# Herwig Peterlik

List of Publications by Year
in descending order



| | | | |
|---|---|---|---|
| 198 papers | 6,618 citations | 61857 43 h-index | 76769 74 g-index |
| 209 all docs | 209 docs citations | 209 times ranked | 8418 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | A reconsideration of the relationship between the crystallite size La of carbons determined by X-ray diffraction and Raman spectroscopy. Carbon, 2006, 44, 3239-3246. | 5.4 | 452 |
| 2 | From brittle to ductile fracture of bone. Nature Materials, 2006, 5, 52-55. | 13.3 | 411 |
| 3 | Confined linear carbon chains as a route to bulkÂcarbyne. Nature Materials, 2016, 15, 634-639. | 13.3 | 341 |
| 4 | Chairside CAD/CAM materials. Part 1: Measurement of elastic constants and microstructural characterization. Dental Materials, 2017, 33, 84-98. | 1.6 | 287 |
| 5 | Determination of SWCNT diameters from the Raman response of the radial breathing mode. European Physical Journal B, 2001, 22, 307-320. | 0.6 | 260 |
| 6 | An Airâ€Stable Organometallic Lowâ€Molecularâ€Mass Gelator: Synthesis, Aggregation, and Catalytic Application of a Palladium Pincer Complex. Angewandte Chemie - International Edition, 2007, 46, 6368-6371. | 7.2 | 194 |
| 7 | Effect of interparticle interactions on size determination of zirconia and silica based systems â€“ A comparison of SAXS, DLS, BET, XRD and TEM. Chemical Physics Letters, 2012, 521, 91-97. | 1.2 | 143 |
| 8 | Glycol-Modified Silanes in the Synthesis of Mesoscopically Organized Silica Monoliths with Hierarchical Porosity. Chemistry of Materials, 2005, 17, 4262-4271. | 3.2 | 138 |
| 9 | Age- and genotype-dependence of bone material properties in the osteogenesis imperfecta murine model (oim). Bone, 2001, 29, 453-457. | 1.4 | 122 |
| 10 | Low temperature fullerene encapsulation in single wall carbon nanotubes: synthesis of N@C60@SWCNT. Chemical Physics Letters, 2004, 383, 362-367. | 1.2 | 122 |
| 11 | Efficient Airâ€Stable Organometallic Lowâ€Molecularâ€Mass Gelators for Ionic Liquids: Synthesis, Aggregation and Application of Pyridineâ€Bridged Bis(benzimidazolylidene)â€“Palladium Complexes. Chemistry - A European Journal, 2009, 15, 1853-1861. | 1.7 | 119 |
| 12 | Inorganicâ€"Organic Hybrid Polymers by Polymerization of Methacrylate- or Acrylate-Substituted Oxotitanium Clusters with Methyl Methacrylate or Methacrylic Acid. Chemistry of Materials, 2002, 14, 2732-2740. | 3.2 | 93 |
| 13 | Periodically Mesostructured Silica Monoliths from Diol-Modified Silanes. Chemistry of Materials, 2003, 15, 2690-2692. | 3.2 | 87 |
| 14 | Structural Characterization of Gel-Derived Calcium Silicate Systems. Journal of Physical Chemistry A, 2010, 114, 10403-10411. | 1.1 | 87 |
| 15 | Texture of PAN- and pitch-based carbon fibers. Carbon, 2002, 40, 551-555. | 5.4 | 86 |
| 16 | Pyridineâ€Bridged Benzimidazolium Salts: Synthesis, Aggregation, and Application as Phaseâ€Transfer Catalysts. Angewandte Chemie - International Edition, 2008, 47, 7127-7131. | 7.2 | 78 |
| 17 | Elastic moduli of nanocrystallites in carbon fibers measured by in-situ X-ray microbeam diffraction. Carbon, 2003, 41, 563-570. | 5.4 | 72 |
| 18 | Dynamics of Carbon Nanotube Growth from Fullerenes. Nano Letters, 2007, 7, 2428-2434. | 4.5 | 72 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Direct Observation of Nanocrystallite Buckling in Carbon Fibers under Bending Load. Physical Review Letters, 2005, 95, 225501. | 2.9 | 69 |
| 20 | Exploring the Formation of Black Phosphorus Intercalation Compounds with Alkali Metals. Angewandte Chemie - International Edition, 2017, 56, 15267-15273. | 7.2 | 69 |
| 21 | A dual crosslinked self-healing system: Supramolecular and covalent network formation of four-arm star polymers. Polymer, 2015, 69, 264-273. | 1.8 | 68 |
| 22 | Surface-active ionic liquids in micellar catalysis: impact of anion selection on reaction rates in nucleophilic substitutions. Physical Chemistry Chemical Physics, 2016, 18, 13375-13384. | 1.3 | 68 |
| 23 | Coating of Carbon Fibers-The Strength of the Fibers. Journal of the American Ceramic Society, 1995, 78, 133-136. | 1.9 | 66 |
