# Seiichi Takami

List of Publications by Year
in descending order



| 190 | 4,794 | 109137 | 123241 |
|---|---|---|---|
| papers | citations | 35 h-index | 61 g-index |

| 193 | 193 | 193 | 5225 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Green materials synthesis with supercritical water. Green Chemistry, 2011, 13, 1380. | 4.6 | 267 |
| 2 | Extra-Low-Temperature Oxygen Storage Capacity of CeO<sub>2</sub>Nanocrystals with Cubic Facets. Nano Letters, 2011, 11, 361-364. | 4.5 | 222 |
| 3 | Bioassisted Room-Temperature Immobilization and Mineralization of Zinc Oxideâ€”The Structural Ordering of ZnO Nanoparticles into a Flower-Type Morphology. Advanced Materials, 2005, 17, 2571-2575. | 11.1 | 217 |
| 4 | Disassembly of lignin and chemical recoveryâ€”rapid depolymerization of lignin without char formation in waterâ€“phenol mixtures. Fuel Processing Technology, 2004, 85, 803-813. | 3.7 | 172 |
| 5 | Surface-Initiated Ring-Opening Metathesis Polymerization on Si/SiO2. Macromolecules, 2000, 33, 2793-2795. | 2.2 | 141 |
| 6 | SUPERCRITICAL WATER TREATMENT OF BIOMASS FOR ENERGY AND MATERIAL RECOVERY. Combustion Science and Technology, 2006, 178, 509-536. | 1.2 | 138 |
| 7 | A Quantum Molecular Dynamics Simulation Study of the Initial Hydrolysis Step in Solâˆ’Gel Process. Journal of Physical Chemistry B, 2003, 107, 1518-1524. | 1.2 | 115 |
| 8 | Hydrothermal synthesis of surface-modified iron oxide nanoparticles. Materials Letters, 2007, 61, 4769-4772. | 1.3 | 111 |
| 9 | Surfactant-assisted one-pot synthesis of superparamagnetic magnetite nanoparticle clusters with tunable cluster size and magnetic field sensitivity. Dalton Transactions, 2011, 40, 1073-1078. | 1.6 | 93 |
| 10 | Enhanced optical properties of metalâ€coated nanoparticles. Journal of Applied Physics, 1993, 73, 1043-1048. | 1.1 | 92 |
| 11 | Growth Mechanism and Surface Chemical Characteristics of Dicarboxylic Acid-Modified CeO<sub>2</sub> Nanocrystals Produced in Supercritical Water: Tailor-Made Water-Soluble CeO<sub>2</sub> Nanocrystals. Crystal Growth and Design, 2009, 9, 5297-5303. | 1.4 | 88 |
| 12 | Catalytic Cracking Reaction of Heavy Oil in the Presence of Cerium Oxide Nanoparticles in Supercritical Water. Energy & Fuels, 2013, 27, 4624-4631. | 2.5 | 88 |
| 13 | Hydrothermal synthesis of fine zinc oxide particles under supercritical conditions. Solid State Ionics, 2004, 172, 261-264. | 1.3 | 79 |
| 14 | Hydrothermal synthesis and in situ surface modification of boehmite nanoparticles in supercritical water. Journal of Supercritical Fluids, 2007, 40, 397-401. | 1.6 | 79 |
| 15 | Continuous synthesis of fine MgFe2O4 nanoparticles by supercritical hydrothermal reaction. Journal of Supercritical Fluids, 2010, 53, 92-94. | 1.6 | 78 |
| 16 | Atomicâ€Scale Valence State Distribution inside Ultrafine CeO<sub>2</sub> Nanocubes and Its Size Dependence. Small, 2018, 14, e1802915. | 5.2 | 77 |
| 17 | Crystal size and magnetic field effects in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Co</mml:mtext></mml:mrow><mml:mn>3</mml:mn></mml:msu nanocrystals. Physical Review B, 2009, 79, . | 1.1 | 76 |
| 18 | Supercritical hydrothermal synthesis of hydrophilic polymer-modified water-dispersible CeO<sub>2</sub>nanoparticles. CrystEngComm, 2011, 13, 2841-2848. | 1.3 | 72 |

| # | Article | IF | Citations |
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| 19 | Supercritical hydrothermal synthesis of organic-inorganic hybrid nanoparticles. Journal of Materials Science, 2006, 41, 1445-1448. | 1.7 | 71 |
