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## Concentration of hydroxyl groups on the surface of amorphous silicas

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847	Siloxane bridges as reactive sites on silica gel. Fourier transform infrared photoacoustic spectroscopic analysis of the chemisorption of diborane. <b>1990</b> , 86, 3747-3750		16
846	Surface Chemistry and Chemical Modification. <b>1990</b> , 616-672		2
845	Surface structure and chemistry of high surface area silica gels. <b>1990</b> , 120, 26-33		89
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840	Silica: backbone material of liquid chromatographic column packings. <b>1991</b> , 549, 1-28	107
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838	Monolayer of Lithocholic Acid by Chemical Reaction on Silicon Crystal Surface. <b>1992</b> , 21, 1477-1480	15
837	Catalytic Properties of Lanthanide Metals on Silica. <b>1992</b> , 65, 244-249	8
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831	Structure of Sodium Aluminosilicate Glass Surfaces. <b>1992</b> , 75, 2353-2362	25
830	Activity testing and surface characterization of pretreated fused-silica capillaries for gas chromatography. <b>1992</b> , 590, 271-288	3
829	Factors influencing the $\gamma$ - $\text{Al}_2\text{O}_3$ - $\beta$ - $\text{Al}_2\text{O}_3$ phase transformation during CVD growth. <b>1993</b> , 56, 165-177	24
828	Quenching of singlet molecular oxygen ( $^1\text{O}_2$ ) in silica gel-solvent heterogeneous system II. A direct time-resolved study. <b>1993</b> , 71, 55-60	14
827	Chemical vapour deposition of tungsten in a UHV system: effect of substrate conditions on the initial stages of growth. <b>1993</b> , 17, 131-136	3
826	A calorimetric-thermodynamic study of the energetic heterogeneity of water/oxide interfaces. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>1993</b> , 70, 111-130	5.1 5

825	Construction of vibrational basis spectra of multicomponent systems 1. Aerosil. <b>1993</b> , 34, 46-55	
824	Structural Evolution of Colloidal Silica Gels to Glass. <b>1993</b> , 76, 2561-2570	27
823	Characterization of amorphous silica surface. <b>1993</b> , 50, 15-25	25
822	Surface characterization of amorphous silica—review of work from the former USSR. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>1993</b> , 74, 71-90	5.1 217
821	Interactions of water with trisiloxane rings. I. Experimental analysis. <b>1993</b> , 152, 101-108	50
820	Silicon functionality distribution on the surface of amorphous silicas by <sup>29</sup> Si solid state NMR. <b>1993</b> , 155, 122-130	31
819	Surface Chemistry and Durability of Borosilicate Glass. <b>1993</b> , 333, 533	8
818	The existence of structure progressions and wetting transitions in intermediately disordered monolayer alkyl chain assemblies. <b>1994</b> , 100, 1761-1764	52
817	Vibrational spectra of water molecules at quartz/water interfaces. <b>1994</b> , 72, 238-241	447
816	How the work of adhesion affects the mechanical properties of silica-filled polymer composites. <b>1994</b> , 29, 2406-2416	57
815	Structural analysis of water adsorbed in silica gel. <b>1994</b> , 1, 153-168	8
814	Synthesis of Ketenes with Oxide Catalysts. <b>1994</b> , 33, 2904-2912	33
813	Fluid composition effects on silica gel aging. <b>1994</b> , 170, 11-20	14
812	Influence of surface silanols on the dielectric properties of nitrogen adsorbed on activated silica. <b>1994</b> , 315, 323-336	7
811	Complexing and Chelating Agents Immobilized on Silica Gel and Related Materials and Their Application for Sorption of Inorganic Species. <b>1994</b> , 23, 77-348	41
810	Structural Investigation of NaNO <sub>3</sub> Nanophase Confined in Porous Silica. <b>1994</b> , 332, 243	1
809	Discontinuous Change of Water Contact Angle against Stearic Acid Langmuir-Blodgett Monolayers Deposited at Various Surface Pressure. <b>1994</b> , 67, 477-483	
808	Heterogeneous catalysis for ring opening anionic oligomerisation. <b>1994</b> , 88, 191-200	11

807	Charge transfer and charge trapping in zeolites and similar media. <b>1995</b> , 38, 199-219		17
806	Effect of Texture on the Rate of Hydroxyapatite Formation on Gel-Silica Surface. <b>1995</b> , 78, 2463-2468		208
805	<sup>1</sup> H, <sup>51</sup> V and <sup>15</sup> N nuclear magnetic resonance studies of structure and properties of vanadia supported on TiO <sub>2</sub> /SiO <sub>2</sub> . <b>1995</b> , 4, 369-79		23
804	Initial stages of growth during CVD of W on TiSi <sub>2</sub> substrates. <b>1995</b> , 263, 54-64		11
803	Chapter 4 Quantification of the silanol number. <b>1995</b> , 93, 79-91		3
802	Atomic layer growth of SiO <sub>2</sub> on Si(100) using SiCl <sub>4</sub> and H <sub>2</sub> O in a binary reaction sequence. <b>1995</b> , 334, 135-152		124
801	Thorium sorption on amorphous silica. <b>1995</b> , 59, 1235-1249		84
800	Quantitative Analysis of Solids by High-Resolution <sup>1</sup> H NMR. <b>1996</b> , 68, 1401-1407		15
799	Formation of Uniform Aminosilane Thin Layers: An Imine Formation To Measure Relative Surface Density of the Amine Group. <i>Langmuir</i> , <b>1996</b> , 12, 4621-4624	4	225
798	Fundamental Study of Residual Silanol Populations on Alkylsilane-Derivatized Silica Surfaces. <i>Langmuir</i> , <b>1996</b> , 12, 4741-4747	4	32
797	Silica-Supported Molybdena Catalysts. Surface Structures, Reduction Pattern, and Oxygen Chemisorption. <b>1996</b> , 100, 19994-20005		25
796	The Fumed Silica Surface: A Study by NMR. <i>Journal of the American Chemical Society</i> , <b>1996</b> , 118, 5103-5110.4		237
795	Thermal Stability of Self-Assembled Monolayers from Alkylchlorosilanes. <i>Langmuir</i> , <b>1996</b> , 12, 2747-2755.4		96
794	Deposition and Characterization of Porous Silica Xerogel Films. <b>1996</b> , 443, 99		9
793	Chapter 2.2 On the nature of the energetic heterogeneity of water/oxide interface in adsorption phenomena occurring at oxide surfaces. <b>1996</b> , 357-409		11
792	Physicochemical principles for developing new materials based on silicate dispersed minerals. <b>1996</b> , 32, 231-243		2
791	Silica from sepiolite: Preparation, textural properties, and use as support to catalysts. <b>1996</b> , 6, 105-114		49
790	Modification of industrial E-glass fibres by long-chain alcohol adsorption. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>1996</b> , 110, 11-22	5.1	10

789	Effect of partially neutralized aluminum solutions on the texture and pore structure of silica. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>1996</b> , 117, 131-141	5.1	
788	Adsorption of alkyl-trichlorosilanes on glass and silicon: a comparative study using sum-frequency spectroscopy and XPS. <b>1996</b> , 289, 272-281		19
787	Mechanisms of hydroxyapatite formation on porous gel-silica substrates. <b>1996</b> , 7, 59-68		160
786	Heterogeneous catalysts from organometallic precursors: how to design isolated, stable and active sites. Applications to zirconium catalyzed organic reactions. <b>1997</b> , 108, 353-360		9
785	Characterization of Silica-Supported Vanadium(V) Complexes Derived from Molecular Precursors and Their Ligand Exchange Reactions. <i>Langmuir</i> , <b>1997</b> , 13, 1545-1551	4	50
784	Theoretical Study of Hydroxylated and Dehydroxylated Surfaces of a Cristobalite Model of Silica. <b>1997</b> , 101, 8197-8203		69
783	Nanometer scale patterning and pattern transfer on amorphous Si, crystalline Si, and SiO <sub>2</sub> surfaces using self-assembled monolayers. <b>1997</b> , 70, 1593-1595		70
782	Absence of Surface Exclusion in the First Stage of Lysozyme Adsorption Is Driven through Electrostatic Self-Assembly. <b>1997</b> , 101, 5465-5469		30
781	Adsorption and Thermogravimetric Studies of Silica-Based Amide Bonded Phases. <b>1997</b> , 101, 6861-6866		74
780	Characterization of Alkali-Doped Ni/SiO <sub>2</sub> Catalysts. <b>1997</b> , 101, 1782-1790		26
779	Surface Heterogeneity on Hydrophilic and Hydrophobic Silicas: Water and Alcohols as Probes for H-Bonding and Dispersion Forces. <i>Langmuir</i> , <b>1997</b> , 13, 895-902	4	70
778	Absolute Surface Density of the Amine Group of the Aminosilylated Thin Layers: Ultraviolet-Visible Spectroscopy, Second Harmonic Generation, and Synchrotron-Radiation Photoelectron Spectroscopy Study. <i>Langmuir</i> , <b>1997</b> , 13, 4305-4310	4	147
777	Diffusion of Er <sup>3+</sup> in porous sol-gel glass. <b>1997</b> , 211, 150-157		14
776	Characterization of porosity of ammonia catalysed alkoxysilane silica. <b>1997</b> , 221, 107-124		34
775	A Detailed Model of Local Structure and Silanol Hydrogen Bonding of Silica Gel Surfaces. <b>1997</b> , 101, 3052-3064	217	
774	Surface Science Approach to Modeling Supported Catalysts. <b>1997</b> , 39, 77-168		321
773	Interaction of Water and other Polar Substances with Hydrophilic Centres on the Surface of Hydrophobic Adsorbents. <b>1997</b> , 15, 497-505		7
772	Chromatographic activity of residual silanols of alkylsilane derivatized silica surfaces. <b>1997</b> , 759, 37-46		34

771	Study of metallocene supported on porous and nonporous silica for the polymerization of ethylene. <b>1997</b> , 46, 107-112		20
770	Electrostatic characterisation of Al-modified, nanosized silica particles. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>1997</b> , 122, 169-181	5.1	29
769	Interaction of flutriafol with the surface of silica and layer silicates. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>1997</b> , 127, 187-199	5.1	7
768	Adsorption of bacterial surface polysaccharides on mineral oxides is mediated by hydrogen bonds. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>1997</b> , 9, 331-343	6	158
767	A molecular route towards silica supported zirconium catalysts active for the mild oxidation of olefins with H <sub>2</sub> O <sub>2</sub> . <b>1997</b> , 120, L27-L31		19
766	Deactivation of silica surfaces with a silanol-terminated polysiloxane; structural characterization by inverse gas chromatography and solid-state NMR. <b>1997</b> , 20, 17-23		9
765	Thermal Transformations of Chromium Acetylacetonate on Silica Surface. <i>Journal of Colloid and Interface Science</i> , <b>1997</b> , 189, 144-150	9.3	40
764	Treatments of fused-silica capillaries and their influence on the electrophoretic characteristics of these columns before and after coating. <b>1998</b> , 823, 561-571		38
763	Thermogravimetry as a Reliable tool to Estimate the Density of Silanols on a Silica Gel Surface. <b>1998</b> , 53, 751-756		65
762	Tetraneopentyltitanium Derived Supported Catalysts. <b>1998</b> , 176, 173-181		37
761	Deposition mechanism of oxide thin films on self-assembled organic monolayers <sup>1</sup> Paper presented at Sympos. Synergistic Synthesis of Inorganic Materials, March 1996, Schloß Ringberg, Germany. <b>1998</b> , 46, 801-815		79
760	Microcalorimetric Study of Argon, Nitrogen, and Carbon Monoxide Adsorption on Mesoporous Vycor Glass. <i>Journal of Colloid and Interface Science</i> , <b>1998</b> , 206, 527-531	9.3	7
759	Origin of Differences in Heats of Immersion of Silicas in Water. <i>Journal of Colloid and Interface Science</i> , <b>1998</b> , 208, 570-574	9.3	24
758	Heat of immersion of amorphous and crystalline silicas in water: effect of crystallinity. <b>1998</b> , 308, 139-145		25
757	The effect of reaction parameters on catalytic activity in the polymerization of ethylene using supported and unsupported metallocene catalysts. <b>1998</b> , 166, 207-213		18
756	Adsorption of styryl pyridinium dyes on polyethylene-glycol-treated silica. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>1998</b> , 134, 249-255	5.1	26
755	The effect of thermal treatment of silica gel on its surface free energy components. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>1998</b> , 134, 321-329	5.1	19
754	Adsorption of cellulose derivatives on inorganic oxides. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>1998</b> , 144, 245-258	5.1	18

753	Adsorption of boric acid trimethyl ester on silica surface studied by FT-IR spectroscopy. <i>Applied Surface Science</i> , <b>1998</b> , 126, 16-20	6.7	7
752	Catalytic properties of lanthanide amide, imide and nitride formed by thermal degradation of liquid ammonia solutions of Eu and Yb metal. <b>1998</b> , 275-277, 903-907		3
751	Relaxation of silica glass surfaces before and after stress modification in a wet and dry atmosphere: molecular dynamics simulations. <b>1998</b> , 226, 47-57		29
750	Wettability of Glass-Bead Surface Modified by Trimethylchlorosilane. <b>1998</b> , 102, 10498-10504		35
749	Preparation, Characterization, and Properties of Mixed Organic and Polymeric Self-Assembled Multilayers. <i>Journal of the American Chemical Society</i> , <b>1998</b> , 120, 8797-8804	16.4	43
748	A Surface Science Study of Model Catalysts. 1. Quantitative Surface Analysis of Wet-Chemically Prepared Cu/SiO <sub>2</sub> Model Catalysts. <b>1998</b> , 102, 9532-9540		11
747	Characterization of GeO <sub>2</sub> Sub-monolayers on SiO <sub>2</sub> Prepared by Chemical Vapor Deposition of Ge(OMe) <sub>4</sub> by EXAFS, FT-IR, and XRD. <i>Langmuir</i> , <b>1998</b> , 14, 3607-3613	4	15
746	Estimation of Adhesion Hysteresis at Polymer/Oxide Interfaces Using Rolling Contact Mechanics. <i>Langmuir</i> , <b>1998</b> , 14, 3090-3100	4	68
745	Surface-confined living radical polymerization for coatings in capillary electrophoresis. <b>1998</b> , 70, 4023-9		120
744	Detection of Local Density Distribution of Isolated Silanol Groups on Planar Silica Surfaces Using Nonlinear Optical Molecular Probes. <b>1998</b> , 70, 4730-4735		61
743	The structure of silica particles prepared by acid treatment of olivine: a nitrogen-physisorption and <sup>29</sup> Si-MAS NMR study.. <b>1998</b> , 118, 755-761		2
742	Porous Silica Xerogel Processing and Integration for ULSI Applications. <b>1998</b> , 511, 213		19
741	Biomolecular Surface Engineering of Materials for Controlling Bone Cell Adhesion and Spreading. <b>1998</b> , 530, 99		
740	Evaluation of the interactions between polymeric chains and surfaces with different structures performed by an atomic force microscope. <b>1998</b> , 1, 19-28		10
739	On the computer simulation of a hydrophobic vitreous silica surface. <b>1999</b> , 111, 9803-9812		111
738	Characteristics of monolayers of calix[4]resorcinarenes derivatives having azobenzene chromophores. <b>1999</b> , 8-9, 353-359		7
737	Realistic surface science models of industrial catalysts. <i>Applied Surface Science</i> , <b>1999</b> , 144-145, 366-374	6.7	26
736	Investigation of adsorption-dissociation mechanism of organic molecules at solid-liquid interface using nonlinear optical molecular probing method. <b>1999</b> , 397, 73-79		



