

Lars Å-sterlund

List of Publications by Year in descending order

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134
papers

5,503
citations

76326

40
h-index

88630

70
g-index

138
all docs

138
docs citations

138
times ranked

7652
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Preparation of Nanosize Anatase and Rutile TiO ₂ by Hydrothermal Treatment of Microemulsions and Their Activity for Photocatalytic Wet Oxidation of Phenol. <i>Journal of Physical Chemistry B</i> , 2002, 106, 10674-10679. | 2.6 | 401 |
| 2 | On the Catalytic Activity of Co ₃ O ₄ in Low-Temperature CO Oxidation. <i>Journal of Catalysis</i> , 2002, 211, 387-397. | 6.2 | 355 |
| 3 | On the Catalytic Activity of Co ₃ O ₄ in Low-Temperature CO Oxidation. <i>Journal of Catalysis</i> , 2002, 211, 387-397. | 6.2 | 238 |
| 4 | A high-pressure scanning tunneling microscope. <i>Review of Scientific Instruments</i> , 2001, 72, 3537-3542. | 1.3 | 194 |
| 5 | TiO ₂ -Based Gas Sensor: A Possible Application to SO ₂ . <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 8516-8522. | 8.0 | 186 |
| 6 | Adsorption and Photoinduced Decomposition of Acetone and Acetic Acid on Anatase, Brookite, and Rutile TiO ₂ Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2010, 114, 14121-14132. | 3.1 | 169 |
| 7 | Adsorption and Solar Light Decomposition of Acetone on Anatase TiO ₂ and Niobium Doped TiO ₂ Thin Films. <i>Journal of Physical Chemistry B</i> , 2006, 110, 1210-1220. | 2.6 | 159 |
| 8 | Dissociative sticking of O ₂ on Al(111). <i>Physical Review B</i> , 1997, 55, 15452-15455. | 3.2 | 152 |
| 9 | Oxidation of Pt(110). <i>Physical Review Letters</i> , 2004, 93, 146104. | 7.8 | 129 |
| 10 | A comparative study of the photocatalytic oxidation of propane on anatase, rutile, and mixed-phase anatase-rutile TiO ₂ nanoparticles: Role of surface intermediates. <i>Journal of Catalysis</i> , 2007, 251, 131-144. | 6.2 | 128 |
| 11 | Nanomaterials for benign indoor environments: Electrochromics for "smart windows", sensors for air quality, and photo-catalysts for air cleaning. <i>Solar Energy Materials and Solar Cells</i> , 2007, 91, 355-365. | 6.2 | 126 |
| 12 | A transient in situ FTIR and XANES study of CO oxidation over Pt/AlO catalysts. <i>Journal of Catalysis</i> , 2004, 226, 422-434. | 6.2 | 122 |
| 13 | Polymorphic and Size-Dependent Uptake and Toxicity of TiO ₂ Nanoparticles in Living Lung Epithelial Cells. <i>Small</i> , 2011, 7, 514-523. | 10.0 | 108 |
| 14 | Bridging the Pressure Gap in Surface Science at the Atomic Level: H/Cu(110). <i>Physical Review Letters</i> , 2001, 86, 460-463. | 7.8 | 99 |
| 15 | Optical properties of nanocrystalline WO ₃ and WO _{3-x} thin films prepared by DC magnetron sputtering. <i>Journal of Applied Physics</i> , 2014, 115, . | 2.5 | 93 |
| 16 | Enhancement of TiO ₂ behavior on photocatalytic oxidation of MO dye using TiO ₂ /AC under visible irradiation and sunlight radiation. <i>Separation and Purification Technology</i> , 2012, 98, 270-279. | 7.9 | 91 |
| 17 | Water adsorption on graphite (0001). <i>Vacuum</i> , 1995, 46, 1109-1112. | 3.5 | 85 |
| 18 | Bacterial and mammalian cell response to poly(3-sulfopropyl methacrylate) brushes loaded with silver halide salts. <i>Biomaterials</i> , 2009, 30, 1524-1531. | 11.4 | 84 |

