

Luminescence of F and F⁺ centers in magnesium oxide

Physical Review B

39, 10309-10318

DOI: [10.1103/physrevb.39.10309](https://doi.org/10.1103/physrevb.39.10309)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Trapped-hole centers in alkaline-earth oxides. <i>Journal of Physics and Chemistry of Solids</i> , 1990, 51, 747-764.	4.0	81
2	A temperature effect in the luminescence emission from electron-irradiated MgO. <i>Journal of Chemical Physics</i> , 1990, 92, 6441-6446.	3.0	14
3	Electronic structure of vacancy defects in MgO crystals. <i>Physical Review B</i> , 1990, 41, 3211-3225.	3.2	69
4	[H ⁺ Ca ⁺]O defect in thermochemically reduced CaO: A static and dynamical EPR study. <i>Physical Review B</i> , 1990, 42, 7604-7609.	3.2	4
5	Effect of substitutional hydride ions on the charge states of oxygen vacancies in thermochemically reduced CaO and MgO. <i>Physical Review B</i> , 1990, 42, 1410-1416.	3.2	39
6	Ablation of Single Crystal MgO by UV Excimer Irradiation. <i>Materials Research Society Symposia Proceedings</i> , 1991, 236, 21.	0.1	7
7	Optically and thermally stimulated luminescence in MgO. <i>Solid State Communications</i> , 1991, 77, 481-483.	1.9	10
8	Luminescence of F ⁺ centers in CaO crystals under pulsed-laser excitation. <i>Physical Review B</i> , 1991, 43, 11991-11998.	3.2	10
9	EPR study of the [H ⁺ Ca ⁺]O defect in Tcr CaO. <i>Radiation Effects and Defects in Solids</i> , 1991, 119-121, 945-950.	1.2	0
10	Mechanisms of Excimer Laser Ablation of Wide Band-Gap Materials: the Role of Defects in Single Crystal MgO. <i>Materials Research Society Symposia Proceedings</i> , 1992, 285, 131.	0.1	4
11	Preparation and luminescence of MgO:Tb phosphors. <i>Journal of Materials Science</i> , 1992, 27, 5883-5886.	3.7	12
12	The electronic structure of neutral and charged surface vacancy defects in periclase. <i>Applied Surface Science</i> , 1993, 72, 285-293.	6.1	52
13	The nature of absorption in the region of 3.0 eV induced by laser and UV irradiation of magnesium oxide in the presence of oxygen. <i>Journal of Applied Spectroscopy</i> , 1993, 58, 261-264.	0.7	1
14	Luminescence from electron-irradiated sapphire. <i>Physical Review B</i> , 1993, 47, 55-61.	3.2	58
15	Interactions of wide band-gap single crystals with 248 nm excimer laser radiation. I. MgO. <i>Journal of Applied Physics</i> , 1993, 74, 2323-2337.	2.5	104
16	Interactions of wide band gap single crystals with 248 nm excimer laser radiation. III. The role of cleavage-induced defects in MgO. <i>Journal of Applied Physics</i> , 1993, 74, 3758-3767.	2.5	49
17	Recombination on fractal networks: Photon and electron emission following fracture of materials. <i>Journal of Materials Research</i> , 1993, 8, 2921-2932.	2.6	19
18	Positive Ion Emission from Excimer Laser Excited MgO Surfaces. <i>Physical Review Letters</i> , 1994, 73, 2630-2633.	7.8	86