735	Heterogeneous nucleation of calcium phosphate salts at a solid/liquid interface examined by scanning angle reflectometry. <b>1999</b> , 197, 927-938		13
734	Effects of Adsorbed Polyaniline on Redox Process on MoO <sub>3</sub> Surface. <i>Journal of Colloid and Interface Science</i> , <b>1999</b> , 212, 123-129	9.3	17
733	A Multivariate Analysis on the Sedimentation of Aqueous Silica Suspensions as Studied by Means of Time Domain Dielectric Spectroscopy. <i>Journal of Colloid and Interface Science</i> , <b>1999</b> , 214, 1-7	9.3	2
732	Fluoroalkylsilane Monolayers Formed by Chemical Vapor Surface Modification on Hydroxylated Oxide Surfaces. <i>Langmuir</i> , <b>1999</b> , 15, 7600-7604	4	288
731	Adsorption by Metal Oxides. <b>1999</b> , 287-354		11
730	Bioactivation of Metal Oxide Surfaces. 1. Surface Characterization and Cell Response. <i>Langmuir</i> , <b>1999</b> , 15, 6931-6939	4	153
729	Quantum Mechanical ab Initio Characterization of a Simple Periodic Model of the Silica Surface. <b>1999</b> , 103, 2165-2171		71
728	Trialkylsilane Monolayers Covalently Attached to Silicon Surfaces: Wettability Studies Indicating that Molecular Topography Contributes to Contact Angle Hysteresis. <i>Langmuir</i> , <b>1999</b> , 15, 3759-3766	4	303
727	Application of natural adsorbents and adsorption-active materials based thereon in the processes of water purification. <b>1999</b> , 659-722		12
726	Adsorption, Thermogravimetric, and NMR Studies of FSM-16 Material Functionalized with Alkylmonochlorosilanes. <b>1999</b> , 103, 6252-6261		53
725	Thoughts on the Structure of Alkylsilane Monolayers. <i>Langmuir</i> , <b>1999</b> , 15, 2773-2778	4	163
724	Identification of Oblique and Coplanar Inclined Fluorescent J-Dimers in Rhodamine 110 Doped Sol-Gel-Glasses. <b>1999</b> , 103, 8080-8086		47
723	Investigation of Size and Charge Effects on the Adsorption of Organic and Inorganic Cations at Solid-Liquid Interfaces Using Nonlinear Optical Molecular Probes. <i>Langmuir</i> , <b>1999</b> , 15, 4590-4594	4	6
722	EFFECT OF WATER PLASMA ON SILICA SURFACES: SYNTHESIS, CHARACTERIZATION AND APPLICATIONS. <b>1999</b> , 212-222		7
721	Chapter 182 The metals and alloys (prepared utilizing liquid ammonia solutions) in catalysis II. <b>2000</b> , 29, 45-74		0
720	Role of Surface Molecular Architecture and Energetics of Hydrogen Bonding Sites in Adsorption of Polymers and Surfactants. <i>Journal of Colloid and Interface Science</i> , <b>2000</b> , 226, 159-165	9.3	32
719	An Improved Method for Calculating Zeta-Potentials from Measurements of the Electrokinetic Sonic Amplitude. <i>Journal of Colloid and Interface Science</i> , <b>2000</b> , 229, 174-183	9.3	32
718	H <sub>2</sub> O Outgassing Properties of Fumed and Precipitated Silica Particles by Temperature-Programmed Desorption. <i>Journal of Colloid and Interface Science</i> , <b>2000</b> , 230, 432-440	9.3	18

717	Synthesis of spherical porous silicas in the micron and submicron size range: challenges and opportunities for miniaturized high-resolution chromatographic and electrokinetic separations. <b>2000</b> , 892, 47-55		157
716	Organosilicon-modified silicas as support for zirconocene catalyst. <b>2000</b> , 154, 103-113		52
715	The surface chemistry of amorphous silica. Zhuravlev model. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2000</b> , 173, 1-38	5.1	1564
714	Monodisperse, nonporous, spherical silica particles. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2000</b> , 166, 171-176	5.1	43
713	Quantification of the Number of Silanol Groups in Silicalite and Mesoporous MCM-41: Use of Ft-Raman Spectroscopy. <b>2000</b> , 33, 569-584		6
712	Effects of Silanol Density, Distribution, and Hydration State of Fumed Silica on the Formation of Self-Assembled Monolayers of n-Octadecyltrichlorosilane. <i>Langmuir</i> , <b>2000</b> , 16, 5008-5016	4	51
711	Characterization of the State of Order of Octadecylsilane Chains on Fumed Silica. <i>Langmuir</i> , <b>2000</b> , 16, 568-576	4	23
710	Reactivities of Silicas with Organometallic Methylating Agents. <i>Journal of the American Chemical Society</i> , <b>2000</b> , 122, 3118-3126	16.4	45
709	Reactions of Organosilanes with Silica Surfaces in Carbon Dioxide. <i>Langmuir</i> , <b>2001</b> , 17, 757-761	4	75
708	Molecular Dynamics Simulations of Silicate Glasses and Glass Surfaces. <b>2001</b> , 42, 131-168		7
707	Surface Grafting of Poly(l-glutamates). 1. Synthesis and Characterization. <i>Langmuir</i> , <b>2001</b> , 17, 6477-6484		47
706	Immobilization of oligodeoxyribonucleotides with multiple anchors to microchips. <b>2001</b> , 29, 955-9		37
705	Phase Fluctuation Chromatography of Diblock Copolymer of Poly(ethylene glycol) and Poly(l-lactide) for Fractionation by the Block Length Ratio. <b>2001</b> , 34, 4949-4957		7
704	5. Molecular Dynamics Simulations of Silicate Glasses and Glass Surfaces. <b>2001</b> , 131-168		7
703	Structure and morphology of self-assembled 3-mercaptopropyltrimethoxysilane layers on silicon oxide. <i>Applied Surface Science</i> , <b>2001</b> , 181, 307-316	6.7	143
702	Parametric calculations of Mo-allyl complexes anchored on silica. <b>2001</b> , 168, 265-277		5
701	Determination of electric double layer parameters for spherical silica particles under application of the triple layer model using surface charge density data and results of electrokinetic sonic amplitude measurements. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2001</b> , 195, 215-225	5.1	62
700	Origins of the Non-DLVO Force between Glass Surfaces in Aqueous Solution. <i>Journal of Colloid and Interface Science</i> , <b>2001</b> , 237, 249-258	9.3	80

699	Aqueous suspension of fumed oxides: particle size distribution and zeta potential. <b>2001</b> , 91, 1-112		182
698	Simulations of the structure and properties of amorphous silica surfaces. <b>2001</b> , 56, 4205-4216		35
697	Hydrogen Production via Catalytic Decomposition of Methane. <b>2001</b> , 199, 9-18		201
696	Rehydroxylation of dehydrated silica surfaces by water vapor adsorption. <b>2001</b> , 12, 331-342		13
695	The enhanced performance of biocidal additives in paints and coatings. <b>2001</b> , 43, 10-17		71
694	Adsorption Properties of Silica towards Poly(Ethylene Oxide) as a Function of pH Studied by Spin-Labeling. <b>2001</b> , 215,		1
693	Plasmachemical Dehydroxylation of High Surface Area Silica at Room Temperature. <b>2001</b> , 105, 2572-2577		3
692	Chemical-mechanical polishing of copper and tantalum with silica abrasives. <b>2001</b> , 16, 1066-1073		53
691	Sol-Gel Processing of Amorphous Nanoporous Silicas: Thin Films and Bulk. <b>2002</b> , 123-139		
690	Molecular Modeling of Self-Assembled Alkynyl Thin Films: Elucidation of Monolayer Structure from Small, Calculated Symmetry Units. <i>Langmuir</i> , <b>2002</b> , 18, 5657-5660	4	12
689	Adsorption of Alkyldimethylamine and Alkyldimethylphosphine Oxides at Curved Aqueous Solution/Silica Interfaces, Studied Using Microcalorimetry. <i>Langmuir</i> , <b>2002</b> , 18, 8436-8446	4	13
688	Preparation of a Water-Resistant Siliceous MCM-41 Sample, through Improvement of Crystallinity, and Its Prominent Adsorption Features. <i>Langmuir</i> , <b>2002</b> , 18, 1595-1603	4	49
687	General Principles for the Synthesis and Modification of Porous Materials. 533-666		2
686	Protein detection by optical shift of a resonant microcavity. <b>2002</b> , 80, 4057-4059		664
685	Streaming Potential Studies on the Adsorption of Amphoteric Alkyldimethylamine and Alkyldimethylphosphine Oxides on Mesoporous Silica from Aqueous Solution. <i>Langmuir</i> , <b>2002</b> , 18, 8447-8454	4	37
684	Effect of interfacial interactions on the initial growth of Cu on clean SiO <sub>2</sub> and 3-mercaptopropyltrimethoxysilane-modified SiO <sub>2</sub> substrates. <b>2002</b> , 20, 589-596		41
683	Conditions of Formation of Copper Phyllosilicates in Silica-Supported Copper Catalysts Prepared by Selective Adsorption. <b>2002</b> , 106, 2277-2286		134
682	Evidence of the Existence of Three Types of Species at the Quartz-Aqueous Solution Interface at pH 0: XPS Surface Group Quantification and Surface Complexation Modeling. <b>2002</b> , 106, 2937-2945		205

681	Anionic Synthesis of Block Copolymer Brushes Grafted from a 1,1-Diphenylethylene Monolayer. <b>2002</b> , 35, 9964-9974		48
680	Interactions of St $\beta$ er Silica with Natural Rubber under the Influence of Coupling Agents, Studied by $^1\text{H}$ NMR T $_2$ Relaxation Analysis. <b>2002</b> , 35, 10026-10037		62
679	Synergy in macrocycle/SiO $_2$ sol-gel nano-composites. <b>2002</b> , 12, 3278-3284		7
678	Interactions between acid- and base-functionalized surfaces. <i>Journal of Colloid and Interface Science</i> , <b>2002</b> , 252, 138-48	9.3	51
677	Preparation and characterization of silica-pillared derivatives from kanemite. <i>Journal of Colloid and Interface Science</i> , <b>2002</b> , 255, 171-6	9.3	11
676	Effect of chemisorption methods on fluorescence behavior of cyanobiphenyl units attached to silica surfaces. <b>2002</b> , 149, 199-206		1
675	Hydroxylation and Dehydroxylation Behavior of Silica Glass Fracture Surfaces. <b>2002</b> , 85, 1499-1504		54
674	IR and theoretical studies of monocarbonyl Ni complexes formed by adsorption of CO at low pressure on silica-supported Ni(II) ions. <i>Journal of the American Chemical Society</i> , <b>2002</b> , 124, 7210-7	16.4	29
673	Low-Temperature Fluorination of Silica by a Nonaqueous Solution of NH $_4$ F. <b>2003</b> , 107, 4497-4505		19
672	Gold nanoparticles in SBA-15 showing catalytic activity in CO oxidation. <b>2003</b> , 254, 289-296		162
671	Pyridine-15N A Mobile NMR Sensor for Surface Acidity and Surface Defects of Mesoporous Silica. <b>2003</b> , 107, 11924-11939		229
670	Study of the Acidic Sites and Their Modifications in Mesoporous Silica Synthesized in Acidic Medium under Quiescent Conditions. <b>2003</b> , 107, 9275-9280		41
669	Adhesion between Hydrocarbon Particles and Silica Surfaces with Different Degrees of Hydration As Determined by the AFM Colloidal Probe Technique. <i>Langmuir</i> , <b>2003</b> , 19, 5311-5317	4	45
668	Two-Dimensional Aggregation of Species with Weak and Strong Bonding Interactions: Modeling the Growth of Self-Assembled Alkylsiloxane Monolayers. <i>Langmuir</i> , <b>2003</b> , 19, 6590-6593	4	21
667	Controlled Growth of Silicon Dioxide from Nanoholes in Silicon-Supported Tris(trimethylsiloxy)silyl Monolayers: Rational Control of Surface Roughness at the Nanometer Length Scale. <i>Langmuir</i> , <b>2003</b> , 19, 2449-2457	4	12
666	Acoustic attenuation in silica porous systems. <b>2003</b> , 322, 29-34		22
665	Molecular modelling of self-assembled alkynyl monolayer structures ? Unnatural symmetry units, surface bonding, and topochemical polymerization1. <b>2003</b> , 81, 1228-1240		2
664	Growth of Si nanocrystals on alumina and integration in memory devices. <b>2003</b> , 82, 4151-4153		51

663	Preparation of organic monolayers on uniformly and prepatterned silicon substrates. <b>2003,</b>		2
662	Hybrid Catalysts for Acetylenes Polymerization Prepared by Anchoring [Rh(cod)Cl] <sub>2</sub> on MCM-41, MCM-48 and SBA-15 Mesoporous Molecular Sieves - The Effect of Support Structure on Catalytic Activity in Polymerization of Phenylacetylene and 4-Ethynyl-N-(4-[(trimethylsilyl)ethynyl]benzylidene)aniline. <b>2003,</b> 68, 1861-1876		15
661	Selective chemical surface modification of fluidic microsystems and characterization studies. <b>2004,</b> 14, 497-505		15
660	Analysis of hydroxyl group controlled atomic layer deposition of hafnium dioxide from hafnium tetrachloride and water. <b>2004,</b> 95, 4777-4786		82
659	Acoustic and thermal properties of silica aerogels and xerogels. <b>2004,</b> 70,		18
658	An on-chip thin film photodetector for the quantification of DNA probes and targets in microarrays. <b>2004,</b> 32, e70		72
657	Mechanisms for Silanol Formation on Amorphous Silica Fracture Surfaces. <b>2004,</b> 82, 1289-1293		62
656	The effect of ultrasonic waves on the fabrication of TiO <sub>2</sub> nanoparticles on a substrate using a self-assembly method. <b>2004,</b> 21, 1062-1065		10
655	Modification of indium-tin oxide (ITO) glass with aziridine provides a surface of high amine density. <i>Journal of Colloid and Interface Science,</i> <b>2004,</b> 277, 499-504	9.3	22
654	Interaction of poly(ethylene oxide) with fumed silica. <i>Journal of Colloid and Interface Science,</i> <b>2004,</b> 279, 326-40	9.3	68
653	Synthesis and characterization of nanosilica prepared by precipitation method. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects,</i> <b>2004,</b> 240, 173-178	5.1	112
652	Preparation of submicron-structured alkylsiloxane monolayers using prepatterned silicon substrates by laser direct writing. <i>Langmuir,</i> <b>2004,</b> 20, 3525-7	4	28
651	Alternative method for fabricating chemically functionalized AFM tips: silane modification of HF-treated Si <sub>3</sub> N <sub>4</sub> probes. <i>Langmuir,</i> <b>2004,</b> 20, 4124-31	4	30
650	Time evolution studies of the H <sub>2</sub> O/quartz interface using sum frequency generation, atomic force microscopy, and molecular dynamics. <i>Langmuir,</i> <b>2004,</b> 20, 10474-80	4	47
649	Spectroscopic Characterization of Highly Dispersed Vanadia Supported on SBA-15. <b>2004,</b> 108, 9703-9709		86
648	Interaction of Gas-Phase Ozone at 296 K with Unsaturated Self-Assembled Monolayers: A New Look at an Old System. <b>2004,</b> 108, 10473-10485		116
647	Rubber, 4. Chemicals and Additives. <b>2004,</b>		3
646	Fluorine-induced hydrophobicity in silica aerogels. <b>2004,</b> 350, 202-208		18

645	Fluid biomembranes supported on nanoporous aerogel/xerogel substrates. <i>Langmuir</i> , <b>2004</b> , 20, 7232-9	4	44
644	Development of label-free microsphere optical resonator bio/chemical sensors. <b>2005</b> , 6004, 137		2
643	Silicon-Based Materials. 858-1007		
642	Physisorbed water layer formation on fully hydroxylated mesoporous silicas. <i>Journal of Colloid and Interface Science</i> , <b>2005</b> , 291, 353-60	9.3	12
641	Ordered mesoporous materials in catalysis. <i>Microporous and Mesoporous Materials</i> , <b>2005</b> , 77, 1-45	5.3	1859
640	Catalytic properties of several supported Pd(II) complexes for Suzuki coupling reactions. <b>2005</b> , 46, 6865-6869		59
639	Rheological studies of fumed silica/polydimethylsiloxane suspensions. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2005</b> , 260, 165-172	5.1	100
638	In vitro haemocompatibility and stability of two types of heparin-immobilized silicon surfaces. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2005</b> , 43, 245-55	6	32
637	Effect of several sterilisation techniques on homogeneous self assembled monolayers. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2005</b> , 44, 15-24	6	16
636	Molecular Dynamics Simulation of the Structure and Hydroxylation of Silica Glass Surfaces. <b>2005</b> , 88, 2532-2539		139
635	Deposition of Palladium from a Cyclopentadienyl-allyl-palladium Precursor on Si-Based Substrates with Various Pretreatments: The Role of Surface SiOH and Si-H Species Studied by X-Ray Photoelectron Spectroscopy. <b>2005</b> , 11, 355-361		9
634	Engineering silicon oxide surfaces using self-assembled monolayers. <b>2005</b> , 44, 6282-304		610
633	Gestaltung der Siliciumoxidoberfläche durch selbstorganisierte Monoschichten. <b>2005</b> , 117, 6438-6462		48
632	In vitro stability study of organosilane self-assemble monolayers and multilayers. <i>Journal of Colloid and Interface Science</i> , <b>2005</b> , 291, 438-47	9.3	76
631	Anatomy of Catalytic Centers in Phillips Ethylene Polymerization Catalyst. 1-35		15
630	Covalent molecular assembly of oligoimide ultrathin films in supercritical and liquid solvent media. <i>Langmuir</i> , <b>2005</b> , 21, 7812-22	4	22
629	Direct observation of cations and polynucleotides explains polyion adsorption to like-charged surfaces. <b>2005</b> , 109, 23001-7		30
628	Subfemtomole detection of small molecules with microsphere sensors. <b>2005</b> , 30, 3189-91		62

