

# Prabir K Dutta

## List of Publications by Year in descending order

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212  
papers

9,361  
citations

38742

50  
h-index

62596

80  
g-index

214  
all docs

214  
docs citations

214  
times ranked

9729  
citing authors

#	ARTICLE	IF	CITATIONS
1	Handbook of Zeolite Science and Technology. , 0, , .		522
2	Water Oxidation Catalysis using Amorphous Manganese Oxides, Octahedral Molecular Sieves (OMS-2), and Octahedral Layered (OL-1) Manganese Oxide Structures. Journal of Physical Chemistry C, 2012, 116, 6474-6483.	3.1	267
3	Handbook of Layered Materials. , 2004, , .		230
4	Nanoparticle processing: Understanding and controlling aggregation. Advances in Colloid and Interface Science, 2020, 279, 102162.	14.7	212
5	Composite nâ€“p semiconducting titanium oxides as gas sensors. Sensors and Actuators B: Chemical, 2001, 79, 17-27.	7.8	206
6	Hydrothermal Synthesis and Dielectric Properties of Tetragonal BaTiO <sub>3</sub> . Chemistry of Materials, 1994, 6, 1542-1548.	6.7	197
7	Titanium dioxide based high temperature carbon monoxide selective sensor. Sensors and Actuators B: Chemical, 2001, 72, 239-248.	7.8	194
8	Storage of light energy by photoelectron transfer across a sensitized zeoliteâ€“solution interface. Nature, 1993, 362, 43-45.	27.8	190
9	High-Temperature Ceramic Gas Sensors: A Review. International Journal of Applied Ceramic Technology, 2006, 3, 302-311.	2.1	164
10	Raman spectroscopic study of the synthesis of zeolite Y. The Journal of Physical Chemistry, 1987, 91, 2332-2336.	2.9	150
11	Correlation of Raman spectra of zeolites with framework architecture. The Journal of Physical Chemistry, 1991, 95, 6654-6656.	2.9	144
12	Synthesis of Tetragonal BaTiO <sub>3</sub> by Microwave Heating and Conventional Heating. Chemistry of Materials, 1997, 9, 3023-3031.	6.7	140
13	Silver nanoparticles embedded in zeolite membranes: release of silver ions and mechanism of antibacterial action. International Journal of Nanomedicine, 2011, 6, 1833.	6.7	139
14	Interaction of Carbon Monoxide with Anatase Surfaces at High Temperatures:Â Optimization of a Carbon Monoxide Sensor. Journal of Physical Chemistry B, 1999, 103, 4412-4422.	2.6	136
15	Oxidation of Water to Dioxygen by Intrazeolitic Ru(bpy) <sub>3</sub> <sup>3+</sup> . Journal of the American Chemical Society, 1995, 117, 7687-7695.	13.7	128
16	Synthesis and structure of zeolite ZSM-5: a Raman spectroscopic study. The Journal of Physical Chemistry, 1987, 91, 4329-4333.	2.9	127
17	Room temperature impedance spectroscopy-based sensing of formaldehyde with porous TiO <sub>2</sub> under UV illumination. Sensors and Actuators B: Chemical, 2013, 185, 1-9.	7.8	125
18	Synthesis of Ultrathin Zeolite Y Membranes and their Application for Separation of Carbon Dioxide and Nitrogen Gases. Langmuir, 2010, 26, 10287-10293.	3.5	119

