

# Mehmet IÅik

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8195823/publications.pdf>

Version: 2024-02-01

90  
papers

675  
citations

623188

14  
h-index

794141

19  
g-index

90  
all docs

90  
docs citations

90  
times ranked

477  
citing authors

#	ARTICLE	IF	CITATIONS
1	CaXH <sub>3</sub> (X = Mn, Fe, Co) perovskite-type hydrides for hydrogen storage applications. International Journal of Energy Research, 2020, 44, 2345-2354.	2.2	46
2	Gd-doped ZnO nanoparticles: Synthesis, structural and thermoluminescence properties. Journal of Luminescence, 2019, 207, 220-225.	1.5	37
3	Structural and temperature-dependent optical properties of thermally evaporated CdS thin films. Materials Science in Semiconductor Processing, 2019, 93, 148-152.	1.9	37
4	Composition-tuned band gap energy and refractive index in Ga <sub>x</sub> Se <sub>1-x</sub> layered mixed crystals. Materials Chemistry and Physics, 2017, 190, 74-78.	2.0	21
5	Temperature-tuned band gap properties of MoS <sub>2</sub> thin films. Materials Letters, 2020, 275, 128080.	1.3	20
6	Spectroscopic ellipsometry study of above-band gap optical constants of layered structured TlGaSe <sub>2</sub> , TlGaS <sub>2</sub> and TlInS <sub>2</sub> single crystals. Physica B: Condensed Matter, 2012, 407, 4193-4197.	1.3	19
7	Temperature dependence of band gaps in sputtered SnSe thin films. Journal of Physics and Chemistry of Solids, 2019, 131, 22-26.	1.9	18
8	Synthesis and temperature-tuned band gap characteristics of magnetron sputtered ZnTe thin films. Physica B: Condensed Matter, 2020, 582, 411968.	1.3	18
9	Temperature-dependent band gap characteristics of Bi <sub>12</sub> SiO <sub>20</sub> single crystals. Journal of Applied Physics, 2019, 126, .	1.1	17
10	Optical characteristics of Bi <sub>12</sub> SiO <sub>20</sub> single crystals by spectroscopic ellipsometry. Materials Science in Semiconductor Processing, 2020, 120, 105286.	1.9	17
11	Traps distribution in sol-gel synthesized ZnO nanoparticles. Materials Letters, 2019, 245, 103-105.	1.3	16
12	Trap Distribution in TlInS <sub>2</sub> Layered Crystals from Thermally Stimulated Current Measurements. Journal of the Korean Physical Society, 2008, 52, 367-373.	0.3	16
13	Temperature-tuned band gap characteristics of InSe layered semiconductor single crystals. Materials Science in Semiconductor Processing, 2020, 107, 104862.	1.9	15
14	Deep Traps Distribution in TlInS <sub>2</sub> Layered Crystals. Acta Physica Polonica A, 2009, 115, 732-737.	0.2	15
15	Investigation of optical properties of Bi <sub>12</sub> GeO <sub>20</sub> sillenite crystals by spectroscopic ellipsometry and Raman spectroscopy. Ceramics International, 2020, 46, 12905-12910.	2.3	14
16	Low-temperature thermoluminescence in TlGaS <sub>2</sub> layered single crystals. Journal of Luminescence, 2013, 135, 60-65.	1.5	12
17	Structural and Optical Properties of Ga <sub>2</sub> Se <sub>3</sub> Crystals by Spectroscopic Ellipsometry. Journal of Electronic Materials, 2019, 48, 2418-2422.	1.0	11
18	Temperature-dependent optical characteristics of sputtered NiO thin films. Applied Physics A: Materials Science and Processing, 2022, 128, 1.	1.1	11