#	ARTICLE	IF	CITATIONS
19	Some peculiarities of the cathodoluminescence of indented MgO crystals. <i>Physica Status Solidi A</i> , 1994, 142, 35-43.	1.7	6
20	Optical properties of lattice defects in $\hat{\Gamma}$ -Al ₂ O ₃ . <i>Nuclear Instruments & Methods in Physics Research B</i> , 1994, 91, 258-262.	1.4	166
21	A novel model for F ⁺ to F photoconversion in corundum crystals. <i>Journal of Physics Condensed Matter</i> , 1994, 6, L569-L573.	1.8	26
22	Stability of vacancy defects in MgO: The role of charge neutrality. <i>Physical Review B</i> , 1994, 50, 2582-2592.	3.2	100
23	Positive Ion Emission Accompanying UV Irradiation of Single Crystal MgO and NaNO ₃ . <i>Materials Research Society Symposia Proceedings</i> , 1995, 397, 33.	0.1	1
24	Point Defects in Electron-Irradiated Oxide Single Crystals. <i>Journal of the American Ceramic Society</i> , 1995, 78, 1054-1060.	3.8	15
25	A review of the optical properties of anion lattice vacancies, and electrical conduction in $\hat{\Gamma}$ -Al ₂ O ₃ : their relation to radiation-induced electrical degradation. <i>Journal of Nuclear Materials</i> , 1995, 219, 202-223.	2.7	208
26	Effects of the microindentation, X-irradiation and annealing on the F-centre-like defects production in MgO. <i>Radiation Effects and Defects in Solids</i> , 1995, 134, 307-309.	1.2	0
27	The energetics and electronic structure of defective and irregular surfaces on MgO. <i>Surface Science</i> , 1995, 343, 221-239.	1.9	186
28	Semi-empirical simulations of the electron centers in MgO crystal. <i>Computational Materials Science</i> , 1996, 5, 298-306.	3.0	40
29	Interaction of wide band gap single crystals with 248 nm excimer laser radiation. IV. Positive ion emission from MgO and NaNO ₃ . <i>Journal of Applied Physics</i> , 1996, 80, 6452-6466.	2.5	49
30	Photoluminescence from indented MgO crystals using a near ultraviolet/visible Raman microscope. <i>Journal of Applied Physics</i> , 1997, 82, 785-791.	2.5	14
31	Kinetics of luminescence decay in electron-irradiated sapphire crystals. <i>Journal of Physics Condensed Matter</i> , 1997, 9, 6457-6465.	1.8	2
32	Radiation-induced point defects in simple oxides. <i>Nuclear Instruments & Methods in Physics Research B</i> , 1998, 141, 1-15.	1.4	248
33	Theoretical study on the electronic structures of various F centers in MgO crystals. <i>Computational and Theoretical Chemistry</i> , 1998, 451, 81-88.	1.5	8
34	Photoconversion of F-type centers in thermochemically reduced MgO single crystals. <i>Physical Review B</i> , 1999, 59, 4786-4790.	3.2	42
35	Luminescence spectra at bending fracture of single crystal MgO. <i>Solid State Communications</i> , 2000, 117, 17-20.	1.9	46
36	Luminescence of defect centers in yttrium-aluminum garnet crystals. <i>Solid State Communications</i> , 2001, 120, 491-494.	1.9	26

#	ARTICLE	IF	CITATIONS
37	F+ laser performance and interaction of Cu, Ag and Au at the reduced oxygen coordination of MgO surface: first principles calculations. <i>Current Applied Physics</i> , 2001, 1, 427-437.	2.4	21
38	Interaction of wide band gap single crystals with 248 nm excimer laser irradiation. VII. Localized plasma formation on NaCl single crystal surfaces. <i>Journal of Applied Physics</i> , 2001, 89, 2370-2378.	2.5	17
39	Some aspects of photon emission of polycrystalline ceramics during fracture. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 2002, 82, 3251-3261.	0.6	9
40	Intensive green light emission from MgO nanobelts. <i>Chemical Physics Letters</i> , 2002, 363, 293-297.	2.6	92
41	Vacancy and interstitial defects in hafnia. <i>Physical Review B</i> , 2002, 65, .	3.2	560
42	Zero-phonon lines in the photoluminescence spectra of MgO:Mn ²⁺ nanocrystals. <i>Physical Review B</i> , 2003, 68, .	3.2	17
43	Models of defects in wide-gap oxides. , 2003, , 151-222.		17
44	Influence of defect states on the secondary electron emission yield $\hat{\Gamma}^3$ from MgO surface. <i>Journal of Applied Physics</i> , 2004, 95, 8419-8424.	2.5	58
45	Stability and optical activity of Er implanted MgO. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2004, 218, 128-132.	1.4	1
46	Models of finely dispersed MgO and V ₂ O ₅ on silica. Theoretical analysis of optical properties using TDDFT. <i>Research on Chemical Intermediates</i> , 2004, 30, 41-64.	2.7	9
47	Synthesis and Characterization of Porous Magnesium Hydroxide and Oxide Nanoplates. <i>Journal of Physical Chemistry B</i> , 2004, 108, 64-70.	2.6	303
48	Dislocations and Indentations. <i>Dislocations in Solids</i> , 2004, , 447-550.	1.6	26
49	Cathodic Tb(III) chelate electrochemiluminescence at oxide-covered magnesium and n-ZnO:Al/MgO composite electrodes. <i>Electrochimica Acta</i> , 2005, 51, 289-296.	5.2	23
50	Carbon-assisted synthesis of nanowires and related nanostructures of MgO. <i>Materials Research Bulletin</i> , 2005, 40, 831-839.	5.2	38
51	Dependence of blue-emitting property on nanopore geometrical structure in Al-based porous anodic alumina membranes. <i>Applied Physics A: Materials Science and Processing</i> , 2005, 81, 1345-1349.	2.3	34
52	Kinetics-Driven Growth of Orthogonally Branched Single-Crystalline Magnesium Oxide Nanostructures. <i>Journal of Physical Chemistry B</i> , 2005, 109, 11204-11208.	2.6	116
53	Calculation of secondary electron emission yield γ_{se} from MgO surface. <i>IEEE Transactions on Plasma Science</i> , 2006, 34, 336-342.	1.3	34
54	A study of the dispersions of metal oxide nanowires in polar solvents. <i>Chemical Physics Letters</i> , 2006, 417, 535-539.	2.6	43