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|----|---|------|-----------|
| 19 | Quantitative Determination of Adsorbate-Adsorbate Interactions. <i>Physical Review Letters</i> , 1999, 83, 4812-4815. | 7.8 | 82 |
| 20 | Electrochemical detection of influenza virus H9N2 based on both immunomagnetic extraction and gold catalysis using an immobilization-free screen printed carbon microelectrode. <i>Biosensors and Bioelectronics</i> , 2018, 107, 170-177. | 10.1 | 79 |
| 21 | Adsorption of Trimethyl Phosphate on Maghemite, Hematite, and Goethite Nanoparticles. <i>Journal of Physical Chemistry A</i> , 2011, 115, 8948-8959. | 2.5 | 71 |
| 22 | Water Adsorption and Coadsorption with Potassium on Graphite(0001). <i>Langmuir</i> , 1995, 11, 1201-1214. | 3.5 | 70 |
| 23 | Electrochromic WO ₃ thin films attain unprecedented durability by potentiostatic pretreatment. <i>Journal of Materials Chemistry A</i> , 2019, 7, 2908-2918. | 10.3 | 66 |
| 24 | Diffusion of N Adatoms on the Fe(100) Surface. <i>Physical Review Letters</i> , 2000, 84, 4898-4901. | 7.8 | 65 |
| 25 | Human primary bronchial epithelial cells respond differently to titanium dioxide nanoparticles than the lung epithelial cell lines A549 and BEAS-2B. <i>Nanotoxicology</i> , 2012, 6, 623-634. | 3.0 | 64 |
| 26 | Large Uptake of Titania and Iron Oxide Nanoparticles in the Nucleus of Lung Epithelial Cells as Measured by Raman Imaging and Multivariate Classification. <i>Biophysical Journal</i> , 2013, 105, 310-319. | 0.5 | 57 |
| 27 | Development of a molecularly imprinted polymer electrochemical sensor and its application for sensitive detection and determination of malathion in olive fruits and oils. <i>Bioelectrochemistry</i> , 2020, 132, 107404. | 4.6 | 57 |
| 28 | Adsorption and photo-oxidation of acetaldehyde on TiO ₂ and sulfate-modified TiO ₂ : Studies by in situ FTIR spectroscopy and micro-kinetic modeling. <i>Journal of Catalysis</i> , 2013, 307, 265-274. | 6.2 | 56 |
| 29 | Microemulsion-Mediated Room-Temperature Synthesis of High-Surface-Area Rutile and Its Photocatalytic Performance. <i>Journal of Physical Chemistry C</i> , 2007, 111, 6789-6797. | 3.1 | 54 |
| 30 | Potassium adsorption on graphite(0001). <i>Surface Science</i> , 1999, 420, 174-189. | 1.9 | 53 |
| 31 | Photoinduced desorption of potassium atoms from a two dimensional overlayer on graphite. <i>Journal of Chemical Physics</i> , 1997, 106, 982-1002. | 3.0 | 51 |
| 32 | Adsorption and photocatalytic degradation of diisopropyl fluorophosphate and dimethyl methylphosphonate over dry and wet rutile TiO ₂ . <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2006, 184, 125-134. | 3.9 | 50 |
| 33 | Photodegradation of DMMP and CEES on zirconium doped titania nanoparticles. <i>Applied Catalysis B: Environmental</i> , 2009, 92, 401-410. | 20.2 | 49 |
| 34 | Adsorption of formic acid on rutile TiO ₂ (110) revisited: An infrared reflection-absorption spectroscopy and density functional theory study. <i>Journal of Chemical Physics</i> , 2014, 140, 034705. | 3.0 | 49 |
| 35 | CO Oxidation Bistability Diagrams for Pt/CeO _x and Pt/SiO ₂ Model Catalysts Prepared by Electron-Beam Lithography. <i>Journal of Catalysis</i> , 2001, 201, 275-285. | 6.2 | 46 |
| 36 | An electrochemical sensor based on chitosan capped with gold nanoparticles combined with a voltammetric electronic tongue for quantitative aspirin detection in human physiological fluids and tablets. <i>Materials Science and Engineering C</i> , 2020, 110, 110665. | 7.3 | 46 |