| 24 | Experimental Investigation of Mechanical Properties of Metallic Hollow Sphere Structures. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2008, 39, 135-146. | 1.0 | 66 |
| 25 | Structural development of PAN-based carbon fibers studied by in situ X-ray scattering at high temperatures under load. Carbon, 2010, 48, 964-971. | 5.4 | 61 |
| 26 | Skin-core structure and bimodal Weibull distribution of the strength of carbon fibers. Carbon, 2007, 45, 2801-2805. | 5.4 | 60 |
| 27 | Lattice Opening upon Bulk Reductive Covalent Functionalization of Black Phosphorus. Angewandte Chemie - International Edition, 2019, 58, 5763-5768. | 7.2 | 60 |
| 28 | Facile Self-Assembly Processes to Phenylene-Bridged Silica Monoliths with Four Levels of Hierarchy. Small, 2006, 2, 503-506. | 5.2 | 56 |
| 29 | The validity of Weibull estimators. Journal of Materials Science, 1995, 30, 1972-1976. | 1.7 | 54 |
| 30 | Unifying Principles of the Reductive Covalent Graphene Functionalization. Journal of the American Chemical Society, 2017, 139, 5175-5182. | 6.6 | 54 |
| 31 | Grasping the Lithium hype: Insights into modern dental Lithium Silicate glass-ceramics. Dental Materials, 2022, 38, 318-332. | 1.6 | 54 |
| 32 | Solvent-driven electron trapping and mass transport in reduced graphites to access perfect graphene. Nature Communications, 2016, 7, 12411. | 5.8 | 53 |
| 33 | Magnetic behaviour of a hybrid polymer obtained from ethyl acrylate and the magnetic cluster Mn12O12(acrylate)16. Journal of Materials Chemistry, 2004, 14, 1873-1878. | 6.7 | 50 |
| 34 | A novel resonant beam technique to determine the elastic moduli in dependence on orientation and temperature up to 2000â€ŠÂ°C. Review of Scientific Instruments, 1999, 70, 3052-3058. | 0.6 | 49 |
| 35 | Simultaneous drying and chemical modification of hierarchically organized silica monoliths with organofunctional silanes. Journal of Materials Chemistry, 2005, 15, 3896. | 6.7 | 49 |
| 36 | Hierarchically Nanostructured Polyisobutylene-Based Ionic Liquids. Macromolecules, 2012, 45, 2074-2084. | 2.2 | 49 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Mixed Silica Titania Materials Prepared from a Single-Source Solâ˜'Gel Precursor:Â A Time-Resolved SAXS Study of the Gelation, Aging, Supercritical Drying, and Calcination Processes. Chemistry of Materials, 2005, 17, 3146-3153. | 3.2 | 48 |
| 38 | Fullerene release from the inside of carbon nanotubes: A possible route toward drug delivery. Chemical Physics Letters, 2007, 445, 288-292. | 1.2 | 47 |
| 39 | Solâ˜'Gel Processing of a Glycolated Cyclic Organosilane and Its Pyrolysis to Silicon Oxycarbide Monoliths with Multiscale Porosity and Large Surface Areas. Chemistry of Materials, 2010, 22, 1509-1520. | 3.2 | 46 |
| 40 | Doping of metalâ€"organic frameworks towards resistive sensing. Scientific Reports, 2017, 7, 2439. | 1.6 | 45 |
| 41 | Ring-opening metathesis polymerizations with norbornene carboxylate-substituted metal oxo clusters. Journal of Materials Chemistry, 2006, 16, 3268. | 6.7 | 44 |
| 42 | Small-Angle X-Ray Scattering to Characterize Nanostructures in Inorganic and Hybrid Materials Chemistry. Monatshefte FÂ¼r Chemie, 2006, 137, 529-543. | 0.9 | 42 |
| 43 | Synthesis and Properties of Highly Dispersed Ionic Silicaâ€"Poly(ethylene oxide) Nanohybrids. ACS Nano, 2013, 7, 1265-1271. | 7.3 | 41 |
| 44 | Cellular mesoscopically organized silica monoliths with tailored surface chemistry by one-step drying/extraction/surface modification processes. Journal of Materials Chemistry, 2005, 15, 1801. | 6.7 | 40 |
| 45 | Fracture anisotropy in texturized lithium disilicate glass-ceramics. Journal of Non-Crystalline Solids, 2018, 481, 457-469. | 1.5 | 39 |
| 46 | Pore structure of carbon/carbon composites studied by small-angle X-ray scattering. Carbon, 1994, 32, 939-945. | 5.4 | 38 |
| 47 | The internal structure of single carbon fibers determined by simultaneous small- and wide-angle scattering. Journal of Applied Crystallography, 2000, 33, 695-699. | 1.9 | 36 |
| 48 | Orientation dependent fracture toughness of lamellar bone. International Journal of Fracture, 2006, 139, 395-405. | 1.1 | 34 |