#	ARTICLE	IF	CITATIONS
55	Zn-catalytic growth and photoluminescence properties of branched MgO nanostructures. <i>Rare Metals</i> , 2006, 25, 74-78.	7.1	3
56	Synthesis and Characterization of Hollow Porous MgO Microspheres. <i>Chemistry Letters</i> , 2006, 35, 380-381.	1.3	9
57	36.4: Characteristics of MgO Layer Deposited under Hydrogen Atmosphere. <i>Digest of Technical Papers SID International Symposium</i> , 2006, 37, 1395.	0.3	3
58	Color cathodoluminescence study of oxides subjected to thermal environments. <i>Scanning</i> , 1997, 19, 48-54.	1.5	1
59	Growth of MgO nanowires assisted by the annealing treatment of Au-coated substrates. <i>Chemical Physics Letters</i> , 2006, 422, 165-169.	2.6	72
60	Morphology and optical properties of MgO thin films on Mo(001). <i>Chemical Physics Letters</i> , 2006, 430, 330-335.	2.6	83
61	A simple solution calcination route to porous MgO nanoplates. <i>Microporous and Mesoporous Materials</i> , 2006, 96, 428-433.	4.4	39
62	Characteristics of MgO layer deposited under hydrogen atmosphere. <i>Journal of Information Display</i> , 2006, 7, 1-5.	4.0	5
63	Simple Synthesis of Single-crystalline Nanoplates of Magnesium Oxide. <i>Chinese Journal of Chemical Physics</i> , 2006, 19, 438-442.	1.3	4
64	The role of the defect levels in MgO in the low firing voltage, wide driving voltage margin operation of an alternate current plasma display panel. <i>Journal of Applied Physics</i> , 2007, 101, 123301.	2.5	17
65	Inheriting morphology and photoluminescence properties of MgO nanoplates. <i>Journal of Materials Research</i> , 2007, 22, 908-912.	2.6	12
66	43.1: <i>Invited Paper</i> : Fundamental Aspects of Exoemission in Plasma Display Panels. <i>Digest of Technical Papers SID International Symposium</i> , 2007, 38, 1425-1429.	0.3	6
67	Zn-Assisted Synthesis and Photoluminescence Properties of MgO Nanotubes. <i>Journal of Physical Chemistry C</i> , 2007, 111, 10273-10277.	3.1	25
68	Getting to the Core of the Problem: Origin of the Luminescence from (Mg,Zn)O Heterostructured Nanowires. <i>Nano Letters</i> , 2007, 7, 1521-1525.	9.1	16
69	Contribution of long lived metastable states to the PL of InP dots in indirect band-gap barrier layers. <i>EPJ Applied Physics</i> , 2007, 37, 15-18.	0.7	2
70	Coaxial Nanorods of MgO Core with Si Shell Layers. <i>Advanced Engineering Materials</i> , 2007, 9, 92-95.	3.5	2
71	Facile Synthesis of Monodisperse Magnesium Oxide Microspheres via Seed-Induced Precipitation and Their Applications in High-Performance Liquid Chromatography. <i>Advanced Functional Materials</i> , 2007, 17, 2447-2454.	14.9	62
72	Growth of MgO thin films with subsequent fabrication of ZnO rods: Structural and photoluminescence properties. <i>Thin Solid Films</i> , 2007, 515, 6433-6437.	1.8	8