| 20 | Titanium peroxide nanoparticles enhanced cytotoxic effects of X-ray irradiation against pancreatic cancer model through reactive oxygen species generation in vitro and in vivo. Radiation Oncology, 2016, 11, 91. | 1.2 | 67 |
| 21 | Periodic density-functional study on oxidation of diamond (100) surfaces. Physical Review B, 2000, 61, 11025-11033. | 1.1 | 55 |
| 22 | Disassembly of lignin and chemical recovery in supercritical water and p-cresol mixture. Bioresource Technology, 2008, 99, 1846-1852. | 4.8 | 55 |
| 23 | Theoretical Investigation on Functionalization of Alkanes by a Rhodium Complex Catalyst. Organometallics, 2002, 21, 3703-3708. | 1.1 | 54 |
| 24 | Continuous synthesis of organicâ€“inorganic hybridized cubic nanoassemblies of octahedral cerium oxide nanocrystals and hexanedioic acid. Dalton Transactions, 2008, , 5442. | 1.6 | 51 |
| 25 | Electronic structures and spectroscopic properties of dimers Cu2, Ag2, and Au2 calculated by density functional theory. Computational and Theoretical Chemistry, 2002, 579, 221-227. | 1.5 | 47 |
| 26 | Supercritical hydrothermal synthesis of metallic cobalt nanoparticles and its thermodynamic analysis. Journal of Supercritical Fluids, 2011, 60, 113-120. | 1.6 | 47 |
| 27 | Synthesis of surface-modified monoclinic ZrO2 nanoparticles using supercritical water. CrystEngComm, 2012, 14, 2132. | 1.3 | 44 |
| 28 | Efficient conversion of lignin into single chemical species by solvothermal reaction in waterâ€“p-cresol solvent. Journal of Physics Condensed Matter, 2004, 16, S1325-S1330. | 0.7 | 42 |
| 29 | Simple and rapid synthesis of ZrO2 nanoparticles from Zr(OEt)4 and Zr(OH)4 using a hydrothermal method. CrystEngComm, 2012, 14, 2117. | 1.3 | 41 |
| 30 | Quantum Chemical Molecular Dynamics Simulation of the Plasma Etching Processes. Japanese Journal of Applied Physics, 2003, 42, 1859-1864. | 0.8 | 40 |
| 31 | Development of New Tight-Binding Molecular Dynamics Program to Simulate Chemical-Mechanical Polishing Processes. Japanese Journal of Applied Physics, 2002, 41, 2410-2413. | 0.8 | 39 |
| 32 | Homogenous Spherical Mosslike Assembly of Pd Nanoparticles by using DNA Compaction: Application of Pdâ€“DNA Hybrid Materials to Volumeâ€Expansion Hydrogen Switches. Advanced Materials, 2008, 20, 1122-1128. | 11.1 | 39 |
| 33 | First-principle study on reactions of diamond (100) surfaces with hydrogen and methyl radicals. Physical Review B, 2000, 62, 16995-17003. | 1.1 | 37 |
| 34 | Combinatorial computational chemistry approach to the design of deNOx catalysts. Applied Catalysis A: General, 2000, 194-195, 183-191. | 2.2 | 36 |
| 35 | Continuous hydrothermal synthesis of nickel oxide nanoplates and their use as nanoinks for p-type channel material in a bottom-gate field-effect transistor. Nanotechnology, 2010, 21, 134009. | 1.3 | 36 |
| 36 | Synthesis of monocarboxylic acid-modified CeO<sub>2</sub> nanoparticles using supercritical water. RSC Advances, 2014, 4, 49605-49613. | 1.7 | 36 |

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| 37 | Ring Opening of Methylenecyclopropane over Lanthanocene Catalyst:â€‰ A Quantum-Chemical Molecular Dynamics Simulation Study. Organometallics, 2003, 22, 2181-2183. | 1.1 | 35 |
| 38 | Direct and Selective Immobilization of Proteins by Means of an Inorganic Material-Binding Peptide: Discussion on Functionalization in the Elongation to Material-Binding Peptide. Journal of Physical Chemistry B, 2010, 114, 480-486. | 1.2 | 35 |
| 39 | Rapid and continuous synthesis of cobalt aluminate nanoparticles under subcritical hydrothermal conditions with in-situ surface modification. Chemical Engineering Science, 2013, 85, 50-54. | 1.9 | 35 |