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|----|---|------|-----------|
| 37 | Electronic and optical properties of nanocrystalline WO ₃ thin films studied by optical spectroscopy and density functional calculations. <i>Journal of Physics Condensed Matter</i> , 2013, 25, 205502. | 1.8 | 43 |
| 38 | Diamonds Are a Spectroscopist's Best Friend: Thin-Film Diamond Mid-Infrared Waveguides for Advanced Chemical Sensors/Biosensors. <i>Analytical Chemistry</i> , 2014, 86, 8136-8141. | 6.5 | 43 |
| 39 | Photoinduced Adsorption and Oxidation of SO ₂ on Anatase TiO ₂ (101). <i>Journal of the American Chemical Society</i> , 2020, 142, 21767-21774. | 13.7 | 43 |
| 40 | Synergistic TiO ₂ /VO ₂ Window Coating with Thermochromism, Enhanced Luminous Transmittance, and Photocatalytic Activity. <i>Joule</i> , 2019, 3, 2457-2471. | 24.0 | 42 |
| 41 | Nanofabrication of Planar Model Catalysts by Colloidal Lithography: Pt/Ceria and Pt/Alumina. <i>Langmuir</i> , 2003, 19, 458-468. | 3.5 | 41 |
| 42 | Spectroscopic Study of the Photofixation of SO ₂ on Anatase TiO ₂ Thin Films and Their Oleophobic Properties. <i>ACS Applied Materials & Interfaces</i> , 2012, 4, 672-679. | 8.0 | 40 |
| 43 | In Situ Reactivity and FTIR Study of the Wet and Dry Photooxidation of Propane on Anatase TiO ₂ . <i>Journal of Physical Chemistry B</i> , 2005, 109, 10886-10895. | 2.6 | 39 |
| 44 | Reactivity of Pt/ceria and Pt/alumina planar model catalysts prepared by colloidal lithography. <i>Journal of Catalysis</i> , 2003, 215, 94-107. | 6.2 | 36 |
| 45 | The Importance of Oxygen Vacancies in Nanocrystalline WO ₃ Thin Films Prepared by DC Magnetron Sputtering for Achieving High Photoelectrochemical Efficiency. <i>Journal of Physical Chemistry C</i> , 2017, 121, 7412-7420. | 3.1 | 35 |
| 46 | Visualization of custom-tailored iron oxide nanoparticles chemistry, uptake, and toxicity. <i>Nanoscale</i> , 2012, 4, 7383. | 5.6 | 34 |
| 47 | Demonstrating Online Monitoring of Air Pollutant Photodegradation in a 3D Printed Gas-Phase Photocatalysis Reactor. <i>Journal of Chemical Education</i> , 2015, 92, 678-682. | 2.3 | 34 |
| 48 | Structural and optical properties of visible active photocatalytic WO ₃ thin films prepared by reactive dc magnetron sputtering. <i>Journal of Materials Research</i> , 2012, 27, 3130-3140. | 2.6 | 33 |
| 49 | Adsorption of trimethyl phosphate and triethyl phosphate on dry and water pre-covered hematite, maghemite, and goethite nanoparticles. <i>Journal of Colloid and Interface Science</i> , 2013, 392, 349-358. | 9.4 | 33 |
| 50 | Insulin resistance, dietary cholesterol, and cholesterol concentration in postmenopausal women. <i>Metabolism: Clinical and Experimental</i> , 2001, 50, 594-597. | 3.4 | 32 |
| 51 | Influence of phonon confinement, surface stress, and zirconium doping on the Raman vibrational properties of anatase TiO ₂ nanoparticles. <i>Journal of Raman Spectroscopy</i> , 2011, 42, 2026-2035. | 2.5 | 32 |
| 52 | Gas-phase photocatalytic activity of sputter-deposited anatase TiO ₂ films: Effect of 0.01% preferential orientation, surface temperature and humidity. <i>Journal of Catalysis</i> , 2016, 335, 187-196. | 6.2 | 32 |
| 53 | Reactive adsorption and photodegradation of soman and dimethyl methylphosphonate on TiO ₂ /nanodiamond composites. <i>Applied Catalysis B: Environmental</i> , 2019, 259, 118097. | 20.2 | 32 |
| 54 | Transparent TiO ₂ and ZnO Thin Films on Glass for UV Protection of PV Modules. <i>Frontiers in Materials</i> , 2019, 6, . | 2.4 | 32 |