#	ARTICLE	IF	CITATIONS
73	Synthesis of MgO microspheres with nanosheets in a mechanical force reactor and its optical property. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2007, 142, 93-97.	3.5	15
74	Synthesis and characteristics of MgO nanowires on Ag-coated substrates. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2007, 204, 563-568.	1.8	1
75	Fabrication of MgO whiskers on metal-coated substrates by heating MgB ₂ powders: Effects of Ag layer thickness. <i>Metals and Materials International</i> , 2007, 13, 479-482.	3.4	2
76	Hollow MgO Nanotube Arrays by Using ZnO Nanorods as Templates. <i>European Journal of Inorganic Chemistry</i> , 2008, 2008, 2727-2732.	2.0	14
77	Composite nanowires with MgO/ZnO core-shell structures: Study of thin ZnO shell layers. <i>Journal of Physics and Chemistry of Solids</i> , 2008, 69, 1491-1494.	4.0	9
78	MgO nanobelts using a reactive and auto-removed ZnO nanobelt template. <i>Solid State Communications</i> , 2008, 147, 57-60.	1.9	4
79	Coating of MgO nanorods with protective layers: Sputtering with a Si target, structure, and photoluminescence properties. <i>Surface and Coatings Technology</i> , 2008, 202, 2503-2508.	4.8	9
80	Transient and stable color centers in neutron irradiated MgO. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2008, 266, 2941-2944.	1.4	2
81	Assessment of correction methods for the band-gap problem and for finite-size effects in supercell defect calculations: Case studies for ZnO and GaAs. <i>Physical Review B</i> , 2008, 78, .	3.2	1,035
82	High-performance MgO thin films for PDPs with a high-rate sputtering-deposition process. <i>Journal of the Society for Information Display</i> , 2008, 16, 1195-1201.	2.1	6
83	Broadband Laser Emission from Color Centers Inside MgO Microcrystals. <i>Physical Review Letters</i> , 2008, 101, 117401.	7.8	38
84	Electronic Structure Calculation of MgO (001) Surface with Aggregated Oxygen Vacancies. <i>Journal of Chemical Theory and Computation</i> , 2008, 4, 1057-1064.	5.3	5
85	Effects of hydrogen doping on surface and discharge properties of MgO thin films grown by ion plating. <i>Journal Physics D: Applied Physics</i> , 2009, 42, 105402.	2.8	6
86	Decay kinetics of luminescence and electron emission from MgO crystal powders in ac plasma display panels. <i>Journal of Applied Physics</i> , 2009, 105, 113304.	2.5	18
87	Luminescence characterization of ultrathin MgO films of high crystallinity prepared by pulsed laser deposition. <i>Journal of Materials Science: Materials in Electronics</i> , 2009, 20, 321-325.	2.2	18
88	Effect of post-annealing on the band gap of sol-gel prepared nano-crystalline Mg _x Zn _{1-x} O (0.0 ≤ x ≤ 0.3) thin films. <i>Journal of Sol-Gel Science and Technology</i> , 2009, 52, 228-234.	2.4	30
89	Thermal annealing behavior of silica-coated coaxial nanowires. <i>Polymers for Advanced Technologies</i> , 2009, 20, 246-250.	3.2	9
90	Properties of oxide thin films and their adsorption behavior studied by scanning tunneling microscopy and conductance spectroscopy. <i>Surface Science Reports</i> , 2009, 64, 595-659.	7.2	213

#	ARTICLE	IF	CITATIONS
91	Investigation of the local structure and the effects of the orbit reduction factor on the EPR g-factors for octahedral (CrO ₆) ⁹⁺ cluster in TiO ₂ :Cr ³⁺ and MgO:Cr ³⁺ systems. <i>Physica B: Condensed Matter</i> , 2009, 404, 4332-4336.	2.7	3
92	Synthesis, characterization and optical properties of Mg(OH) ₂ micro-/nanostructure and its conversion to MgO. <i>Ceramics International</i> , 2009, 35, 3355-3364.	4.8	237
93	Effect of annealing treatment on luminescence property of MgO nanowires. <i>Current Applied Physics</i> , 2009, 9, 1288-1292.	2.4	22
94	Electronic energy states in Si-doped MgO for exoelectron emission. <i>Journal of Applied Physics</i> , 2009, 106, 014911.	2.5	12
95	Mechanism of stimulated optical emission from MgO microcrystals with color centers. <i>Physical Review B</i> , 2009, 79, .	3.2	25
96	Numerical analysis of density of energy states for electron emission sources in MgO. <i>Journal of the Society for Information Display</i> , 2009, 17, 1059-1068.	2.1	3
97	Improved discharge characteristics using MgO single-crystal particles and advanced CEL structure. <i>Journal of the Society for Information Display</i> , 2009, 17, 113.	2.1	19
98	35.2: Invited Paper: A Consideration of Excitation and De-excitation Process of MgO Protective Layer. <i>Digest of Technical Papers SID International Symposium</i> , 2010, 41, 507.	0.3	3
99	Physicochemistry of the surface of and exoemission from magnesium oxide. <i>Russian Journal of Physical Chemistry A</i> , 2010, 84, 285-290.	0.6	1
100	Green luminescence and EPR studies on Mn-activated yttrium aluminum garnet phosphor. <i>Applied Physics B: Lasers and Optics</i> , 2010, 98, 407-415.	2.2	30
101	Triboplasma Generation and Triboluminescence: Influence of Stationary Sliding Partner. <i>Tribology Letters</i> , 2010, 37, 215-228.	2.6	36
102	Emission Time Constant of Exoelectron and Formative Delay Time Analyzed by Using Discharge Probability Distribution. <i>IEEE Transactions on Electron Devices</i> , 2010, 57, 3377-3387.	3.0	4
103	Optical properties of rare-earth doped epitaxial Sr _{0.5} Ba _{0.5} Nb ₂ O ₆ thin films grown by pulsed laser deposition. <i>Thin Solid Films</i> , 2010, 519, 52-57.	1.8	13
104	Influence of Ion Bombardment on Electron Emission of MgO Surface in AC Plasma Display Panel. <i>IEEE Transactions on Plasma Science</i> , 2010, 38, 2439-2444.	1.3	17
105	Control of defect-mediated tunneling barrier heights in ultrathin MgO films. <i>Applied Physics Letters</i> , 2010, 97, 263502.	3.3	22
106	49.4: Photon and Electron Excitation Characteristics of MgO Submicron Crystals Made From Precursors. <i>Digest of Technical Papers SID International Symposium</i> , 2010, 41, 742-745.	0.3	1
107	Enhanced Secondary Electron Emission in Nanoscale Thin Metal Containing MgO Film: Laser Irradiation on Creation of F Centers. <i>Journal of Physical Chemistry C</i> , 2011, 115, 17910-17914.	3.1	12
108	Photoexcitation, trapping, and recombination processes of the F -type centers in lasing MgO microcrystals. <i>Physical Review B</i> , 2011, 83, .	3.2	41