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19	Photoelectron transfer from tris(2,2'-bipyridine)ruthenium(II) to methylviologen in zeolite cages: a resonance Raman spectroscopic study. <i>The Journal of Physical Chemistry</i> , 1987, 91, 4443-4446.	2.9	110
20	Intrazeolitic photoinduced redox reactions between tris(2,2'-bipyridine)ruthenium(2+) and methylviologen. <i>The Journal of Physical Chemistry</i> , 1992, 96, 9410-9416.	2.9	103
21	Zeta potential measurements of zeolite Y: Application in homogeneous deposition of particle coatings. <i>Microporous and Mesoporous Materials</i> , 2007, 103, 102-107.	4.4	102
22	Spectroscopic studies of the photochromic molecule N-(2-hydroxybenzylidene)aniline and its photoproduct. <i>The Journal of Physical Chemistry</i> , 1990, 94, 4060-4066.	2.9	101
23	New Pebax®/zeolite Y composite membranes for CO <sub>2</sub> capture from flue gas. <i>Journal of Membrane Science</i> , 2015, 495, 415-423.	8.2	101
24	Amine-containing polymer/zeolite Y composite membranes for CO <sub>2</sub> /N <sub>2</sub> separation. <i>Journal of Membrane Science</i> , 2016, 497, 21-28.	8.2	101
25	Correlation of sensing behavior of mixed potential sensors with chemical and electrochemical properties of electrodes. <i>Solid State Ionics</i> , 2004, 171, 183-190.	2.7	97
26	Effect of Microwave Frequency on Hydrothermal Synthesis of Nanocrystalline Tetragonal Barium Titanate. <i>Journal of Physical Chemistry C</i> , 2008, 112, 9659-9667.	3.1	97
27	Correlation of framework Raman bands of zeolites with structure. <i>Zeolites</i> , 1988, 8, 306-309.	0.5	96
28	Zeolite host-guest interactions: optical spectroscopic properties of tris(bipyridine)ruthenium(II) in zeolite Y cages. <i>The Journal of Physical Chemistry</i> , 1990, 94, 3075-3081.	2.9	96
29	Crystallization of zeolite A: a spectroscopic study. <i>The Journal of Physical Chemistry</i> , 1986, 90, 2331-2334.	2.9	92
30	Exploitation of Unique Properties of Zeolites in the Development of Gas Sensors. <i>Sensors</i> , 2012, 12, 5170-5194.	3.8	92
31	Minimal Intestinal Epithelial Cell Toxicity in Response to Short- and Long-Term Food-Relevant Inorganic Nanoparticle Exposure. <i>Chemical Research in Toxicology</i> , 2013, 26, 1514-1525.	3.3	88
32	Controlled growth of microporous crystals nucleated in reverse micelles. <i>Nature</i> , 1995, 374, 44-46.	27.8	87
33	Zeolite-supported silver as antimicrobial agents. <i>Coordination Chemistry Reviews</i> , 2019, 383, 1-29.	18.8	85
34	Examination of Au/SnO <sub>2</sub> core-shell architecture nanoparticle for low temperature gas sensing applications. <i>Sensors and Actuators B: Chemical</i> , 2011, 157, 444-449.	7.8	84
35	Raman spectroscopy of zeolite A: influence of silicon/aluminum ratio. <i>The Journal of Physical Chemistry</i> , 1988, 92, 354-357.	2.9	81
36	Nanometer-Sized Zeolite X Crystals: Use as Photochemical Hosts. <i>Journal of Physical Chemistry B</i> , 1998, 102, 1696-1702.	2.6	81

