Ken-ichi Katsumata

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Complete decomposition of sulfamethoxazole during an advanced oxidation process in a simple water treatment system. Chemosphere, 2022, 287, 132029.	4.2	13
2	Effects of particle size, concentration and pore size on the loading density of silica nanoparticle monolayer arrays on anodic aluminum oxide substrates prepared by the spin-coating method. Materials Chemistry and Physics, 2022, 277, 125465.	2.0	4
3	Regioselective Approach to Characterizing Increased Edge Availability in Layered Crystal Materials following Layer Expansion: Reaction of Kaolinite with Octadecyltrimethylammonium Salts. Materials, 2022, 15, 588.	1.3	5
4	ZnO/ZnS-Polyvinyl Alcohol Hydrogel for Photocatalytic H2-Generation. Catalysts, 2022, 12, 272.	1.6	12
5	Enhanced Hydrogen Production at Optimum pH for the Recovery Cycle of β-FeOOH. ACS Omega, 2022, 7, 16049-16054.	1.6	5
6	Effect of kaolinite edge surfaces on formation of Tb ³⁺ -doped phosphor by solid-state reaction. RSC Advances, 2022, 12, 15435-15439.	1.7	10
7	Assessment of the Crystallization Process of CaO–Al ₂ O ₃ –SiO ₂ Glass Probed with Tb ³⁺ Luminescence. Inorganic Chemistry, 2022, 61, 11478-11483.	1.9	8
8	Hydrogen production using iron oxyhydroxide with light irradiation. Renewable Energy, 2021, 164, 1284-1289.	4.3	7
9	Expansion of orderly stacked metakaolinite layers and order destruction using a kaolinite-tetraphenylphosphonium chloride intercalation compound. RSC Advances, 2021, 11, 23090-23094.	1.7	5
10	Preparation of microporous glass fiber cloth without cracking. Journal of the Ceramic Society of Japan, 2021, 129, 438-442.	0.5	2
11	C-doped ZnS-ZnO/Rh nanosheets as multijunctioned photocatalysts for effective H2 generation from pure water under solar simulating light. Applied Catalysis B: Environmental, 2021, 297, 120473.	10.8	45
12	A facile method of generating aluminosilicate nanoparticles: Complete fragmentation of kaolinite nanoscrolls via manual grinding. Applied Clay Science, 2021, 214, 106295.	2.6	6
13	Rod-Shaped Î ² -FeOOH Synthesis for Hydrogen Production under Light Irradiation. ACS Omega, 2021, 6, 30562-30568.	1.6	7
14	Effects of kaolinite layer expansion and impurities on the solid-state reaction of kaolinite. RSC Advances, 2021, 11, 38473-38477.	1.7	12
15	Hydrogen Production System by Lightâ€Induced αâ€FeOOH Coupled with Photoreduction. Chemistry - A European Journal, 2020, 26, 2380-2385.	1.7	5
16	The study of correlation between electrical conductivity of solution-processed ZnO film and UV irradiation. Materials Science in Semiconductor Processing, 2020, 120, 105266.	1.9	1
17	One-Pot Synthesis of Anatase, Rutile-Decorated Hydrogen Titanate Nanorods by Yttrium Doping for Solar H ₂ Production. ACS Omega, 2020, 5, 23081-23089.	1.6	7
18	Formation of ammonium ions by electrochemical oxidation of urea with a boron-doped diamond electrode. New Journal of Chemistry, 2020, 44, 17637-17640.	1.4	7

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19	One-pot synthesis of (anatase/bronze-type)-TiO2/carbon dot polymorphic structures and their photocatalytic activity for H2 generation. Applied Surface Science, 2020, 526, 146650.	3.1	11
20	Fabrication of a Silica–Silica Nanoparticle Monolayer Array Nanocomposite Film on an Anodic Aluminum Oxide Substrate and Its Optical and Tribological Properties. ACS Applied Materials & Interfaces, 2020, 12, 27672-27681.	4.0	4
21	Hydrogen Production System by Lightâ€Induced αâ€FeOOH Coupled with Photoreduction. Chemistry - A European Journal, 2020, 26, 2297-2297.	1.7	1