#	ARTICLE	IF	CITATIONS
109	Comparative study of microwave and conventional methods for the preparation and optical properties of novel MgO-micro and nano-structures. Journal of Alloys and Compounds, 2011, 509, 9809-9815.	5.5	211
110	37.1: Invited Paper: Surface Electronic States of MgO Induced by Auger Neutralization Process. Digest of Technical Papers SID International Symposium, 2011, 42, 501-504.	0.3	1
111	Multiplesite structure and photoluminescence properties of Eu^{3+} -doped MgO nanocrystals. Applied Physics A: Materials Science and Processing, 2011, 102, 387-392.	2.3	24
112	Evaporation mechanisms of MgO in laser assisted atom probe tomography. Ultramicroscopy, 2011, 111, 571-575.	1.9	36
113	Sol-gel synthesis of highly luminescent magnesium oxide nanocrystallites. Journal of Luminescence, 2011, 131, 640-648.	3.1	54
114	Blue luminescence at room temperature in defective MgO films. Solid State Communications, 2011, 151, 751-753.	1.9	28
115	Influence of hydrogen-doped MgO thin films on the discharge characteristics in plasma display panels. Thin Solid Films, 2011, 519, 3037-3042.	1.8	8
116	Luminescence-based magnetic imaging with scanning x-ray transmission microscopy. Applied Physics Letters, 2012, 101, 083114.	3.3	14
117	Structure and Photoluminescence Properties of $\text{Ca}_9\text{Al}(\text{PO}_4)_7$: Ce^{3+} , Mn^{2+} Phosphors. ECS Journal of Solid State Science and Technology, 2012, 1, R92-R97.	1.8	19
118	Cathode luminescence diagnostics of MgO, MgO:Si, MgO:Sc, and MgCaO. Journal of the Society for Information Display, 2012, 20, 63-69.	2.1	6
119	Synthesis of biaxial MgO/Mg SnO nanowire heterostructures and their structural and luminescence properties. Journal of Alloys and Compounds, 2012, 541, 163-167.	5.5	22
120	The Influence of the Defect States on the Secondary Electron Emission from the $\text{Mg}_{1-x}\text{B}_x\text{O}$ Protective Layer of AC Plasma Display Panels. Molecular Crystals and Liquid Crystals, 2012, 564, 43-49.	0.9	1
121	Photoluminescence properties of Sn-embedded MgO nanorods with different morphologies synthesized by a single thermal evaporation process. Chemical Engineering Journal, 2012, 198-199, 420-425.	12.7	9
122	Preparation and characterization of MgO nanorods sheathed with ZnS. Journal of the Korean Physical Society, 2012, 61, 847-851.	0.7	1
123	First-Principles Optical Spectra for F Centers in MgO. Physical Review Letters, 2012, 108, 126404.	7.8	157
124	Defect and adsorbate induced ferromagnetic spin-order in magnesium oxide nanocrystallites. Applied Physics Letters, 2012, 100, .	3.3	33
125	Tailoring the photoluminescence of MgO nanowires using the Ag shell layers and nanoparticles. Thin Solid Films, 2012, 520, 2627-2631.	1.8	1
126	Constrained density functional theory applied to electron tunnelling between defects in MgO. Physical Chemistry Chemical Physics, 2013, 15, 2184.	2.8	56