#	ARTICLE	IF	CITATIONS
19	Ellipsometry study of interband transitions in $TlGa_{2-x}Se_2$ mixed crystals ( $0 \leq x \leq 1$ ). Optics Communications, 2012, 285, 4092-4096.	1.0	10
20	Thermoluminescence characteristics of $Bi_{12}SiO_{20}$ single crystals. Journal of Luminescence, 2020, 224, 117280.	1.5	10
21	Structural and temperature-tuned optical characteristics of $Bi_{12}GeO_{20}$ sillenite crystals. Chinese Journal of Physics, 2020, 66, 422-429.	2.0	9
22	TL and TSC studies on $TlGaSe_2$ layered single crystals. Journal of Luminescence, 2013, 144, 163-168.	1.5	8
23	Trap characterization by photo-transferred thermoluminescence in MgO nanoparticles. Physica B: Condensed Matter, 2018, 537, 301-305.	1.3	8
24	The defect state of Yb-doped ZnO nanoparticles using thermoluminescence study. Materials Science in Semiconductor Processing, 2019, 100, 29-34.	1.9	8
25	Optical band gap and dispersion of optical constants of Cu-Ga-S thin films. Optik, 2019, 186, 147-154.	1.4	8
26	Effect of temperature on band gap of $PbWO_4$ single crystals grown by Czochralski method. Physica Scripta, 2022, 97, 045803.	1.2	8
27	Structural and temperature-tuned band gap energy characteristics of $PbMoO_4$ single crystals. Optical Materials, 2022, 126, 112210.	1.7	8
28	Structural, morphological and temperature-tuned bandgap characteristics of CuS nano-flake thin films. Physica E: Low-Dimensional Systems and Nanostructures, 2022, 144, 115407.	1.3	8
29	Determination of optical parameters of $Ga_{0.75}In_{0.25}Se$ layered crystals. Crystal Research and Technology, 2012, 47, 530-534.	0.6	7
30	Temperature-dependent optical properties of GaSe layered single crystals. Philosophical Magazine, 2016, 96, 2564-2573.	0.7	7
31	Ellipsometric study of optical properties of $GaS \times Se_{1-x}$ layered mixed crystals. Optical Materials, 2016, 54, 155-159.	1.7	7
32	Thermoluminescence properties of ZnO nanoparticles in the temperature range $10 \leq T \leq 300$ K. Journal of Sol-Gel Science and Technology, 2016, 78, 76-81.	1.1	7
33	Thermoluminescence study in $Cu_3Ga_5S_9$ single crystals: Application of heating rate and $T_m \leq T_{stop}$ methods. Journal of Luminescence, 2018, 199, 334-338.	1.5	7
34	Study of vibrational modes in $(Ga_2S_3)_x(Ga_2Se_3)_{1-x}$ mixed crystals by Raman and infrared reflection measurements. Optical Materials, 2019, 95, 109228.	1.7	7
35	Spectroscopic ellipsometry study of $Bi_{12}TiO_{20}$ single crystals. Journal of Materials Science: Materials in Electronics, 2021, 32, 7019-7025.	1.1	7
36	Optical and structural characteristics of electrodeposited $Cd_{1-x}Zn_xS$ nanostructured thin films. Optical Materials, 2021, 114, 110966.	1.7	7

#	ARTICLE	IF	CITATIONS
37	Electronic, optical and thermodynamic characteristics of Bi <sub>12</sub> SiO <sub>20</sub> sillenite: First principle calculations. <i>Materials Chemistry and Physics</i> , 2021, 267, 124711.	2.0	7
38	Absorption edge and optical constants of Tl <sub>2</sub> Ga <sub>2</sub> S <sub>3</sub> Se crystals from reflection and transmission, and ellipsometric measurements. <i>Physica B: Condensed Matter</i> , 2012, 407, 2229-2233.	1.3	6
39	Thermoluminescence properties of Tl <sub>2</sub> Ga <sub>2</sub> S <sub>3</sub> Se layered single crystals. <i>Journal of Applied Physics</i> , 2013, 113, 193510.	1.1	6
40	Low-Temperature Thermoluminescence Studies on TlInS <sub>2</sub> Layered Single Crystals. <i>Acta Physica Polonica A</i> , 2014, 126, 1299-1303.	0.2	6
41	Optical characterization of CuIn <sub>5</sub> S <sub>8</sub> crystals by ellipsometry measurements. <i>Journal of Physics and Chemistry of Solids</i> , 2016, 91, 13-17.	1.9	6
42	Vibrational modes in (TlGaS <sub>2</sub> ) <sub>x</sub> (TlGaSe <sub>2</sub> ) <sub>1-x</sub> mixed crystals by Raman measurements: compositional dependence of the mode frequencies and line-shapes. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 14330-14335.	1.1	6
43	Defect characterization in Bi <sub>12</sub> GeO <sub>20</sub> single crystals by thermoluminescence. <i>Journal of Luminescence</i> , 2021, 233, 117905.	1.5	6
44	Structural and temperature-tuned bandgap characteristics of thermally evaporated $\hat{I}^2$ -In <sub>2</sub> S <sub>3</sub> thin films. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 15851-15856.	1.1	6
45	Effect of thallium (Tl) substitution for indium (In) on ellipsometric characteristics of TlInSe <sub>2</sub> single crystals. <i>Materials Science in Semiconductor Processing</i> , 2021, 134, 106005.	1.9	6
46	Temperature-tuned optical bandgap of Al-doped ZnO spin coated nanostructured thin films. <i>Materials Letters</i> , 2022, 321, 132415.	1.3	6
47	Trapping centers and their distribution in Tl <sub>2</sub> InGaSe <sub>4</sub> single crystals by thermally stimulated luminescence. <i>Journal of Materials Science</i> , 2014, 49, 2542-2547.	1.7	5
48	Determination of trapping parameters of thermoluminescent glow peaks of semiconducting Tl <sub>2</sub> Ga <sub>2</sub> S <sub>3</sub> Se crystals. <i>Journal of Physics and Chemistry of Solids</i> , 2015, 82, 56-59.	1.9	5
49	Characteristic features of thermoluminescence in neodymium-doped gallium sulfide. <i>Luminescence</i> , 2018, 33, 759-763.	1.5	5
50	Thermoluminescence properties of Al doped ZnO nanoparticles. <i>Ceramics International</i> , 2018, 44, 13929-13933.	2.3	5
51	Material and Si-based diode analyses of sputtered ZnTe thin films. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 11390-11397.	1.1	5
52	Influence of temperature on optical properties of electron-beam-evaporated ZnSe thin film. <i>Physica Scripta</i> , 2020, 95, 075804.	1.2	5
53	Temperature-tuned bandgap characteristics of Bi <sub>12</sub> TiO <sub>20</sub> sillenite single crystals. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 1316-1322.	1.1	5
54	Determination of mechanical properties of Bi <sub>12</sub> TiO <sub>20</sub> crystals by nanoindentation. <i>Materials Science in Semiconductor Processing</i> , 2022, 140, 106389.	1.9	5