627	Surface chemistry of atomic layer deposition: A case study for the trimethylaluminum/water process. <b>2005</b> , 97, 121301		1978
626	Quantitative determination of surface silanol groups in silicagel by deuterium exchange combined with infrared spectroscopy and chemometrics. <b>2005</b> , 130, 738-44		27
625	The structure of active centers and the ethylene polymerization mechanism on the Cr/SiO <sub>2</sub> catalyst: a frontier for the characterization methods. <b>2005</b> , 105, 115-84		359
624	Evolution of the adsorbed water layer structure on silicon oxide at room temperature. <b>2005</b> , 109, 16760-3		527
623	Organic thin-film transistors with poly(methyl silsesquioxane) modified dielectric interfaces. <b>2006</b> , 89, 013505		30
622	Functionalization of indium tin oxide. <i>Langmuir</i> , <b>2006</b> , 22, 11113-25	4	56
621	Quantifying surface coverage of colloidal silica by a cationic peptide using a combined centrifugation/time-resolved fluorescence anisotropy approach. <i>Langmuir</i> , <b>2006</b> , 22, 1852-7	4	6
620	Polynucleotide adsorption to negatively charged surfaces in divalent salt solutions. <b>2006</b> , 90, 1164-74		57
619	Structural Investigations of Silica Polyamine Composites: Surface Coverage, Metal Ion Coordination, and Ligand Modification. <b>2006</b> , 45, 6538-6547		30
618	Interactions of biopolymers with silica surfaces: Force measurements and electronic structure calculation studies. <b>2006</b> , 70, 3803-3819		34
617	Classical molecular dynamics study of [60]fullerene interactions with silica and polyester surfaces. <b>2006</b> , 110, 15963-72		21
616	Influences of pretreatment temperature on the surface silylation of diatomaceous amorphous silica with trimethylchlorosilane. <b>2006</b> , 352, 3762-3771		45
615	Spectroscopic and kinetic confirmations of quartz surface complexation model. <b>2006</b> , 397-416		1
614	Computational Molecular Basis for Improved Silica Surface Complexation Models. <b>2006</b> , 359-396		7
613	A new approach to determine the mean thickness and refractive index of polyelectrolyte multilayer using optical reflectometry. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2006</b> , 289, 163-171	5.1	27
612	Immobilization of polysaccharides on a fluorinated silicon surface. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2006</b> , 47, 57-63	6	32
611	Grafted lanthanide amides: Versatile catalysts for various transformations. <b>2006</b> , 257, 31-40		32
610	Aqueous mercuric ion detection with microsphere optical ring resonator sensors. <b>2006</b> , 120, 207-212		50

609	A simple FTIR technique for estimating the surface area of silica powders and films. <i>Journal of Colloid and Interface Science</i> , <b>2006</b> , 295, 294-8	9-3	40
608	Preparation, structure and thermal stability of onium- and amino-functionalized silicas for the use as catalysts supports. <i>Journal of Colloid and Interface Science</i> , <b>2006</b> , 302, 214-29	9-3	35
607	Silica gel ethyleneimine and its adsorption capacity for divalent Pb, Cd, and Hg. <b>2006</b> , 440, 176-180		17
606	Determination of hydroxyls density in the silica-mesostructured cellular foams by thermogravimetry. <b>2006</b> , 443, 49-52		19
605	Self-assembly of octadecyltrichlorosilane monolayers on silicon-based substrates by chemical vapor deposition. <b>2006</b> , 515, 2116-2122		77
604	Adsorption of Linear Polyethylene and Isotactic Polypropylene from 1,1,2,2-Tetrachloroethane and 1,2,3-Trichloropropane on to Polar Adsorbents. <b>2006</b> , 64, 183-190		11
603	Modification of zeolite surfaces by Grignard reagent. <b>2006</b> , 13, 5-11		7
602	Preparation of Ti/SiO <sub>2</sub> catalysts by chemical vapor deposition method for olefin epoxidation with cumene hydroperoxide. <b>2006</b> , 301, 59-65		16
601	Supported hybrid catalysts based on zirconocene and tris(pyrazolyl)borate titanium derivatives. <b>2006</b> , 99, 2002-2009		4
600	Surface treatment and characterization: perspectives to electrophoresis and lab-on-chips. <b>2006</b> , 27, 584-610		84
599	Demonstration of sub-femtomole sensitivity for small molecules with microsphere ring resonator sensors. <b>2006</b> , 6092, 200		
598	Effect of Surface Reactive Site Density and Reactivity on the Growth of Atomic Layer Deposited WN <sub>x</sub> C <sub>y</sub> Films. <b>2006</b> , 9, F64		6
597	High density Ru nanocrystal deposition for nonvolatile memory applications. <b>2007</b> , 101, 124503		58
596	Pore Size Effect on Improvement of Surface Proton Conductivity for Three-Dimensionally Ordered Macroporous Silica Composite Membrane. <b>2007</b> , 154, B871		7
595	Analysis on Deterioration Mechanism of Release Layer in Nanoimprint Process. <b>2007</b> , 20, 545-548		36
594	Biofunctionalization of Metallic Nanoparticles and Microarrays for Biomolecular Detection. <b>2007</b> ,		
593	On the nature of the Brønsted acidic groups on native and functionalized mesoporous siliceous SBA-15 as studied by benzylamine adsorption from solution. <i>Langmuir</i> , <b>2007</b> , 23, 4315-23	4	129
592	NMR provides checklist of generic properties for atomic-scale models of periodic mesoporous silicas. <b>2007</b> , 111, 12088-96		59



591	Effect of Surface Composition and Atomic Roughness on Interfacial Adhesion between Polyester and Amorphous Carbon. <b>2007</b> , 111, 3000-3009		17
590	Patterned forest-assembly of single-wall carbon nanotubes on gold using a non-thiol functionalization technique. <b>2007</b> , 17, 4577		10
589	19F Magic angle spinning NMR reporter molecules: empirical measures of surface shielding, polarisability and H-bonding. <i>Physical Chemistry Chemical Physics</i> , <b>2007</b> , 9, 2274-83	3.6	5
588	Formation of dense self-assembled monolayers of (n-decyl)trichlorosilanes on Ta/Ta <sub>2</sub> O <sub>5</sub> . <i>Langmuir</i> , <b>2007</b> , 23, 443-51	4	35
587	Computational Study of the Adsorption of Trichlorophosphate, Dimethyl Methylphosphonate, and Sarin on Amorphous SiO <sub>2</sub> . <b>2007</b> , 111, 9314-9323		54
586	In-situ AFM studies of the phase-transition behavior of single thermoresponsive hydrogel particles. <i>Langmuir</i> , <b>2007</b> , 23, 130-7	4	102
585	Synthesis and characterization of surface-grafted polyacrylamide brushes and their inhibition of microbial adhesion. <i>Langmuir</i> , <b>2007</b> , 23, 5120-6	4	103
584	Surface-Grafted, Molecularly Imprinted Polymers Grown from Silica Gel for Chromatographic Separations. <b>2007</b> , 46, 2117-2124		55
583	. <b>2007</b> ,		79
582	Key Chemical Components in Metal CMP Slurries. 201-247		1
581	Stability of and inflammatory response to silicon coated with a fluoroalkyl self-assembled monolayer in the central nervous system. <b>2007</b> , 81, 363-72		13
580	Durability of aminosilane-silica hybrid gas-barrier coatings on polymers. <b>2007</b> , 202, 208-216		13
579	A comprehensive assessment of supported titania photocatalysts in a fluidized bed photoreactor: Photocatalytic activity and adherence stability. <b>2007</b> , 71, 151-162		36
578	Spectral and nonlinear optical properties of metal complexes with 1,2-naphthalocyanine in silicate gel matrices. <b>2007</b> , 74, 485-493		9
577	Energetics of the interaction of water and other liquids with the surface of hydrophilic and hydrophobic sorbents according to data on the heats of wetting. <b>2008</b> , 44, 1-25		3
576	Hydroxylation of dental zirconia surfaces: characterization and bonding potential. <b>2008</b> , 87, 461-7		62
575	Synthesis and Photophysical Properties of Silica-Gel-Supported Photofunctional (Phthalocyaninato)silicon Complexes. <b>2008</b> , 2008, 2975-2981		18
574	Sulfated zirconia nanoparticles as a proton conductor for fuel cell electrodes. <b>2008</b> , 185, 656-663		25

573	A comparative study of the growth of octadecyltrichlorosilane and 3-mercaptopropyltrimethoxysilane self-assembled monolayers on hydrophilic silicon surfaces. <i>Applied Surface Science</i> , <b>2008</b> , 255, 1726-1735	6.7	33
572	Fabrication of nanoparticle micro-arrays patterned using direct write laser photoreduction. <i>Applied Surface Science</i> , <b>2008</b> , 255, 2159-2161	6.7	11
571	Quantitative determination of surface area of silica gel particles by near infrared spectroscopy and chemometrics. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2008</b> , 322, 248-252	5.1	13
570	Solid-state NMR characterization of a controlled-pore glass and of the effects of electron irradiation. <b>2008</b> , 33, 1-11		20
569	Germanium interactions with Si-etched silicon dioxide. <b>2008</b> , 602, 3071-3076		1
568	Site-specific forest-assembly of single-wall carbon nanotubes on electron-beam patterned SiO <sub>x</sub> /Si substrates. <b>2008</b> , 28, 1366-1371		4
567	Functionalization degree of SBA-15 as key factor to modulate sodium alendronate dosage. <i>Microporous and Mesoporous Materials</i> , <b>2008</b> , 116, 4-13	5.3	109
566	Hydroxylated crystalline edingtonite silica faces as models for the amorphous silica surface. <b>2008</b> , 117, 012026		10
565	Effect of Curvature on the Packing and Ordering of Organosilane Monolayers Supported on Solids. <b>2008</b> , 20, 382-387		32
564	Solid phase adsorption of crystal violet lactone on silica nanoparticles to probe mechanochemical surface modification. <i>Langmuir</i> , <b>2008</b> , 24, 6470-9	4	22
563	Ab Initio Study of the Hydroxylated Surface of Amorphous Silica: A Representative Model. <b>2008</b> , 20, 3336-3344		205
562	Neutral vs zwitterionic glycine forms at the water/silica interface: structure, energies, and vibrational features from B3LYP periodic simulations. <i>Langmuir</i> , <b>2008</b> , 24, 14027-34	4	43
561	Interactions of silica nanoparticles in supercritical carbon dioxide. <b>2008</b> , 129, 174704		19
560	Adsorption of simple fluid on silica surface and nanopore: effect of surface chemistry and pore shape. <i>Langmuir</i> , <b>2008</b> , 24, 7285-93	4	59
559	FFSiOH: a New Force Field for Silica Polymorphs and Their Hydroxylated Surfaces Based on Periodic B3LYP Calculations. <b>2008</b> , 20, 2522-2531		65
558	A quantum mechanical study of the reactivity of (SiO) <sub>2</sub> -defective silica surfaces. <b>2008</b> , 128, 204702		40
557	Analysis of surface structure and hydrogen/deuterium exchange of colloidal silica suspension by contrast-variation small-angle neutron scattering. <i>Langmuir</i> , <b>2008</b> , 24, 4537-43	4	20
556	Charge Modification of Pharmaceutical Nanocarriers: Biological Implications. <b>2008</b> , 337-362		3

555	Dissociative Chemisorption of Water onto Silica Surfaces and Formation of Hydronium Ions. <b>2008</b> , 112, 1507-1515	139
554	Probing the molecular-level control of aluminosilicate dissolution: A sensitive solid-state NMR proxy for reactive surface area. <b>2008</b> , 72, 5949-5961	24
553	Growth of ordered SrO layers on Si(100) using metal-organic surface reactions. <b>2008</b> , 26, 83-89	9
552	Ordered Mesoporous Silica to Study the Preparation of Ni/SiO <sub>2</sub> ex Nitrate Catalysts: Impregnation, Drying, and Thermal Treatments. <b>2008</b> , 20, 2921-2931	140
551	Influence of substrate treatment on self-organized pattern formation by langmuir-blodgett transfer. <b>2008</b> , 112, 824-7	15
550	Adsorption and Reaction of HfCl <sub>4</sub> with H <sub>2</sub> O-Terminated Si(100)-2 × 1. <b>2008</b> , 112, 1994-2003	7
549	Removal of Branched Dibenzothiophenes from Hydrocarbon Mixtures via Charge Transfer Complexes with a TAPA-Functionalized Adsorbent. <b>2008</b> , 47, 4448-4454	8
548	Adsorption characteristics of bottle-brush polymers on silica: effect of side chain and charge density. <i>Langmuir</i> , <b>2008</b> , 24, 5341-9	4 47
547	Investigation of the Chemical Purity of Silicon Surfaces Reacted with Liquid Methanol. <b>2008</b> , 112, 11907-11919	48
546	A molecular simulation study of an organosilane self-assembled monolayer/SiO <sub>2</sub> substrate interface. <b>2008</b> , 128, 164710	15
545	Ordered Mesoporous Materials. <b>2008</b> , 178	3
544	Influence of relative humidity on the wettability of silicon wafer surfaces. <b>2008</b> , 63,	10
543	In-plane X-ray Diffraction Profiles from Organosilane Monolayer/SiO <sub>2</sub> Models. <b>2008</b> , 1, 105002	1
542	Bridging oxygen as a site for proton adsorption on the vitreous silica surface. <b>2009</b> , 131, 074703	48
541	Nanometric ionic-liquid films on silica: a joint experimental and computational study. <b>2009</b> , 21, 424118	28
540	Influence of added nanosilica and/or silica fume on fresh and hardened properties of mortars and cement pastes. <b>2009</b> , 108, 418-428	27
539	Well-defined silica-supported calcium reagents: control of Schlenk equilibrium by grafting. <b>2009</b> , 15, 4382-93	47
538	Atomic force microscopy study of the role of LPS O-antigen on adhesion of E. coli. <b>2009</b> , 22, 347-55	62

537	Effect of the pH grade of silicates on chemical stability of coground amorphous quinapril hydrochloride and its stabilization using pH-modifiers. <b>2009</b> , 98, 3358-72		16
536	UV cross-linking of unmodified DNA on glass surfaces. <b>2009</b> , 395, 1097-105		19
535	Laser-induced local dehydroxylation on surface-oxidized silicon substrates: mechanistic aspects and prospects in nanofabrication. <b>2009</b> , 94, 95-103		13
534	Alginate aerogels as adsorbents of polar molecules from liquid hydrocarbons: Hexanol as probe molecule. <b>2009</b> , 75, 52-57		51
533	Spectroscopic evaluation of surface functionalization efficiency in the preparation of mercaptopropyltrimethoxysilane self-assembled monolayers on glass. <i>Journal of Colloid and Interface Science</i> , <b>2009</b> , 332, 432-8	9.3	48
532	The role of hydrogen bonding in nanocolloidal amorphous silica particles in electrolyte solutions. <i>Journal of Colloid and Interface Science</i> , <b>2009</b> , 339, 351-61	9.3	12
531	Control of hydroxyl group content in silica particle synthesized by the sol-precipitation process. <b>2009</b> , 35, 1015-1019		110
530	Infrared characterization of biotinylated silicon oxide surfaces, surface stability, and specific attachment of streptavidin. <b>2009</b> , 113, 8776-83		83
529	How do colloidal aggregates yield to compressive stress?. <i>Langmuir</i> , <b>2009</b> , 25, 4692-707	4	27
528	Inverse Reaction Chromatography. 2. Hydrogen/Deuterium Exchange with Silanol Groups on the Surface of Fumed Silica. <b>2009</b> , 113, 13894-13898		14
527	Surface modification of bioactive glasses and preparation of PDLLA/bioactive glass composite films. <b>2009</b> , 24, 119-38		28
526	Modeling of Bottle-Brush Polymer Adsorption onto Mica and Silica Surfaces. <b>2009</b> , 42, 6310-6318		29
525	Mid- and Near-Infrared Study of Hydroxyl Groups at a Silica Surface: H-Bond Effect. <b>2009</b> , 113, 13300-13308		32
524	A novel synthetic strategy for covalently bonding dendrimers to ordered mesoporous silica: potential drug delivery applications. <b>2009</b> , 19, 9012		54
523	Thermal expansion of confined water. <i>Langmuir</i> , <b>2009</b> , 25, 5076-83	4	50
522	Rapid contamination during storage of carbonaceous chondrites prepared for micro FTIR measurements. <b>2009</b> , 44, 545-557		32
521	Ordered Microporous and Mesoporous Materials. <b>2009</b> , 243-329		1
520	Quantum-chemical approaches to identification of nanostructures synthesized by molecular layering technique. <b>2010</b> , 80, 643-657		5