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37	Strategies for total NO <sub>x</sub> measurement with minimal CO interference utilizing a microporous zeolitic catalytic filter. <i>Sensors and Actuators B: Chemical</i> , 2003, 88, 168-177.	7.8	81
38	Microporous zeolite modified yttria stabilized zirconia (YSZ) sensors for nitric oxide (NO) determination in harsh environments. <i>Sensors and Actuators B: Chemical</i> , 2002, 82, 142-149.	7.8	75
39	Controlled release of paraquat from surface-modified zeolite Y. <i>Microporous and Mesoporous Materials</i> , 2006, 88, 312-318.	4.4	65
40	Critical assessment of toxicological effects of ingested nanoparticles. <i>Environmental Science: Nano</i> , 2016, 3, 256-282.	4.3	63
41	Raman spectroscopic studies of the synthesis of faujasitic zeolites: Comparison of two silica sources. <i>Zeolites</i> , 1991, 11, 672-679.	0.5	61
42	Vibrational spectroscopic examination of the formation of mordenite crystals. <i>The Journal of Physical Chemistry</i> , 1991, 95, 5267-5271.	2.9	61
43	Development of high sensitivity potentiometric NO <sub>x</sub> sensor and its application to breath analysis. <i>Sensors and Actuators B: Chemical</i> , 2011, 158, 292-298.	7.8	61
44	Intrazeolitic Photochemical Charge Separation for Ru(bpy) <sub>3</sub> <sup>2+</sup> Bipyridinium System: A Role of the Zeolite Structure. <i>Journal of Physical Chemistry B</i> , 1999, 103, 2408-2416.	2.6	60
45	Oxidation chemistry and electrical activity of Pt on titania: development of a novel zeolite-filter hydrocarbon sensor. <i>Sensors and Actuators B: Chemical</i> , 2004, 102, 132-141.	7.8	59
46	On the Nature and Extent of Intermolecular Interactions between Entrapped Complexes of Ru(bpy) <sub>3</sub> <sup>2+</sup> in Zeolite Y. <i>Journal of Physical Chemistry B</i> , 1999, 103, 309-320.	2.6	57
47	Nitric oxide sensors using combination of p- and n-type semiconducting oxides and its application for detecting NO in human breath. <i>Sensors and Actuators B: Chemical</i> , 2013, 186, 117-125.	7.8	57
48	Photoelectron Transfer in Zeolite Cages and Its Relevance to Solar Energy Conversion. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 467-476.	4.6	55
49	Multilayer polymer/zeolite Y composite membrane structure for CO <sub>2</sub> capture from flue gas. <i>Journal of Membrane Science</i> , 2016, 498, 1-13.	8.2	55
50	Zeolite Membrane-Based Artificial Photosynthetic Assembly for Long-Lived Charge Separation. <i>Journal of Physical Chemistry B</i> , 2005, 109, 6929-6932.	2.6	54
51	High temperature zirconia oxygen sensor with sealed metal/metal oxide internal reference. <i>Sensors and Actuators B: Chemical</i> , 2007, 124, 192-201.	7.8	53
52	Raman spectroscopic studies of zeolite framework. Hydrated zeolite A and the influence of cations. <i>The Journal of Physical Chemistry</i> , 1985, 89, 1861-1865.	2.9	52
53	Raman spectroscopic studies of the tetramethylammonium ion in zeolite cages. <i>Chemical Physics Letters</i> , 1986, 127, 200-204.	2.6	51
54	Interaction of CO with hydrous ruthenium oxide and development of a chemoresistive ambient CO sensor. <i>Sensors and Actuators B: Chemical</i> , 2011, 152, 307-315.	7.8	51