22	Synergetic effect in water treatment with mesoporous TiO ₂ /BDD hybrid electrode. RSC Advances, 2020, 10, 1793-1798.	1.7	11
23	Persistent luminescence properties of monoclinic luminescent zirconium oxide annealed under different oxygen partial pressures. Journal of the Ceramic Society of Japan, 2020, 128, 175-180.	0.5	5
24	Synthesis of a mesoporous titania thin film with a pseudo-single-crystal framework by liquid-phase epitaxial growth, and enhancement of photocatalytic activity. RSC Advances, 2020, 10, 40658-40662.	1.7	2
25	In situ charge carrier dynamics of semiconductor nanostructures for advanced photoelectrochemical and photocatalytic applications. Nanophotonics, 2020, 10, 777-795.	2.9	44
26	Liquid-phase atomic layer deposition of crystalline hematite without post-growth annealing. CrystEngComm, 2019, 21, 4184-4191.	1.3	11
27	Single Crystal ZrO ₂ Nanosheets Formed by Thermal Transformation for Solid Oxide Fuel Cells and Oxygen Sensors. ACS Applied Nano Materials, 2019, 2, 6866-6873.	2.4	10
28	Underwater wettability of oleic acid on TiO 2 photocatalyst surface. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 548, 32-36.	2.3	4
29	Efficient photocatalytic degradation of gaseous acetaldehyde over ground Rh–Sb co-doped SrTiO ₃ under visible light irradiation. RSC Advances, 2018, 8, 5331-5337.	1.7	23
30	Solution Plasma Process-Derived Defect-Induced Heterophase Anatase/Brookite TiO ₂ Nanocrystals for Enhanced Gaseous Photocatalytic Performance. ACS Omega, 2018, 3, 898-905.	1.6	47
31	Multifunctionality in coating films including Nb-doped TiO ₂ and Cs _{<i>x</i>} WO ₃ : near infrared shielding and photocatalytic properties. Nanotechnology, 2018, 29, 224001.	1.3	22
32	Synthesis and fluorescence properties of lanthanide-supported titanate nanosheets. Journal of Luminescence, 2018, 194, 316-320.	1.5	4
33	Positive shift in the potential of photo-electrochemical CO2 reduction to CO on Ag-loaded boron-doped diamond electrode by an electrochemical pre-treatment. Journal of Applied Electrochemistry, 2018, 48, 61-73.	1.5	15
34	Photocatalytic reduction of CO2 on Cu2O-loaded Zn-Cr layered double hydroxides. Applied Catalysis B: Environmental, 2018, 224, 783-790.	10.8	129
35	Ion exchange of layered titanate with transition metal and application to ammonia storage. Journal of the Ceramic Society of Japan, 2018, 126, 808-813.	0.5	1
36	Denaturation of Lysozyme with Visible-light-responsive Photocatalysts of Ground Rhodium-doped and Ground Rhodium-antimony-co-doped Strontium Titanate. Journal of Oleo Science, 2018, 67, 1521-1533.	0.6	2

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37	Synthesis of Mesoporous TiO2/Boron-Doped Diamond Photocatalyst and Its Photocatalytic Activity under Deep UV Light (λ = 222 nm) Irradiation. Molecules, 2018, 23, 3095.	1.7	11
38	Facile Deposition of Cuâ^'SnO _x Hybrid Nanostructures on Lightly Boronâ€Đoped Diamond Electrodes for CO ₂ Reduction. ChemElectroChem, 2018, 5, 2542-2550.	1.7	24
39	Photocatalytic, superhydrophilic, self-cleaning TiO2 coating on cheap, light-weight, flexible polycarbonate substrates. Applied Surface Science, 2018, 458, 917-923.	3.1	126
40	Fe2O3-loaded activated carbon fiber/polymer materials and their photocatalytic activity for methylene blue mineralization by combined heterogeneous-homogeneous photocatalytic processes. Applied Surface Science, 2017, 402, 444-455.	3.1	20
41	Systematic studies of TiO2-based photocatalysts anti-algal effects on Chlorella vulgaris. Journal of Applied Electrochemistry, 2017, 47, 197-203.	1.5	7
