

Bingtian Tu

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Novel transparent ZnO \cdot 3Al $_2$ O $_3$ ceramics prepared by reactive hot isostatic pressing. Journal of the European Ceramic Society, 2022, 42, 724-728.	2.8	2
2	Investigation of the structural characteristics, dielectric properties, and infrared reflectivity spectra of AlON transparent ceramics. Journal of the European Ceramic Society, 2022, 42, 1362-1369.	2.8	6
3	Compositional tailoring effect on crystal structure, mechanical and thermal properties of $\hat{\Gamma}^3$ -AlON transparent ceramics. Journal of the European Ceramic Society, 2022, 42, 2983-2993.	2.8	8
4	Elasticity of Nonstoichiometric Alumina-Rich Spinel Determined by Bond Valence Theory and Brillouin Scattering. Inorganic Chemistry, 2022, 61, 4743-4751.	1.9	0
5	Highly transparent MgAl $_0.5$ Ga $_1.5$ O $_4$ ceramic for overcoming the trade-off between infrared transmittance and mechanical properties. Scripta Materialia, 2022, 216, 114756.	2.6	2
6	Crystal structure and luminescence mechanism of novel Fe ³⁺ -doped Mg _{0.752} Al _{2.165} O ₄ deep red-emitting phosphors. Journal of the American Ceramic Society, 2022, 105, 5783-5792.	1.9	7
7	Investigation on composition-dependent properties of Mg $_5$ Al $_23\hat{\Gamma}^3$ O $_27+5N5\hat{\Gamma}^3$ (0 $\hat{\Gamma}^3$ x $\hat{\Gamma}^3$ 1): Part I. optical properties via first-principles calculations. Journal of the European Ceramic Society, 2021, 41, 1543-1549.	2.8	4
8	Theoretical study on composition-dependent properties of ZnO \cdot n Al $_2$ O $_3$ spinels. Part I: Optical and dielectric. Journal of the American Ceramic Society, 2021, 104, 5099-5109.	1.9	5
9	Theoretical study on composition-dependent properties of ZnO \cdot n Al $_2$ O $_3$ spinels. Part II: Mechanical and thermophysical. Journal of the American Ceramic Society, 2021, 104, 6455-6466.	1.9	10
10	A new quaternary Li $_0.19$ Al $_2.72$ O $_3.64$ N $_0.36$ transparent ceramic with high hardness. Scripta Materialia, 2021, 199, 113837.	2.6	6
11	Effect of nitrogen content on optical properties of transparent $\hat{\Gamma}^3$ -AlON polycrystalline ceramics. Journal of the European Ceramic Society, 2021, 41, 4319-4326.	2.8	15
12	Investigation on composition-dependent properties of Mg $_5$ Al $_23\hat{\Gamma}^3$ O $_27+5N5\hat{\Gamma}^3$ (0 $\hat{\Gamma}^3$ x $\hat{\Gamma}^3$ 1): Part II. Mechanical properties via first-principles calculations combined with bond valence models. Journal of the European Ceramic Society, 2021, 41, 4942-4950.	2.8	5
13	A novel durable spinel-type ZnGa $_2$ O $_4$ transparent ceramic with wide transmission range. Scripta Materialia, 2021, 205, 114186.	2.6	6
14	Predicting Thermomechanical Properties of MgAl $_2$ O $_4$ Transparent Ceramic Based on Bond Valence Models. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2021, 36, 1067.	0.6	3
15	Fabrication and properties of highly transparent Li $_0.07$ Al $_2.76$ O $_3.64$ N $_0.36$ ceramics by aqueous gelcasting and two-step preparation. Ceramics International, 2021, 48, 6608-6608.	2.3	2
16	A novel spinel-type Mg $_0.55$ Al $_2.36$ O $_3.81$ N $_0.19$ transparent ceramic with infrared transmittance range comparable to c-plane sapphire. Scripta Materialia, 2020, 178, 428-432.	2.6	25
17	Structural Study of Mg $_y$ Al $(8+x\hat{\Gamma}^3+2y)$ /3O $_4\hat{\Gamma}^3$ N $_x$ (0 < x < 0.5, 0 < y < 1) Spinel Probed by X-ray Diffraction, 27 Al MAS NMR, and First-Principles Calculations. Inorganic Chemistry, 2020, 59, 17009-17017.	1.9	9
18	Uranyl Organic Framework as a Highly Selective and Sensitive Turn-on and Turn-off Luminescent Sensor for Dual Functional Detection Arginine and MnO $_4$ ⁻ . Inorganic Chemistry, 2020, 59, 5004-5017.	1.9	53