| 40 | Combinatorial computational chemistry approach as a promising method for design of Fischerâ€“Tropsch catalysts based on Fe and Co. Applied Surface Science, 2002, 189, 245-252. | 3.1 | 34 |
| 41 | Material-binding peptide applicationâ€”ZnO crystal structure control by means of a ZnO-binding peptide. Journal of Bioscience and Bioengineering, 2011, 111, 140-145. | 1.1 | 34 |
| 42 | Continuous hydrothermal synthesis of 3,4-dihydroxyhydrocinnamic acid-modified magnetite nanoparticles with stealth-functionality against immunological response. Journal of Materials Chemistry, 2012, 22, 9041. | 6.7 | 33 |
| 43 | Kinetics study to identify reaction-controlled conditions for supercritical hydrothermal nanoparticle synthesis with flow-type reactors. Journal of Supercritical Fluids, 2016, 110, 161-166. | 1.6 | 31 |
| 44 | Structural Properties of LixMn2O4as Investigated by Molecular Dynamics and Density Functional Theory. Japanese Journal of Applied Physics, 2000, 39, 4318-4322. | 0.8 | 30 |
| 45 | Beneficial use of CeO2 nanocatalyst for black liquor conversion under sub and supercritical conditions. Journal of Supercritical Fluids, 2015, 105, 66-76. | 1.6 | 30 |
| 46 | Kinetic Study on the Selective Production of 2-(Hydroxybenzyl)-4-methylphenol from Organosolv Lignin in a Mixture of Supercritical Water and p-Cresol. Industrial & Engineering Chemistry Research, 2012, 51, 4804-4808. | 1.8 | 29 |
| 47 | Particle size for photocatalytic activity of anatase TiO2 nanosheets with highly exposed {001} facets. RSC Advances, 2013, 3, 19268. | 1.7 | 29 |
| 48 | Development of tight-binding, chemical-reaction-dynamics simulator for combinatorial computational chemistry. Applied Surface Science, 2004, 223, 188-195. | 3.1 | 28 |
| 49 | Supercritical Hydrothermal Synthesis and In situ Organic Modification of Indium Tin Oxide Nanoparticles Using Continuous-Flow Reaction System. ACS Applied Materials & Interfaces, 2012, 4, 351-354. | 4.0 | 28 |
| 50 | Molecular dynamics calculations of CO2/N2 mixture through the NaY type zeolite membrane. Journal of Membrane Science, 2001, 188, 21-28. | 4.1 | 27 |
| 51 | A density functional theory calculation on lanthanide monosulfides. Chemical Physics, 2002, 282, 197-206. | 0.9 | 27 |
| 52 | Synthesis of shape-controlled and organic-hybridized hafnium oxide nanoparticles under sub- and supercritical hydrothermal conditions. Journal of Supercritical Fluids, 2012, 62, 190-196. | 1.6 | 27 |
| 53 | Neutron radiography on tubular flow reactor for hydrothermal synthesis: In situ monitoring of mixing behavior of supercritical water and room-temperature water. Journal of Supercritical Fluids, 2012, 63, 46-51. | 1.6 | 27 |
| 54 | Comparative Investigation on the Adsorption Properties of Precious Metal Clusters toward NO:Â A Density Functional Study. Journal of Physical Chemistry B, 2000, 104, 5110-5117. | 1.2 | 26 |

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| 55 | Quantum Chemical Calculations of Sulfur Doping Reactions in Diamond CVD. Japanese Journal of Applied Physics, 2001, 40, 2830-2832. | 0.8 | 26 |
| 56 | Computational chemistry study on the dynamics of lubricant molecules under shear conditions. Tribology International, 2003, 36, 297-303. | 3.0 | 26 |
| 57 | Improvement in carrier mobility of poly(3,4â€ethylenedioxythiophene) nanowires synthesized in porous alumina templates. Journal of Polymer Science, Part B: Polymer Physics, 2011, 49, 1762-1768. | 2.4 | 25 |