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55	Analysis of the biological and chemical reactivity of zeolite-based aluminosilicate fibers and particulates.. Environmental Health Perspectives, 2002, 110, 1087-1096.	6.0	50
56	High temperature amperometric total NO <sub>x</sub> sensors with platinum-loaded zeolite Y electrodes. Sensors and Actuators B: Chemical, 2007, 123, 929-936.	7.8	50
57	Resonance coherent anti-Stokes Raman scattering (CARS) spectra of flavin adenine dinucleotide, riboflavin binding protein and glucose oxidase. Biochemical and Biophysical Research Communications, 1978, 83, 209-216.	2.1	48
58	Mechanism of zeolite formation: Seed-gel interaction. Zeolites, 1994, 14, 250-255.	0.5	48
59	Direct Synthesis of Aqueous CdSe/ZnS-Based Quantum Dots Using Microwave Irradiation. Journal of Physical Chemistry C, 2009, 113, 12132-12139.	3.1	48
60	Analysis of the Photodecomposition Products of Ru(bpy) <sub>3</sub> <sup>2+</sup> in Various Buffers and upon Zeolite Encapsulation. Analytical Chemistry, 2000, 72, 5219-5224.	6.5	47
61	Development of a dissolved oxygen sensor using tris(bipyridyl) ruthenium (II) complexes entrapped in highly siliceous zeolites. Microporous and Mesoporous Materials, 2003, 64, 109-118.	4.4	45
62	Promoting selectivity and sensitivity for a high temperature YSZ-based electrochemical total NO <sub>x</sub> sensor by using a Pt-loaded zeolite Y filter. Sensors and Actuators B: Chemical, 2007, 125, 30-39.	7.8	45
63	Examination of Fatty Acid Exchanged Layered Double Hydroxides as Supports for Photochemical Assemblies. Langmuir, 1996, 12, 402-408.	3.5	44
64	Study of the resistance behavior of anatase and rutile thick films towards carbon monoxide and oxygen at high temperatures and possibilities for sensing applications. Sensors and Actuators B: Chemical, 2009, 143, 308-315.	7.8	44
65	Infrared Spectroscopic Study of Reaction of Carbon Dioxide with Aqueous Monoethanolamine Solutions. Industrial & Engineering Chemistry Research, 2016, 55, 6276-6283.	3.7	43
66	Synthesis of silver-zeolite films on micropatterned porous alumina and its application as an antimicrobial substrate. Microporous and Mesoporous Materials, 2010, 135, 131-136.	4.4	41
67	Assembly of Nanoparticles in Zeolite Y for the Photocatalytic Generation of Hydrogen from Water. Journal of Physical Chemistry C, 2011, 115, 2938-2947.	3.1	41
68	Raman Spectral Study of the Composition of Basic Silicate Solutions. Applied Spectroscopy, 1985, 39, 343-346.	2.2	40
69	Examination of the solventlike nature of zeolites based on solvatochromic indicator. The Journal of Physical Chemistry, 1991, 95, 4087-4092.	2.9	39
70	Structure and Vibrational Spectra of Mononitrated Benzo[a]pyrenes. Journal of Physical Chemistry A, 2006, 110, 76-84.	2.5	39
71	Tuning the Activities and Structures of Enzymes Bound to Graphene Oxide with a Protein Glue. Langmuir, 2013, 29, 15643-15654.	3.5	38
72	SO <sub>2</sub> interference on separation performance of amine-containing facilitated transport membranes for CO <sub>2</sub> capture from flue gas. Journal of Membrane Science, 2017, 534, 33-45.	8.2	38