519	Quantum-chemical analysis and experimental study of the process of the silica surface interaction with the CrO <sub>2</sub> Cl <sub>2</sub> and VOCl <sub>3</sub> vapor mixture. <b>2010</b> , 80, 1168-1175		6
518	pH-operated nanopistons on the surfaces of mesoporous silica nanoparticles. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 13016-25	16.4	280
517	Binding, inactivation, and adhesion forces between antimicrobial peptide cecropin P1 and pathogenic E. coli. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2010</b> , 75, 156-64	6	56
516	Silicon Based Nanocoatings on Metal Alloys and Their Role in Surface Engineering. <b>2010</b> , 2, 117-151		17
515	Thermal pretreatment of silica composite filler materials. <b>2010</b> , 99, 237-243		28
514	Functionalizing mesoporous bioglasses for long-term anti-osteoporotic drug delivery. <b>2010</b> , 16, 10879-86		73
513	Post-synthetic activation of silanol covering in the mesostructured silicate materials MCM-41 and SBA-15. <i>Microporous and Mesoporous Materials</i> , <b>2010</b> , 133, 124-133	5.3	55
512	Effect of moisture on the self-healing of vitreous silica under irradiation. <b>2010</b> , 400, 73-78		8
511	In vitro stability of SBA-15 under physiological conditions. <i>Microporous and Mesoporous Materials</i> , <b>2010</b> , 132, 442-452	5.3	63
510	NMR study of proton transfer to strong bases on inner surfaces of MCM-41. <i>Microporous and Mesoporous Materials</i> , <b>2010</b> , 134, 22-28	5.3	18
509	Hydrogenation of phenylacetylene and 3-phenylpropyne using Rh(diene) complexes under homogeneous and heterogeneous conditions. <b>2010</b> , 372, 34-39		11
508	On silsesquioxanes accuracy as molecular models for silica-grafted complexes in heterogeneous catalysis. <b>2010</b> , 254, 707-728		153
507	The difference between the surface reactivity of amorphous silica in the gas and liquid phase due to material porosity. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2010</b> , 355, 67-74	5.1	13
506	Generation and excitation of point defects in silica by synchrotron radiation above the absorption edge. <b>2010</b> , 81,		25
505	Interfacial organic layers: Tailored surface chemistry for nucleation and growth. <b>2010</b> , 28, 1033-1059		17
504	Platinum Nanoparticles Grown by Atomic Layer Deposition for Charge Storage Memory Applications. <b>2010</b> , 157, H589		32
503	Density Functional Theory Study of Catechol Adhesion on Silica Surfaces. <b>2010</b> , 114, 20793-20800		97
502	Precise Synthesis and Physicochemical Properties of High-Density Polymer Brushes designed with Poly(N-isopropylacrylamide). <b>2010</b> , 43, 9945-9956		23

501	Hydrophobic Behavior of Dehydroxylated Silica Surfaces: A B3LYP Periodic Study. <b>2010</b> , 114, 19984-19992		22
500	Gold Nanoparticle Aggregates Immobilized on High Surface Area Silica Substrate for Efficient and Clean SERS Applications. <b>2010</b> , 114, 3857-3862		24
499	Measurement of the Reactive Surface Area of Clay Minerals Using Solid-State NMR Studies of a Probe Molecule <b>2010</b> , 114, 5491-5498		35
498	Control of thin liquid film morphology during solvent-assisted film deposition. <i>Langmuir</i> , <b>2010</b> , 26, 7126-7132		2
497	Functional assessment of metal oxide nanoparticle toxicity in immune cells. <i>ACS Nano</i> , <b>2010</b> , 4, 3363-73	16.7	142
496	Effect of particle structure and surface chemistry on PMMA adsorption to silica nanoparticles. <i>Langmuir</i> , <b>2010</b> , 26, 5077-87	4	28
495	The Formation of Gold Clusters Supported on Mesoporous Silica Material Surfaces: A Molecular Picture. <b>2010</b> , 114, 9002-9007		27
494	Grafting of lanthanide complexes on silica surfaces: a theoretical investigation. <b>2010</b> , 114, 6322-30		25
493	Autonomous in vitro anticancer drug release from mesoporous silica nanoparticles by pH-sensitive nanovalves. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 12690-7	16.4	511
492	Thermally Induced Structural Modification of Silica Nanoparticles Investigated by Raman and Infrared Absorption Spectroscopies. <b>2010</b> , 114, 13991-13997		30
491	Adsorption of alexa-labeled Bt toxin on mica, glass, and hydrophobized glass: study by normal scanning confocal fluorescence. <b>2010</b> , 11, 1661-6		23
490	Zwitterion-stabilized silica nanoparticles: toward nonstick nano. <i>Langmuir</i> , <b>2010</b> , 26, 16884-9	4	126
489	Surface electrochemistry of mesoporous silicas as a key factor in the design of tailored delivery devices. <i>Langmuir</i> , <b>2010</b> , 26, 5038-49	4	79
488	Reactive Molecular Dynamics Studies of DMMP Adsorption and Reactivity on Amorphous Silica Surfaces. <b>2010</b> , 114, 18894-18902		51
487	Formation and colloidal stability of DMPC supported lipid bilayers on SiO <sub>2</sub> nanobeads. <i>Langmuir</i> , <b>2010</b> , 26, 12081-8	4	72
486	Use of Mordenite Surface Acidity Properties for the Selective Separation of Halide Salts: Modification of Dielectric Effects. <b>2011</b> , 50, 4003-4010		7
485	Simulation of Si nanowire biosensor: Effects of surface and biasing on sensitivity and linearity. <b>2011</b> , ,		2
484	Spontaneous waveguide Raman spectroscopy of self-assembled monolayers in silica micropores. <i>Langmuir</i> , <b>2011</b> , 27, 630-6	4	5

483	Hydrophobic transition in porous amorphous silica. <b>2011</b> , 115, 7881-6		51
482	Carbon dioxide sorbents with propylamine groups-silica functionalized with a fractional factorial design approach. <i>Langmuir</i> , <b>2011</b> , 27, 3822-34	4	40
481	Evidence for the pairwise disposition of grafting sites on highly dehydroxylated silicas via their reactions with Ga(CH <sub>3</sub> ) <sub>3</sub> . <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 4847-55	16.4	39
480	Binding of Small Molecules to a Silica Surface: Comparing Experimental and Theoretical Results. <b>2011</b> , 115, 24734-24742		7
479	Zwitteration as an alternative to PEGylation. <i>Langmuir</i> , <b>2011</b> , 27, 6794-800	4	187
478	Hydration repulsion effects on the formation of supported lipid bilayers. <b>2011</b> , 7, 1936		27
477	Self-Assembled Monolayer-Immobilized Gold Nanoparticles as Durable, Anti-Stiction Coatings for MEMS. <b>2011</b> , 20, 424-435		15
476	Tailoring and probing particle-polymer interactions in PMMA/silica nanocomposites. <b>2011</b> , 7, 8401		21
475	Rubber, 9. Chemicals and Additives. <b>2011</b> ,		5
474	Three regimes of water adsorption in annealed silica opals and optical assessment. <i>Langmuir</i> , <b>2011</b> , 27, 13992-5	4	18
473	Controlled silanization of silica nanoparticles to stabilize foams, climbing films, and liquid marbles. <i>Langmuir</i> , <b>2011</b> , 27, 12869-76	4	19
472	Nanoseeding via dual surface modification of alkyl monolayer for site-controlled electroless metallization. <i>Langmuir</i> , <b>2011</b> , 27, 12143-8	4	10
471	Exploring Metal Oxides: A Theoretical Approach. <b>2011</b> , 375-426		
470	High-resolution X-ray photoelectron spectroscopy of mixed silane monolayers for DNA attachment. <b>2011</b> , 3, 3285-92		20
469	Gold-nanoparticle-functionalized In <sub>2</sub> O <sub>3</sub> nanowires as CO gas sensors with a significant enhancement in response. <b>2011</b> , 3, 2246-52		131
468	An SCC-DFTB/MD Study of the Adsorption of Zwitterionic Glycine on a Geminal Hydroxylated Silica Surface in an Explicit Water Environment. <b>2011</b> , 115, 9615-9621		36
467	The molecular level modification of surfaces: from self-assembled monolayers to complex molecular assemblies. <i>Chemical Society Reviews</i> , <b>2011</b> , 40, 2704-18	58.5	386
466	Sorption and Speciation of Uranium on Silica Colloids. <b>2011</b> , 315-332		6

465	Deposition of Thin Films for Sensor Applications. <b>2011</b> , 309-335		3
464	Silicon, silica and its surface patterning/activation with alkoxy- and amino-silanes for nanomedical applications. <b>2011</b> , 6, 281-300		28
463	Simple method for detection of extremely diluted anti beta-casein antibodies from glass bead based receptors. <b>2011</b> , 84, 632-7		11
462	Size and Spatial Distribution of Micropores in SBA-15 using CM-SANS. <b>2011</b> , 23, 3828-3840		37
461	. <b>2011</b> ,		235
460	Thermal degradation of poly(methyl methacrylate) on SiO <sub>2</sub> nanoparticles as a function of SiO <sub>2</sub> size and silanol density. <b>2011</b> , 526, 83-89		24
459	Oxo/imido heterometathesis of N-sulfinylamines and carbonyl compounds catalyzed by silica-supported vanadium oxochloride. <b>2011</b> , 283, 108-118		13
458	Synthesis of short chain thiol capped gold nanoparticles, their stabilization and immobilization on silicon surface. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2011</b> , 390, 149-156	5.1	12
457	Monoamine-grafted MCM-48: An efficient material for CO <sub>2</sub> removal at low partial pressures. <b>2011</b> , 175, 291-297		37
456	Energetics of lysozyme adsorption on mesostructured cellular foam silica: effect of salt concentration. <b>2011</b> , 1218, 6697-704		25
455	Stability of aqueous silica nanoparticle dispersions. <b>2011</b> , 13, 839-850		196
454	Molecular dynamics simulations of surfactants at the silica-water interface: anionic vs nonionic headgroups. <i>Journal of Colloid and Interface Science</i> , <b>2011</b> , 362, 135-43	9.3	58
453	Water Confined in Cylindrical Pores: A Molecular Dynamics Study. <b>2011</b> , 6, 233-240		27
452	Characterization of $\beta$ -cyclodextrin modified SiO <sub>2</sub> . <b>2011</b> , 43, 884-892		13
451	Drug delivery formulations of ordered and nonordered mesoporous silica: comparison of three drug loading methods. <b>2011</b> , 100, 3294-3306		126
450	A New Modifier for Silica in Reinforcing SBR Elastomers for the Tyre Industry. <b>2011</b> , 296, 455-464		37
449	Nanoporous silica polyamine composites for metal ion capture from rice hull ash. <b>2011</b> , 25, 530-536		7
448	Application of liquid phase deposition method for preparation of Co/ZrO <sub>x</sub> /SiO <sub>2</sub> catalyst with enhanced Fischer-Tropsch synthesis activity: Importance of Co-Zr interaction. <b>2011</b> , 398, 168-178		4



447	Carbon dioxide conversion to dimethyl carbonate: The effect of silica as support for SnO <sub>2</sub> and ZrO <sub>2</sub> catalysts. <b>2011</b> , 14, 780-785		23
446	Comparison of mesoporous silicon and non-ordered mesoporous silica materials as drug carriers for itraconazole. <b>2011</b> , 414, 148-56		108
445	Aging mechanism of the native oxide on silicon (100) following atmospheric oxygen plasma cleaning. <b>2011</b> , 29, 041403		15
444	Nucleation delay in atomic layer deposition on a thin organic layer and the role of reaction thermochemistry. <b>2012</b> , 30, 01A102		25
443	Atomic layer deposition of Ru onto organic monolayers: Shifting metal effective work function using monolayer structure. <b>2012</b> , 30, 01A162		3
442	EFFECTS AND ROLE OF WATER ENVIRONMENT ON A GEMINAL HYDROXYLATED SILICA SURFACE [SELF-CONSISTENT CHARGE DENSITY FUNCTIONAL TIGHT BINDING THEORY BASED MOLECULAR DYNAMICS SIMULATION. <b>2012</b> , 11, 155-162		12
441	Interaction of U, Np, and Pu with colloidal SiO <sub>2</sub> particles. <b>2012</b> , 54, 537-541		3
440	Molecular Dynamics Simulations of Alkylsilane Monolayers on Silica Nanoasperities: Impact of Surface Curvature on Monolayer Structure and Pathways for Energy Dissipation in Tribological Contacts. <b>2012</b> , 116, 25165-25177		28
439	Presence of nano-sized silica during in vitro digestion of foods containing silica as a food additive. <i>ACS Nano</i> , <b>2012</b> , 6, 2441-51	16.7	241
438	PDMS-glass bonding using grafted polymeric adhesive--alternative process flow for compatibility with patterned biological molecules. <b>2012</b> , 12, 4120-7		19
437	Dependence of surface properties of silylated silica on the length of silane arms. <b>2012</b> , 18, 307-320		12
436	Photochemical synthesis of polymeric fiber coatings and their embedding in matrix material: morphology and nanomechanical properties at the fiber-matrix interface. <b>2012</b> , 4, 3484-92		30
435	Noninvasive surface coverage determination of chemically modified conical nanopores that rectify ion transport. <b>2012</b> , 84, 6926-9		17
434	Dielectric Study of Hydration Water in Silica Nanoparticles. <b>2012</b> , 116, 24340-24349		70
433	Role of Liquid vs Vapor Water in the Hydrothermal Degradation of SBA-15. <b>2012</b> , 116, 22802-22814		39
432	Interactions and binding energies of dimethyl methylphosphonate and dimethyl chlorophosphate with amorphous silica. <i>Langmuir</i> , <b>2012</b> , 28, 10962-7	4	34
431	Self-Assembled Monolayers of Vinyltriethoxysilane and Vinyltrichlorosilane Deposited on Silicon Dioxide Surfaces. <b>2012</b> , 26, 2543-2554		3
430	Visible Photoluminescence from Photoinduced Molecular Species in Nanometer-Sized Oxides: Crystalline Al <sub>2</sub> O <sub>3</sub> and Amorphous SiO <sub>2</sub> Nanoparticles. <b>2012</b> , 116, 15747-15755		46

429	Bulk hydrolysis and solid-liquid sorption of heavy metals in multi-component aqueous suspensions containing porous inorganic solids: are these mechanisms competitive or cooperative?. <i>Journal of Colloid and Interface Science</i> , <b>2012</b> , 386, 300-6	9.3	9
428	Reactions between water and vitreous silica during irradiation. <b>2012</b> , 430, 239-245		4
427	Effect of calcination temperature of starch-modified silica on the performance of silica supported Cu catalyst in methanol conversion. <b>2012</b> , 40, 1328-1335		7
426	Physisorption of an organometallic platinum complex on silica: an ab initio study. <b>2012</b> , 14, 073040		23
425	Processing pathway dependence of amorphous silica nanoparticle toxicity: colloidal vs pyrolytic. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 15790-804	16.4	315
424	Effect of substrate on the mechanical response and adhesion of PEGylated surfaces: insights from all-atom simulations. <i>Langmuir</i> , <b>2012</b> , 28, 17263-72	4	10
423	. <b>2012</b> , 11, 501-512		23
422	Ionic Liquid-Modified Porous Materials for Gas Separation and Heterogeneous Catalysis. <b>2012</b> , 116, 16398-16411		10
421	A weakened structure-breaking effect of Na <sup>+</sup> and Cl <sup>-</sup> on water inside partially filled mesoporous silica. <b>2012</b> , 533, 40-44		3
420	Mechanistic aspects of the role of chelating agents in enhancing Fischer-Tropsch synthesis activity of Co/SiO <sub>2</sub> catalyst: Importance of specific interaction of Co with chelate complex during calcination. <b>2012</b> , 289, 151-163		17
419	Intramesoporous silica structure differentiating protein loading density. <b>2012</b> , 75, 102-106		5
418	A novel scheme for quantitative characterization of the structures of mesoporous silica by solid-state <sup>29</sup> Si NMR. <i>Microporous and Mesoporous Materials</i> , <b>2012</b> , 155, 240-244	5.3	9
417	Ultrathin PFPE Film Systems Fabricated by Covalent Assembly: An Application to Tribology. <b>2012</b> , 45, 371-378		3
416	New insights into the bioactivity of SiO <sub>2</sub> -CaO and SiO <sub>2</sub> -CaO-B <sub>2</sub> O <sub>5</sub> sol-gel glasses by molecular dynamics simulations. <b>2013</b> , 67, 208-219		15
415	Dynamic and structural properties of room-temperature ionic liquids near silica and carbon surfaces. <i>Langmuir</i> , <b>2013</b> , 29, 9744-9	4	55
414	Ordered Mesoporous and Microporous Materials with Heteroatoms. <b>2013</b> , 231-245		5
413	C <sub>60</sub> -fullerene bound silica for the preconcentration and the fractionation of multiphosphorylated peptides. <b>2013</b> , 761, 92-101		15
412	Reaction mechanisms in irradiated, precipitated, and mesoporous silica. <b>2013</b> , 117, 3304-18		14