#	ARTICLE	IF	CITATIONS
127	Comparative study of the luminescence properties of macro- and nanocrystalline MgO using synchrotron radiation. Nuclear Instruments & Methods in Physics Research B, 2013, 310, 23-26.	1.4	45
128	Electron Transfer at Oxide Surfaces. The MgO Paradigm: from Defects to Ultrathin Films. Chemical Reviews, 2013, 113, 4035-4072.	47.7	265
129	Phosphorescent luminescence of pure magnesium oxide transparent ceramics produced by spark plasma sintering. Optical Materials, 2013, 35, 558-562.	3.6	22
130	X-ray excited optical luminescence of metal oxide single crystals. Journal of Electron Spectroscopy and Related Phenomena, 2013, 189, 1-4.	1.7	12
131	Investigations of MgO:Li,Gd thermally and optically stimulated luminescence. Journal of Luminescence, 2013, 137, 282-289.	3.1	34
132	A facile template free solution approach for the synthesis of dypingite nanowires and subsequent decomposition to nanoporous MgO nanowires with excellent arsenate adsorption properties. RSC Advances, 2013, 3, 5430.	3.6	36
133	Point-defect optical transitions and thermal ionization energies from quantum Monte Carlo methods: Application to the F -center defect in MgO. Physical Review B, 2013, 87, .	3.2	53
134	Effects of Sc- and Zr-doped MgO layers on electron emission and discharge characteristics of alternating-current plasma display panels. Japanese Journal of Applied Physics, 2014, 53, 036002.	1.5	7
135	Effect of solvent and annealed temperature on band gap energies of MgO nanoparticles. , 2014, , .		2
136	Synthesis, structural and luminescence studies of magnesium oxide nanopowder. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2014, 118, 847-851.	3.9	94
137	Localized states in advanced dielectrics from the vantage of spin- and symmetry-polarized tunnelling across MgO. Nature Communications, 2014, 5, 4547.	12.8	36
138	Monitoring F, F+ and F22+ related intense defect emissions from nanocrystalline MgO. Journal of Luminescence, 2014, 149, 280-286.	3.1	37
139	Oxygen vacancies in LiAlO ₂ crystals. Physical Review B, 2015, 92, .	3.2	11
140	Band gap and defect states of MgO thin films investigated using reflection electron energy loss spectroscopy. AIP Advances, 2015, 5, .	1.3	81
142	Cause of the appearance of oxygen vacancies in yttria-stabilized zirconia and its relation to 2.8 eV photoluminescence. Japanese Journal of Applied Physics, 2015, 54, 06GC03.	1.5	11
143	Ultraviolet stimulated emission from high-temperature-annealed MgO microcrystals at room temperature. Applied Physics Letters, 2015, 106, .	3.3	8
144	Two-band luminescence from an intrinsic defect in spherical and terraced MgO nanoparticles. Applied Physics Letters, 2015, 106, .	3.3	26
145	Luminescent, optical and electronic properties of La ₃ Ta _{0.5} Ga _{5.5} O ₁₄ single crystals grown in different atmospheres. Journal of Luminescence, 2016, 177, 152-159.	3.1	10

#	ARTICLE	IF	CITATIONS
146	Size-Dependent Luminescence in HfO ₂ Nanocrystals: Toward White Emission from Intrinsic Surface Defects. <i>Chemistry of Materials</i> , 2016, 28, 3245-3253.	6.7	54
147	Defects induced changes in the electronic structures of MgO and their correlation with the optical properties: a special case of electron-hole recombination from the conduction band. <i>RSC Advances</i> , 2016, 6, 96398-96415.	3.6	78
148	Oxygen-vacancy driven tunnelling spintronics across MgO. <i>Proceedings of SPIE</i> , 2016, , .	0.8	3
149	Dosimeter properties of MgO transparent ceramic doped with C. <i>Radiation Measurements</i> , 2016, 92, 93-98.	1.4	21
150	Study of the defects in La ₃ Ta _{0.5} Ga _{5.5} O ₁₄ single crystals. <i>Journal of Luminescence</i> , 2016, 180, 95-102.	3.1	14
151	Optical, scintillation and dosimeter properties of MgO transparent ceramic doped with Mn ²⁺ . <i>Journal of the Ceramic Society of Japan</i> , 2016, 124, 559-563.	1.1	27
152	Room temperature stable CO _x -free H ₂ production from methanol with magnesium oxide nanophotocatalysts. <i>Science Advances</i> , 2016, 2, e1501425.	10.3	62
153	Triboplasma Generation and Triboluminescence in the Inside and the Front Outside of the Sliding Contact. <i>Tribology Letters</i> , 2016, 63, 1.	2.6	18
154	Luminescent and dosimetric properties of ultrafine magnesium oxide ceramics after high dose irradiation. <i>Radiation Measurements</i> , 2016, 90, 252-256.	1.4	18
155	Optical, scintillation and dosimeter properties of MgO translucent ceramic doped with Cr ³⁺ . <i>Optical Materials</i> , 2016, 54, 134-138.	3.6	40
156	Optical, scintillation and dosimeter properties of MgO transparent ceramic and single crystal. <i>Ceramics International</i> , 2016, 42, 5617-5622.	4.8	49
157	Blue and Orange Photoluminescence and Surface Band-Gap Narrowing in Lithium-Doped MgO Microcrystals. <i>Journal of Physical Chemistry C</i> , 2017, 121, 1884-1892.	3.1	8
158	Near UV excitable yellow light emitting Zn doped MgO for WLED application. <i>Superlattices and Microstructures</i> , 2017, 106, 174-183.	3.1	20
159	Manufacture of luminescent ceramics by vacuum sintering of nanopowder oxides. <i>Vacuum</i> , 2017, 143, 433-437.	3.5	9
160	Defect induced ferromagnetism in MgO and its exceptional enhancement upon thermal annealing: a case of transformation of various defect states. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 11975-11989.	2.8	56
161	Synthesis of {111} Facet-Exposed MgO with Surface Oxygen Vacancies for Reactive Oxygen Species Generation in the Dark. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 12687-12693.	8.0	115
162	Dosimetric properties of Y-doped MgO transparent ceramics. <i>Radiation Measurements</i> , 2017, 106, 84-88.	1.4	6
163	Dosimeter properties of Ce-doped MgO transparent ceramics. <i>Journal of Luminescence</i> , 2017, 192, 316-320.	3.1	16