| 49 | Determination of interface parameters for carbon/carbon composites by the fibre-bundle pull-out test. Composites Science and Technology, 1996, 56, 1017-1029. | 3.8 | 32 |
| 50 | Effect of hot stretching graphitization on the structure and mechanical properties of rayon-based carbon fibers. Journal of Materials Science, 2014, 49, 673-684. | 1.7 | 32 |
| 51 | Bimodal strength distributions and flaw populations of ceramics and fibres. Engineering Fracture Mechanics, 2001, 68, 253-261. | 2.0 | 31 |
| 52 | Experimental validation of the shear correction factor. Journal of Sound and Vibration, 2003, 261, 177-184. | 2.1 | 31 |
| 53 | Preparation of mesoporous titania by surfactant-assisted solâ€"gel processing of acetaldoxime-modified titanium alkoxides. Journal of Non-Crystalline Solids, 2010, 356, 1217-1227. | 1.5 | 30 |
| 54 | Liquid-phase syntheses of cobalt ferrite nanoparticles. Journal of Nanoparticle Research, 2012, 14, 1. | 0.8 | 30 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Structural flexibility of RNA as molecular basis for Hfq chaperone function. Nucleic Acids Research, 2012, 40, 8072-8084. | 6.5 | 29 |
| 56 | Reaction of bone nanostructure to a biodegrading Magnesium WZ21 implant â€“ A scanning small-angle X-ray scattering time study. Acta Biomaterialia, 2016, 31, 448-457. | 4.1 | 29 |
| 57 | Title is missing!. Journal of Materials Science, 2000, 35, 699-705. | 1.7 | 26 |
| 58 | Mechanical, thermomechanical, and thermal properties of polystyrene crosslinked with a multifunctional zirconium oxo cluster. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 2215-2231. | 2.4 | 26 |
| 59 | Atomistic Structure of Monomolecular Surface Layer Self-Assemblies: Toward Functionalized Nanostructures. ACS Nano, 2011, 5, 2288-2297. | 7.3 | 26 |
| 60 | Surface modification of MoS2 nanoparticles with ionic liquidâ€“ligands: towards highly dispersed nanoparticles. Chemical Communications, 2013, 49, 9311. | 2.2 | 26 |
| 61 | Effect of surface roughness on friction in fibre-bundle pull-out tests. Composites Science and Technology, 2005, 65, 981-988. | 3.8 | 25 |
| 62 | Anion metathesis in ionic silicananoparticle networks. Journal of Materials Chemistry, 2010, 20, 1269-1276. | 6.7 | 25 |
| 63 | Different Synthesis Protocols for Co<sub>3</sub>O<sub>4</sub>â€“CeO<sub>2</sub> Catalystsâ€”Partâ€…1: Influence on the Morphology on the Nanoscale. Chemistry - A European Journal, 2015, 21, 885-892. | 1.7 | 24 |
| 64 | Cross-sectional texture of carbon fibres analysed by scanning microbeam X-ray diffraction. Journal of Applied Crystallography, 2001, 34, 473-479. | 1.9 | 23 |
| 65 | Nickel clusters embedded in carbon nanotubes as high performance magnets. Scientific Reports, 2015, 5, 15033. | 1.6 | 23 |
| 66 | Investigation of microemulsion microstructure and its impact on skin delivery of flufenamic acid. International Journal of Pharmaceutics, 2015, 490, 292-297. | 2.6 | 23 |
| 67 | Non-contacting strain measurements of ceramic and carbon single fibres by using the laser-speckle method. Composites Part A: Applied Science and Manufacturing, 2003, 34, 1029-1033. | 3.8 | 22 |
| 68 | Asymmetric polysilazane-derived ceramic structures with multiscalar porosity for membrane applications. Microporous and Mesoporous Materials, 2016, 232, 196-204. | 2.2 | 22 |
| 69 | Elastic moduli and interlaminar shear strength of a bidirectional carboncarbon composite after heat treatment. Composites Science and Technology, 1995, 53, 7-12. | 3.8 | 21 |
| 70 | Inhomogeneity ofC13isotope distribution in isotope engineered carbon nanotubes: Experiment and theory. Physical Review B, 2007, 75, . | 1.1 | 21 |
| 71 | Polyareneâ€Functionalized Fullerenes in Carbon Nanotubes: Towards Controlled Geometry of Molecular Chains. Small, 2008, 4, 2262-2270. | 5.2 | 21 |
| 72 | Keratin homogeneity in the tail feathers of Pavo cristatus and Pavo cristatus mut. alba. Journal of Structural Biology, 2010, 172, 270-275. | 1.3 | 21 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Novel Solâ€“Gel Precursors for Thin Mesoporous Eu3+-Doped Silica Coatings as Efficient Luminescent Materials.. Chemistry of Materials, 2012, 24, 3674-3683. | 3.2 | 21 |