411	Structure and Adsorption Properties of Photoactive Mesoporous Titania/Silica Systems Obtained by the Hydrolysis of Titanium Tetrachloride in the Presence of Fine Silica. <b>2013</b> , 49, 333-339		1
410	Ultra-Deep Adsorptive Desulfurization of Light-Irradiated Diesel Fuel over Supported TiO <sub>2</sub> /FeO <sub>2</sub> Adsorbents. <b>2013</b> , 52, 15746-15755		46
409	Fast direct determination of strontium in seawater using high-performance chelation ion chromatography. <b>2013</b> , 111, 8-15		11
408	Superhard transparent hybrid nanocomposites for high fidelity UV-nanoimprint lithography. <b>2013</b> , 54, 6177-6183		8
407	Titration of free hydroxyl and strained siloxane sites on silicon dioxide with fluorescent probes. <i>Langmuir</i> , <b>2013</b> , 29, 11868-75	4	11
406	Atomic structure and dehydration mechanism of amorphous silica: Insights from <sup>29</sup> Si and <sup>1</sup> H solid-state MAS NMR study of SiO <sub>2</sub> nanoparticles. <b>2013</b> , 120, 39-64		44
405	Pluronic polymer capped biocompatible mesoporous silica nanocarriers. <i>Chemical Communications</i> , <b>2013</b> , 49, 9782-4	5.8	45
404	Niobium metallocenes deposited onto mesoporous silica via dry impregnation as catalysts for selective epoxidation of alkenes. <b>2013</b> , 298, 77-83		58
403	An Overview of Adsorbents in the Rotary Desiccant Dehumidifier for Air Dehumidification. <b>2013</b> , 31, 1334-1345		61
402	Effect of thermal treatment and moisture content on the charge of silica particles in non-polar media. <b>2013</b> , 9, 7242		16
401	Self-assembled monolayers with dynamicity stemming from (bio)chemical conversions: from construction to application. <b>2013</b> , 14, 55-69		24
400	Coordination chemistry for antibacterial materials: a monolayer of a Cu(2+) 2,2'-bipyridine complex grafted on a glass surface. <b>2013</b> , 42, 4552-60		17
399	What are the main contributions to the total enthalpy of displacement accompanying the adsorption of some multivalent metals at the silica-electrolyte interface?. <i>Journal of Colloid and Interface Science</i> , <b>2013</b> , 396, 205-9	9.3	17
398	Reductase-like activity of silicon nanowire arrays. <b>2013</b> , 5, 1800-5		24
397	MOF-supported selective ethylene dimerization single-site catalysts through one-pot postsynthetic modification. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 4195-8	16.4	213
396	Mesoporous silica nanoparticle nanocarriers: biofunctionality and biocompatibility. <b>2013</b> , 46, 792-801		696
395	Silica surface features and their role in the adsorption of biomolecules: computational modeling and experiments. <b>2013</b> , 113, 4216-313		414
394	Does Dispersion Dominate over H-Bonds in Drug-Surface Interactions? The Case of Silica-Based Materials As Excipients and Drug-Delivery Agents. <b>2013</b> , 9, 2404-15		62

393	Surface Binding of Organophosphates on Silica: Comparing Experiment and Theory. <b>2013</b> , 117, 2699-2708		18
392	Selective catalytic oxidation of olefins by novel oxovanadium(IV) complexes having different donor ligands covalently anchored on SBA-15: a comparative study. <b>2013</b> , 3, 1972		20
391	Tailoring nanohybrids and nanocomposites for catalytic applications. <b>2013</b> , 15, 1398		75
390	Experimental investigation of rates and mechanisms of isotope exchange (O, H) between volcanic ash and isotopically-labeled water. <b>2013</b> , 111, 5-27		29
389	Quantification of silanol sites for the most common mesoporous ordered silicas and organosilicas: total versus accessible silanols. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 642-50	3.6	79
388	Superhydrophobic and omnidirectional antireflective surfaces from nanostructured ormosil colloids. <b>2013</b> , 5, 853-60		63
387	Surface modification of silicon oxide with trialkoxysilanes toward close-packed monolayer formation. <i>Langmuir</i> , <b>2013</b> , 29, 6361-8	4	21
386	Infrared Spectra and Binding Energies of Chemical Warfare Nerve Agent Simulants on the Surface of Amorphous Silica. <b>2013</b> , 117, 15685-15697		56
385	Quantification of steady-state ion transport through single conical nanopores and a nonuniform distribution of surface charges. <i>Langmuir</i> , <b>2013</b> , 29, 8743-52	4	29
384	From protected trialkoxysilyl-peptide building blocks to bioorganic-silica hybrid materials. <b>2013</b> , 1, 6510-6515		15
383	Optical and physico-chemical properties of tetrapyrrole molecules in nanoporous silicate gel matrices. <b>2013</b> , 17, 636-648		4
382	Adsorption of sulfur dioxide on volcanic ashes. <b>2014</b> , 99, 1085-1094		12
381	Metal-insulator-metal capacitor using electrosprayed nanoparticles. <b>2014</b> , 105, 013109		7
380	Coating thickness and coverage effects on the forces between silica nanoparticles in water. <b>2014</b> , 140, 194904		22
379	Revealing the fine details of functionalized silica surfaces by solid-state NMR and adsorption isotherm measurements: the case of fluorinated stationary phases for liquid chromatography. <b>2014</b> , 20, 8138-48		9
378	Hydrophobation of silica surface by silylation with new organo-silanes bearing a polybutadiene oligomer tail. <b>2014</b> , 35, 1603-1613		11
377	Proton Dynamics at the Water/Silica Interface via Dissociative Molecular Dynamics. <b>2014</b> , 118, 29750-29759		27
376	Adsorption by Metal Oxides. <b>2014</b> , 393-465		3

375	PAMAM dendrimers on controlled pore glass: The effect of tethered dendrimer size and tethered affinity groups NTA and terpy on metal ion and indicator dye uptake. <b>2014</b> , 409, 127-136		1
374	Electrical conductance through adsorbed water molecules on freshly fractured glass surfaces. <b>2014</b> , 195, 109-115		1
373	Exploring the potential of siloxane surface modified nano-SiO <sub>2</sub> to improve the Portland cement pastes hydration properties. <i>Construction and Building Materials</i> , <b>2014</b> , 54, 99-105	6.7	51
372	Immobilisation of iron tris(β-diketonates) on a two-dimensional flat amine functionalised silicon wafer: A catalytic study of the formation of urethane, from ethanol and a diisocyanate derivative. <b>2014</b> , 79, 52-59		16
371	Determination of the electronic and structural configuration of coordination compounds by synchrotron-radiation techniques. <b>2014</b> , 277-278, 130-186		81
370	Surface roughness effects in the catalytic behavior of vanadia supported on SBA-15. <b>2014</b> , 312, 170-178		37
369	Simulation-Experimental Approach to Investigate the Role of Interfaces in Self-Replenishing Composite Coatings. <b>2014</b> , 1, 1400053		11
368	Noncovalent functionalization of mesoporous silica nanoparticles with amphiphilic peptides. <b>2014</b> , 2, 2168-2174		17
367	Azobenzene-Functionalized SBA-15 Material for Application in Selective Separation. <b>2014</b> , 640, 595-603		8
366	Adsorption and Dynamics in Hierarchical Metal-Organic Frameworks. <b>2014</b> , 118, 7423-7433		21
365	Coordination chemistry of surface-grafted ligands for antibacterial materials. <b>2014</b> , 275, 37-53		34
364	Bio-active engineered 50 nm silica nanoparticles with bone anabolic activity: therapeutic index, effective concentration, and cytotoxicity profile in vitro. <b>2014</b> , 28, 354-64		34
363	Large-Scale B3LYP Simulations of Ibuprofen Adsorbed in MCM-41 Mesoporous Silica as Drug Delivery System. <b>2014</b> , 118, 26737-26749		41
362	Formation of hybrid poly(styrene-co-maleic anhydride)-silica microcapsules. <b>2014</b> , 2, 4826-4835		10
361	Silanization of solid surfaces via mercaptopropylsilatrane: a new approach of constructing gold colloid monolayers. <i>RSC Advances</i> , <b>2014</b> , 4, 46527-46535	3.7	42
360	Organic amine-functionalized silica-based mesoporous materials: an update of syntheses and catalytic applications. <i>RSC Advances</i> , <b>2014</b> , 4, 57111-57124	3.7	32
359	Understanding mixed-mode retention mechanisms in liquid chromatography with hydrophobic stationary phases. <b>2014</b> , 86, 4919-26		21
358	Thermally induced structural modifications and O <sub>2</sub> trapping in highly porous silica nanoparticles. <b>2014</b> , 148, 956-963		2

357	Silica-based materials as drug adsorbents: first principle investigation on the role of water microsolvation on Ibuprofen adsorption. <b>2014</b> , 118, 5801-7		40
356	Chemical Warfare Agent Surface Adsorption: Hydrogen Bonding of Sarin and Soman to Amorphous Silica. <b>2014</b> , 5, 1393-9		32
355	Force Field and a Surface Model Database for Silica to Simulate Interfacial Properties in Atomic Resolution. <b>2014</b> , 26, 2647-2658		244
354	Environmental effects on initiation and propagation of surface defects on silicate glasses: scratch and fracture toughness study. <b>2014</b> , 116, 519-528		41
353	Mixed bifunctional surface-modified silicas using tethered aminofunctional silane catalysts. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2014</b> , 462, 1-8	5.1	13
352	Treatment of Petrochemical Wastewater by Acid Precipitation and Carbon Adsorption. <b>2014</b> , 18, 04014013		11
351	Hierarchically Nanoporous Bioactive Glasses for High Efficiency Immobilization of Enzymes. <b>2014</b> , 24, 2206-2215		29
350	Adsorption and nanowear properties of bovine submaxillary mucin films on solid surfaces: influence of solution pH and substrate hydrophobicity. <i>Journal of Colloid and Interface Science</i> , <b>2014</b> , 428, 242-50	9.3	18
349	Optical characterization of colloidal silica crystals with controlled size microspheres. <b>2014</b> , 116, 420-424		10
348	Bimodal Mesoporous Carbon Nanofibers with High Porosity: Freestanding and Embedded in Membranes for LithiumSulfur Batteries. <b>2014</b> , 26, 3879-3886		77
347	Functionalization of Colloidal Silica Nanoparticles and Their Use in Paint and Coatings. <b>2014</b> , 123-140		
346	Selective Ordering of Pertechetate at the Interface between Amorphous Silica and Water: a Poisson Boltzmann Treatment. <b>2015</b> , 1744, 53-58		
345	Effect of the processing method on the electrical behavior of silicon nitride / epoxy nanocomposites. <b>2015</b> ,		2
344	Nanoparticles and Composites. <b>2015</b> , 225-244		3
343	Adsorbents of H <sub>2</sub> based on amine-modified porous materials. <b>2015</b> , 64, 2958-2962		1
342	Hydrophobic Monolayer Surfaces: Synthesis and Wettability. <b>2015</b> , 3120-3140		
341	Silica Gels: Characterization by Physical Methods. <b>2015</b> , 6606-6622		
340	Molecularly imprinted polymers on a silica surface for the adsorption of tobacco-specific nitrosamines in mainstream cigarette smoke. <b>2015</b> , 38, 2551-7		11

339	Simulation and Experiment Reveal a Complex Scenario for the Adsorption of an Antifungal Drug in Ordered Mesoporous Silica. <b>2015</b> , 119, 13068-13079		22
338	Molecular Dynamics Simulations of CO <sub>2</sub> /Water/Quartz Interfacial Properties: Impact of CO <sub>2</sub> Dissolution in Water. <i>Langmuir</i> , <b>2015</b> , 31, 5812-9	4	55
337	Whispering gallery mode sensors. <b>2015</b> , 7, 168-240		512
336	A New Insight into Catalytic Ozonation with Nanosized CeO <sub>2</sub> Oxides for NO <sub>x</sub> Removal: Confirmation of CeO <sub>2</sub> for Active Sites. <b>2015</b> , 54, 2012-2022		59
335	Quantification of variable functional-group densities of mixed-silane monolayers on surfaces via a dual-mode fluorescence and XPS label. <b>2015</b> , 87, 2685-92		20
334	Photoluminescence of MEH-PPV Brushes, Pancakes, and Free Molecules in Solutions and Dry States. <b>2015</b> , 2, 33-42		6
333	A porosity difference based selective dissolution strategy to prepare shape-tailored hollow mesoporous silica nanoparticles. <b>2015</b> , 3, 3839-3846		34
332	Gas-phase dehydration of vicinal diols to epoxides: Dehydrative epoxidation over a Cs/SiO <sub>2</sub> catalyst. <b>2015</b> , 323, 85-99		21
331	Selective adsorption of thiophenic compounds from fuel over TiO <sub>2</sub> /SiO <sub>2</sub> under UV-irradiation. <b>2015</b> , 300, 426-432		38
330	Grafting of lanthanide complexes on silica surfaces dehydroxylated at 200 °C: a theoretical investigation. <b>2015</b> , 39, 7703-7715		13
329	Synthesis and characterization of a novel BiVO <sub>4</sub> /SiO <sub>2</sub> nanocomposites. <b>2015</b> , 160, 218-221		20
328	First-Principles Calculations of Lithiation of a Hydroxylated Surface of Amorphous Silicon Dioxide. <b>2015</b> , 119, 16424-16431		30
327	Computational Study of Acidic and Basic Functionalized Crystalline Silica Surfaces as a Model for Biomaterial Interfaces. <i>Langmuir</i> , <b>2015</b> , 31, 6321-31	4	11
326	Simultaneous Nanoscale Surface Charge and Topographical Mapping. <i>ACS Nano</i> , <b>2015</b> , 9, 7266-76	16.7	58
325	Investigating the colloidal stability of fluorescent silica nanoparticles under isotonic conditions for biomedical applications. <i>Journal of Colloid and Interface Science</i> , <b>2015</b> , 456, 50-8	9.3	18
324	Adsorption of Surface-Modified Silica Nanoparticles to the Interface of Melt Poly(lactic acid) and Supercritical Carbon Dioxide. <i>Langmuir</i> , <b>2015</b> , 31, 5571-9	4	19
323	Gold nanoparticles supported on conventional silica as catalysts for the low-temperature CO oxidation. <b>2015</b> , 404-405, 83-91		11
322	Surface activity and flocculation behavior of polyethylene glycol-functionalized silica nanoparticles. <i>Journal of Colloid and Interface Science</i> , <b>2015</b> , 452, 215-223	9.3	20

321	Bio-functional nano-coatings on metallic biomaterials. <b>2015</b> , 55, 227-51		82
320	Role of acid sites and surface hydroxyl groups in isophthalonitrile hydrogenation catalyzed by supported Ni <sub>2</sub> O catalysts. <i>RSC Advances</i> , <b>2015</b> , 5, 26465-26474	3-7	11
319	Water Contact Angle Dependence with Hydroxyl Functional Groups on Silica Surfaces under CO <sub>2</sub> Sequestration Conditions. <b>2015</b> , 49, 14680-7		74
318	Challenges and developments of self-assembled monolayers and polymer brushes as a green lubrication solution for tribological applications. <i>RSC Advances</i> , <b>2015</b> , 5, 89698-89730	3-7	39
317	Density functional theory based-study of 5-fluorouracil adsorption on cristobalite (1 1 1) hydroxylated surface: The importance of H-bonding interactions. <i>Applied Surface Science</i> , <b>2015</b> , 359, 474-479	6-7	13
316	Comparison of monomethoxy-, dimethoxy-, and trimethoxysilane anchor groups for surface-initiated RAFT polymerization from silica surfaces. <b>2015</b> , 53, 103-113		18
315	Surface Patterning Using Diazonium Ink Filled Nanopipette. <b>2015</b> , 87, 10956-62		14
314	Quantification of silane molecules on oxidized silicon: are there options for a traceable and absolute determination?. <b>2015</b> , 87, 10117-24		41
313	Adsorption and wetting properties of cationic, anionic and nonionic surfactants in the glass-aqueous solution of surfactant-air system. <b>2015</b> , 162, 166-176		18
312	SBA-15 materials: calcination temperature influence on textural properties and total silanol ratio. <b>2015</b> , 21, 659-669		24
311	An investigation of the textural properties of mesostructured silica-based adsorbents for predicting CO <sub>2</sub> adsorption capacity. <i>RSC Advances</i> , <b>2015</b> , 5, 103147-103154	3-7	15
310	Co-catalytic enhancement of H <sub>2</sub> production by SiO <sub>2</sub> nanoparticles. <b>2015</b> , 242, 146-152		13
309	Selective propane dehydrogenation with single-site CoII on SiO <sub>2</sub> by a non-redox mechanism. <b>2015</b> , 322, 24-37		138
308	Interfacial characterization of epoxy/silica nanocomposites measured by fluorescence. <b>2015</b> , 62, 31-42		20
307	Laboratory studies on the removal of radon-born lead from KamLAND's organic liquid scintillator. <b>2015</b> , 769, 79-87		8
306	Implications of silica on biorefineries – Interactions with organic material and mineral elements in grasses. <b>2015</b> , 9, 109-121		26
305	Tailoring the properties of sub-3 μm silica core-shell particles prepared by a multilayer-by-multilayer process. <i>Journal of Colloid and Interface Science</i> , <b>2015</b> , 437, 50-57	9-3	9
304	Isolated Surface Hydrides: Formation, Structure, and Reactivity. <b>2016</b> , 116, 8463-505		102