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|----|---|------|-----------|
| 55 | Exhaled breath analysis for gastric cancer diagnosis in Colombian patients. <i>Oncotarget</i> , 2018, 9, 28805-28817. | 1.8 | 31 |
| 56 | Photocatalytic degradation of azo dye Reactive Red 15 over synthesized titanium and zinc oxides photocatalysts: a comparative study. <i>Desalination and Water Treatment</i> , 2012, 48, 120-129. | 1.0 | 29 |
| 57 | Midâ€infrared thinâ€film diamond waveguides combined with tunable quantum cascade lasers for analyzing the secondary structure of proteins. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016, 213, 2117-2123. | 1.8 | 29 |
| 58 | Electronic structure and kinetics of K on graphite. <i>Journal of Chemical Physics</i> , 2000, 112, 4788-4796. | 3.0 | 27 |
| 59 | Effect of sample preparation and humidity on the photodegradation rate of CEES on pure and Zn doped anatase TiO ₂ nanoparticles prepared by homogeneous hydrolysis. <i>Applied Catalysis B: Environmental</i> , 2009, 88, 194-203. | 20.2 | 27 |
| 60 | Solar Light Degradation of Trimethyl Phosphate and Triethyl Phosphate on Dry and Water-Precovered Hematite and Goethite Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2012, 116, 14917-14929. | 3.1 | 27 |
| 61 | Band gap states in nanocrystalline WO ₃ thin films studied by soft x-ray spectroscopy and optical spectrophotometry. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 475802. | 1.8 | 25 |
| 62 | A Prospective, Randomized Trial of Phenytoin in Nonpileptic Subjects With Reduced HDL Cholesterol. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 1995, 15, 2151-2156. | 2.4 | 24 |
| 63 | Combined chemoresistive and in situ FTIR spectroscopy study of nanoporous NiO films for light-activated nitrogen dioxide and acetone gas sensing. <i>Sensors and Actuators B: Chemical</i> , 2022, 353, 131125. | 7.8 | 24 |
| 64 | Tuning the Photocatalytic Activity of Anatase TiO ₂ Thin Films by Modifying the Preferred <001> Grain Orientation with Reactive DC Magnetron Sputtering. <i>Coatings</i> , 2014, 4, 587-601. | 2.6 | 23 |
| 65 | Differential cellular responses in healthy mice and in mice with established airway inflammation when exposed to hematite nanoparticles. <i>Toxicology and Applied Pharmacology</i> , 2015, 288, 1-11. | 2.8 | 23 |
| 66 | Chemical warfare agent simulant DMMP reactive adsorption on TiO ₂ /graphene oxide composites prepared via titanium peroxo-complex or urea precipitation. <i>Journal of Hazardous Materials</i> , 2018, 359, 482-490. | 12.4 | 23 |
| 67 | Acetaldehyde adsorption and condensation on anatase TiO ₂ : Influence of acetaldehyde dimerization. <i>Journal of Molecular Catalysis A</i> , 2014, 381, 77-88. | 4.8 | 20 |
| 68 | Oxygen Diffusion and Photon-Induced Decomposition of Acetone on Zr- and Nb-Doped TiO ₂ Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2009, 113, 3810-3818. | 3.1 | 18 |
| 69 | Changes in secondary structure of Î±-synuclein during oligomerization induced by reactive aldehydes. <i>Biochemical and Biophysical Research Communications</i> , 2015, 464, 336-341. | 2.1 | 18 |
| 70 | Ligand-Capped Ultrapure Metal Nanoparticle Sensors for the Detection of Cutaneous Leishmaniasis Disease in Exhaled Breath. <i>ACS Sensors</i> , 2018, 3, 2532-2540. | 7.8 | 18 |
| 71 | A Novel ATR-FTIR Approach for Characterisation and Identification of Ex Situ Immobilised Species. <i>ChemPhysChem</i> , 2007, 8, 712-722. | 2.1 | 17 |
| 72 | Photo-fixation of SO ₂ in nanocrystalline TiO ₂ films prepared by reactive DC magnetron sputtering. <i>Thin Solid Films</i> , 2009, 518, 1341-1344. | 1.8 | 17 |