| 74 | Study of the effect of the concentration, size and surface chemistry of zirconia and silica nanoparticle fillers within an epoxy resin on the bulk properties of the resulting nanocomposites. Polymer International, 2012, 61, 274-285. | 1.6 | 21 |
| 75 | Nanoparticles/Ionic Linkers of Different Lengths: Short-Range Order Evidenced by Small-Angle X-ray Scattering. Journal of Physical Chemistry C, 2009, 113, 6547-6552. | 1.5 | 20 |
| 76 | Structure and mechanical properties of carbon fibres: a review of recent microbeam diffraction studies with synchrotron radiation. Journal of Synchrotron Radiation, 2005, 12, 758-764. | 1.0 | 19 |
| 77 | Photoluminescence as Complementary Evidence for Short-Range Order in Ionic Silica Nanoparticle Networks. Journal of Physical Chemistry C, 2010, 114, 21342-21347. | 1.5 | 19 |
| 78 | Designing melt flow of poly(isobutylene)-based ionic liquids. Journal of Materials Chemistry A, 2013, 1, 12159. | 5.2 | 19 |
| 79 | Cycle Stability and Hydration Behavior of Magnesium Oxide and Its Dependence on the Precursor-Related Particle Morphology. Nanomaterials, 2018, 8, 795. | 1.9 | 19 |
| 80 | Exchange coupling in a frustrated trimetric molecular magnet reversed by a 1D nano-confinement. Nanoscale, 2019, 11, 10615-10621. | 2.8 | 19 |
| 81 | Relationships between fracture toughness, Y2O3 fraction and phases content in modern dental Yttria-doped zirconias. Journal of the European Ceramic Society, 2021, 41, 7771-7782. | 2.8 | 19 |
| 82 | Structural Investigations on Hybrid Polymers Suitable as a Nanoparticle Precipitation Environment. Chemistry of Materials, 2009, 21, 695-705. | 3.2 | 18 |
| 83 | Surface layer protein characterization by small angle x-ray scattering and a fractal mean force concept: From protein structure to nanodisk assemblies. Journal of Chemical Physics, 2010, 133, 175102. | 1.2 | 18 |
| 84 | Solâ€“gel synthesis of ZnTiO3 using a single-source precursor based on p-carboxybenzaldehyde oxime as a linker. Journal of Materials Chemistry, 2012, 22, 24034. | 6.7 | 18 |
| 85 | Ageing bone fractures: The case of a ductile to brittle transition that shifts with age. Bone, 2020, 131, 115176. | 1.4 | 18 |
| 86 | Structural investigation of alumina silica mixed oxide gels prepared from organically modified precursors. Journal of Non-Crystalline Solids, 2007, 353, 1635-1644. | 1.5 | 17 |
| 87 | Controlling intermolecular spin interactions of La@C82 in empty fullerene matrices. Physical Chemistry Chemical Physics, 2010, 12, 1618. | 1.3 | 17 |
| 88 | Nanoparticle Assemblies as Probes for Self-Assembled Monolayer Characterization: Correlation between Surface Functionalization and Agglomeration Behavior. Langmuir, 2012, 28, 741-750. | 1.6 | 17 |
| 89 | Microcracks and Osteoclast Resorption Activity In Vitro. Calcified Tissue International, 2012, 90, 230-238. | 1.5 | 17 |
| 90 | Comparison of evaluation procedures for the subcritical crack growth parameter n. Journal of the European Ceramic Society, 1994, 13, 509-519. | 2.8 | 16 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Relationship of Strength and Defects of Ceramic Materials and Their Treatment by Weibull Theory.. Journal of the Ceramic Society of Japan, 2001, 109, S121-S126. | 1.3 | 16 |
| 92 | Characterizing the Sâ€layer structure and antiâ€Sâ€layer antibody recognition on intact Tannerella forsythia cells by scanning probe microscopy and small angle Xâ€ray scattering. Journal of Molecular Recognition, 2013, 26, 542-549. | 1.1 | 16 |
| 93 | Formation of RuO2 nanoparticles by thermal decomposition of Ru(NO)(NO3)3. Ceramics International, 2015, 41, 7811-7815. | 2.3 | 16 |
| 94 | Title is missing!. Journal of Materials Science, 2000, 35, 707-711. | 1.7 | 15 |
| 95 | Small-angle X-ray scattering investigation of the cluster distribution in inorganicâ€“organic hybrid polymers prepared from organically substituted metal oxide clusters. Comptes Rendus Chimie, 2004, 7, 495-502. | 0.2 | 15 |
| 96 | Identifying the electron spin resonance of conduction electrons in alkali doped SWCNTs. Physica Status Solidi (B): Basic Research, 2009, 246, 2760-2763. | 0.7 | 15 |