42	Fabrication of Efficient Visible-light-responsive TiO ₂ -WO ₃ Hollow Particle Photocatalyst by Electrospray Method. Chemistry Letters, 2017, 46, 122-124.	0.7	9
43	Selective Inactivation of Bacteriophage in the Presence of Bacteria by Use of Ground Rh-Doped SrTiO ₃ Photocatalyst and Visible Light. ACS Applied Materials & Interfaces, 2017, 9, 31393-31400.	4.0	35
44	Influence of Surface Morphology and Conductivity on Photocatalytic Performance of Solutionâ€Processed Zinc Oxide Film. Chemistry - an Asian Journal, 2017, 12, 2480-2485.	1.7	2
45	Series of MxWO3/ZnO (M = K, Rb, NH4) nanocomposites: Combination of energy saving and environmental decontamination functions. Applied Catalysis B: Environmental, 2017, 201, 128-136.	10.8	96
46	Effect of rutile TiO2 on the photocatalytic performance of g-C3N4/brookite-TiO2-xNy photocatalyst for NO decomposition. Applied Surface Science, 2017, 392, 531-539.	3.1	66
47	Comparative Study of Crystallographic and Electrical Properties of Zinc Oxide Films Fabricated by Dry and Wet Processes. Science of Advanced Materials, 2017, 9, 1678-1682.	0.1	0
48	Fabrication of Al-Doped ZnO Film with High Conductivity Induced by Photocatalytic Activity. Journal of Electronic Materials, 2016, 45, 4875-4880.	1.0	8
49	Ionicâ€Liquidâ€Assisted Selective and Controlled Electrochemical CO ₂ Reduction at Cuâ€Modified Boronâ€Đoped Diamond Electrode. ChemElectroChem, 2016, 3, 1044-1047.	1.7	31
50	Adhesive strength of bioactive oxide layers fabricated on TNTZ alloy by three different alkali-solution treatments. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 61, 174-181.	1.5	7
51	Different hollow and spherical TiO2 morphologies have distinct activities for the photocatalytic inactivation of chemical and biological agents. Photochemical and Photobiological Sciences, 2016, 15, 988-994.	1.6	18
52	Boron-doped diamond semiconductor electrodes: Efficient photoelectrochemical CO2 reduction through surface modification. Scientific Reports, 2016, 6, 38010.	1.6	43
53	Sporicidal performance induced by photocatalytic production of organic peroxide under visible light irradiation. Scientific Reports, 2016, 6, 33715.	1.6	13
54	Facet control of ceria nanocrystals synthesized by an oleate-modified hydrothermal method. Advanced Powder Technology, 2016, 27, 64-71.	2.0	6

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55	High-conductivity solution-processed ZnO films realized via UV irradiation and hydrogen treatment. Acta Materialia, 2016, 103, 844-849.	3.8	23
56	Bioactive surface modification of Ti–29Nb–13Ta–4.6Zr alloy through alkali solution treatments. Materials Science and Engineering C, 2016, 62, 662-667.	3.8	11
57	The Morphological Properties of Heterostructured Fe ₃ O ₄ /ZnO Film by Aqueous Solution Process. IEEE Transactions on Magnetics, 2016, 52, 1-5.	1.2	1
58	Low temperature Solution-Processed ZnO film on flexible substrate. Materials Science in Semiconductor Processing, 2016, 47, 20-24.	1.9	12
59	Porous magnetite secondary particles prepared by surfactant-free solvothermal method with non-contact heat-assisted drug releasing property. Advanced Powder Technology, 2016, 27, 513-520.	2.0	3
60	Nitrogen-doped ZnO Rods Synthesized from an Ammine–Hydroxo Zinc Complex. Chemistry Letters, 2015, 44, 651-653.	0.7	1
61	Study on the Effect of Pt Intercalation into Layered Niobate Perovskite for Photocatalytic Behavior. Langmuir, 2015, 31, 7660-7665.	1.6	11
62	Porous ZrO ₂ sheets synthesized using an ionothermal method and their absorption properties. Dalton Transactions, 2015, 44, 8247-8254.	1.6	9
