

# Katrin Hurle

## List of Publications by Year in descending order

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Version: 2024-02-01

29  
papers

659  
citations

623574

14  
h-index

580701

25  
g-index

30  
all docs

30  
docs citations

30  
times ranked

694  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mapping the elemental and crystalline phase distribution in Cu <sup>2+</sup> doped 45S5 bioactive glass upon crystallization. <i>CrystEngComm</i> , 2022, 24, 284-293.	1.3	1
2	Progressive changes in crystallographic textures of biominerals generate functionally graded ceramics. <i>Materials Advances</i> , 2022, 3, 1527-1538.	2.6	4
3	Scavenging of bacteria or bacterial products by magnetic particles functionalized with a broad-spectrum pathogen recognition receptor motif offers diagnostic and therapeutic applications. <i>Acta Biomaterialia</i> , 2022, 141, 418-428.	4.1	11
4	Grasping the Lithium hype: Insights into modern dental Lithium Silicate glass-ceramics. <i>Dental Materials</i> , 2022, 38, 318-332.	1.6	54
5	Pyrophosphate ions inhibit calcium phosphate cement reaction and enable storage of premixed pastes with a controlled activation by orthophosphate addition. <i>Ceramics International</i> , 2022, 48, 15390-15404.	2.3	4
6	Crystallization study of sol-gel derived 13-93 bioactive glass powder. <i>Journal of the European Ceramic Society</i> , 2021, 41, 1695-1706.	2.8	17
7	Concurrent kinetics of crystallization and toughening in multicomponent biomedical SiO <sub>2</sub> -Li <sub>2</sub> O-P <sub>2</sub> O <sub>5</sub> -ZrO <sub>2</sub> glass-ceramics. <i>Journal of Non-Crystalline Solids</i> , 2021, 554, 120607.	1.5	20
8	Ion-doped Brushite Cements for Bone Regeneration. <i>Acta Biomaterialia</i> , 2021, 123, 51-71.	4.1	58
9	Relationships between fracture toughness, Y <sub>2</sub> O <sub>3</sub> fraction and phases content in modern dental Yttria-doped zirconias. <i>Journal of the European Ceramic Society</i> , 2021, 41, 7771-7782.	2.8	19
10	Deepening our understanding of bioactive glass crystallization using TEM and 3D nano-CT. <i>Journal of the European Ceramic Society</i> , 2021, 41, 4958-4969.	2.8	15
11	Toughening by revitrification of Li <sub>2</sub> SiO <sub>3</sub> crystals in Obsidian <sup>®</sup> dental glass-ceramic. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021, 124, 104739.	1.5	8
12	Shape Matters: Crystal Morphology and Surface Topography Alter Bioactivity of Bioceramics in Simulated Body Fluid. <i>Advanced Engineering Materials</i> , 2020, 22, 2000044.	1.6	3
13	Crack growth rates in lithium disilicates with bulk (mis)alignment of the Li <sub>2</sub> Si <sub>2</sub> O <sub>5</sub> phase in the [001] direction. <i>Journal of Non-Crystalline Solids</i> , 2020, 532, 119877.	1.5	11
14	Cu <sup>2+</sup> doped $\beta$ -tricalcium phosphate: Solid solution limit and crystallographic characterization by rietveld refinement. <i>Journal of Solid State Chemistry</i> , 2020, 285, 121225.	1.4	17
15	New insights into the crystallization process of sol-gel derived 45S5 bioactive glass. <i>Journal of the American Ceramic Society</i> , 2020, 103, 4234-4247.	1.9	28
16	Setting Mechanism of a CDHA Forming $\beta$ -TCP Cement Modified with Sodium Phytate for Improved Injectability. <i>Materials</i> , 2019, 12, 2098.	1.3	11
17	Effect of sintering parameters on phase evolution and strength of dental lithium silicate glass-ceramics. <i>Dental Materials</i> , 2019, 35, 1360-1369.	1.6	14
18	Phase-specific bioactivity and altered Ostwald ripening pathways of calcium carbonate polymorphs in simulated body fluid. <i>RSC Advances</i> , 2019, 9, 18232-18244.	1.7	44

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19	Crack-healing during two-stage crystallization of biomedical lithium (di)silicate glass-ceramics. <i>Dental Materials</i> , 2019, 35, 1130-1145.	1.6	43
20	Mechanical improvement of calcium carbonate cements by <i>in situ</i> HEMA polymerization during hardening. <i>Journal of Materials Chemistry B</i> , 2019, 7, 3403-3411.	2.9	22
21	Phase characterization of lithium silicate biomedical glass-ceramics produced by two-stage crystallization. <i>Journal of Non-Crystalline Solids</i> , 2019, 510, 42-50.	1.5	27
22	Mechanical activation and cement formation of trimagnesium phosphate. <i>Journal of the American Ceramic Society</i> , 2018, 101, 1830-1834.	1.9	10
23	Hydration mechanism of a calcium phosphate cement modified with phytic acid. <i>Acta Biomaterialia</i> , 2018, 80, 378-389.	4.1	26
24	Hydration mechanism of partially amorphized $\beta$ -tricalcium phosphate. <i>Acta Biomaterialia</i> , 2017, 54, 429-440.	4.1	7
25	Hydration enthalpy of amorphous tricalcium phosphate resulting from partial amorphization of $\beta$ -tricalcium phosphate. <i>BioNanoMaterials</i> , 2017, 18, .	1.4	3
26	Influence of $\text{Sr}^{2+}$ on Calcium-Deficient Hydroxyapatite Formation Kinetics and Morphology in Partially Amorphized $\beta$ -TCP. <i>Journal of the American Ceramic Society</i> , 2016, 99, 1055-1063.	1.9	9
27	Reaction kinetics of dual setting $\beta$ -tricalcium phosphate cements. <i>Journal of Materials Science: Materials in Medicine</i> , 2016, 27, 1.	1.7	113
28	Calorimetry investigations of milled $\beta$ -tricalcium phosphate ( $\beta$ -TCP) powders to determine the formation enthalpies of $\beta$ -TCP and X-ray amorphous tricalcium phosphate. <i>Acta Biomaterialia</i> , 2015, 23, 338-346.	4.1	14
29	Effect of amorphous phases during the hydraulic conversion of $\beta$ -TCP into calcium-deficient hydroxyapatite. <i>Acta Biomaterialia</i> , 2014, 10, 3931-3941.	4.1	46