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## Silicon Nitride and Related Materials

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1093	Composite coatings of Si <sub>3</sub> N <sub>4</sub> -soda lime silica produced by the thermal spray process. <b>2000</b> , 9, 603-608		7
1092	Fatigue in Ceramic Matrix Composites. <b>2000</b> , 163-219		3
1091	Densification behaviour of Ca-B-sialons. <i>Ceramics International</i> , <b>2001</b> , 27, 461-466	5.1	13
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627	High Temperature Behavior of Si <sub>3</sub> N <sub>4</sub> and Yb <sub>2</sub> SiO <sub>5</sub> Coated Carbon Fibers for Silicon-Nitride CMC. <b>2014</b> , 16, 556-564		0

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511	Cell structure imaging with bright and homogeneous nanometric light source. <b>2017</b> , 10, 503-510		3
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499	Effect of comburent ratios on combustion synthesis of Eu-doped SiAlON green phosphors. <b>2017</b> , 35, 430-435		10
498	Microstructural evolution of Si <sub>3</sub> N <sub>4</sub> /Ti6Al4V joints brazed with nano-Si <sub>3</sub> N <sub>4</sub> reinforced AgCuTi composite filler. <b>2017</b> , 142, 58-65		22
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495	Near-net shaping of silicon nitride via aqueous room-temperature injection molding and pressureless sintering. <i>Ceramics International</i> , <b>2017</b> , 43, 10791-10798	5.1	9
494	The effect of silicon nitride powder characteristics on SiAlON microstructures, densification and phase assemblage. <i>Ceramics International</i> , <b>2017</b> , 43, 10057-10065	5.1	11
493	Nitridation behavior of silicon powder compacts of various thicknesses with Y <sub>2</sub> O <sub>3</sub> and MgO as sintering additives. <i>International Journal of Applied Ceramic Technology</i> , <b>2017</b> , 14, 1157-1163	2	3
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486	Si <sub>3</sub> N <sub>4</sub> /graphene nanocomposites for tribological application in aqueous environments prepared by attritor milling and hot pressing. <i>Journal of the European Ceramic Society</i> , <b>2017</b> , 37, 3797-3804	6	33
485	Material and optical properties of low-temperature NH <sub>3</sub> -free PECVD Si <sub>x</sub> N <sub>y</sub> layers for photonic applications. <b>2017</b> , 50, 025106		37
484	Robocasting of silicon nitride with controllable shape and architecture for biomedical applications. <i>International Journal of Applied Ceramic Technology</i> , <b>2017</b> , 14, 117-127	2	30
483	Phase transformation and interface segregation behavior in Si <sub>3</sub> N <sub>4</sub> ceramics sintered with La <sub>2</sub> O <sub>3</sub> /U <sub>2</sub> O <sub>3</sub> mixed additive. <i>Journal of the American Ceramic Society</i> , <b>2017</b> , 100, 1231-1240	3.8	9

482	Atomic Layer Deposition of Wet-Etch Resistant Silicon Nitride Using Di(sec-butylamino)silane and N Plasma on Planar and 3D Substrate Topographies. <b>2017</b> , 9, 1858-1869		35
481	Synthesis of Si <sub>3</sub> N <sub>4</sub> /SiC reaction-bonded SiC refractories: The effects of Si/C molar ratio on microstructure and properties. <i>Ceramics International</i> , <b>2017</b> , 43, 16518-16524	5.1	7
480	Review—Silicon Nitride and Silicon Nitride-Rich Thin Film Technologies: Trends in Deposition Techniques and Related Applications. <b>2017</b> , 6, P691-P714		78
479	Equiaxed $\beta$ -Si <sub>3</sub> N <sub>4</sub> ceramics prepared by rapid reaction-bonding and post-sintering using TiO <sub>2</sub> –ZrO <sub>2</sub> –Al <sub>2</sub> O <sub>3</sub> additives. <i>Journal of the American Ceramic Society</i> , <b>2017</b> , 100, 5353-5357	3.8	6
478	Thermal Shock Resistance of Si <sub>3</sub> N <sub>4</sub> /h-BN Composites Prepared via Catalytic Reaction-Bonding Route. <b>2017</b> , 26, 4291-4296		2
477	The reaction behavior of MoSi <sub>2</sub> powder in N <sub>2</sub> atmosphere at high temperatures. <i>Ceramics International</i> , <b>2017</b> , 43, 16525-16530	5.1	1
476	Silicon nitride-based composites reinforced with zirconia nanofibres. <i>Ceramics International</i> , <b>2017</b> , 43, 16811-16818	5.1	12
475	Effect of precursor size on the structure and mechanical properties of calcium-stabilized sialon/cubic boron nitride nanocomposites. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 728, 836-843	5.7	18