#	ARTICLE	IF	CITATIONS
164	Synthesis and magnetic properties of ceramic MgO porous film. <i>Journal of the European Ceramic Society</i> , 2017, 37, 4727-4731.	5.7	14
165	Exo-Electron Emission From MgO Nanopowders on MgO Thin Film of Alternating Current Plasma Display Panels Part I. Mechanism of Exo-Electron Emission. <i>IEEE Transactions on Electron Devices</i> , 2017, 64, 3252-3260.	3.0	1
166	Analysis on electron emission characteristics of MgO layer with MgO crystal powder under various panel temperatures in ac-plasma display panels. <i>Molecular Crystals and Liquid Crystals</i> , 2017, 645, 102-111.	0.9	0
167	Dosimeter properties of CaO transparent ceramic prepared by the SPS method. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 7018-7023.	2.2	8
168	Synthesis and optical properties of anion deficient nano MgO. <i>Journal of Alloys and Compounds</i> , 2017, 693, 534-542.	5.5	43
169	Pressure-induced photoluminescence of MgO. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 194002.	1.8	5
170	Scintillation and dosimeter properties of Ca-doped MgO transparent ceramics. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2018, 435, 313-317.	1.4	10
171	Strategies for Stabilizing Atomically Dispersed Metal Catalysts. <i>Small Methods</i> , 2018, 2, 1700286.	8.6	276
172	Photoactivity and Stability Co-Enhancement: When Localized Plasmons Meet Oxygen Vacancies in MgO. <i>Small</i> , 2018, 14, e1803233.	10.0	28
173	Magnesium Oxide in Nanodimension: Model for MRI and Multimodal Therapy. <i>Journal of Nanomaterials</i> , 2018, 2018, 1-12.	2.7	10
174	Wideband luminescence from bandgap-matched Mg-based Si core-shell geometry nanocomposite. <i>AIP Advances</i> , 2018, 8, 055324.	1.3	4
175	Biocompatible and Biodegradable Magnesium Oxide Nanoparticles with In Vitro Photostable Near-Infrared Emission: Short-Term Fluorescent Markers. <i>Nanomaterials</i> , 2019, 9, 1360.	4.1	25
176	First principles calculations of optical properties for oxygen vacancies in binary metal oxides. <i>Journal of Chemical Physics</i> , 2019, 150, 044702.	3.0	27
177	O ₂ atmospheric annealing-tunable defects in ionic oxide MgO nanoribbons. <i>Applied Physics Letters</i> , 2019, 114, .	3.3	14
178	Hot-Electron-Mediated Ion Diffusion in Semiconductors for Ion-Beam Nanostructuring. <i>Nano Letters</i> , 2019, 19, 3939-3947.	9.1	15
179	Spark plasma sintering of nano magnesia: Processing parameters influencing optical properties. <i>Materials Chemistry and Physics</i> , 2019, 228, 51-59.	4.0	5
180	Fabrication and optical properties of highly transparent MgO ceramics by spark plasma sintering. <i>Scripta Materialia</i> , 2019, 162, 14-17.	5.2	25
181	On the in-situ aqueous stability of an Mg-Li-(Al-Y-Zr) alloy: Role of Li. <i>Corrosion Science</i> , 2020, 164, 108342.	6.6	25