| 97 | Studies on the Formation of CdS Nanoparticles from Solutions of (NMe<sub>4</sub>)<sub>4</sub>[Cd<sub>10</sub>S<sub>4</sub>(SPh)<sub>16</sub>]. European Journal of Inorganic Chemistry, 2010, 2010, 2266-2275. | 1.0 | 15 |
| 98 | Inorganicâ€“organic hybrid materials through post-synthesis modification: Impact of the treatment with azides on the mesopore structure. Beilstein Journal of Nanotechnology, 2011, 2, 486-498. | 1.5 | 15 |
| 99 | Timescales of self-healing in human bone tissue and polymeric ionic liquids. Bioinspired, Biomimetic and Nanobiomaterials, 2014, 3, 123-130. | 0.7 | 15 |
| 100 | Potassium intercalated multiwalled carbon nanotubes. Carbon, 2016, 105, 90-95. | 5.4 | 15 |
| 101 | Carbon Nano-onions: Potassium Intercalation and Reductive Covalent Functionalization. Journal of the American Chemical Society, 2021, 143, 18997-19007. | 6.6 | 15 |
| 102 | Hutchinson's shear coefficient for anisotropic beams. Journal of Sound and Vibration, 2003, 266, 207-216. | 2.1 | 14 |
| 103 | A new fibre-bundle pull-out test to determine interface properties of a 2D-woven carbon/carbon composite. Composites Science and Technology, 2003, 63, 653-660. | 3.8 | 14 |
| 104 | Epoxy Resin Nanocomposites: The Influence of Interface Modification on the Dispersion Structureâ€”A Small-Angle-X-ray-Scattering Study. Surfaces, 2020, 3, 664-682. | 1.0 | 14 |
| 105 | The dependence of the elastic moduli of reaction bonded alumina on porosity. Journal of the European Ceramic Society, 2007, 27, 35-39. | 2.8 | 13 |
| 106 | Variation of the crosslinking density in cluster-reinforced polymers. Materials Today Communications, 2015, 5, 10-17. | 0.9 | 13 |
| 107 | Influence of DVB as linker molecule on the micropore formation in polymer-derived SiCN ceramics. Journal of the European Ceramic Society, 2021, 41, 3292-3302. | 2.8 | 13 |
| 108 | Size independence of the strength of snow. Physical Review E, 2004, 69, 011306. | 0.8 | 12 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | Nanostructure of Gel-Derived Aluminosilicate Materials. Langmuir, 2008, 24, 949-956. | 1.6 | 12 |
| 110 | Structural transformations of heat-treated bacterial iron oxide. Materials Chemistry and Physics, 2015, 155, 67-75. | 2.0 | 12 |
| 111 | Exploring the Formation of Black Phosphorus Intercalation Compounds with Alkali Metals. Angewandte Chemie, 2017, 129, 15469-15475. | 1.6 | 12 |
| 112 | Calcium Doping Facilitates Water Dissociation in Magnesium Oxide. Advanced Sustainable Systems, 2018, 2, 1700096. | 2.7 | 12 |
| 113 | GitterÃ¶ffnung durch reduktive kovalente Volumenâ€Funktionalisierung von schwarzem Phosphor. Angewandte Chemie, 2019, 131, 5820-5826. | 1.6 | 12 |
| 114 | Biphenyl-Bridged Organosilica as a Precursor for Mesoporous Silicon Oxycarbide and Its Application in Lithium and Sodium Ion Batteries. Nanomaterials, 2019, 9, 754. | 1.9 | 12 |
| 115 | Mesoporous dendrimer silica monoliths studied by small-angle X-ray scattering. Journal of Materials Chemistry, 2008, 18, 4783. | 6.7 | 11 |
| 116 | Atom Transfer Radical Polymerizations of Complexes Based on Ti and Zr Alkoxides Modified with Î²-Keto Ester Ligands and Transformation of the Resulting Polymers in Nanocomposites. Macromolecules, 2008, 41, 1131-1139. | 2.2 | 11 |
| 117 | Organosilica Monoliths with Multiscale Porosity: Detailed Investigation of the Influence of the Surfactant on Structure Formation. Silicon, 2009, 1, 19-28. | 1.8 | 11 |
| 118 | Supported and Free-Standing Sulfonic Acid Functionalized Mesostructured Silica Films with High Proton Conductivity. European Journal of Inorganic Chemistry, 2010, 2010, 3993-3999. | 1.0 | 11 |
| 119 | The structural evolution of multi-layer graphene stacks in carbon fibers under load at high temperature â€“ A synchrotron radiation study. Carbon, 2014, 80, 373-381. | 5.4 | 11 |
| 120 | A detailed comparison of CVD grown and precursor based DWCNTs. Physica Status Solidi (B): Basic Research, 2008, 245, 1943-1946. | 0.7 | 10 |
| 121 | Batch-wise adsorption, saxs and microscopic studies of zeolite pelletized with biopolymeric alginate. Brazilian Journal of Chemical Engineering, 2011, 28, 63-71. | 0.7 | 10 |
| 122 | Surface-Active Ionic Liquids in Catalytic Water Splitting. Australian Journal of Chemistry, 2019, 72, 34. | 0.5 | 10 |