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|----|--|------|-----------|
| 73 | ZnO/spiral-shaped glass for solar photocatalytic oxidation of Reactive Red 120. <i>Arabian Journal of Chemistry</i> , 2017, 10, S3501-S3507. | 4.9 | 17 |
| 74 | Characterisation, phase stability and surface chemical properties of photocatalytic active Zr and Y co-doped anatase TiO ₂ nanoparticles. <i>Journal of Solid State Chemistry</i> , 2013, 199, 212-223. | 2.9 | 16 |
| 75 | Simulation of IRRAS Spectra for Molecules on Oxide Surfaces: CO on TiO ₂ (110). <i>Journal of Physical Chemistry C</i> , 2015, 119, 5403-5411. | 3.1 | 16 |
| 76 | Quantitative relation between photocatalytic activity and degree of 001 orientation for anatase TiO ₂ thin films. <i>Journal of Materials Chemistry A</i> , 2015, 3, 17369-17375. | 10.3 | 16 |
| 77 | Photostimulated desorption of metal adatoms: potassium on graphite. <i>Surface Science</i> , 1994, 311, L724-L730. | 1.9 | 15 |
| 78 | Solar light decomposition of DFP on the surface of anatase and rutile TiO ₂ prepared by hydrothermal treatment of microemulsions. <i>Surface Science</i> , 2005, 584, 98-105. | 1.9 | 15 |
| 79 | Formic Acid on TiO ₂ (110): Dissociation, Motion, and Vacancy Healing. <i>Journal of Physical Chemistry C</i> , 2014, 118, 14876-14887. | 3.1 | 15 |
| 80 | Polycrystalline Diamond Thin-Film Waveguides for Mid-Infrared Evanescent Field Sensors. <i>ACS Omega</i> , 2018, 3, 6190-6198. | 3.5 | 14 |
| 81 | Solar light decomposition of warfare agent simulant DMMP on TiO ₂ /graphene oxide nanocomposites. <i>Catalysis Science and Technology</i> , 2019, 9, 1816-1824. | 4.1 | 13 |
| 82 | Infrared spectroscopy study of adsorption and photodecomposition of formic acid on reduced and defective rutile TiO ₂ (110) surfaces. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2014, 32, . | 2.1 | 12 |
| 83 | Structure-Reactivity Relationships of Anatase and Rutile TiO ₂ Nanocrystals Measured by <i>In Situ</i> Vibrational Spectroscopy. <i>Solid State Phenomena</i> , 2010, 162, 203-219. | 0.3 | 11 |
| 84 | Role of bismuth in nano-structured doped TiO ₂ photocatalyst prepared by environmentally benign soft synthesis. <i>Journal of Materials Science</i> , 2014, 49, 3560-3571. | 3.7 | 11 |
| 85 | Nanocrystalline diamond sensor targeted for selective CRP detection: an ATR-FTIR spectroscopy study. <i>Analytical and Bioanalytical Chemistry</i> , 2016, 408, 3675-3680. | 3.7 | 11 |
| 86 | SO ₂ adsorption on rutile TiO ₂ (110): An infrared reflection-absorption spectroscopy and density functional theory study. <i>Surface Science</i> , 2018, 677, 46-51. | 1.9 | 11 |
| 87 | Co-adsorption of oxygen and formic acid on rutile TiO ₂ (110) studied by infrared reflection-absorption spectroscopy. <i>Surface Science</i> , 2017, 663, 47-55. | 1.9 | 10 |
| 88 | Diagnosis of Human Echinococcosis via Exhaled Breath Analysis: A Promise for Rapid Diagnosis of Infectious Diseases Caused by Helminths. <i>Journal of Infectious Diseases</i> , 2018, 219, 101-109. | 4.0 | 10 |
| 89 | Cation/Anion-Based Electrochemical Degradation and Rejuvenation of Electrochromic Nickel Oxide Thin Films. <i>ChemElectroChem</i> , 2018, 5, 3548-3556. | 3.4 | 10 |
| 90 | Characterization of nanocrystalline-nanoporous nickel oxide thin films prepared by reactive advanced gas deposition. <i>Materials Chemistry and Physics</i> , 2019, 227, 98-104. | 4.0 | 10 |