474	Characterization of crystalline SiCN formed during the nitridation of silicon and cornstarch powder compacts. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 725, 326-333	5.7	5
473	Effect of SiO <sub>2</sub> addition on Si <sub>3</sub> N <sub>4</sub> ceramics prepared by rapid nitridation and post-sintering route. <i>Ceramics International</i> , <b>2017</b> , 43, 13901-13906	5.1	1
472	Open-Porous Silicon Nitride-Based Ceramics in Tubular Geometry Obtained by Slip-Casting and Gelcasting. <b>2017</b> , 19, 1700434		10
471	Enhanced tensile properties of Al matrix composites reinforced with $\beta$ -Si <sub>3</sub> N <sub>4</sub> whiskers. <b>2017</b> , 102, 145-153		18
470	Porous Si <sub>3</sub> N <sub>4</sub> ceramics fabricated through a modified incomplete gelcasting and freeze-drying method. <i>Ceramics International</i> , <b>2017</b> , 43, 14678-14682	5.1	8
469	Processing and characterization of sintered reaction bonded Si <sub>3</sub> N <sub>4</sub> ceramics. <b>2017</b> , 68, 75-83		6
468	Design of Metastable Tin Titanium Nitride Semiconductor Alloys. <b>2017</b> , 29, 6511-6517		19
467	Radiative Properties of Ceramic (hbox {Al}_{2}hbox {O}_{3}), AlN and (hbox {Si}_{3}hbox {N}_{4})\u00a0\u00a0: Modeling. <b>2017</b> , 38, 1		15
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465	Pyrite form of group-14 element pernitrides synthesized at high pressure and high temperature. <b>2017</b> , 46, 9750-9754		15

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463	Role of surface finishing on the in vitro biological properties of a silicon nitride-titanium nitride (Si <sub>3</sub> N <sub>4</sub> -TiN) composite. <b>2017</b> , 52, 467-477		15
462	Nanocomposites through the Chemistry of Single-Source Precursors: Understanding the Role of Chemistry behind the Design of Monolith-Type Nanostructured Titanium Nitride/Silicon Nitride. <b>2017</b> , 23, 832-845		30
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460	Effect of Z Values on the Microstructure and Mechanical Properties of Post-sintered Reaction Bonded SiALON. <b>2017</b> , 36, 453-458		5
459	New route to improve the fracture toughness and flexural strength of Si <sub>3</sub> N <sub>4</sub> ceramics by adding FeSi <sub>2</sub> . <b>2017</b> , 126, 11-14		28
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456	Mechanical, elastic, anisotropy, and electronic properties of monoclinic phase of m-Si <sub>x</sub> Ge <sub>3-4x</sub> N <sub>4</sub> . <b>2017</b> , 26, 126105		3
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454	Design of ceramic materials for orthopedic devices. <b>2017</b> , 331-353		1
453	Ceramics for joint replacement. <b>2017</b> , 129-179		1
452	Mechanical, Anisotropic, and Electronic Properties of XN (X = C, Si, Ge): Theoretical Investigations. <i>Materials</i> , <b>2017</b> , 10,	3-5	3
451	Microstructure and Properties of Porous Si <sub>3</sub> N <sub>4</sub> /Dense Si <sub>3</sub> N <sub>4</sub> Joints Bonded Using RE-Si-Al-O Glasses (RE = Y or Yb). <b>2017</b> , 7, 500		4
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443	Damage evolution and contact surfaces analysis of high-loaded oscillating hybrid bearings. <b>2018</b> , 406-407, 1-12		9
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439	Low temperature pressureless sintering of silicon nitride ceramics for circuit substrates in powder electronic devices. <i>Ceramics International</i> , <b>2018</b> , 44, 4375-4380	5.1	8
438	Low-temperature spark plasma sintering of calcium stabilized alpha sialon using nano-size aluminum nitride precursor. <b>2018</b> , 71, 301-306		14
437	Removal of Boron from Molten Si and Si-Cu Using Ammonia Containing Gas. <b>2018</b> , 10, 1809-1817		2
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430	Fabrication processing and mechanical properties of Si <sub>3</sub> N <sub>4</sub> ceramic turbocharger wheel. <i>Ceramics International</i> , <b>2018</b> , 44, 10596-10603	5.1	7
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428	Dry Sliding Friction and Wear Behavior of AA7075-Si <sub>3</sub> N <sub>4</sub> Composite. <b>2018</b> , 10, 1819-1829		68
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426	Microstructure and mechanical properties of aluminum matrix composites reinforced with pre-oxidized Si <sub>3</sub> N <sub>4</sub> whiskers. <b>2018</b> , 723, 109-117		9
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423	Spark plasma sintering of biodegradable Si <sub>3</sub> N <sub>4</sub> bioceramic with Sr, Mg and Si as sintering additives for spinal fusion. <i>Journal of the European Ceramic Society</i> , <b>2018</b> , 38, 2110-2119	6	12