| 123 | In-situ small angle X-ray scattering (SAXS) â€“ A versatile tool for clarifying the evolution of microporosity in polymer-derived ceramics. Microporous and Mesoporous Materials, 2021, 324, 111268. | 2.2 | 10 |
| 124 | Structure investigation of intelligent aerogels. Physica B: Condensed Matter, 2000, 276-278, 392-393. | 1.3 | 9 |
| 125 | Organically modified mixed-oxide solâ€“gel films with complex compositions and pore structures. Journal of Materials Chemistry, 2009, 19, 75-81. | 6.7 | 9 |
| 126 | Electron spin resonance from semiconductorâ€“metal separated SWCNTs. Physica Status Solidi (B): Basic Research, 2010, 247, 2851-2854. | 0.7 | 9 |

| # | Article | IF | Citations |
|---|---|---|---|
| 127 | Porous Titania Ionic Nanoparticle Networks. Langmuir, 2011, 27, 4110-4116. | 1.6 | 9 |
| 128 | Strategies for the covalent conjugation of a bifunctional chelating agent to albumin: Synthesis and characterization of potential MRI contrast agents. Journal of Inorganic Biochemistry, 2011, 105, 250-255. | 1.5 | 9 |
| 129 | Small-Angle X-Ray Scattering for Imaging of Surface Layers on Intact Bacteria in the Native Environment. Journal of Bacteriology, 2013, 195, 2408-2414. | 1.0 | 9 |
| 130 | Porous titanium and zirconium oxo carboxylates at the interface between solâ€“gel and metalâ€“organic framework structures. Dalton Transactions, 2014, 43, 950-957. | 1.6 | 9 |
| 131 | Hierarchically Organized Silicaâ€“Titania Monoliths Prepared under Purely Aqueous Conditions. Chemistry - A European Journal, 2014, 20, 17409-17419. | 1.7 | 9 |
| 132 | Ovalbumin Epitope SIINFEKL Self-Assembles into a Supramolecular Hydrogel. Scientific Reports, 2019, 9, 2696. | 1.6 | 9 |
| 133 | Uniformly oriented, ellipsoidal nanovoids in glass created by electric-field-assisted dissolution of metallic nanoparticles. Physical Review B, 2009, 79, . | 1.1 | 8 |
| 134 | Meso-scale mechanical testing methods for diamond composite materials. International Journal of Refractory Metals and Hard Materials, 2010, 28, 508-515. | 1.7 | 8 |
| 135 | Various Three-Dimensional Structures Connected by Alâ€“O/OH/Acetateâ€“Al Bonds. Inorganic Chemistry, 2013, 52, 13238-13243. | 1.9 | 8 |
| 136 | Self-supporting hierarchically organized silicon networks via magnesiothermic reduction. Monatshefte FÃ¼r Chemie, 2016, 147, 269-278. | 0.9 | 8 |
| 137 | Toughening by revitrification of Li2SiO3 crystals in ObsidianÂ® dental glass-ceramic. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 124, 104739. | 1.5 | 8 |
| 138 | Transverse expansion of 2-D carbon/carbon laminates as a consequence of delamination. Composites Science and Technology, 1992, 45, 65-72. | 3.8 | 7 |
| 139 | Elastic Moduli of Porous and Anisotropic Composites at High Temperatures. Advanced Engineering Materials, 2004, 6, 138-142. | 1.6 | 7 |
| 140 | Extension of the resonant beam technique to highly anisotropic materials. Journal of Sound and Vibration, 2005, 279, 1121-1129. | 2.1 | 7 |
| 141 | Polyester Preparation in the Presence of Pristine and Phosphonicâ€Acidâ€Modified Zirconia Nanopowders. Macromolecular Materials and Engineering, 2012, 297, 219-227. | 1.7 | 7 |
| 142 | Crystallization in segregated supramolecular pseudoblock copolymers. European Polymer Journal, 2015, 64, 138-146. | 2.6 | 7 |
| 143 | The formation of ZnO nanoparticles from zinc gluconate. Ceramics International, 2015, 41, 4975-4981. | 2.3 | 7 |
| 144 | Hierarchically organized silica monoliths: influence of different acids on macro- and mesoporous formation. Journal of Sol-Gel Science and Technology, 2015, 73, 103-111. | 1.1 | 7 |

| # | Article | IF | Citations |
|---|---|---|---|
| 145 | Viscoelastic effects in testing of an Al2O3 ceramic containing a glassy phase. Journal of Materials Science, 1993, 28, 4341-4346. | 1.7 | 6 |
| 146 | Changing poissonâ€™s ratio of mesoporous silica monoliths with high temperature treatment. Journal of Non-Crystalline Solids, 2006, 352, 5251-5256. | 1.5 | 6 |
| 147 | Growth mechanisms of innerâ€shell tubes in doubleâ€wall carbon nanotubes. Physica Status Solidi (B): Basic Research, 2007, 244, 4097-4101. | 0.7 | 6 |
| 148 | The structure of carbon fibres. , 2009, , 353-377. | | 6 |
