Andrei Kanaev

List of Publications by Year
in descending order

56 papers	1,169 citations	430874 18 h-index	395702 33 g-index
56 all docs	56 docs citations	56 times ranked	1570 citing authors

#	Article	IF	Citations
1	Defect-related photoluminescence of hexagonal boron nitride. Physical Review B, 2008, 78, .	3.2	199
2	New homogeneously doped Fe(III)â€“TiO2 photocatalyst for gaseous pollutant degradation. Applied Catalysis A: General, 2011, 399, 191-197.	4.3	59
3	New photoactive hybrid organicâ€“inorganic materials based on titanium-oxo-PHEMA nanocomposites exhibiting mixed valence properties. Journal of Materials Chemistry, 2005, 15, 3380.	6.7	56
4	Light-induced charge separation and storage in titanium oxide gels. Physical Review E, 2005, 71, 021403.	2.1	53
5	Stability and Growth of Titanium-oxo-alkoxy TixOy(OiPr)zClusters. Journal of Physical Chemistry C, 2007, 111, 16243-16248.	3.1	48
6	Solâ€“Gel Reactor With Rapid Micromixing. Chemical Engineering Research and Design, 2005, 83, 67-74.	5.6	47
7	Laser-induced photopatterning of organicâ€“inorganic TiO2-based hybrid materials with tunable interfacial electron transfer. Physical Chemistry Chemical Physics, 2009, 11, 1248.	2.8	47
8	Elaboration of pure and doped TiO2 nanoparticles in solâ€“gel reactor with turbulent micromixing: Application to nanocoatings and photocatalysis. Chemical Engineering Research and Design, 2010, 88, 1123-1130.	5.6	42
9	Nanoparticulate TiO₂â€“Al₂O₃ Photocatalytic Media: Effect of Particle Size and Polymorphism on Photocatalytic Activity. ACS Catalysis, 2012, 2, 1884-1892.	11.2	41
10	Amorphousâ€“anatase phase transition in single immobilized TiO2 nanoparticles. Chemical Physics Letters, 2013, 558, 53-56.	2.6	40
11	Photocatalytic paper based on solâ€“gel titania nanoparticles immobilized on porous silica for VOC abatement. Applied Catalysis B: Environmental, 2014, 154-155, 123-133.	20.2	34
12	Extinction of photo-induced Ti3+ centres in titanium oxide gels and gel-based oxo-PHEMA hybrids. Chemical Physics Letters, 2006, 429, 523-527.	2.6	33
13	Kinetics of UV-induced darkening of titanium-oxide gels. Applied Surface Science, 2005, 248, 86-90.	6.1	32
14	Novel nanostructured pHEMAâ€“TiO2 hybrid materials with efficient light-induced charge separation. Nanoscale, 2011, 3, 1807.	5.6	24
15	Temperature dependence of the titanium oxide sols precipitation kinetics in the solâ€“gel process. Chemical Physics Letters, 2004, 398, 157-162.	2.6	22
16	Nucleationâˆ’Growth of TiO₂ Nanoparticles Doped with Iron Acetylacetonate. Journal of Physical Chemistry C, 2011, 115, 5244-5250.	3.1	22
17	Growth of Silver Nanoclusters on Monolayer Nanoparticulate Titanium-oxo-alkoxy Coatings. Journal of Physical Chemistry C, 2012, 116, 17239-17247.	3.1	20
18	Photoluminescence and electronic transitions in cubic silicon nitride. Scientific Reports, 2016, 6, 18523.	3.3	19

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19	Synthesis and photoluminescence properties of nanostructured mullite/Î±-Al2O3. Acta Materialia, 2014, 71, 108-116.	7.9	18
20	Effect of Light Intensity on the Free-Radical Photopolymerization Kinetics of 2-Hydroxyethyl Methacrylate: Experiments and Simulations. Journal of Physical Chemistry B, 2020, 124, 6857-6866.	2.6	18
21	Isolation of titania nanoparticles in monolithic ultraporous alumina: Effect of nanoparticle aggregation on anatase phase stability and photocatalytic activity. Applied Catalysis A: General, 2011, 402, 156-161.	4.3	17
22	Solvent effect on nucleation-growth of titanium-oxo-alkoxy nanoparticles. Chemical Physics Letters, 2017, 672, 119-123.	2.6	17
23	Laser imprinting of 3D structures in gel-based titanium oxide organic-inorganic hybrids. Applied Physics A: Materials Science and Processing, 2006, 84, 27-30.	2.3	16
24	Nucleation and growth kinetics of zirconium-oxo-alkoxy nanoparticles. Physical Chemistry Chemical Physics, 2015, 17, 2651-2659.	2.8	16
25	Laser-Assisted High-Pressure-Induced Polymerization of 2-(Hydroxyethyl)methacrylate. Journal of Physical Chemistry B, 2015, 119, 3577-3582.	2.6	15
26	Mixing strategies for zinc oxide nanoparticle synthesis via a polyol process. AIChE Journal, 2015, 61, 1708-1721.	3.6	13
27	A New Route for High-Purity Organic Materials: High-Pressure-Ramp-Induced Ultrafast Polymerization of 2-(Hydroxyethyl)Methacrylate. Scientific Reports, 2016, 5, 18244.	3.3	13
28	Electronic transitions in Î±, Î¸ and Î³ polymorphs of ultraporous monolithic alumina. Physica Status Solidi - Rapid Research Letters, 2013, 7, 1026-1029.	2.4	12
29	Surface structuring of rutile TiO₂(100) and (001) single crystals with femtosecond pulsed laser irradiation. Journal of the Optical Society of America B: Optical Physics, 2018, 35, 2600.	2.1	12
30	Morphology and luminescence of MgAl2O4 ceramics obtained via spark plasma sintering. Ceramics International, 2019, 45, 8305-8312.	4.8	12
31	Luminescence properties of pHEMA-TiO2 gels based hybrids materials. Journal of Luminescence, 2012, 132, 1192-1199.	3.1	11
32	Synthesis of organicâ€“inorganic hybrids <i>via</i> a high-pressure-ramp process: the effect of inorganic nanoparticle loading on structural and photochromic properties. Nanoscale, 2018, 10, 22293-22301.	5.6	11
33	Porous monoliths consisting of aluminum oxyhydroxide nanofibrils: 3D structure, chemical composition, and phase transformations in the temperature range 25â€“1700 Â°C. Journal of Nanoparticle Research, 2018, 20, 1.	1.9	11
34	From nanoparticles to bulk crystalline solid: nucleation, growth kinetics and crystallisation of mixed oxide Zr_xTi_{1âˆ’x}O₂ nanoparticles. CrystEngComm, 2017, 19, 3955-3965.	2.6	9
35	Design of Novel Sulfated Nanozirconia Catalyst for Biofuel Synthesis. Industrial & Engineering Chemistry Research, 2017, 56, 1394-1403.	3.7	8
36	Effects of Ta doping and irradiation with He+ ions on photoluminescence of MgAl2O4 spinel ceramics. Journal of the European Ceramic Society, 2020, 40, 3215-3221.	5.7	8