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|-----|---|-----|-----------|
| 91 | Exhaled air analysis as a potential fast method for early diagnosis of dengue disease. <i>Sensors and Actuators B: Chemical</i> , 2020, 310, 127859. | 7.8 | 10 |
| 92 | Polarized and non-polarized Raman spectroscopy of ZnO crystals: Method for determination of crystal growth and crystal plane orientation for nanomaterials. <i>Journal of Raman Spectroscopy</i> , 2021, 52, 1395-1405. | 2.5 | 10 |
| 93 | Graphene oxide nanoparticle attachment and its toxicity on living lung epithelial cells. <i>RSC Advances</i> , 2015, 5, 59447-59457. | 3.6 | 9 |
| 94 | Fluctuation-enhanced and conductometric gas sensing with nanocrystalline NiO thin films: A comparison. <i>Sensors and Actuators B: Chemical</i> , 2017, 242, 132-139. | 7.8 | 9 |
| 95 | Fabrication and characterisation of ligand-functionalised ultrapure monodispersed metal nanoparticle nanoassemblies employing advanced gas deposition technique. <i>Nanotechnology</i> , 2018, 29, 065603. | 2.6 | 9 |
| 96 | Multicolored absorbing nickel oxide films based on anodic electrochromism and structural coloration. <i>Journal of Applied Physics</i> , 2021, 129, . | 2.5 | 9 |
| 97 | Copper-zinc oxide heterojunction catalysts exhibiting enhanced photocatalytic activity prepared by a hybrid deposition method. <i>RSC Advances</i> , 2021, 11, 10224-10234. | 3.6 | 9 |
| 98 | A novel ATR-FTIR method for functionalised surface characterisation. <i>Surface and Interface Analysis</i> , 2008, 40, 623-626. | 1.8 | 8 |
| 99 | Surface Properties of Reduced and Stoichiometric TiO ₂ As Probed by SO ₂ Adsorption. <i>Journal of Physical Chemistry C</i> , 2019, 123, 24549-24557. | 3.1 | 8 |
| 100 | Ni-Ag Nanostructure-Modified Graphitic Carbon Nitride for Enhanced Performance of Solar-Driven Hydrogen Production from Ethanol. <i>ACS Applied Energy Materials</i> , 2020, 3, 10131-10138. | 5.1 | 8 |
| 101 | Photoinduced desorption of potassium atoms from graphite. <i>Surface Science</i> , 1996, 363, 247-251. | 1.9 | 7 |
| 102 | Determination of Volatile Organic Compounds in Water by Attenuated Total Reflection Infrared Spectroscopy and Diamond-Like Carbon Coated Silicon Wafers. <i>Chemosensors</i> , 2020, 8, 75. | 3.6 | 7 |
| 103 | Photon induced desorption and intercalation of potassium atoms deposited on graphite (0001). <i>Applied Surface Science</i> , 1996, 106, 186-192. | 6.1 | 6 |
| 104 | <i>In Situ</i> FTIR Spectroscopy Study of the Photodegradation of Acetaldehyde and azo Dye Photobleaching on Bismuth-Modified TiO ₂ . <i>Photochemistry and Photobiology</i> , 2015, 91, 48-58. | 2.5 | 6 |
| 105 | Corrosion Detection by Infrared Attenuated Total Reflection Spectroscopy via Diamond-Like Carbon-Coated Silicon Wafers and Iron-Sensitive Dyes. <i>Sensors</i> , 2019, 19, 3373. | 3.8 | 6 |
| 106 | Effects of Anodic Aluminum Oxide Substrate Pore Geometry on the Gas-Phase Photocatalytic Activity of ZnO/Al ₂ O ₃ Composites Prepared by Atomic Layer Deposition. <i>Symmetry</i> , 2021, 13, 1456. | 2.2 | 6 |
| 107 | Warfare Agents Degradation on Zirconium Doped Titania. <i>Microscopy and Microanalysis</i> , 2009, 15, 1038-1039. | 0.4 | 5 |
| 108 | Sputter-Deposited Indium-Tin Oxide Thin Films for Acetaldehyde Gas Sensing. <i>Coatings</i> , 2016, 6, 19. | 2.6 | 5 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 109 | Noise Removal with Maintained Spatial Resolution in Raman Images of Cells Exposed to Submicron Polystyrene Particles. <i>Nanomaterials</i> , 2016, 6, 83. | 4.1 | 5 |
| 110 | Non-Invasive Method to Detect Infection with Mycobacterium tuberculosis Complex in Wild Boar by Measurement of Volatile Organic Compounds Obtained from Feces with an Electronic Nose System. <i>Sensors</i> , 2021, 21, 584. | 3.8 | 5 |