| 149 | Titanium alkoxo oximates, with surfactant-like properties of the oximate ligands, as precursors for porous TiO2 and mixed oxide solâ€“gel films. Journal of Materials Chemistry, 2010, 20, 5527. | 6.7 | 6 |
| 150 | Engineering molecular chains in carbon nanotubes. Nanoscale, 2012, 4, 7540. | 2.8 | 6 |
| 151 | Toward Synthesis and Characterization of Unconventional C<sub>66</sub> and C<sub>68</sub> Fullerenes inside Carbon Nanotubes. Journal of Physical Chemistry C, 2014, 118, 30260-30268. | 1.5 | 6 |
| 152 | Silaffinâ€Inspired Peptide Assemblies Template Silica Particles with Variable Morphologies. ChemNanoMat, 2018, 4, 1209-1213. | 1.5 | 6 |
| 153 | Porosity at Different Structural Levels in Human and Yak Belly Hair and Its Effect on Hair Dyeing. Molecules, 2020, 25, 2143. | 1.7 | 6 |
| 154 | FTâ€Raman characterization of the antipodal bisâ€adduct of C<sub>60</sub> and anthracene. Physica Status Solidi (B): Basic Research, 2009, 246, 2794-2797. | 0.7 | 5 |
| 155 | Ferromagnetic decoration in metalâ€“semiconductor separated and ferrocene functionalized singleâ€walled carbon nanotubes. Physica Status Solidi (B): Basic Research, 2012, 249, 2323-2327. | 0.7 | 5 |
| 156 | Irreversible thermochromism in copper chloride Imidazolium Nanoparticle Networks. Physical Chemistry Chemical Physics, 2013, 15, 12717. | 1.3 | 5 |
| 157 | SAXS studies on silica nanoparticle aggregation in a humid atmosphere. Journal of Nanoparticle Research, 2014, 16, 1. | 0.8 | 5 |
| 158 | Nucleophilic substitution on silica surfaces: Comparison of the reactivity of α- versus γ-chlorosubstituted silanes in the reaction with sodium azide. Journal of the Ceramic Society of Japan, 2015, 123, 764-769. | 0.5 | 5 |
| 159 | Ordered meso-/macroporous silica and titania films by breath figure templating in combination with non-hydrolytic solâ€“gel processing. Microporous and Mesoporous Materials, 2015, 217, 233-243. | 2.2 | 5 |
| 160 | HamiltonReceptorâ€Mediated Selfâ€Assembly of Orthogonally Functionalized Au and TiO2Nanoparticles. Helvetica Chimica Acta, 2019, 102, e1900015. | 1.0 | 5 |
| 161 | Crack bridging stresses in alumina during crack extension. Journal of Materials Science Letters, 2001, 20, 1703-1705. | 0.5 | 4 |
| 162 | Suppression of Crazing in Polystyrene Crosslinked with a Multifunctional Zirconium Oxo Cluster Observed In Situ during Tensile Tests. Macromolecular Rapid Communications, 2007, 28, 2145-2150. | 2.0 | 4 |

| # | Article | IF | Citations |
|---|---|---|---|
| 163 | Tailoring Photoluminescence Properties in Ionic Nanoparticle Networks. Chemistry - A European Journal, 2014, 20, 10763-10774. | 1.7 | 4 |
| 164 | Hierarchically Mesostructured Polyisobutyleneâ€Based Ionic Liquids. Macromolecular Rapid Communications, 2016, 37, 1175-1180. | 2.0 | 4 |
| 165 | Brittle fracture of samples cycled in the ultrasonic test system. Part IIâ€"Experimental results. Applied Acoustics, 1989, 26, 85-98. | 1.7 | 3 |
| 166 | Viscoelasticity of ceramics at high temperatures. Journal of Materials Science, 1994, 29, 2401-2405. | 1.7 | 3 |
| 167 | Microcracks in Carbon/Carbon Composites: A Microtomography Investigation using Synchrotron Radiation. Materials Research Society Symposia Proceedings, 2001, 678, 381. | 0.1 | 3 |
| 168 | Evaluation of Surface Preparation Techniques, SFG: Swing Frame Grinding and LPG: Low-Temperature Precision Grinding, by Comparison of Results on Alumnia and Silicon Carbide Model Materials. Key Engineering Materials, 2002, 223, 139-148. | 0.4 | 3 |
| 169 | Measurement of shear lag parameter Î² for a fibre bundle pull-out geometry. Composites Science and Technology, 2004, 64, 65-70. | 3.8 | 3 |
| 170 | Covalent Embedding of Ni<sup>2+</sup>/Fe<sup>3+</sup> Cyanometallate Structures in Silica by Solâ€"Gel Processing. Chemistry - A European Journal, 2014, 20, 9212-9215. | 1.7 | 3 |
| 171 | Crystalline meso-/macroporous magnesium oxide prepared by a nanocasting route. Journal of Supercritical Fluids, 2019, 152, 104549. | 1.6 | 3 |
| 172 | Controlling the Formation of Sodium/Black Phosphorus IntercalationCompounds Towards High Sodium Content. Batteries and Supercaps, 2021, 4, 1304-1309. | 2.4 | 3 |