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19	Theoretical study on composition- and pressure-dependent mechanical properties of AlON solid solution. <i>Journal of the American Ceramic Society</i> , 2020, 103, 4390-4401.	1.9	8
20	Highly transparent Mg _{0.27} Al _{2.58} O _{3.73} N _{0.27} ceramic fabricated by aqueous gelcasting, pressureless sintering, and post-HIP. <i>Journal of the American Ceramic Society</i> , 2019, 102, 6507-6516.	1.9	16
21	Predicting properties of MgO·nAl ₂ O ₃ by first-principles calculation combined with bond valence models. <i>Journal of the American Ceramic Society</i> , 2019, 102, 6913-6924.	1.9	6
22	Effect of pretreated microstructure on subsequent sintering performance of MgAl ₂ O ₄ ceramics. <i>Ceramics International</i> , 2019, 45, 7544-7551.	2.3	10
23	Preparation of transparent MgO·1.8Al ₂ O ₃ spinel ceramics by aqueous gelcasting, presintering and hot isostatic pressing. <i>Journal of the European Ceramic Society</i> , 2018, 38, 4057-4063.	2.8	25
24	Magic Angle Spinning NMR Study on Inversion Behavior and Vacancy Disorder in Alumina-Rich Spinel. <i>Inorganic Chemistry</i> , 2018, 57, 8390-8395.	1.9	10
25	Phase relations of the nepheline-kalsilite system: X-ray diffraction and Mössbauer spectroscopy. <i>Journal of Alloys and Compounds</i> , 2017, 712, 613-617.	2.8	6
26	Variation of Structure and Photoluminescence Properties of Ce ³⁺ Doped MgAlON Transparent Ceramics with Different Doping Content. <i>Materials</i> , 2017, 10, 792.	1.3	4
27	Combining ²⁷ Al Solid-State NMR and First-Principles Simulations To Explore Crystal Structure in Disordered Aluminum Oxynitride. <i>Inorganic Chemistry</i> , 2016, 55, 12930-12937.	1.9	19
28	Characterization in activators TM distribution and photoluminescence properties of Ce ³⁺ doped MgAlON transparent fluorescent ceramic. <i>Journal of the European Ceramic Society</i> , 2016, 36, 2801-2805.	2.8	13
29	Theoretical predictions of composition-dependent structure and properties of alumina-rich spinel. <i>Journal of the European Ceramic Society</i> , 2016, 36, 1073-1079.	2.8	20
30	Novel divalent europium doped MgAlON transparent ceramic for shortwave ultraviolet erasable windows. <i>Scripta Materialia</i> , 2015, 105, 30-33.	2.6	22
31	First-Principles Insight into the Composition-Dependent Structure and Properties of $\hat{\Gamma}^3$ -Alon. <i>Journal of the American Ceramic Society</i> , 2014, 97, 2996-3003.	1.9	24
32	Composition-dependent bonding and hardness of $\hat{\Gamma}^3$ -aluminum oxynitride: A first-principles investigation. <i>Journal of Applied Physics</i> , 2014, 115, 223511.	1.1	14
33	Highly Transparent $\text{Mg}_{0.27}\text{Al}_{2.58}\text{O}_{3.73}\text{N}_{0.27}$ Ceramic Prepared by Pressureless Sintering. <i>Journal of the American Ceramic Society</i> , 2014, 97, 63-66.	1.9	16
34	Chemical Composition, Crystal Structure, and Their Relationships with the Intrinsic Properties of Spinel-Type Crystals Based on Bond Valences. <i>Inorganic Chemistry</i> , 2014, 53, 5986-5992.	1.9	32
35	First-Principles Study on Site Preference of Aluminum Vacancy and Nitrogen Atoms in $\hat{\Gamma}^3$ -Alon. <i>Journal of the American Ceramic Society</i> , 2013, 96, 1937-1943.	1.9	34
36	ZnO·2.7Al ₂ O ₃ Nanocomposite with high optical transparency. <i>Journal of the American Ceramic Society</i> , 0, , .	1.9	0