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37	Electronic Band Transitions in Î³-Ge3N4. Electronic Materials Letters, 2021, 17, 315-323.	2.2	8
38	A new solvothermal route to efficient titania photocatalyst. Materials Chemistry and Physics, 2015, 160, 73-79.	4.0	7
39	Superhydrophobic and luminescent highly porous nanostructured alumina monoliths modified with tris(8-hydroxyquinolinato)aluminium. Microporous and Mesoporous Materials, 2020, 293, 109804.	4.4	7
40	Defects induced by He+ irradiation in Î³-Si3N4. Journal of Luminescence, 2021, 237, 118132.	3.1	7
41	Formation of gel of preformed size-selected titanium-oxo-alkoxy nanoparticles: towards organic-inorganic hybrid material with efficient interfacial electron transfer. Materials Research Express, 2014, 1, 045039.	1.6	6
42	Effect of laser polarization and crystalline orientation on ZnO surface nanostructuring in the regime of high-density electronic excitation. Journal of the Optical Society of America B: Optical Physics, 2014, 31, C44.	2.1	6
43	The Role of Crystalline Orientation in the Formation of Surface Patterns on Solids Irradiated with Femtosecond Laser Double Pulses. Applied Sciences (Switzerland), 2020, 10, 8811.	2.5	6
44	Solvent-Free Synthesized Monolithic Ultraporous Aluminas for Highly Efficient Removal of Remazol Brilliant Blue R: Equilibrium, Kinetic, and Thermodynamic Studies. Materials, 2021, 14, 3054.	2.9	6
45	Photocatalytic Activity of Nanocoatings Based on Mixed Oxide V-TiO2 Nanoparticles with Controlled Composition and Size. Catalysts, 2021, 11, 1457.	3.5	6
46	Alkoxysilane effect in hybrid material: A comparison of pHEMA-TiO2 and pMAPTMS-TiO2 nanoparticulate hybrids. Materials Research Bulletin, 2019, 114, 130-137.	5.2	5
47	Microstructure and optical properties of alumina sintered from various phases. Ceramics International, 2019, 45, 9625-9630.	4.8	5
48	Nucleation and growth of mixed vanadium-titanium oxo-alkoxy nanoparticles in sol-gel synthesis. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 610, 125636.	4.7	5
49	Pathways control in modification of solid surfaces induced by temporarily separated femtosecond laser pulses. Applied Surface Science, 2021, 566, 150611.	6.1	5
50	Observation of cavitation in exocentric T-mixer. Chemical Engineering Journal, 2017, 321, 146-150.	12.7	4
51	Nucleation and fractal growth of zirconium oxo-alkoxy nanoparticles at the induction stage of solâ€“gel process. Journal of Sol-Gel Science and Technology, 2012, 64, 145-148.	2.4	3
52	Photocatalytic Nanoparticulate Zr_xTi_{1â€x}O₂ Coatings with Controlled Homogeneity of Elemental Composition. ChemistrySelect, 2018, 3, 11118-11126.	1.5	3
53	Polymerization initiation of pure 2-hydroxyethylmethacrylate under shock wave compression. New Journal of Chemistry, 2022, 46, 9258-9263.	2.8	2
54	Laccase Cross-Linked Ultraporous Aluminas for Sustainable Biodegradation of Remazol Brilliant Blue R. Catalysts, 2022, 12, 744.	3.5	2

#	Article	IF	Citations
55	Study of the Photocatalytic Antimicrobial Activity of Nanocomposites Based on TiO2â€“Al2O3 under Action of LED Radiation (405 nm) on Staphylococci. Optics and Spectroscopy (English Translation of) Tj ETQq1 1 0.784314 rg BT /Overlo	0.8	1
56	Mixing-Time in T-Mixer Reactor. Lecture Notes in Mechanical Engineering, 2019, , 1-8.	0.4	0