303	Reactive Molecular Dynamics Simulations of the Silanization of Silica Substrates by Methoxysilanes and Hydroxysilanes. <i>Langmuir</i> , <b>2016</b> , 32, 7045-55	4	8
302	Stable Encapsulation of Air in Mesoporous Silica Nanoparticles: Fluorocarbon-Free Nanoscale Ultrasound Contrast Agents. <b>2016</b> , 5, 1290-8		48
301	Standing and sitting adlayers in atomic layer deposition of ZnO. <b>2016</b> , 34, 01A143		17
300	A new method for the generation of realistic atomistic models of siliceous MCM-41. <i>Microporous and Mesoporous Materials</i> , <b>2016</b> , 228, 215-223	5-3	9
299	Desorption of crude oil components from silica and aluminosilicate surfaces upon exposure to aqueous low salinity and surfactant solutions. <b>2016</b> , 180, 1-8		22
298	Synthesis of nanoSiO <sub>2</sub> @PCE core-shell nanoparticles and its effect on cement hydration at early age. <i>Construction and Building Materials</i> , <b>2016</b> , 114, 673-680	6-7	41
297	Infiltrated porous oxide monoliths as high lithium transference number electrolytes. <b>2016</b> , 4, 7135-7140		24
296	Pressure and Temperature Dependence of Contact Angles for CO <sub>2</sub> /Water/Silica Systems Predicted by Molecular Dynamics Simulations. <b>2016</b> , 30, 5027-5034		29
295	Elemental areal density calculation and oxygen speciation for flat glass surfaces using x-ray photoelectron spectroscopy. <b>2016</b> , 450, 185-193		23
294	Chromatographic behaviour of synthetic high pressure high temperature diamond in aqueous normal phase chromatography. <b>2016</b> , 1470, 59-69		9
293	Oligomerization of Supported Vanadia: Structural Insight Using Surface-Science Models with Chemical Complexity. <b>2016</b> , 120, 18510-18519		16
292	Low-temperature NO <sub>x</sub> ( $x = 1, 2$ ) removal with OH radicals from catalytic ozonation over a RGO/FeO <sub>2</sub> nanocomposite: the highly promotional effect of oxygen vacancies. <i>RSC Advances</i> , <b>2016</b> , 6, 87869-87877	3-7	13
291	Controlled chemical modification of the internal surface of photonic crystal fibers for application as biosensitive elements. <b>2016</b> , 60, 283-289		7
290	Hydration in silica based mesoporous materials: a DFT model. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 32962-32972	3-6	37
289	W(h)ither dielectrics?. <b>2016</b> ,		3
288	A method to derivatize surface silanol groups to Si-alkyl groups in carbon-doped silicon oxides. <i>RSC Advances</i> , <b>2016</b> , 6, 93219-93230	3-7	45
287	Quantum-chemical analysis and experimental synthesis of titanium-vanadium-containing coatings on the silica surface from a mixture of TiCl <sub>4</sub> and VOCl <sub>3</sub> vapors. <b>2016</b> , 86, 2113-2123		5
286	Effect of SiO <sub>2</sub> oligomers on water absorption of cementitious materials. <b>2016</b> , 87, 22-30		31

285	Effect of Coordination Environment in Grafted Single-Site Ti-SiO <sub>2</sub> Olefin Epoxidation Catalysis. <b>2016</b> , 59, 1110-1122		8
284	Effect of Nanoparticle Functionalization on the Performance of Polycyanurate/Silica Nanocomposites. <b>2016</b> , 55, 7096-7107		10
283	Preliminary kinetic data of silicic acid species prior to the formation of exoskeletal structures. <b>2016</b> , 181, 18-24		2
282	Molecular dynamics study of interfacial mechanical behavior between asphalt binder and mineral aggregate. <i>Construction and Building Materials</i> , <b>2016</b> , 121, 246-254	6.7	85
281	Ionic liquid mediated deposition of ruthenium mirrors on glass under multiphase conditions. <b>2016</b> , 40, 1948-1952		1
280	Siloxane D4 adsorption by mesoporous aluminosilicates. <b>2016</b> , 289, 356-364		31
279	Effect of substrate on the responsive behaviour of functionalised surfaces: insights from molecular simulation. <b>2016</b> , 42, 563-572		4
278	Investigation of interaction between the Pt(II) ions and aminosilane-modified silica surface in heterogeneous system. <i>Applied Surface Science</i> , <b>2016</b> , 371, 494-503	6.7	7
277	Isothiourea-Mediated Organocatalytic Michael Addition-Lactonization on a Surface: Modification of SAMs on Silicon Oxide Substrates. <i>Langmuir</i> , <b>2016</b> , 32, 3130-8	4	10
276	Cytotoxicity of multifunctional surfactant containing capped mesoporous silica nanoparticles. <i>RSC Advances</i> , <b>2016</b> , 6, 32060-32069	3.7	11
275	Catalytic adsorptive desulfurization of model diesel fuel using TiO <sub>2</sub> /SBA-15 under mild conditions. <b>2016</b> , 174, 118-125		56
274	How Ion Condensation Occurs at a Charged Surface: A Molecular Dynamics Investigation of the Stern Layer for Water/Silica Interfaces. <b>2016</b> , 120, 963-973		44
273	Anchoring sulfonic acid on silica surface through Si C bond for immobilization of catalyst for polyketone synthesis. <b>2016</b> , 265, 77-83		10
272	The facile preparation of self-cleaning fabrics. <b>2016</b> , 122, 1-9		33
271	Inorganic composite sorbents for water vapor sorption: A research progress. <b>2016</b> , 54, 761-776		39
270	Methane adsorption on porous nano-silica in the presence of water: An experimental and ab initio study. <i>Journal of Colloid and Interface Science</i> , <b>2016</b> , 467, 60-69	9.3	8
269	Understanding the Liberation of Asphaltenes on the Muscovite Surface. <b>2017</b> , 31, 1174-1181		19
268	5-fluorouracil adsorption on hydrated silica: density functional theory based-study. <b>2017</b> , 23, 321-325		9

267	New insights provided by solvent relaxation NMR-measured surface area in liquids to explain phenolics sorption on silica nanoparticles. <b>2017</b> , 4, 577-584		9
266	Models for biomedical interfaces: a computational study of quinone-functionalized amorphous silica surface features. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 7793-7806	3.6	10
265	Nanoparticle decoration with surfactants: Molecular interactions, assembly, and applications. <b>2017</b> , 72, 1-58		313
264	The effect of gas-wetting nano-particle on the fluid flowing behavior in porous media. <b>2017</b> , 196, 431-441		27
263	Physicochemical properties of the surfaces of silica species. <b>2017</b> , 91, 217-225		2
262	Synthesis and XPS characterization of Si-supported chromium(0) Fischer aminocarbene complexes. <b>2017</b> , 836-837, 62-67		12
261	Atomistic models of hydroxylated, ethoxylated and methylated silica surfaces and nitrogen adsorption isotherms: A molecular dynamics approach. <i>Microporous and Mesoporous Materials</i> , <b>2017</b> , 250, 158-169	5.3	9
260	Magnetic HMS silica as a Support to Immobilization of Catalysts Based on Cationic Manganese Porphyrins. <b>2017</b> , 2, 3703-3715		5
259	Hydrophobization of Silica Nanoparticles in Water: Nanostructure and Response to Drying Stress. <i>Langmuir</i> , <b>2017</b> , 33, 4709-4719	4	8
258	Silica Nanoparticles Functionalized with Zwitterionic Sulfobetaine Siloxane for Application as a Versatile Antifouling Coating System. <b>2017</b> , 9, 18584-18594		64
257	Evolution of Ultrafast Vibrational Dynamics During Sol-Gel Aging. <b>2017</b> , 121, 2933-2939		6
256	Effect of surface heterogeneity on phosphorus adsorption onto mineral particles: experiments and modeling. <b>2017</b> , 17, 2887-2898		18
255	Change in the surface OH group on soda lime silicate glass and silica glass after heat treatment in nitrogen atmosphere. <b>2017</b> , 464, 89-91		8
254	Single positively charged particle trapping in nanofluidic systems. <b>2017</b> , 175, 43-49		5
253	The elusive silica/water interface: isolated silanols under water as revealed by vibrational sum frequency spectroscopy. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 10343-10349	3.6	72
252	Scrutinizing Electro-Osmosis and Surface Conductivity with Molecular Dynamics. <b>2017</b> , 121, 6756-6769		23
251	Comparative investigation of two methods for Acetylcholinesterase enzyme immobilization on modified porous silicon. <i>Applied Surface Science</i> , <b>2017</b> , 421, 148-154	6.7	23
250	Fabrication of a new gel polymer electrolyte containing core-shell silica/polyelectrolyte nanoparticles via activators regenerated by electron transfer atom transfer radical polymerization (ARGET-ATRP) for high-performance lithium-sulfur batteries. <b>2017</b> , 71, 21-28		10

249	Single-site zinc on silica catalysts for propylene hydrogenation and propane dehydrogenation: Synthesis and reactivity evaluation using an integrated atomic layer deposition-catalysis instrument. <b>2017</b> , 345, 170-182		55
248	Fluidization of Nanoparticle Agglomerates at Elevated Temperatures. <b>2017</b> , 56, 13955-13969		5
247	Liquid Microjet Measurements of the Entry of Organic Acids and Bases into Salty Water. <b>2017</b> , 121, 20911-20924		24
246	Characterization of surface structures of dealcalized soda lime silica glass using X-ray photoelectron, specular reflection infrared, attenuated total reflection infrared and sum frequency generation spectroscopies. <b>2017</b> , 474, 24-31		30
245	Nanometric Assembly of Functional Terpyridyl Complexes on Transparent and Conductive Oxide Substrates: Structure, Properties, and Applications. <b>2017</b> , 50, 2128-2138		44
244	Measuring Competing Equilibria at a Silica Surface through the Contact Angle of a Nonpolar Liquid. <i>Langmuir</i> , <b>2017</b> , 33, 9632-9636	4	1
243	Investigating Alkylsilane Monolayer Tribology at a Single-Asperity Contact with Molecular Dynamics Simulation. <i>Langmuir</i> , <b>2017</b> , 33, 11270-11280	4	16
242	Characterization, modeling and physical mechanisms of different surface treatment methods at room temperature on the oxide and interfacial quality of the SiO <sub>2</sub> film using the spectroscopic scanning capacitance microscopy. <b>2017</b> , 7, 1308-1318		32
241	Design and characterization of a microreactor for spatially confined atomic layer deposition and in situ UHV surface analysis. <b>2017</b> , 35, 061604		4
240	Bare and Effective Charge of Mesoporous Silica Particles. <i>Langmuir</i> , <b>2017</b> , 33, 7343-7351	4	7
239	Experimental and modelling studies of CO <sub>2</sub> /N <sub>2</sub> mixture separations using amine functionalised silicas. <b>2017</b> , 23, 847-869		3
238	Probing properties of the interfacial perimeter sites in TiO <sub>x</sub> /Au/SiO <sub>2</sub> with 2-propanol decomposition. <b>2017</b> , 548, 150-163		5
237	Controlling the Surface Hydroxyl Concentration by Thermal Treatment of Layered Double Hydroxides. <b>2017</b> , 56, 7842-7850		15
236	On-the-fly dopant redistribution in a silicon nanowire p-n junction. <b>2017</b> , 10, 2845-2855		3
235	Treatment of purified terephthalic acid wastewater using a bio-waste-adsorbent bagasse fly ash (BFA). <b>2017</b> , 24, 1953-1966		4
234	Greensilica vectors for smart textiles. <b>2017</b> , 156, 268-275		6
233	Molecular sensors confined on SiO <sub>x</sub> substrates. <b>2017</b> , 330, 144-163		22
232	Molecular dynamics study of oxidative aging effect on asphalt binder properties. <b>2017</b> , 188, 1-10		197

231	Adsorption and Dimerization of Late Transition Metal Atoms on the Regular and Defective Quartz (001) Surface. <b>2017</b> , 60, 459-470		10
230	Characterization of silica particles modified with $\gamma$ -methacryloxypropyltrimethoxysilane. <i>Applied Surface Science</i> , <b>2017</b> , 397, 104-111	6.7	26
229	On the origin of near-IR luminescence in SiO <sub>2</sub> glass with bismuth as the single dopant. Formation of the photoluminescent univalent bismuth silanolate by SiO <sub>2</sub> surface modification. <b>2017</b> , 183, 233-237		15
228	The Study of a Novel Modified Silica Nanofluid for Pressure-Decreasing Application in the Ultra-Low Permeable Formation. <b>2017</b> ,		1
227	. <b>2017</b> , 24, 3073-3082		15
226	Preparation of Silica Membranes by Atomic Layer Deposition. <b>2017</b> , 45-62		3
225	The hydrophilic-to-hydrophobic transition in glassy silica is driven by the atomic topology of its surface. <b>2018</b> , 148, 074503		26
224	Structure and Dynamics of Solvated Polymers near a Silica Surface: On the Different Roles Played by Solvent. <b>2018</b> , 122, 4573-4582		6
223	Phosphate ester cleavage by a positively charged porous silica adorned with lanthanum (III). <i>Microporous and Mesoporous Materials</i> , <b>2018</b> , 268, 144-152	5.3	8
222	Whispering gallery mode coulometry of the nanoparticle-microcavity interaction in aqueous solution. <b>2018</b> , 112, 051109		5
221	Hydrogen abstraction from methane on cristobalite supported W and Mn oxo complexes: A DFT study. <b>2018</b> , 445, 307-315		10
220	Modeling of a Hybrid Langmuir Adsorption Isotherm for Describing Interactions Between Drug Molecules and Silica Surfaces. <b>2018</b> , 107, 1392-1397		8
219	Construction of fiber-based BiVO <sub>4</sub> /SiO <sub>2</sub> /reduced graphene oxide (RGO) with efficient visible light photocatalytic activity. <b>2018</b> , 25, 1089-1101		34
218	Modelling the surface of amorphous dehydroxylated silica: the influence of the potential on the nature and density of defects. <b>2018</b> , 42, 1356-1367		9
217	Interface Properties of Nanosilica-Modified Waterborne Epoxy Cement Repairing System. <b>2018</b> , 10, 21696-21710		10
216	Recognition mechanism of aromatic derivatives resolved by argentation chromatography: The driving role played by substituent groups. <b>2018</b> , 1019, 135-141		3
215	Calculation of surface potentials at the silica/water interface using molecular dynamics: Challenges and opportunities. <i>Japanese Journal of Applied Physics</i> , <b>2018</b> , 57, 04FM02	1.4	11
214	Silica nanofluid flooding for enhanced oil recovery in sandstone rocks. <b>2018</b> , 27, 105-110		75