| 58 | Neutron radiography and numerical simulation of mixing behavior in a reactor for supercritical hydrothermal synthesis. AICHE Journal, 2014, 60, 1168-1175. | 1.8 | 25 |
| 59 | Materials design of perovskite-based oxygen ion conductor by molecular dynamics method. Solid State Ionics, 2003, 160, 93-101. | 1.3 | 24 |
| 60 | Surfactant-Assisted Hydrothermal Synthesis of Water-Dispersible Hafnium Oxide Nanoparticles in Highly Alkaline Media. Crystal Growth and Design, 2012, 12, 5219-5226. | 1.4 | 24 |
| 61 | Composite Monolayer of Ag and Cu on Au(111) by Sequential Underpotential Deposition. Langmuir, 2001, 17, 441-448. | 1.6 | 23 |
| 62 | Direct Imaging for Single Molecular Chain of Surfactant on CeO<sub>2</sub> Nanocrystals. Small, 2018, 14, e1801093. | 5.2 | 23 |
| 63 | Synthesis and morphology control of surface functionalized nanoscale yttrium aluminum garnet particles via supercritical hydrothermal method. Progress in Crystal Growth and Characterization of Materials, 2012, 58, 43-50. | 1.8 | 22 |
| 64 | X-ray detection properties of plastic scintillators containing surface-modified Bi<sub>2</sub>O<sub>3</sub>nanoparticles. Japanese Journal of Applied Physics, 2018, 57, 052203. | 0.8 | 22 |
| 65 | Title is missing!. Topics in Catalysis, 2000, 11/12, 271-278. | 1.3 | 21 |
| 66 | Chemical reaction dynamics of PeCB and TCDD decomposition: A tight-binding quantum chemical molecular dynamics study with first-principles parameterization. International Journal of Quantum Chemistry, 2005, 102, 318-327. | 1.0 | 21 |
| 67 | Exploitation of Surfaceâ€Sensitive Electrons in Scanning Electron Microscopy Reveals the Formation Mechanism of New Cubic and Truncated Octahedral CeO<sub>2</sub> Nanoparticles. ChemCatChem, 2011, 3, 1038-1044. | 1.8 | 21 |
| 68 | Tight-binding quantum chemical molecular dynamics study of cathode materials for lithium secondary battery. Solid State Ionics, 2002, 152-153, 273-277. | 1.3 | 20 |
| 69 | Quantum Chemical Molecular Dynamics Studies on the Chemical Mechanical Polishing Process of Cu Surface. Japanese Journal of Applied Physics, 2003, 42, 1897-1902. | 0.8 | 20 |
| 70 | Relationship between size distribution of synthesized nanoparticles and flow and thermal fields in a flow-type reactor for supercritical hydrothermal synthesis. Journal of Supercritical Fluids, 2016, 109, 43-50. | 1.6 | 20 |
| 71 | X-ray detection capabilities of plastic scintillators incorporated with hafnium oxide nanoparticles surface-modified with phenyl propionic acid. Japanese Journal of Applied Physics, 2018, 57, 012601. | 0.8 | 20 |
| 72 | Rapid synthesis of tin-doped indium oxide microcrystals in supercritical water using hydrazine as reducing agent. Progress in Crystal Growth and Characterization of Materials, 2011, 57, 117-126. | 1.8 | 19 |

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| 73 | Tuning surface grafting density of CeO<sub>2</sub> nanocrystals with near- and supercritical solvent characteristics. Physical Chemistry Chemical Physics, 2016, 18, 1727-1734. | 1.3 | 19 |
| 74 | Disassembly of Organosolv Lignin in Supercritieal Fluid-Phenol as a Suppressor for Repolymerization-. Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy, 2005, 84, 486-490. | 0.2 | 19 |
| 75 | Combinatorial computational chemistry approach to the design of methanol synthesis catalyst. Applied Surface Science, 2002, 189, 253-259. | 3.1 | 18 |
| 76 | The development of computational chemistry approach to predict the viscosity of lubricants. Tribology International, 2003, 36, 455-458. | 3.0 | 18 |
| 77 | Impact of magnetic field on molecular alignment and electrical conductivity in phthalocyanine nanowires. Journal of Materials Chemistry, 2012, 22, 8629. | 6.7 | 18 |