63	Transparent ZnO Films Deposited by Aqueous Solution Process Under Various pH Conditions. Journal of Electronic Materials, 2015, 44, 2657-2662.	1.0	7
64	Highly Dispersed Iron Oxide Nanoparticles Synthesized by Solvothermal Method Adding Electrostatic Stabilizers. IEEE Transactions on Magnetics, 2015, 51, 1-4.	1.2	2
65	Self-organization of TiO2 Nanobamboos by Anodization with Deep Eutectic Solvent. Electrochimica Acta, 2015, 153, 409-415.	2.6	35
66	ZnO–graphene composites as practical photocatalysts for gaseous acetaldehyde degradation and electrolytic water oxidation. Applied Catalysis A: General, 2015, 490, 1-9.	2.2	123
67	Enhanced photocatalytic activity of titanium dioxide/allophane mixed powder by acid treatment. Applied Clay Science, 2014, 90, 61-66.	2.6	5
68	Using design of mixture experiments to optimize triaxial ceramic tile compositions incorporating Cambodian clays. Applied Clay Science, 2014, 87, 97-107.	2.6	19
69	Preparation of Bi2WO6– and BiOI–allophane composites for efficient photodegradation of gaseous acetaldehyde under visible light. Applied Clay Science, 2014, 101, 38-43.	2.6	22
70	Template-free solvothermal preparation of ZnO hollow microspheres covered with c planes. RSC Advances, 2014, 4, 25148-25154.	1.7	11
71	Preparation of iron oxide-impregnated spherical granular activated carbon-carbon composite and its photocatalytic removal of methylene blue in the presence of oxalic acid. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2014, 49, 763-769	0.9	13
72	Photodegradation of gaseous acetaldehyde and methylene blue in aqueous solution with titanium dioxide-loaded activated carbon fiber polymer materials and aquatic plant ecotoxicity tests. Environmental Science and Pollution Research, 2014, 21, 4309-4319.	2.7	19

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73	Adsorption and photodegradation of methylene blue with Fe2O3-activated carbons under UV illumination in oxalate solution. Journal of Environmental Chemical Engineering, 2014, 2, 2026-2036.	3.3	20
74	Synthesis of heterostructured In2O3/BiOCl powders and their visible-light-driven photocatalytic activity for the degradation of Rhodamine B. Advanced Powder Technology, 2014, 25, 1292-1303.	2.0	19
75	Fabrication of Heterostructured α-Fe2O3/ZnO Film for Photoelectrode by Aqueous Solution Process. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2014, 61, S324-S326.	0.1	4
76	Adsorption and photodegradation of methylene blue by iron oxide impregnated on granular activated carbons in an oxalate solution. Applied Surface Science, 2013, 284, 72-79.	3.1	37
77	Preparation and UV-shielding property of Zr0.7Ce0.3O2–kaolinite nanocomposites. Applied Clay Science, 2013, 80-81, 147-153.	2.6	19
78	Heterostructured Fe3O4/Bi2O2CO3 photocatalyst: Synthesis, characterization and application in recyclable photodegradation of organic dyes under visible light irradiation. Materials Chemistry and Physics, 2013, 142, 95-105.	2.0	46
79	Preparation of graphitic carbon nitride (g-C3N4)/WO3 composites and enhanced visible-light-driven photodegradation of acetaldehyde gas. Journal of Hazardous Materials, 2013, 260, 475-482.	6.5	265
80	Capillary rise properties of porous mullite ceramics prepared by an extrusion method with various diameters of fiber pore formers. Journal of Materials Science, 2013, 48, 941-947.	1.7	17
81	Preparation and photocatalytic reduction of CO2 on noble metal (Pt, Pd, Au) loaded Zn–Cr layered double hydroxides. Materials Letters, 2013, 107, 138-140.	1.3	64
82	Preparation and characterization of lotus ceramics with different pore sizes and their implication for the generation of microbubbles for CO2 sequestration applications. Ceramics International, 2013, 39, 1443-1449.	2.3	9