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413	Optical and electrical characterization methods of plasma-induced damage in silicon nitride films. <b>2018</b> , 57, 06JD03		3
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402	Comparative study of fluoride and non-fluoride additives in high thermal conductive silicon nitride ceramics fabricated by spark plasma sintering and post-sintering heat treatment. <i>Ceramics International</i> , <b>2018</b> , 44, 23202-23207	5.1	12
401	Effect of temperature on dielectric response in X-band of silicon nitride ceramics prepared by gelcasting. <b>2018</b> , 8, 075127		2
400	N <sub>2</sub> dissociation and kinetics of N(4S) atoms in nitrogen DC glow discharge. <b>2018</b> , 51, 364002		20
399	Response of Silicon Nitride Ceramics under High-enthalpy Plasma Flows. <b>2018</b> , 33, 828-835		1
398	Tribo-mechanical characterization of SPS processed, phase pure 15R-SiAlON polytype: Effect of sintering temperature. <i>Ceramics International</i> , <b>2018</b> , 44, 18703-18710	5.1	3
397	Microstructure and Mechanical Properties of Si <sub>3</sub> N <sub>4</sub> /Fe <sub>3</sub> Si Composites Prepared by Gas-Pressure Sintering. <i>Materials</i> , <b>2018</b> , 11,	3.5	2
396	A novel approach to fabricate Si <sub>3</sub> N <sub>4</sub> by selective laser melting. <i>Ceramics International</i> , <b>2018</b> , 44, 13689-13694	5.1	22
395	Self-Lubricating Si <sub>3</sub> N <sub>4</sub> -based composites toughened by in situ formation of silver. <i>Ceramics International</i> , <b>2018</b> , 44, 14327-14334	5.1	18
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392	United in Nitride: The Highly Condensed Boron Phosphorus Nitride BP3N6. <b>2018</b> , 130, 13386-13389		13
391	United in Nitride: The Highly Condensed Boron Phosphorus Nitride BP N. <b>2018</b> , 57, 13202-13205		19
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387	Microstructure and Dielectric Property of 3D BNf/Si <sub>3</sub> N <sub>4</sub> Fabricated by CVI Process. <b>2019</b> , 34, 818-823		0
386	Gas permeation performance of porous silicon nitride ceramics with controllable pore structures. <i>Ceramics International</i> , <b>2019</b> , 45, 22351-22356	5.1	5
385	Enhanced mechanical properties of Si <sub>3</sub> N <sub>4</sub> ceramics with ZrB <sub>2</sub> -B binary additives prepared at low temperature. <i>Journal of the European Ceramic Society</i> , <b>2019</b> , 39, 5102-5105	6	5
384	Design of Optimal Organic Materials System for Ceramic Suspension-Based Additive Manufacturing. <b>2019</b> , 21, 1900445		8
383	Synthesis and mechanical properties of highly porous ultrafine-grain Si <sub>3</sub> N <sub>4</sub> ceramics via carbothermal reduction-nitridation combined with liquid phase sintering. <i>Ceramics International</i> , <b>2019</b> , 45, 21359-21364	5.1	4
382	Microstructure evolution and mechanical properties of porous Si <sub>3</sub> N <sub>4</sub> and dense Si <sub>3</sub> N <sub>4</sub> joints bonded using CaO-Al <sub>2</sub> O <sub>3</sub> -SiO <sub>2</sub> glass-ceramic. <i>Journal of the European Ceramic Society</i> , <b>2019</b> , 39, 4545-4553	6	12
381	Continuous and symmetric graded Si <sub>3</sub> N <sub>4</sub> ceramics designed by spark plasma sintering at 15 MPa. <i>Ceramics International</i> , <b>2019</b> , 45, 16703-16706	5.1	4
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374	Microstructural evolution mechanism of porous reaction bonded silicon nitride ceramics heat-treated in two powder beds. <i>Ceramics International</i> , <b>2019</b> , 45, 21986-21997	5.1	4
373	Monitoring of Surface Reactions during Atomic Layer Etching of Silicon Nitride Using Hydrogen Plasma and Fluorine Radicals. <b>2019</b> , 11, 37263-37269		13
372	Direct fabrication mechanism of pre-sintered Si <sub>3</sub> N <sub>4</sub> ceramic with ultra-high porosity by laser additive manufacturing. <b>2019</b> , 173, 91-95		8
371	Synthesis of Si <sub>3</sub> N <sub>4</sub> powder by high energy ball milling assisting molten salt nitridation method at low temperature. <i>Ceramics International</i> , <b>2019</b> , 45, 18445-18451	5.1	1
370	The effect of gelcasting parameters on microstructural optimization of porous Si <sub>3</sub> N <sub>4</sub> ceramics. <i>Ceramics International</i> , <b>2019</b> , 45, 9719-9725	5.1	13
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