#	ARTICLE	IF	CITATIONS
55	Study on thermoluminescence of TlInS <sub>2</sub> layered crystals doped with Pr. Materials Science in Semiconductor Processing, 2018, 80, 99-103.	1.9	4
56	Structural and optical properties of thermally evaporated Cu-Ga-S (CGS) thin films. Physica B: Condensed Matter, 2018, 547, 92-96.	1.3	4
57	Investigation of structural and optical characteristics of thermally evaporated Ga <sub>2</sub> Se <sub>3</sub> thin films. Vacuum, 2020, 179, 109501.	1.6	4
58	First principles study of Bi <sub>12</sub> GeO <sub>20</sub> : Electronic, optical and thermodynamic characterizations. Materials Today Communications, 2021, 27, 102299.	0.9	4
59	Experimental and theoretical investigation of the mechanical characteristics of sillenite compound: Bi <sub>12</sub> GeO <sub>20</sub> . Journal of Alloys and Compounds, 2021, 882, 160686.	2.8	4
60	Structural and optical characteristics of thermally evaporated TlGaSe <sub>2</sub> thin films. Optical Materials, 2022, 124, 112018.	1.7	4
61	Linear and nonlinear optical characteristics of Bi <sub>12</sub> SiO <sub>20</sub> single crystals. Optical Materials, 2022, 131, 112692.	1.7	4
62	Dielectric functions and interband critical points of anisotropic chain structured TlSe single crystals. Journal of Applied Physics, 2012, 112, 083526.	1.1	3
63	Optical properties of TlGa <sub>x</sub> In <sub>1-x</sub> Se <sub>2</sub> -layered mixed crystals (0.5 ≤ x ≤ 1) by spectroscopic ellipsometry, transmission, and reflection measurements. Philosophical Magazine, 2014, 94, 2623-2632.	1.5	3
64	Optical characterization of Ga <sub>2</sub> SeS layered crystals by transmission, reflection and ellipsometry. Modern Physics Letters B, 2015, 29, 1550088.	1.0	3
65	Temperature-dependent material characterization of CuZnSe <sub>2</sub> thin films. Thin Solid Films, 2020, 701, 137941.	0.8	3
66	Structural and optical properties of thermally evaporated (GaSe) <sub>0.75</sub> (GaS) <sub>0.25</sub> thin films. Optik, 2021, 230, 166344.	1.4	3
67	Evaluation of mechanical properties of Bi <sub>12</sub> SiO <sub>20</sub> sillenite using first principles and nanoindentation. Philosophical Magazine, 2021, 101, 2200-2215.	0.7	3
68	Thermoluminescence properties and trapping parameters of TlGaS <sub>2</sub> single crystals. Journal of Luminescence, 2022, 244, 118714.	1.5	3
69	Spectroscopic ellipsometry characterization of PbWO <sub>4</sub> single crystals. Optical Materials, 2022, 131, 112680.	1.7	3
70	Thermoluminescence characteristics of Tl <sub>4</sub> GaIn <sub>3</sub> S <sub>8</sub> layered single crystals. Philosophical Magazine, 2014, 94, 141-151.	0.7	2
71	Temperature-tuned band gap energy and oscillator parameters of GaS <sub>0.5</sub> Se <sub>0.5</sub> single crystals. Optik, 2016, 127, 8301-8305.	1.4	2
72	Thermoluminescence characterization of (Ga <sub>2</sub> Se <sub>3</sub> ) <sub>0.25</sub> (Ga <sub>2</sub> S <sub>3</sub> ) <sub>0.75</sub> single crystal compounds. Materials Science in Semiconductor Processing, 2020, 108, 104875.	1.9	2