| 78 | Atomistic origin of high-concentration Ce3+ in {100}-faceted Cr-substituted CeO2 nanocrystals. Acta Materialia, 2021, 203, 116473. | 3.8 | 18 |
| 79 | Organic-ligand-assisted hydrothermal synthesis of ultrafine and hydrophobic ZnO nanoparticles. Journal of Materials Research, 2010, 25, 219-223. | 1.2 | 17 |
| 80 | Green solvent for green materials: a supercritical hydrothermal method and shape-controlled synthesis of Cr-doped CeO <sub>2</sub> nanoparticles. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20150012. | 1.6 | 17 |
| 81 | Hydrothermal synthesis of inorganicâ€“organic hybrid gadolinium hydroxide nanoclusters with controlled size and morphology. Dalton Transactions, 2013, 42, 16176. | 1.6 | 16 |
| 82 | Highly Cr-Substituted CeO<sub>2</sub>Nanoparticles Synthesized Using a Non-equilibrium Supercritical Hydrothermal Process: High Oxygen Storage Capacity Materials Designed for a Low-Temperature Bitumen Upgrading Process. ACS Applied Energy Materials, 2020, 3, 4305-4319. | 2.5 | 16 |
| 83 | Potential Energy Surface and Dynamics of Pd/MgO(001) System as Investigated by Periodic Density Functional Calculations and Classical Molecular Dynamics Simulations. Japanese Journal of Applied Physics, 2000, 39, 4255-4260. | 0.8 | 14 |
| 84 | Computational Chemistry Study on Crystal Growth of InGaN/GaN. Japanese Journal of Applied Physics, 2001, 40, 2991-2995. | 0.8 | 14 |
| 85 | Combinatorial computational chemistry approach to the design of cathode materials for a lithium secondary battery. Applied Surface Science, 2002, 189, 313-318. | 3.1 | 14 |
| 86 | Computational chemical study on separation of benzene and cyclohexane by a NaY zeolite membrane. Desalination, 2002, 147, 339-344. | 4.0 | 14 |
| 87 | Controlled reduction of Cu2+ to Cu+ with an N,O-type chelate under hydrothermal conditions to produce Cu2O nanoparticles. Materials Letters, 2010, 64, 1049-1051. | 1.3 | 14 |
| 88 | Fabrication of Two-Dimensional Structures of Metal Oxide Nanocrystals Using Si Substrate Modified with 3,4-Dihydroxyhydrocinnamic Acid. Chemistry of Materials, 2010, 22, 1862-1869. | 3.2 | 14 |
| 89 | Formation dynamics of mesocrystals composed of organically modified CeO<sub>2</sub> nanoparticles: analogy to a particle formation model. CrystEngComm, 2019, 21, 3836-3843. | 1.3 | 14 |
| 90 | The Fate of a Cluster Colliding onto a Substrate Dissipation of Translational Kinetic Energy. Journal of Nanoparticle Research, 2001, 3, 213-218. | 0.8 | 13 |

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| 91 | Periodic density functional study on adsorption properties of organic molecules on clean Al (111) surface. Applied Surface Science, 2000, 158, 38-42. | 3.1 | 12 |
| 92 | Non-equilibrium molecular simulation studies on gas separation by microporous membranes using dual ensemble molecular simulation techniques. Fluid Phase Equilibria, 2002, 194-197, 319-326. | 1.4 | 12 |
| 93 | A theoretical study on electronic structures and spectroscopic properties of cyclopropane in ground and excited states. Chemical Physics, 2002, 279, 7-14. | 0.9 | 12 |
| 94 | A Theoretical Study on the Realistic Low Concentration Doping in Silicon Semiconductors by Accelerated Quantum Chemical Molecular Dynamics Method. Japanese Journal of Applied Physics, 2003, 42, 1877-1881. | 0.8 | 12 |
| 95 | Design of new catalysts for ecological high-quality transportation fuels by combinatorial computational chemistry and tight-binding quantum chemical molecular dynamics approaches. Catalysis Today, 2004, 89, 479-493. | 2.2 | 12 |
