum Electronics** 52, 335 (2020), <https://doi.org/10.1007/s11082-020-02448-9>
- 14- A.A. Akl, I.M. El Radaf, **A.S. Hassanien**, Intensive comparative study using X-Ray diffraction for investigating microstructural parameters and crystal defects of the novel nanostructural $ZnGa_2S_4$ thin films, **Superlattices and Microstructures**, 143 (2020) 106544, <https://doi.org/10.1016/j.spmi.2020.106544>
- 15- **A.S. Hassanien**, R.Neffati, K.A. Aly, Impact of Cd-addition upon optical properties and dispersion parameters of thermally evaporated $Cd_xZn_{1-x}Se$ films: Discussions on bandgap engineering, conduction and valence band positions, **Optik**, 212 (2020) 164681, <https://doi.org/10.1016/j.ijleo.2020.164681>
- 16- I. M. El Radaf, H. Y. S. Al-Zahrani, **A.S. Hassanien**, Novel synthesis, structural, linear and nonlinear optical properties of p-type kesterite nanosized Cu_2MnGeS_4 thin films, **J. Materials Science: Materials in Electronics**, 31 (2020) 8336-8348, <https://doi.org/10.1007/s10854-020-03369-9>
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- 21- **A.S. Hassanien**, Ishu Sharma, Band-gap engineering, conduction and valence band positions of thermally evaporated amorphous $\text{Ge}_{15-x}\text{Sb}_x\text{Se}_{50}\text{Te}_{35}$ thin films: Influences of Sb upon some optical characterizations and physical parameters, *Journal of Alloys and Compounds*, 798 (2019) 750-763, <https://doi.org/10.1016/j.jallcom.2019.05.252>
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- 25- **A.S. Hassanien**, A. A. Akl, Influence of thermal and compositional variations on conduction mechanisms and localized state density of amorphous $\text{Cd}_{50}\text{S}_{50-x}\text{Se}_x$ thin films, *Journal of Non-Crystalline Solids*, 487 (2018) 28-36, <https://doi.org/10.1016/j.jnoncrysol.2018.02.018>
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- 27- A.A. Akl Safwat A. Mahmoud, S.M Al Shomar, **A.S. Hassanien**, improving microstructural properties and minimizing crystal imperfections of nanocrystalline Cu_2O thin films of different solution molarities for solar cell applications, *Materials Science in Semiconductor Processing*, 74 (2018) 183–192, <https://doi.org/10.1016/j.mssp.2017.10.007>
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- 33- **A.S. Hassanien**, A. A. Akl, Influence of composition on optical and dispersion parameters of thermally evaporated non-crystalline Cd₅₀S_{50-x}Se_x thin films, **Journal of Alloys and Compounds** 648 (2015) 280-290, <https://doi.org/10.1016/j.jallcom.2015.06.231>
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- 37- S. A. Fayek, M. El-Ocker, **A.S. Hassanien**, Optical and electrical properties of Ge_{10+x}Se₄₀Te_{50-x} thin film, **Materials chemistry and physics**, 70 (2) (2001) 231-235.
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Manuscripts Under publication or preparation:

- 1- **A. S. Hassanien**, Alaa Ahmed Akl, I.M. El Redaf , Optical properties of polycrystalline ZnGa₂S₄ thin films sprayed at different film thicknesses: Comparative studies for determining the optical band-gap energy, , Under Publication.
- 2- **A. S. Hassanien**, Inference of Sn addition on the optical and physical properties of the novel non-crystalline thermally evaporated Ge₁₅Te₅₀S_{35-x}Sn_x thin films, , Under Publication.
- 3- **A. S. Hassanien, Ishu Sharma, Pankaj Sharma**, Optical Properties and optoelectrical parameters of the quaternary chalcogenide amorphous **Ge₁₅Sn_xS_{35-x}Te₅₀ films**, Under publication process.
- 4- **A. S. Hassanien**, Studies on optical properties of the thermally evaporated **a-Ge₁₅S₃₅Te₅₀ films**, under review.
- 5- **A.S. Hassanien, U. T. Khaton**, **Silver oxide-NPs** Synthesized by the chemical reduction method at different precursor's concentration, under review.

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Journal Referee (Reviewer)

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41. online).
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