| 173 | Brittle fracture of samples cycled in the ultrasonic test system. Part Iâ€"A basic model. Applied Acoustics, 1989, 26, 9-24. | 1.7 | 2 |
| 174 | Comment on â€œRelationship between the Estimated Weibull Modulus and the Coefficient of Variation of the Measured Strength for Ceramicsâ€• Journal of the American Ceramic Society, 2000, 83, 1013-1014. | 1.9 | 2 |
| 175 | Structural investigation of carbon/carbon composites by neutron scattering. Physica B: Condensed Matter, 2006, 385-386, 538-541. | 1.3 | 2 |
| 176 | Crosslinked hybrid polymer matrices with nanostructure directing abilities for lanthanum hydroxide growth. Chemical Communications, 2009, , 5564. | 2.2 | 2 |
| 177 | A new approach to control the dispersion of platinum nanoparticles in a metal oxide coating. Polyhedron, 2010, 29, 569-573. | 1.0 | 2 |
| 178 | Raman response from doubleâ€wall carbon nanotubes based on metallicity selected host SWCNTs. Physica Status Solidi (B): Basic Research, 2010, 247, 2880-2883. | 0.7 | 2 |
| 179 | Pitfalls of determining the elastic properties of stabilized zirconia with indentation methods. Ceramics International, 2019, 45, 9491-9496. | 2.3 | 2 |
| 180 | Green hydrothermal synthesis yields perylenebisimideâ€“SiO<sub>2</sub> hybrid materials with solution-like fluorescence and photoredox activity. Journal of Materials Chemistry A, 2022, 10, 12817-12831. | 5.2 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 181 | Ejection velocities of brittle materials fracturing during the ultrasonic fatigue test. Applied Acoustics, 1991, 32, 243-251. | 1.7 | 1 |
| 182 | ON THE DETERMINATION OF ELASTIC MODULI WITH BRITTLE MATRIX COMPOSITES. , 2003, , 389-400. | | 1 |
| 183 | Inorganic-Organic Hybrid Hierarchically Structured Methyl-modified Silica Monoliths. Materials Research Society Symposia Proceedings, 2004, 847, 320. | 0.1 | 1 |
| 184 | Porous Silicaâ€Based Mixed Oxides with Basic Organic Sites. European Journal of Inorganic Chemistry, 2012, 2012, 5207-5215. | 1.0 | 1 |
| 185 | SAXS and in-situ SAXS to follow the structural evolution in hybrid materials. Materials Research Society Symposia Proceedings, 2015, 1754, 3-11. | 0.1 | 1 |
| 186 | Micro-/Mesoporous Polymer-Derived Ceramic Structures Using Molecular Porogens. Key Engineering Materials, 0, 742, 310-316. | 0.4 | 1 |
| 187 | Ni2+â€“Fe3+ cyanometallate structures covalently embedded in silica: Influence of the blocking ligand at Ni2+. Inorganica Chimica Acta, 2019, 487, 456-464. | 1.2 | 1 |
| 188 | Electrochromic 2,5â€Dihydroxyterephthalic Acid Linker in Metalâ^'Organic Frameworks. Advanced Photonics Research, 0, , 2100219. | 1.7 | 1 |
| 189 | Crack motion and hydrodynamic flow. International Journal of Fracture, 1992, 54, 101-116. | 1.1 | 0 |
| 190 | Quantum oscillations for the spectral moments of Raman spectra from SWCNT. AIP Conference Proceedings, 2001, , . | 0.3 | 0 |
| 191 | Structure of Post-Creep Carbon Fibres. Key Engineering Materials, 2005, 290, 268-271. | 0.4 | 0 |
| 192 | Determination of Elastic Modules in Dependence on Orientation by the Resonant Beam Technique. Materials Science Forum, 2006, 514-516, 815-824. | 0.3 | 0 |
| 193 | The effects of inhomogeneous isotope distribution on the vibrational properties of isotope enriched double walled carbon nanotubes. Physica Status Solidi (B): Basic Research, 2007, 244, 4257-4260. | 0.7 | 0 |
| 194 | Tuning the Pore Size in Ionic Nanoparticle Networks. Journal of Nanoparticles, 2013, 2013, 1-9. | 1.4 | 0 |
| 195 | Characterizing the Cell Surface Structure and Antibody Recognition Forces on Intact Microbial Cells using Scanning Probe Microscopy. Biophysical Journal, 2014, 106, 511a-512a. | 0.2 | 0 |
| 196 | Development of a Liquid Formulation for Proteins for Long Time Storage. Biophysical Journal, 2014, 106, 618a. | 0.2 | 0 |
| 197 | Thermochemical Energy Storage: Calcium Doping Facilitates Water Dissociation in Magnesium Oxide (Adv. Sustainable Syst. 1/2018). Advanced Sustainable Systems, 2018, 2, 1870004. | 2.7 | 0 |
| 198 | High Temperature Behaviour of Ceramic Foams from Si/Sic-Filled Preceramic Polymers. Ceramic Engineering and Science Proceedings, 0, , 465-470. | 0.1 | 0 |