| 96 | Dispersion and rheology of nanofluids with various concentrations of organic modified nanoparticles: Modifier and solvent effects. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 583, 123876. | 2.3 | 12 |
| 97 | Interconnected 3D Framework of CeO<sub>2</sub> with High Oxygen Storage Capacity: High-Resolution Scanning Electron Microscopic Observation. ACS Applied Nano Materials, 2020, 3, 2346-2353. | 2.4 | 12 |
| 98 | Monolayer nitridation of silicon surfaces by a dry chemical process using dimethylhydrazine or ammonia. Applied Physics Letters, 1995, 66, 1527-1529. | 1.5 | 11 |
| 99 | Title is missing!. Tribology Letters, 2003, 15, 155-162. | 1.2 | 11 |
| 100 | Hydrothermal Synthesis of Cerium Oxide Nanoassemblies through Coordination Programming with Amino Acids. Chemistry Letters, 2014, 43, 1343-1345. | 0.7 | 11 |
| 101 | In-situ Neutron Tomography on Mixing Behavior of Supercritical Water and Room Temperature Water in a Tubular Flow Reactor. Physics Procedia, 2015, 69, 564-569. | 1.2 | 11 |
| 102 | Selective chemical recovery from biomass under hydrothermal conditions using metal oxide nanocatalyst. Journal of Supercritical Fluids, 2018, 133, 726-737. | 1.6 | 11 |
| 103 | Adsorption properties of SO2 on ultrafine precious metal particles studied using density functional calculation. Applied Surface Science, 2001, 177, 180-188. | 3.1 | 10 |
| 104 | Numerical Simulation of Dispersion and Aggregation Behavior of Surface-modified Nanoparticles in Organic Solvents. Journal of Chemical Engineering of Japan, 2018, 51, 492-500. | 0.3 | 10 |
| 105 | Supercritical hydrothermal synthesis of highly crystalline lanthanum zirconate nanoparticles. Journal of Supercritical Fluids, 2019, 143, 134-138. | 1.6 | 10 |
| 106 | Numerical simulations of dispersion and aggregation behavior of surface-modified nanoparticles under shear flow. Powder Technology, 2019, 343, 113-121. | 2.1 | 10 |
| 107 | Density functional theory calculations of molecular nitrogen on a ruthenium cluster. Chemical Physics Letters, 1999, 313, 279-282. | 1.2 | 9 |
| 108 | Computer-aided design of novel heterogeneous catalystsâ€"A combinatorial computational chemistry approach. Studies in Surface Science and Catalysis, 2000, , 401-406. | 1.5 | 9 |

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| 109 | Investigation of Thermal Annealing Process of GaN Layer on Sapphire by Molecular Dynamics. Japanese Journal of Applied Physics, 2000, 39, 4400-4403. | 0.8 | 9 |
| 110 | Effect of S and O on the growth of chemical-vapor deposition diamond (100) surfaces. Journal of Chemical Physics, 2001, 115, 5284-5291. | 1.2 | 9 |
| 111 | Combinatorial Computational Chemistry Approach to the High-Throughput Screening of Metal Sulfide Catalysts for CO Hydrogenation Process. Energy & Fuels, 2003, 17, 857-861. | 2.5 | 9 |
| 112 | Mechanistic study on the synthesis of one-dimensional yttrium aluminum garnet nanostructures under supercritical hydrothermal conditions in the presence of organic amines. CrystEngComm, 2012, 14, 6085. | 1.3 | 9 |
| 113 | Annealingâ€promoted unidirectional migration of organicâ€modified nanoparticles embedded twoâ€dimensionally in polymer thin films. Journal of Applied Polymer Science, 2015, 132, . | 1.3 | 9 |
| 114 | Kinetic Study on Oxidation of Si(111) Surfaces using H2O. Japanese Journal of Applied Physics, 1997, 36, 2288-2291. | 0.8 | 8 |
| 115 | Combinatorial computational chemistry approach to the design of metal oxide electronics materials. , 2000, 3941, 2. | | 8 |