| 111 | Lithographic Techniques in Nanocatalysis. <i>Nanoscience and Technology</i> , 2007, , 269-341. | 1.5 | 5 |
| 112 | Development of a diamond waveguide sensor for sensitive protein analysis using IR quantum cascade lasers. , 2018, , . | | 5 |
| 113 | Alkali ion diffusion and structure of chemically strengthened TiO ₂ doped soda-lime silicate glass. <i>Journal of Non-Crystalline Solids</i> , 2022, 586, 121564. | 3.1 | 5 |
| 114 | Surface characteristics and electronic structure of photocatalytic reactions on TiO ₂ and doped TiO ₂ nanoparticles. , 2006, , . | | 4 |
| 115 | Porous Nickel Oxide Film Sensor for Formaldehyde. <i>Journal of Physics: Conference Series</i> , 2014, 559, 012012. | 0.4 | 4 |
| 116 | Ultrapure Organically Modified Gold Nanoparticles for Breath Analysis. <i>Procedia Engineering</i> , 2016, 168, 133-136. | 1.2 | 4 |
| 117 | Photodegradation of Stearic Acid Adsorbed on Copper Oxide Heterojunction Thin Films Prepared by Magnetron Sputtering. <i>ChemEngineering</i> , 2018, 2, 40. | 2.4 | 4 |
| 118 | Spectral Selective Solar Light Enhanced Photocatalysis: TiO ₂ /TiAlN Bilayer Films. <i>Topics in Catalysis</i> , 2018, 61, 1607-1614. | 2.8 | 4 |
| 119 | Electrochromism in Ni Oxide Thin Films Made by Advanced Gas Deposition and Sputtering: A Comparative Study Demonstrating the Significance of Surface Effects. <i>Journal of the Electrochemical Society</i> , 2020, 167, 116519. | 2.9 | 4 |
| 120 | Embedded Oxidized Ag—Pd—Cu Ultrathin Metal Alloy Film Prepared at Low Temperature with Excellent Electronic, Optical, and Mechanical Properties. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 15756-15764. | 8.0 | 4 |
| 121 | Interaction of water with potassium on graphite: A HREELS study. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 1993, 64-65, 279-285. | 1.7 | 3 |
| 122 | Photocatalytic oxide films in the built environment. <i>Journal of Physics: Conference Series</i> , 2014, 559, 012009. | 0.4 | 3 |
| 123 | Fine control of the amount of preferential $\langle 111 \rangle$ orientation in DC magnetron sputtered nanocrystalline TiO ₂ films. <i>Journal of Physics: Conference Series</i> , 2014, 559, 012011. | 0.4 | 2 |
| 124 | Diamond Waveguides for Infrared Spectroscopy and Sensing. <i>Springer Series on Chemical Sensors and Biosensors</i> , 2017, , 87-117. | 0.5 | 2 |
| 125 | Optimizing photocatalytic oxidation for purifying air. <i>SPIE Newsroom</i> , 2006, , . | 0.1 | 2 |
| 126 | Energy Alignment of Quantum-Confined ZnO Particles with Copper Oxides for Heterojunctions with Improved Photocatalytic Performance. <i>ACS Nanoscience Au</i> , 2022, 2, 128-139. | 4.8 | 2 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 127 | Fourier-Transform Infrared and Raman Spectroscopy of Pure and Doped TiO ₂ Photocatalysts. , 0 , 189-238. | | 1 |
| 128 | Fabrication of photonic opal structures on different support materials by convective evaporation. Journal of Physics: Conference Series, 2014, 559, 012007. | 0.4 | 1 |
| 129 | What Makes a Good TiO ₂ Photocatalyst?. Ceramic Engineering and Science Proceedings, 0 , 19-35. | 0.1 | 1 |
| 130 | Demonstration of Slow Photon Chemistry on Multilayer Inverse Opals. Science of Advanced Materials, 2017, 9, 1947-1952. | 0.7 | 1 |
| 131 | Photodecomposition of Acetone on ZrO _x -TiO ₂ Thin Films in O ₂ Excess and Deficit Conditions. , 0 , 175-186. | | 1 |
| 132 | Nickel oxide thin film sensor for fluctuation-enhanced gas sensing of formaldehyde. , 2015, , . | | 0 |
| 133 | Advanced Oxide Materials ~ Growth, Application, Characterization. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1800546. | 1.8 | 0 |
| 134 | TiO ₂ /VO ₂ Bilayer Coatings for Glazing: Synergistically Enhanced Photocatalytic, Thermo-chromic, and Luminous Properties. SSRN Electronic Journal, 0 , . | 0.4 | 0 |