#	ARTICLE	IF	CITATIONS
182	Effects of divalent-cation iron and manganese oxides on the luminescence of free lime and free magnesia. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2020, 229, 117952.	3.9	19
183	Characterization of MgO thin film prepared by spray pyrolysis technique using perfume atomizer. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 14838-14850.	2.2	19
184	Impact of single and double oxygen vacancies on electronic transport in Fe/MgO/Fe magnetic tunnel junctions. <i>Journal of Applied Physics</i> , 2020, 128, .	2.5	3
185	Specific absorption in Y3Al5O12:Eu ceramics and the role of stable Eu2+ in energy transfer processes. <i>Journal of Materials Chemistry C</i> , 2020, 8, 8823-8839.	5.5	13
186	High-pressure torsion to induce oxygen vacancies in nanocrystals of magnesium oxide: Enhanced light absorbance, photocatalysis and significance in geology. <i>Materialia</i> , 2020, 11, 100670.	2.7	12
187	Influence of Li+ co-doping on the luminescence of MgO:Eu3+ nanocrystals: Probing asymmetry, energy transfer and defects. <i>Solid State Sciences</i> , 2020, 105, 106286.	3.2	14
188	Analysis and Simulation of Interface Quality and Defect Induced Variability in MgO Spin-Transfer Torque Magnetic RAMs. <i>IEEE Electron Device Letters</i> , 2021, 42, 34-37.	3.9	4
189	A periodic equation-of-motion coupled-cluster implementation applied to f -centers in alkaline earth oxides. <i>Journal of Chemical Physics</i> , 2021, 154, 064106.	3.0	19
190	MgF2 Optical Ceramics. <i>Russian Physics Journal</i> , 2021, 64, 74-81.	0.4	1
191	Nanoparticle Properties Modulate Their Effect on the Human Blood Functions. <i>BioNanoScience</i> , 2021, 11, 816-824.	3.5	0
192	Tuning PL emission energy and bandgap with Ni dopant of MgO thin films. <i>Ceramics International</i> , 2021, 47, 15792-15800.	4.8	13
193	Simple One-Step Leaf Extract-Assisted Preparation of Fe_2O_3 Nanoparticles, Physicochemical Properties, and Its Sunlight-Driven Photocatalytic Activity on Methylene Blue Dye Degradation. <i>Journal of Nanomaterials</i> , 2021, 2021, 1-25.	2.7	14
194	Transformation of free-standing ZnO nanorods upon Er doping. <i>Applied Surface Science</i> , 2021, 562, 150217.	6.1	21
195	Effect of Oxygen Vacancies on the Mechanoluminescence Response of Magnesium Oxide. <i>Journal of Physical Chemistry C</i> , 2021, 125, 854-864.	3.1	4
196	Catalyst-Free Growth of Magnesium Oxide Whiskers and Their Characteristics. <i>Acta Physica Polonica A</i> , 2008, 113, 1021-1024.	0.5	5
197	Fabrication and Raman Studies of MgO/SnO ₂ Core-Shell Heteronanowires. <i>Acta Physica Polonica A</i> , 2009, 116, 58-61.	0.5	19
198	Promoting Effect of MgO in the Photodegradation of Methylene Blue Over MgO/MWCNT/TiO ₂ Photocatalyst. <i>Korean Journal of Materials Research</i> , 2010, 20, 345-350.	0.2	3
199	What Can We Learn About Perfect and Defective MgO (001) Surface Using Density Functional Theory?. , 2000, , 49-60.		0

#	ARTICLE	IF	CITATIONS
200	Intrinsic Defects in UV-irradiated MgO Single Crystal Detected by Thermoluminescence. Journal of Applied Sciences, 2005, 5, 1345-1349.	0.3	5
201	Study of a MgO Protective Layer Deposited with Oxygen Ion Beam Assisted Deposition in an AC PDP. Journal of the Korean Institute of Electrical and Electronic Material Engineers, 2007, 20, 615-619.	0.0	0
202	Low Temperature Synthesis and Improvement in Optical Properties of MgO: Tb ³⁺ . International Journal of Materials Science and Engineering, 2015, , 167-174.	0.1	0
203	Luminescence of ultrafine magnesium oxide ceramics with deep traps. Journal of Physics: Conference Series, 2017, 830, 012135.	0.4	0
204	The effect of carboxylate compounds on Volta potential and corrosion inhibition of Mg containing different levels of iron. Corrosion Science, 2022, 194, 109937.	6.6	25
205	Electric field manipulation of nonvolatile magnetization in MgO-based memory device with resistive switching effect. Chemical Physics Letters, 2022, 799, 139560.	2.6	1
206	Defect-related luminescence of MgO single crystals irradiated with swift ¹³² Xe ions. Optical Materials, 2022, 127, 112308.	3.6	1
207	Yb doped MgO transparent ceramics generated through the SPS method. Journal of the European Ceramic Society, 2022, 42, 4320-4327.	5.7	3
208	Effects of Calcinations Temperatures on Structural, optical and magnetic properties of MgO nanoflakes and its photocatalytic applications. Optical Materials, 2022, 132, 112777.	3.6	8
209	Crystalline Orientation-Dependent Ferromagnetism in N ⁺ -Implanted MgO Single Crystal. Materials, 2022, 15, 7274.	2.9	1
210	Tuning optical bandgap of crystalline MgO by MeV Co ion beam induced defects. Applied Physics A: Materials Science and Processing, 2022, 128, .	2.3	5
211	Thermal, structural and optical properties of un-doped and lanthanide-doped germanate ceramics. Journal of Alloys and Compounds, 2023, 934, 167956.	5.5	2
212	Magnetic Properties of C-Implanted and P-Implanted MgO Single Crystal: A Comparative Experimental and First-Principle Study. Crystals, 2023, 13, 386.	2.2	0
213	Erbium-Doped Lu ₂ O ₃ -MgO and Sc ₂ O ₃ -MgO IR-Transparent Composite Ceramics. Nanomaterials, 2023, 13, 1620.	4.1	1
214	Reconstruction of Highly Defective MgO and Exceptional Photochemical Activity on CO ₂ Upgrade in Aqueous Solution. Small, 0, , .	10.0	0
215	Optical Properties of Neutral F Centers in Bulk MgO with Density Matrix Embedding. Journal of Physical Chemistry Letters, 2023, 14, 7703-7710.	4.6	4