| 116 | Density-functional theory of potassium atoms in zeolite. Chemical Physics Letters, 2000, 325, 1-6. | 1.2 | 8 |
| 117 | The adsorption of nitrogen oxides and water on rare-earth ion-exchanged ZSM-5: a density functional study. Applied Surface Science, 2002, 202, 283-288. | 3.1 | 8 |
| 118 | Monte Carlo simulation of hydrogen absorption in palladium and palladiumâ€“silver alloys. Catalysis Today, 2003, 82, 233-240. | 2.2 | 8 |
| 119 | Hydrothermal synthesis of luminescent GdVO4:Eu nanoparticles with dispersibility in organic solvents. Journal of Nanoparticle Research, 2014, 16, 1. | 0.8 | 8 |
| 120 | Multistage ordering and critical singularities inCo1â^'xZnxAl2O4(0â‰xâ‰1): Dilution and pressure effects in a magnetically frustrated system. Physical Review B, 2015, 91, . | 1.1 | 8 |
| 121 | Synthesis of ZrO2 nanoparticles for liquid scintillators used in the detection of neutrinoless double beta decay. Journal of Radioanalytical and Nuclear Chemistry, 2017, 314, 611-615. | 0.7 | 8 |
| 122 | Flow visualization of heavy oil in a packed bed using real-time neutron radiography. Chemical Engineering Science, 2019, 196, 425-432. | 1.9 | 8 |
| 123 | Direct Observation Techniques Using Scanning Electron Microscope for Hydrothermally Synthesized Nanocrystals and Nanoclusters. Nanomaterials, 2021, 11, 908. | 1.9 | 8 |
| 124 | Radiosensitization Effect of Gold Nanoparticles on Plasmid DNA Damage Induced by Therapeutic MV X-rays. Nanomaterials, 2022, 12, 771. | 1.9 | 8 |
| 125 | Curcumin-Loaded Liposome Preparation in Ultrasound Environment under Pressurized Carbon Dioxide. Foods, 2022, 11, 1469. | 1.9 | 8 |
| 126 | Molecular Dynamics Studies of Surface Difference Effect on Gas Separation by Zeolite Membranes. Japanese Journal of Applied Physics, 2000, 39, 4385-4388. | 0.8 | 7 |

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| 127 | Fabrication of FeO -ZrO2 nanostructures for automotive three-way catalysts by supercritical hydrothermal synthesis with supercritical CO2 drying. Journal of Supercritical Fluids, 2019, 147, 302-309. | 1.6 | 7 |
| 128 | In-situ visualization of heavy oil behavior in supercritical water using neutron radiography. Chemical Engineering Science, 2020, 225, 115816. | 1.9 | 7 |
| 129 | Preparation of CuCl microcrystalsâ€doped SiO2 glass by coâ€sputtering method. Applied Physics Letters, 1996, 68, 1020-1021. | 1.5 | 6 |
| 130 | Theoretical Study on Fe-Based Metal Clusters: Application in Heterogeneous Catalysis. Materials Transactions, 2001, 42, 2180-2183. | 0.4 | 6 |
| 131 | Control of Designed High-Order DNA Conformation as a Template for Nano Particle Assembly. Kobunshi Ronbunshu, 2004, 61, 617-622. | 0.2 | 6 |
| 132 | Biomass-assisted Hydrothermal Synthesis of Ceria Nanoparticle â€"A New Application of Lignin as a Bio-nanopoolâ€". Chemistry Letters, 2006, 35, 732-733. | 0.7 | 6 |
| 133 | Synthesis of octabutoxyphthalocyanine nanorods using porous alumina as a template and magnetic-field-directed control of the molecular orientation in the nanorods. Journal of Materials Chemistry, 2008, 18, 4347. | 6.7 | 6 |
| 134 | Phthalocyanine molecular nanowires that were prepared using porous alumina as a template: Development in the sample preparation procedure to evaluate electronic properties. Thin Solid Films, 2009, 518, 692-694. | 0.8 | 6 |
| 135 | Hybridisation of Sebacic Acid on the Surface of Î³-Alumina Nanoparticles in Sub- and Supercritical Water. Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 2010, 65, 1045-1050. | 0.3 | 6 |