83	One-step hydrothermal synthesis and photocatalytic performance of ZnWO4/Bi2WO6 composite photocatalysts for efficient degradation of acetaldehyde under UV light irradiation. Applied Catalysis A: General, 2013, 457, 12-20.	2.2	45
84	Visible-light-driven photodegradation of acetaldehyde gas catalyzed by aluminosilicate nanotubes and Cu(II)-grafted TiO2 composites. Applied Catalysis B: Environmental, 2013, 138-139, 243-252.	10.8	30
85	Synthesis of In ₂ O ₃ /BiOCl Composite Photocatalyst and its Photocatalytic Activity for the Degradation of Rhodamine B under Visible Light Irradiation. Advanced Materials Research, 2013, 747, 635-638.	0.3	2
86	Effects of Thermal Treatment on Crystallographic and Electrical Properties of Transparent Conductive ZnO Films Deposited by Spin-Spray Method. Japanese Journal of Applied Physics, 2013, 52, 110108.	0.8	12
87	Granular Activated Carbons Impregnated by Iron Oxide (Fe-GACs) for Simultaneous Adsorption and Photodecomposition of Methylene Blue in an Oxalate Solution. Advanced Materials Research, 2013, 795, 153-157.	0.3	5
88	Crystal-face Dependence of Photoinduced Hydrophilic Conversion on SrTiO3 Surfaces. Chemistry Letters, 2013, 42, 618-620.	0.7	4
89	Solution Process for Synthesizing Bioactive Nano-Mesh Layer on Ti-Based Bulk Metallic Glasses. Materials Transactions, 2013, 54, 1343-1346.	0.4	6
90	Production of Ni-Based Glassy Alloy-Coated Bipolar Plate with Hydrophilic Surface for PEMFC and Its Evaluation by Electrochemical Impedance Spectroscopy. Materials Transactions, 2013, 54, 1324-1329.	0.4	4

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91	Preparation of TiO _{2} -Fullerene Composites and Their Photocatalytic Activity under Visible Light. International Journal of Photoenergy, 2012, 2012, 1-9.	1.4	17
92	An aqueous solution process and subsequent UV treatment for highly transparent conductive ZnO films. Journal of Materials Chemistry, 2012, 22, 20706.	6.7	35
93	CaTiO3 nanobricks prepared from anodized TiO2 nanotubes. Electrochemistry Communications, 2012, 22, 101-104.	2.3	20
94	Stability of Sc2O3 and CeO2 co-doped ZrO2 electrolyte during the operation of solid oxide fuel cells: Part III. Detailed mechanism of the decomposition. Solid State Ionics, 2012, 224, 6-14.	1.3	15
95	Bioactive Titanium Oxide-Based Nanostructures Prepared by One-Step Hydrothermal Anodization. Journal of Physical Chemistry C, 2012, 116, 8054-8062.	1.5	19
96	Synthesis of Amphiphilic Brookite Nanoparticles with High Photocatalytic Performance for Wide Range of Application. ACS Applied Materials & Interfaces, 2012, 4, 4846-4852.	4.0	50
97	NIR-excited NIR and visible luminescent properties of amphipathic YVO4: Er3+/Yb3+ nanoparticles. Journal of Materials Science, 2012, 47, 2241-2247.	1.7	22
98	Porous ceramics mimicking nature—preparation and properties of microstructures with unidirectionally oriented pores. Science and Technology of Advanced Materials, 2011, 12, 064701.	2.8	48
99	Tuning Growth Modes of Ceria-Based Nanocubes by a Hydrothermal Method. Crystal Growth and Design, 2011, 11, 3754-3760.	1.4	76
100	Pseudo-Cube Shaped Brookite (TiO2) Nanocrystals Synthesized by an Oleate-Modified Hydrothermal Growth Method. Crystal Growth and Design, 2011, 11, 4831-4836.	1.4	50
101	A Proposal of Recycling Type Spin-spray Ferrite Plating to Attain Low Environmental Load. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2011, 58, 560-565.	0.1	Ο