213	Photoexcitation effect on the adsorption of hazardous gases on silica surface. <b>2018</b> , 341, 93-101		23
212	Dissolution of commercial nanoscale silica particles in electrolyte solution: The importance of the solid-solvent-ratio to physical and chemical properties of the solid-liquid interface. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2018</b> , 537, 591-603	5.1	3
211	Tuning the textural properties of HMS mesoporous silica. Functionalization towards CO <sub>2</sub> adsorption. <i>Microporous and Mesoporous Materials</i> , <b>2018</b> , 260, 235-244	5.3	54
210	Optimal sample formulations for DNP SENS: The importance of radical-surface interactions. <b>2018</b> , 33, 9-18		34
209	The excess electron in polymer nanocomposites. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 27528-27538		14
208	Sol-Gel Tailored Synthesized Nanosilica for Enhanced Oil Recovery in Water-Wet and Oil-Wet Bentheimer Sandstone. <b>2018</b> , 32, 12373-12382		1
207	Time-Dependent Dynamic Behaviors of a Confined Liquid To Achieve Tailored Adhesion Force with Repeated Contacts Revealed by Atomic Force Microscopy. <i>Langmuir</i> , <b>2018</b> , 34, 15211-15227	4	11
206	Chemical Functionalization for Quantitative Spectroscopic Labeling on Macroscopically Flat Surfaces. <b>2018</b> , 592-603		
205	Area-Selective Atomic Layer Deposition Using Si Precursors as Inhibitors. <b>2018</b> , 30, 7603-7610		52
204	Quantification and Stability Determination of Surface Amine Groups on Silica Nanoparticles Using Solution NMR. <b>2018</b> , 90, 13322-13330		25
203	Self-Assembled Monolayers of Silver Nanoparticles: From Intrinsic to Switchable Inorganic Antibacterial Surfaces. <b>2018</b> , 2018, 4846-4855		39
202	Zirconium Modification Promotes Catalytic Activity of a Single-Site Cobalt Heterogeneous Catalyst for Propane Dehydrogenation. <b>2018</b> , 3, 11117-11127		26
201	Raman characterization of CuZnSnS nanocrystals: phonon confinement effect and formation of Cu S phases.. <i>RSC Advances</i> , <b>2018</b> , 8, 30736-30746	3.7	25
200	Poly( N-isopropylacrylamide)-Grafted Polydimethylsiloxane Substrate for Controlling Cell Adhesion and Detachment by Dual Stimulation of Temperature and Mechanical Stress. <b>2018</b> , 19, 4014-4022		17
199	Biofunctionalization of Nano Channels by Direct In-Pore Solid-Phase Peptide Synthesis. <b>2018</b> , 24, 17814-17822		12
198	Quantum Nano-Photonics. <b>2018</b> ,		
197	Ionic PMMA/nanosilica interfaces from grafting ionic liquids under supercritical CO <sub>2</sub> conditions. <b>2018</b> , 109, 82-92		4
196	Molecular dynamics simulation of gaseous nitroaromatic compounds interacting with silica surfaces under various humidity conditions. <i>Applied Surface Science</i> , <b>2018</b> , 455, 533-542	6.7	2

195	Ab Initio Modeling of Hydrogen Bond Interaction at Silica Surfaces With Focus on Silica/Drugs Systems. <b>2018</b> , 297-328		6
194	Effect of surface hydroxyl groups on heat capacity of mesoporous silica. <b>2018</b> , 112, 201903		8
193	Engineering surface functional groups on mesoporous silica: towards a humidity-resistant hydrophobic adsorbent. <b>2018</b> , 6, 13769-13777		31
192	Impact of polyacrylamide adsorption on flow through porous siliceous materials: State of the art, discussion and industrial concern. <i>Journal of Colloid and Interface Science</i> , <b>2018</b> , 531, 693-704	9-3	16
191	Probing Hydrogen-Bonding Interactions of Water Molecules Adsorbed on Silica, Sodium Calcium Silicate, and Calcium Aluminosilicate Glasses. <b>2018</b> , 122, 17792-17801		20
190	Synthesis and functionalisation of mesoporous materials for transparent coatings and organic dye adsorption. <b>2018</b> , 42, 10254-10262		8
189	Structural Properties of Al-O Monolayers in SiO on Silicon and the Maximization of Their Negative Fixed Charge Density. <b>2018</b> , 10, 30495-30505		14
188	Probing the single pair rupture force of supramolecular quadruply hydrogen bonding modules by nano-adhesion measurement.. <i>RSC Advances</i> , <b>2018</b> , 8, 21798-21805	3-7	0
187	Controlled Silanization Using Functional Silatrane for Thin and Homogeneous Antifouling Coatings. <i>Langmuir</i> , <b>2019</b> , 35, 1662-1671	4	21
186	Zwitterion Functionalized Silica Nanoparticle Coatings: The Effect of Particle Size on Protein, Bacteria, and Fungal Spore Adhesion. <i>Langmuir</i> , <b>2019</b> , 35, 1335-1345	4	21
185	Surface Characterization of Colloidal Silica Nanoparticles by Second Harmonic Scattering: Quantifying the Surface Potential and Interfacial Water Order. <b>2019</b> , 123, 20393-20404		25
184	Structure and reactivity of single site Ti catalysts for propylene epoxidation. <b>2019</b> , 377, 419-428		22
183	Quantification of surface functional groups on silica nanoparticles: comparison of thermogravimetric analysis and quantitative NMR. <b>2019</b> , 144, 5589-5599		21
182	Initial Growth Study of Atomic-Layer Deposition of AlO by Vibrational Sum-Frequency Generation. <i>Langmuir</i> , <b>2019</b> , 35, 10374-10382	4	10
181	Amine grafting of acid-activated bentonite for carbon dioxide capture. <b>2019</b> , 180, 105195		11
180	Tg Confinement Effect of Random Copolymers of 4-tert-Butylstyrene and 4-Acetoxy styrene with Different Compositions. <b>2019</b> , 8, 1280-1284		5
179	Overview of Multiscale Molecular Modeling and Simulation of Silica Aerogels. <b>2019</b> , 58, 18905-18929		11
178	Molecular hydrophobicity at a macroscopically hydrophilic surface. <b>2019</b> , 116, 1520-1525		69

177	Hybrid amine-silica materials: Determination of N content by <sup>29</sup> Si NMR and application to direct CO <sub>2</sub> capture from air. <b>2019</b> , 373, 1286-1294	21
176	Challenges in isolating silica particles from organic food matrices with microwave-assisted acidic digestion. <b>2019</b> , 411, 5817-5831	4
175	Tungstenocene-grafted silica catalysts for the selective epoxidation of alkenes. <b>2019</b> , 581, 133-142	9
174	Moisture outgassing from siloxane elastomers containing surface-treated-silica fillers. <b>2019</b> , 3,	2
173	Propylene Polymerization Catalyzed by Metallocene /Methylaluminoxane Systems on Rice Husk Ash. <b>2019</b> , 24,	3
172	A Critical Review of Solid Materials for Low-Temperature Thermochemical Storage of Solar Energy Based on Solid-Vapour Adsorption in View of Space Heating Uses. <b>2019</b> , 24,	24
171	Quantification of amine functional groups on silica nanoparticles: a multi-method approach. <b>2019</b> , 1, 1598-1607	23
170	Piezoelectric thin film on glass fiber fabric with structural hierarchy: An approach to high-performance, superflexible, cost-effective, and large-scale nanogenerators. <b>2019</b> , 59, 745-753	42
169	Modular and conservative procedure for the quantification of amino functionalities bonded to solid porous matrices. <b>2019</b> , 1068, 120-130	1
168	Wettability of rock/CO <sub>2</sub> /brine and rock/oil/CO <sub>2</sub> -enriched-brine systems:Critical parametric analysis and future outlook. <b>2019</b> , 268, 91-113	54
167	Mechanical reinforcement of methylcellulose hydrogels by rigid particle additives. <b>2019</b> , 132, 57-65	8
166	TiO <sub>2</sub> Nanoparticles Supported on Hierarchical Meso/Macroporous SiO <sub>2</sub> Spheres for Photocatalytic Applications. <b>2019</b> ,	2
165	Advanced surface modification technologies for biosensors. <b>2019</b> , 65-86	8
164	Model of a Reversed Phase Grafted on Silica Gel. <b>2019</b> , 93, 2490-2493	1
163	SBA-15 Anchored Metal Containing Catalysts in the Oxidative Desulfurization Process. <b>2019</b> , 9, 984	25
162	Priming and bonding metal, ceramic and polycarbonate brackets. <b>2019</b> , 6, 61-72	3
161	Viscoelastic solid-repellent coatings for extreme water saving and global sanitation. <b>2019</b> , 2, 1097-1105	41
160	X-ray Standing Waves and Molecular Dynamics Studies of Ion Surface Interactions in Water at a Charged Silica Interface. <b>2019</b> , 123, 30294-30304	2



159	Current trends, challenges, and perspectives of anti-fogging technology: Surface and material design, fabrication strategies, and beyond. <b>2019</b> , 99, 106-186		83
158	Wettability alteration in carbonate and sandstone rocks due to low salinity surfactant flooding. <i>Journal of Molecular Liquids</i> , <b>2019</b> , 275, 265-280	6	22
157	Molecular understanding of the adhesive interactions between silica surface and epoxy resin: Effects of interfacial water. <b>2019</b> , 40, 164-171		27
156	Soil water repellency: A molecular-level perspective of a global environmental phenomenon. <b>2019</b> , 338, 56-66		10
155	Adhesion force behaviors between two silica surfaces with varied water thin film due to substrate temperature studied by AFM. <b>2020</b> , 96, 855-872		6
154	Experimental study of nanoparticles as catalyst in enhancing matrix acidizing for carbonate reservoir. <b>2020</b> , 10, 1145-1153		1
153	Covalently attachment of aliphatic linear non-branched alcohols to silicon oxide and glass substrates in liquid paraffin solvent. <i>Applied Surface Science</i> , <b>2020</b> , 509, 145102	6.7	1
152	Modifying the Wettability of Sandstones Using Nonfluorinated Silylation: To Minimize the Water Blockage Effect. <b>2020</b> , 34, 709-719		3
151	Effect of water film on oil flow in quartz nanopores from molecular perspectives. <b>2020</b> , 262, 116560		29
150	Understanding the roles of patterning and foulant chemistry on nanofiltration threshold flux. <b>2020</b> , 597, 117746		7
149	ISFET and Dex-AgNPs based portable sensor for reusable and real-time determinations of concanavalin A and glucose on smartphone. <b>2020</b> , 151, 111962		14
148	Role of Hydrogen-Bonding and OH-Interactions in the Adhesion of Epoxy Resin on Hydrophilic Surfaces. <b>2020</b> , 5, 26211-26219		12
147	Poison or Promoter? Investigating the Dual-Role of Carbon Monoxide in Pincer-Iridium-Based Alkane Dehydrogenation Systems via Operando Diffuse Reflectance Infrared Fourier Transform Spectroscopy. <b>2020</b> , 10, 12425-12436		3
146	Two-Dimensional Layers of Colloidal CdTe Quantum Dots: Assembly, Optical Properties, and Vibroelectronic Coupling. <b>2020</b> , 124, 25873-25883		5
145	Interaction between transition metals (Co, Ni, and Cu) systems and amorphous silica surfaces: A DFT investigation. <i>Applied Surface Science</i> , <b>2020</b> , 533, 147422	6.7	11
144	Protein encapsulation in functionalized sol-gel silica: Effect of the encapsulation method on the release kinetics and the activity. <i>Microporous and Mesoporous Materials</i> , <b>2020</b> , 308, 110502	5.3	6
143	Influence of surface Sn species and hydrogen interactions on the OH group formation over spherical silica-supported tin oxide catalysts. <b>2020</b> , 5, 1814-1823		2
142	Molecular Weight Dependence of the Glass Transition Temperature (T <sub>g</sub> )-Confinement Effect in Well-Dispersed Poly(2-vinyl pyridine)Silica Nanocomposites: Comparison of Interfacial Layer T <sub>g</sub> and Matrix T <sub>g</sub> . <b>2020</b> , 53, 8725-8736		9

141	Nontraditional Catalyst Supports in Surface Organometallic Chemistry. <b>2020</b> , 10, 11822-11840		40
140	Assessing the Potential of Amorphous Silica Surfaces for the Removal of Phenol from Biofuel: A Density Functional Theory Investigation. <b>2020</b> , 124, 20262-20269		8
139	Thermochromatographic behavior of iodine in fused silica columns when evaporated from leadBismuth eutectic. <b>2020</b> , 326, 1249-1258		2
138	Enhanced adhesion in two-photon polymerization direct laser writing. <b>2020</b> , 10, 045217		4
137	Photocatalytic degradation of organic dye over bismuth vanadateSilicon dioxideGraphene oxide nanocomposite under visible light irradiation. <b>2020</b> , 56, 1237-1241		5
136	Analysis of interfacial adhesion properties of nano-silica modified asphalt mixtures using molecular dynamics simulation. <i>Construction and Building Materials</i> , <b>2020</b> , 255, 119354	6.7	51
135	The contribution of aqueous catechol-silica complexes to silicification during carbonate diagenesis. <b>2020</b> , 280, 185-201		4
134	Immobilization of [VCl <sub>3</sub> (N-2,6-Me <sub>2</sub> C <sub>6</sub> H <sub>3</sub> )] Complex on Silica Supports: Synthesis and Catalytic Testing for Ethylene Polymerization. <b>2020</b> , 59, 12710-12718		4
133	Material combination of Tunnel-SiO <sub>2</sub> with a (sub-)Monolayer of ALD-AlO <sub>x</sub> on silicon offering a highly passivating hole selective contact. <b>2020</b> , 215, 110654		11
132	Grafting of iron on amorphous silica surfaces from ab initio calculations. <b>2020</b> , 152, 214706		10
131	Molecular dynamics analysis of moisture effect on asphalt-aggregate adhesion considering anisotropic mineral surfaces. <i>Applied Surface Science</i> , <b>2020</b> , 527, 146830	6.7	23
130	Polymer-coated cationic silica nanoparticles for slow-release Pickering emulsions. <b>2020</b> , 298, 559-568		2
129	Efficient Catalysis of Phosphate Ester Hydrolysis by Bare Silica. <b>2020</b> , 124, 17111-17120		0
128	Cationic Imidazolium Polythiophenes: Effects of Imidazolium-Methylation on Solution Concentration-Driven Aggregation and Surface Free Energy of Films Processed from Solvents with Different Polarity. <i>Langmuir</i> , <b>2020</b> , 36, 2278-2290	4	5
127	Direct and Indirect Dynamic Nuclear Polarization Transfer Observed in Mesoporous Materials Impregnated with Nonionic Surfactant Solutions of Polar Polarizing Agents. <b>2020</b> , 124, 5145-5156		5
126	A review of the analysis and characterisation of polymeric glass fibre sizings. <b>2020</b> , 85, 106421		14
125	Enhanced Menshutkin S <sub>2</sub> Reactivity in Mesoporous Silica: The Influence of Surface Catalysis and Confinement. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 5636-5648	16.4	15
124	Phase Inversions Observed in Thermoresponsive Pickering Emulsions Stabilized by Surface Functionalized Colloidal Silica. <i>Langmuir</i> , <b>2020</b> , 36, 2357-2367	4	10

123	Changing Sandstone Rock Wettability with Supercritical CO <sub>2</sub> -Based Silylation. <b>2020</b> , 34, 2015-2027	4
122	Hydration and reaction mechanisms on sodium silicate glass surfaces from molecular dynamics simulations with reactive force fields. <b>2020</b> , 103, 3676-3690	12
121	Extreme Antiscaling Performance of Slippery Omniphobic Covalently Attached Liquids. <b>2020</b> , 12, 12054-12067	23
120	TEMPO-functionalized mesoporous silica particles as heterogeneous oxidation catalysts in flow. <b>2020</b> , 8, 4107-4117	15
119	Salt-Responsive Zwitterionic Polymer Brush Based on Modified Silica Nanoparticles as a Fluid-Loss Additive in Water-Based Drilling Fluids. <b>2020</b> , 34, 1669-1679	22
118	Moisture effect on nanostructure and adhesion energy of asphalt on aggregate surface: A molecular dynamics study. <i>Applied Surface Science</i> , <b>2020</b> , 510, 145435	6.7 45
117	Carboxybetaine functionalized nanosilicas as protein resistant surface coatings. <b>2020</b> , 15, 011001	2
116	Green Synthesis of Oxide-Supported Pd Nanocatalysts by Laser Methods for Room-Temperature Carbon-Carbon Cross-Coupling Reactions. <b>2020</b> , 12, 23844-23852	10
115	Effect of Glass Fibers Thermal Treatment on the Mechanical and Thermal Behavior of Polysulfone Based Composites. <b>2020</b> , 12,	8
114	Surface Potential and Interfacial Water Order at the Amorphous TiO Nanoparticle/Aqueous Interface.. <b>2020</b> , 124, 10961-10974	13
113	Area Occupied by a Water Molecule Adsorbed on Silica at 298 K: Zeta Adsorption Isotherm Approach. <b>2020</b> , 124, 9269-9280	5
112	Study of liquid-liquid two-phase flow in hydrophilic nanochannels by molecular simulations and theoretical modeling. <b>2020</b> , 395, 125053	27
111	Molecular dynamics simulation of thermal degradation of silicone grease using reactive force field. <b>2021</b> , 138, 50203	2
110	Reaction Acceleration at Solid/Solution Interfaces: Katritzky Reaction Catalyzed by Glass Particles. <b>2021</b> , 60, 2929-2933	8
109	Reaction Acceleration at Solid/Solution Interfaces: Katritzky Reaction Catalyzed by Glass Particles. <b>2021</b> , 133, 2965-2969	1
108	Desiccated Microclimates for Heritage Metals: Creation and Management. <b>2021</b> , 66, 127-153	1
107	Advanced characterisation of the early age behaviour of bulk hydrophobic mortars. <i>Construction and Building Materials</i> , <b>2021</b> , 267, 120904	6.7 0
106	Surface contacts strongly influence the elasticity and thermal conductivity of silica nanoparticle fibers. <i>Physical Chemistry Chemical Physics</i> , <b>2021</b> , 23, 3707-3715	3.6 2