#	ARTICLE	IF	CITATIONS
73	Material and device properties of Si-based Cu <sub>0.5</sub> Ag <sub>0.5</sub> InSe <sub>2</sub> thin-film heterojunction diode. Journal of Materials Science: Materials in Electronics, 2020, 31, 1566-1573.	1.1	2
74	Optical constants and critical point energies of (AgInSe <sub>2</sub> ) <sub>0.75</sub> (In <sub>2</sub> Se <sub>3</sub> ) <sub>0.25</sub> single crystals. Journal of Materials Science: Materials in Electronics, 2020, 31, 4702-4707.	1.1	2
75	Optical and Nanomechanical Properties of Ga <sub>2</sub> Se <sub>3</sub> Single Crystals and Thin Films. Jom, 2021, 73, 558-565.	0.9	2
76	Investigation of traps distribution in GaS single crystals by thermally stimulated current measurements. Materials Science in Semiconductor Processing, 2021, 125, 105626.	1.9	2
77	The effect of Zn concentration on the structural and optical properties of Cd <sub>1-x</sub> Zn <sub>x</sub> S nanostructured thin films. Journal of Materials Science: Materials in Electronics, 2021, 32, 25225-25233.	1.1	2
78	Optical parameters of anisotropic chain-structured Tl <sub>2</sub> InGaTe <sub>4</sub> crystals by spectroscopic ellipsometry. Optik, 2016, 127, 10637-10642.	1.4	1
79	Temperature-dependent optical and electrical characterization of Cu-Ga-S thin films and their diode characteristics on n-Si. Optik, 2020, 208, 164485.	1.4	1
80	Trapping centers in Bi <sub>12</sub> TiO <sub>20</sub> single crystals by thermally stimulated current. Optical Materials, 2021, 122, 111797.	1.7	1
81	Thermoluminescence characteristics of GaSe and Ga <sub>2</sub> Se <sub>3</sub> single crystals. Journal of Luminescence, 2022, 246, 118846.	1.5	1
82	Study of the structural and optical properties of thallium gallium disulfide (TlGa <sub>2</sub> S <sub>2</sub> ) thin films grown via thermal evaporation. Physica Scripta, 0, .	1.2	1
83	Structural and optical properties of thermally evaporated GaInSe thin films. Modern Physics Letters B, 2014, 28, 1450101.	1.0	0
84	Compositional Dependence of Optical Modes Frequencies in TlGa <sub>x</sub> In <sub>1-x</sub> S <sub>2</sub> Layered Mixed Crystals (0 ≤ x ≤ 1). Acta Physica Polonica A, 2014, 126, 747-751.	0.2	0
85	Low temperature thermoluminescence of quaternary thallium sulfide Tl <sub>4</sub> InGa <sub>3</sub> S <sub>8</sub> . Indian Journal of Physics, 2015, 89, 571-576.	0.9	0
86	Defect characterization of Ga <sub>4</sub> Se <sub>3</sub> S layered single crystals by thermoluminescence. Pramana - Journal of Physics, 2016, 86, 893-900.	0.9	0
87	Analysis of temperature-dependent transmittance spectra of Zn <sub>0.5</sub> In <sub>0.5</sub> Se (ZIS) thin films. Journal of Materials Science: Materials in Electronics, 2019, 30, 9356-9362.	1.1	0
88	Analysis of Thermoluminescence Glow Peaks in $\hat{\Gamma}^2$ -Irradiated TlGaSeS Crystals. Acta Physica Polonica A, 2016, 129, 1165-1168.	0.2	0
89	Annealing Effect on Dark Electrical Conductivity and Photoconductivity of Ga-In-Se Thin Films. Acta Physica Polonica A, 2018, 133, 1119-1124.	0.2	0
90	Investigation of defect levels in Bi <sub>12</sub> SiO <sub>20</sub> single crystals by thermally stimulated current measurements. Physica Scripta, 2021, 96, 125875.	1.2	0