102	Preparation of TiO ₂ Thin Films Using Waterâ€soluble Titanium Complexes and Their Photoinduced Properties. Photochemistry and Photobiology, 2011, 87, 988-994.	1.3	10
103	Photocatalytic Activity and Related Surface Properties of Transparent ZnO Films Prepared by a Lowâ€ŧemperature Aqueous Route. Photochemistry and Photobiology, 2011, 87, 1009-1015.	1.3	7
104	Stability of Sc2O3 and CeO2 co-doped ZrO2 electrolyte during the operation of solid oxide fuel cells: Part II the influences of Mn, Al and Si. Solid State Ionics, 2011, 204-205, 120-128.	1.3	6
105	Control of wetting on Ti-based bulk metallic glass surfaces by a hydrothermal method. Journal of Materials Science, 2011, 46, 3430-3435.	1.7	1
106	Photo-induced hydrophilicity of polycrystalline SrTiO3 thin films. Journal of the Ceramic Society of Japan, 2010, 118, 43-47.	0.5	9
107	ãfŠãfŽã,∙ãf¼ãf^å‰è§¦åª'ã,³ãf¼ãf†ã,£ãf³ã,°ã,¬ãf©ã,¹ã®é−<発. Hyomen Gijutsu/Journal of the Surface	Finisching S	ociety of Japar
108	Effect of surface microstructures on photo-induced hydrophilicity of NaNbO3 thin films by sol–gel process. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 173, 267-270.	1.7	13

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109	Control of the Microstructure and Crystalline Orientation of ZnO Films on a Seed-free Glass Substrate by Using a Spin-Spray Method. Crystal Growth and Design, 2010, 10, 4968-4975.	1.4	39
110	Single-Step Fabrication of ZnO Rod Arrays on a Nonseeded Glass Substrate by a Spin-Spray Technique at 90 ŰC. Crystal Growth and Design, 2010, 10, 3502-3507.	1.4	30
111	Preparation and Characterization of Self-Cleaning Glass for Vehicle with Niobia Nanosheets. ACS Applied Materials & Interfaces, 2010, 2, 1236-1241.	4.0	48
112	Synthesis of Amphipathic YVO4:Eu3+ Nanophosphors by Oleate-Modified Nucleation/Hydrothermal-Growth Process. Journal of Physical Chemistry C, 2010, 114, 3763-3769.	1.5	39
113	Nanoscale heterogeneities in CeO2–ZrO2 nanocrystals highlighted by UV-resonant Raman spectroscopy. Nanoscale, 2010, 2, 1426.	2.8	42
114	Photocatalytic Activity of NaNbO ₃ Thin Films. Journal of the American Chemical Society, 2009, 131, 3856-3857.	6.6	74
115	Photoinduced surface roughness variation in polycrystalline TiO2 thin films under different atmospheres. Journal of Photochemistry and Photobiology A: Chemistry, 2007, 190, 53-57.	2.0	14
116	Photoinduced surface roughness variation in polycrystalline TiO2 thin films. Journal of Photochemistry and Photobiology A: Chemistry, 2006, 180, 75-79.	2.0	31
117	Effect of microstructure on photoinduced hydrophilicity of transparent anatase thin films. Surface Science, 2005, 579, 123-130.	0.8	28
118	Preparation and characterization of TiO2 thin films using vacuum ultraviolet light in a sol–gel process. Surface Science, 2005, 596, 197-205.	0.8	6
119	Preparation of phase-separated textures and crystalline phases from two-liquid immiscible melts in the TiO2–SiO2 system. Materials Research Bulletin, 2004, 39, 1131-1139.	2.7	14
120	Effects of selective leaching of bismuth oxide sheets in triple-layered Aurivillius phases on their photocatalytic activities. Chemical Physics Letters, 2004, 393, 12-16.	1.2	21
121	Effect of Germanium Oxide (GeO2) Additive on the Anatase-to-Rutile Phase Transition. Journal of the American Ceramic Society, 2002, 85, 2078-2082.	1.9	12
122	The Effect of Citric Ion on the Spin-Sprayed ZnO Films: IR and XPS Study for the Organic Impurities. Key Engineering Materials, 0, 485, 291-294.	0.4	4
123	Hydrothermal Synthesis and Visible-Light-Driven Photocatalytic Activity of Allophane – Wakefieldite-(Ce) Composite. Advanced Materials Research, 0, 896, 545-548.	0.3	1