105	Perspectives on additives for polymers. Part 2. Aspects of photostabilization and role of fillers and pigments. <b>2021</b> , 27, 211-239		7
104	Abnormally large and small adhesion forces between plasma-treated silicon surfaces studied on AFM. <b>2021</b> , 97, 305-327		1
103	Surface chemical reactions on self-assembled silane based monolayers. <i>Chemical Society Reviews</i> , <b>2021</b> , 50, 6507-6540	58.5	10
102	Competitive adsorption of phenol and toluene onto silica-supported transition metal clusters for biofuel purification.		3
101	Glass surface as strong base, 'green' heterogeneous catalyst and degradation reagent. <b>2021</b> , 12, 9816-9822		5
100	Surface organometallic and coordination chemistry approach to formation of single site heterogeneous catalysts. <b>2021</b> ,		
99	Highly conductive and stable CoS thin films by atomic layer deposition: from process development and film characterization to selective and epitaxial growth. <b>2021</b> , 50, 13264-13275		
98	Adsorption affinity of Zn (II) ions for nanostructured zirconium phosphate/silica or titania composites. 1		3
97	Physicochemical and electrochemical characterization of Nafion-type membranes with embedded silica nanoparticles: Effect of functionalization. <b>2021</b> , 370, 137689		2
96	Strength and dilatancy of sand before and after stabilisation with colloidal-silica gel. 1-15		6
95	Modeling of catalytic adsorptive desulfurization in a cyclic process. <b>2021</b> , 9, 105048		0
94	Protein encapsulation in functionalized sol-gel silica: influence of organosilanes and main silica precursors. <b>2021</b> , 56, 14234-14256		2
93	Genome-Wide DNA Methylation Alterations and Potential Risk Induced by Subacute and Subchronic Exposure to Food-Grade Nanosilica in Mice. <i>ACS Nano</i> , <b>2021</b> , 15, 8225-8243	16.7	1
92	Surface-modified elastomeric nanofluidic devices for single nanoparticle trapping. <b>2021</b> , 7, 46		1
91	Basic silica catalysts for the efficient dehydration of biomass-derived compounds [Elucidating structure-activity relationships for Na <sub>2</sub> O/SiO <sub>2</sub> -type materials. <b>2021</b> , 286, 119933		4
90	Silica Nanoparticle Deposition on Natural Fibrous Substrates: Kinetic and Thermodynamic Studies. <b>2021</b> , 60, 9500-9507		3
89	Elucidating the Mechanism of Condensation-Mediated Degradation of Organofunctional Silane Self-Assembled Monolayer Coatings. <b>2021</b> , 13, 34923-34934		10
88	Structure and Thermodynamics of Silicon Oxycarbide Polymer-Derived Ceramics with and without Mixed-Bonding. <i>Materials</i> , <b>2021</b> , 14,	3.5	1

87	Energy Decomposition Analysis of the Adhesive Interaction between an Epoxy Resin Layer and a Silica Surface. <i>Langmuir</i> , <b>2021</b> , 37, 8417-8425	4	0
86	Clinical outcomes of tooth-supported leucite-reinforced glass-ceramic crowns after a follow-up time of 13-15 years. <b>2021</b> , 111, 103721		1
85	Properties of silica-filled rubber compounds vs. epoxidized oil content and degree of epoxidation. <b>2021</b> , 168, 113600		3
84	Innovative application of waste polyethylene terephthalate (PET) derived additive as an antistripping agent for asphalt mixture: Experimental investigation and molecular dynamics simulation. <b>2021</b> , 300, 121015		9
83	How Ion Pair Formation Drives Adsorption in the Electrical Double Layer: Molecular Dynamics of Charged Silica-Water Interfaces in the Presence of Divalent Alkaline Earth Ions. <b>2021</b> , 125, 20551-20569		1
82	Multistage Quality Control of Active Fiber Light Guides. <b>2021</b> , 64, 768-775		
81	Core-shell structured SiO@ZrO@SiO filler for radiopacity and ultra-low shrinkage dental composite resins. <b>2021</b> , 121, 104593		4
80	Size-dependent dissociation of surface hydroxyl groups of silica in aqueous solution. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2021</b> , 629, 127446	5.1	0
79	Ab initio investigation of the adsorption of phenolic compounds, CO, and H <sub>2</sub> O over metallic cluster/silica catalysts for hydrodeoxygenation process. <i>Applied Surface Science</i> , <b>2021</b> , 567, 150790	6.7	4
78	Understanding geopolymer binder-aggregate interfacial characteristics at molecular level. <b>2021</b> , 149, 106582		5
77	Effect of potassium hydrogen difluoride in zirconia-to-resin bonding. <b>2021</b> , 40, 245-252		0
76	Structure of ice confined in silica nanopores. <i>Physical Chemistry Chemical Physics</i> , <b>2021</b> , 23, 12706-12717	3.6	0
75	Optimization of Nanofluidic Devices for Geometry-Induced Electrostatic Trapping. <b>2021</b> , 38, 2000275		1
74	On the Structure and Lithium Adsorption Mechanism of Layered HTiO. <b>2021</b> , 13, 8361-8369		8
73	Catalysis by Metal Oxides. <b>2006</b> , 39-62		1
72	Nanoporous Silica as an Ultralow-k Dielectric. <b>1997</b> , 22, 39-42		69
71	Surface Properties and Analysis. <b>2006</b> ,		
70	Surface Properties and Analysis. <b>2006</b> , 67-99		

69	Evaluation and Interpretation of the Experimental Data. <b>2008</b> , 119-190		
68	Simulations of Glass Surfaces: Structure and Adsorption. <b>1994</b> , 375-390		
67	Mechanisms of Hydroxyapatite Formation on Porous Gel-Silica Substrates. <b>1996</b> , 59-68		1
66	Evolution of the Surface and Internal Structure of Silica Aerogels During the Isothermal Sintering Process. <b>1999</b> , 277-282		
65	Intercomponent interactions in hybrid polymer composites based on chemically modified silica and silver nanoparticles. <b>2014</b> , 134-141		1
64	Analysis of microscopic images. <b>2015</b> , 95-114		
63	7.4.1 Silicon oxides. <b>2015</b> , 393-396		
62	Chapter 2 Preparation of Nanoparticles. <b>2016</b> , 9-40		
61	Chapter 14 Whispering Gallery Mode Resonators as Opto-Mechanical Probes to Nanoparticle-Microcavity Interaction and Charge. <b>2018</b> , 267-276		
60	Pristine and humidity-related photoluminescence in gadolinium niobate nanophosphors synthesized at low temperatures. <i>Materials Research Bulletin</i> , <b>2022</b> , 146, 111600	5.1	
59	Examining the role of salinity on the dynamic stability of Pickering emulsions. <i>Journal of Colloid and Interface Science</i> , <b>2021</b> , 608, 2321-2321	9.3	1
58	Precipitated Silica and Non-Black Fillers. <b>2020</b> , 451-532		
57	Improving Thermal Stability and Hydrophobicity of Rutile-TiO <sub>2</sub> Nanoparticles for Oil-Impregnated Paper Application. <i>Energies</i> , <b>2021</b> , 14, 7964	3.1	1
56	Organosilica Nanoparticles with Ordered Trimodal Porosity and Selectively Functionalized Mesopores. <i>Chemie-Ingenieur-Technik</i> ,	0.8	
55	Nanoantibiotics Based in Mesoporous Silica Nanoparticles: New Formulations for Bacterial Infection Treatment.. <i>Pharmaceutics</i> , <b>2021</b> , 13,	6.4	3
54	A simple liquid state H NMR measurement to directly determine the surface hydroxyl density of porous silica. <i>Chemical Communications</i> , <b>2021</b> , 57, 12804-12807	5.8	
53	Proton transport over nanoparticle surface in insulating nanoparticle film-based humidity sensor. <i>Japanese Journal of Applied Physics</i> ,	1.4	
52	Evidence for Entropically Controlled Interfacial Hydration in Mesoporous Organosilicas.. <i>Journal of the American Chemical Society</i> , <b>2022</b> ,	16.4	0

51	Self-association and gel formation during sedimentation of like-charged colloids.. <i>Materials Horizons</i> , <b>2022</b> ,	14.4	
50	Adsorption of Amine Compounds on the Glass Surface and Their Impact on the Development of Analytical Method and Pharmaceutical Process. <i>Organic Process Research and Development</i> ,	3.9	
49	Fabrication of a new magnetic CoFe <sub>2</sub> O <sub>4</sub> /ZrMCM-41 nanocomposite: Simple construction and application for fast reduction of Cr(IV) and nitroaromatic compounds. <i>Journal of Molecular Structure</i> , <b>2022</b> , 1254, 132367	3.4	0
48	Experimentally probing ionic solutions in single-digit nanoconfinement.. <i>Journal of Colloid and Interface Science</i> , <b>2022</b> , 614, 396-404	9.3	0
47	Molecularly resolved, label-free nucleic acid sensing at solid-liquid interface using non-ionic DNA analogues.. <i>RSC Advances</i> , <b>2022</b> , 12, 9263-9274	3.7	1
46	Can Mesoporous Silica Speed Up Degradation of Benzodiazepines? Hints from Quantum Mechanical Investigations.. <i>Materials</i> , <b>2022</b> , 15,	3.5	
45	Enhanced longitudinal compressive strength of CFRP composites through matrix stiffening via flexible/rigid epoxide grafted silica: A combined analysis of simulation and experiments. <i>Composites Part B: Engineering</i> , <b>2022</b> , 235, 109756	10	1
44	Simulations of Glass-Water Interactions. <b>2022</b> , 490-521		1
43	Molecular dynamics simulation on cohesion and adhesion properties of the emulsified cold recycled mixtures. <i>Construction and Building Materials</i> , <b>2022</b> , 333, 127403	6.7	2
42	Protein encapsulation in mesoporous silica: Influence of the mesostructured and pore wall properties. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2022</b> , 642, 128629	5.1	0
41	Characterizing the autoignition behavior of simple paraffins and alcohols; comparisons and implications. <i>Journal of Loss Prevention in the Process Industries</i> , <b>2022</b> , 77, 104773	3.5	0
40	Critical Packing Density of Water-Mediated Nonstick Self-Assembled Monolayer Coatings.. <i>Langmuir</i> , <b>2021</b> ,	4	
39	Optical Trapping and Positioning of Silicon Nanowires via Photonic Nozzling.. <i>Nano Letters</i> , <b>2022</b> ,	11.5	1
38	Strain-rate dependent mode I cohesive traction laws for glass fiber-epoxy interphase using molecular dynamics simulations. <i>Composites Part B: Engineering</i> , <b>2022</b> , 237, 109877	10	0
37	Cephalexin loading and controlled release studies on mesoporous silica functionalized with amino groups. <i>Journal of Drug Delivery Science and Technology</i> , <b>2022</b> , 72, 103348	4.5	0
36	Competitive adsorption of asphaltene and n-heptane on quartz surfaces and its effect on crude oil transport through nanopores. <i>Journal of Molecular Liquids</i> , <b>2022</b> , 359, 119312	6	0
35	A Chemical Nanoreactor Based on a Levitated Nanoparticle in Vacuum.. <i>ACS Nano</i> , <b>2022</b> ,	16.7	2
34	Engineering mesoporous silica nanoparticles for drug delivery: where are we after two decades?. <i>Chemical Society Reviews</i> ,	58.5	19

33	Spectroscopic insight into post-synthetic surface modification of porous glass beads as silica model system. <i>Physical Chemistry Chemical Physics</i> ,	3.6	0
32	Modeling of linear nanopores in a-SiO <sub>2</sub> tuning pore surface structure. <i>Microporous and Mesoporous Materials</i> , <b>2022</b> , 112077	5.3	
31	Leucine on Silica: A Combined Experimental and Modeling Study of a System Relevant for Origins of Life, and the Role of Water Coadsorption. <i>Langmuir</i> ,	4	0
30	Molecular recognition between membrane epitopes and nearly free surface silanols explains silica membranolytic activity. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2022</b> , 217, 112625	6	1
29	Molecular-dynamics study on the thermodynamic properties of nano-SiO <sub>2</sub> particle-doped silicone rubber composites. <i>Computational Materials Science</i> , <b>2022</b> , 212, 111571	3.2	1
28	Influence of Mineral Composition on Nano-Interfacial Adhesion of Asphalt Mixtures Exposed to Chloride Salt Erosion. <i>SSRN Electronic Journal</i> ,	1	
27	Contact time dependence of adhesion force at silica/silica interface on AFM: Influence of relative humidity and contact history. <i>Applied Surface Science</i> , <b>2022</b> , 600, 154175	6.7	1
26	Amorphous silica dissolution kinetics in freshwater environments: Effects of Fe <sup>2+</sup> and other solution compositional controls. <b>2022</b> , 158239		0
25	Nanomechanical-atomistic insights on interface interactions in asphalt mixtures with various chloride ion erosion statuses. <b>2022</b> , 628, 891-909		0
24	Amine functionalization derived lattice engineered and electron deficient palladium catalyst for selective production of hydrogen peroxide. <b>2022</b> , 604, 154464		
23	Effect of geometric modification of fumed nanoscale silica for medical applications on adsorption of human serum albumin: Physicochemical and surface properties. <b>2022</b> , 220, 1294-1308		0
22	Immobilization of a trimeric ruthenium cluster in mesoporous chromium terephthalate and its catalytic application. <b>2022</b> , 51, 13189-13194		1
21	Tuning the thermodynamic, optical, and rheological properties of thermoresponsive polymer solutions via silica nanoparticle shape and concentration. <b>2023</b> , 629, 878-895		0
20	Comparative characteristics of the structure and physicochemical properties of silica synthesized by pyrogenic and fluoride methods.		0
19	Comparative Characteristics of the Structure and Physicochemical Properties of Silica Synthesized by Pyrogenic and Fluoride Methods.		0
18	Carbonation Resistance of Hybrid NanoSiO <sub>2</sub> Modified Cementitious Surface Protection Materials. <b>2022</b> , 37, 855-862		0
17	Hydroxylation and Water-Surface Interaction for S-Glass and Silica Glass using ReaxFF based Molecular Dynamics Simulations. <b>2022</b> , 155078		0
16	Immobilization of Metronidazole on Mesoporous Silica Materials. <b>2022</b> , 14, 2332		0



- 15 Impacts of asphalt and mineral types on interfacial behaviors: A molecular dynamics study. **2022**, 17, e01581 ○
- 14 Theoretical modelling of electrostatic interactions in pH-dependent drug loading and releasing by functionalized mesoporous silica nanoparticles. ○
- 13 Atomistic insights into migration mechanism of graphene-based membranes on soil mineral phases. **2022**, 137617 ○
- 12 A Molecular Theory of Polypeptide Adsorption at Inorganic Surfaces. ○
- 11 Quantitative and convenient protocol for analysis of surface-modified silica nanoparticles using 29 Si-NMR and near-infrared diffuse reflection spectroscopy. ○
- 10 Composition Effect on Interfacial Reactions of Sodium Aluminosilicate Glasses in Aqueous Solution. **2023**, 127, 269-284 ○
- 9 Influence of mineral composition on nano-interfacial adhesion of asphalt mixtures exposed to chloride salt erosion. **2023**, 367, 130213 ○
- 8 Stability of asphaltene-mircoparticles co-stabilized emulsions by oxygen-enriched nonionic demulsifier. **2023**, 381, 121819 ○
- 7 Nanoscale insights into the interfacial characteristics between calcium silicate hydrate and silica. **2023**, 616, 156478 ○
- 6 Cyclic or Linear? Parameters Determining the Outcome of Glycine Polymerization in Silica Surface Prebiotic Scenarios. **2023**, 29, ○
- 5 A novel study on hydro-mechanical characteristics of biopolymer-stabilized dune sand. **2023**, 398, 136518 1
- 4 In silico approaches for aerogel. **2023**, 399-477 ○
- 3 Revisiting Alkoxysilane Assembly on Silica Surfaces: Grafting versus Homo-Condensation in Solution. **2023**, 145, 6671-6681 ○
- 2 Matrix transformation of lunar regolith and its use as a feedstock for additive manufacturing. **2023**, 26, 106382 ○
- 1 Structural and Surface Changes of SiO<sub>2</sub> Flint Aggregates under Thermal Treatment for Potential Valorization. **2023**, 13, 647 ○