| 136 | Carbon-doped K4 nitrogen: A novel high energy density material. Chemical Physics Letters, 2011, 506, 175-178. | 1.2 | 6 |
| 137 | Pressure-dependent mechanical stability of simple cubic carbon. Physica B: Condensed Matter, 2011, 406, 2654-2657. | 1.3 | 6 |
| 138 | Supercritical Hydrothermal Synthesis. , 2013, , 949-978. | | 5 |
| 139 | Supercritical Hydrothermal Synthesis of Nanoparticles. , 2018, , 683-689. | | 5 |
| 140 | Integrated computational chemistry system for catalysts design. Bulletin of Materials Science, 1999, 22, 851-861. | 0.8 | 4 |
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| 142 | Adsorption Properties of CH3OH on Al (111) and Fe (100) Surfaces: A Periodic First-Principles Investigation. Japanese Journal of Applied Physics, 2000, 39, 4275-4278. | 0.8 | 4 |
| 143 | A theoretical study of interaction of oxygen with noble metal clusters. Scripta Materialia, 2001, 44, 1919-1923. | 2.6 | 4 |
| 144 | Control of molecular packing structure of a derivative of vanadyl-phthalocyanine using pore wall of porous alumina and/or magnetic field. Thin Solid Films, 2008, 516, 2438-2442. | 0.8 | 4 |

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| 145 | Oleic acid-enhanced dissolution of cellulose in high-temperature water. Research on Chemical Intermediates, 2011, 37, 415-419. | 1.3 | 4 |
| 146 | Coâ€“Doping of Tin and Zinc into Indium Oxide Nanocrystals Using a Facile Hydrothermal Method. ChemistrySelect, 2016, 1, 518-523. | 0.7 | 4 |
| 147 | Crack Formation in Polymer Nanocomposite Thin Films Containing Surface-Modified Nanoparticles during Solution Casting. Journal of Chemical Engineering of Japan, 2018, 51, 460-468. | 0.3 | 4 |
| 148 | Control of Selective Tungsten Chemical Vapor Deposition by Monolayer Nitridation of Silicon Surface. Journal of the Electrochemical Society, 1996, 143, L38-L40. | 1.3 | 3 |
| 149 | Investigation of Initial Growth Process of GaN Film on Sapphire Using Computational Chemistry. Japanese Journal of Applied Physics, 2000, 39, 2380-2384. | 0.8 | 3 |
| 150 | <title>Theoretical design of heterogenous catalysts by combinatorial computational chemistry approach: application to Fischer-Tropsch synthesis</title>. , 2001, , . | | 3 |
| 151 | <title>Design of the most active catalysts for methanol synthesis: combinatorial computational chemistry approach</title>. , 2001, 4281, 97. | | 3 |
| 152 | Mechanical stabilities of K4 carbon and K4-like NaC2. Journal of Physics and Chemistry of Solids, 2012, 73, 1264-1267. | 1.9 | 3 |
| 153 | Stress inversion from initial tensile to compressive side during ultrathin oxide growth of the Si(100) surface. Journal of Physics Condensed Matter, 2013, 25, 355007. | 0.7 | 3 |
| 154 | Phase-Field Simulation of Polymerization-Induced Phase Separation: I. Effect of Reaction Rate and Coexisting Polymer. Journal of Chemical Engineering of Japan, 2013, 46, 709-715. | 0.3 | 3 |
| 155 | Inhomogeneous magnetic phase in Coâ€“Alâ€“O spinel nanocrystals. Journal of Magnetism and Magnetic Materials, 2014, 350, 161-166. | 1.0 | 3 |
| 156 | Influence of the crystal structure on the physical properties of monoclinic ZrO 2 nanocrystals. Nano Structures Nano Objects, 2015, 1, 1-6. | 1.9 | 3 |
| 157 | Effect of Surface Modifier of Nanoparticles on Dewetting Behaviors of Polymer Nanocomposite Thin Films. Journal of Chemical Engineering of Japan, 2018, 51, 282-288. | 0.3 | 3 |
| 158 | Surface Protrusions of Chemical Vapor Deposited TiN Films Caused by Cu Contamination of Silicon Substrates. Japanese Journal of Applied Physics, 1998, 37, L607-L609. | 0.8 | 2 |
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