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73	Synthesis and characterization of a ruthenium oxide-zeolite Y catalyst for photochemical oxidation of water to dioxygen. <i>Microporous and Mesoporous Materials</i> , 1998, 22, 475-483.	4.4	37
74	Use of surface-modified zeolite Y for extraction of metal ions from aqueous to organic phase. <i>Microporous and Mesoporous Materials</i> , 1999, 32, 29-35.	4.4	37
75	TiO <sub>2</sub> -based sensor arrays modeled with nonlinear regression analysis for simultaneously determining CO and O <sub>2</sub> concentrations at high temperatures. <i>Sensors and Actuators B: Chemical</i> , 2002, 87, 471-479.	7.8	35
76	High temperature potentiometric NO <sub>2</sub> sensor with asymmetric sensing and reference Pt electrodes. <i>Sensors and Actuators B: Chemical</i> , 2010, 143, 459-463.	7.8	35
77	Inflammatory Properties of Iron-Containing Carbon Nanoparticles. <i>Chemical Research in Toxicology</i> , 2007, 20, 1149-1154.	3.3	34
78	Synthesis of Au/SnO <sub>2</sub> core-shell structure nanoparticles by a microwave-assisted method and their optical properties. <i>Journal of Solid State Chemistry</i> , 2011, 184, 312-316.	2.9	34
79	Resonance CARS line shapes: Excited state parameters for flavin adenine dinucleotide. <i>Journal of Chemical Physics</i> , 1978, 69, 3119-3123.	3.0	33
80	Resonance CARS (coherent anti-Stokes Raman scattering) line shapes via Frank-Condon scattering: Cytochrome c and $\beta$ -carotene. <i>Journal of Chemical Physics</i> , 1980, 73, 3580-3585.	3.0	33
81	DENSITY FUNCTIONAL THEORETICAL STUDY OF NITRATED POLYCYCLIC AROMATIC HYDROCARBONS. <i>Polycyclic Aromatic Compounds</i> , 2004, 24, 37-64.	2.6	33
82	Interaction of Dimethylmethylphosphonate with Zeolite Y: Impedance-Based Sensor for Detecting Nerve Agent Simulants. <i>Journal of Physical Chemistry C</i> , 2010, 114, 7986-7994.	3.1	33
83	Rapid Crystallization of Faujasitic Zeolites: Mechanism and Application to Zeolite Membrane Growth on Polymer Supports. <i>Langmuir</i> , 2014, 30, 6929-6937.	3.5	33
84	Photochemistry of Azobenzene in Microporous Aluminophosphate AlPO <sub>4</sub> -5. <i>Journal of Physical Chemistry B</i> , 1998, 102, 8557-8562.	2.6	32
85	Crystal Growth of Faujasitic Microporous Zincophosphate Crystals Using Reverse Micelles as Reactants. <i>Langmuir</i> , 2000, 16, 4148-4153.	3.5	32
86	Temperature-controlled CO, CO <sub>2</sub> and NO <sub>x</sub> sensing in a diesel engine exhaust stream. <i>Sensors and Actuators B: Chemical</i> , 2005, 107, 839-848.	7.8	32
87	Synthesis of zeolite A from reactants enclosed in reverse micelles. <i>Langmuir</i> , 1991, 7, 1048-1050.	3.5	31
88	Novel Surface Structure of Microporous Faujasitic-like Zincophosphate Crystals Grown via Reverse Micelles. <i>Langmuir</i> , 2002, 18, 8193-8197.	3.5	30
89	Interaction of Water with Titania: Implications for High-Temperature Gas Sensing. <i>Journal of Physical Chemistry B</i> , 2006, 110, 5647-5654.	2.6	30
90	Dependence of potentiometric oxygen sensing characteristics on the nature of electrodes. <i>Sensors and Actuators B: Chemical</i> , 2006, 113, 162-168.	7.8	30

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91	Charge Transport through a Novel Zeolite Y Membrane by a Self-Exchange Process. <i>Journal of Physical Chemistry B</i> , 2002, 106, 11898-11904.	2.6	29
92	Resonance Raman spectroscopic studies of adriamycin and copper(II)-adriamycin and copper(II)-adriamycin-DNA complexes. <i>Biochemistry</i> , 1986, 25, 691-695.	2.5	28
93	Infra-red investigation of sulphonated EPDM polymers. <i>Polymer</i> , 1987, 28, 1467-1471.	3.8	28
94	Fenton Chemistry of FeIII-Exchanged Zeolitic Minerals Treated with Antioxidants. <i>Environmental Science &amp; Technology</i> , 2005, 39, 6147-6152.	10.0	28
95	High temperature potentiometric carbon dioxide sensor with minimal interference to humidity. <i>Sensors and Actuators B: Chemical</i> , 2009, 142, 337-341.	7.8	28
96	Rapid synthesis of faujasite/polyethersulfone composite membrane and application for CO <sub>2</sub> /N <sub>2</sub> separation. <i>Microporous and Mesoporous Materials</i> , 2015, 208, 72-82.	4.4	28
97	Synthesis of Au@SnO <sub>2</sub> core-shell nanoparticles with controllable shell thickness and their CO sensing properties. <i>Materials Chemistry and Physics</i> , 2015, 166, 87-94.	4.0	28
98	Charge-Transfer Processes in Zeolites: Toward Better Artificial Photosynthetic Models. <i>Progress in Inorganic Chemistry</i> , 0, , 209-271.	3.0	28
99	Reverse Micelle Based Growth of Zincophosphate Sodalite: An Examination of Crystal Growth. <i>The Journal of Physical Chemistry</i> , 1996, 100, 9870-9880.	2.9	27
100	Oxidizing Properties of Zeolite-Encapsulated Oxobis(2,2'-bipyridine)ruthenium(IV) Complexes Formed by Air Oxidation of Bis(2,2'-bipyridine)aquaruthenium(II). <i>Journal of the American Chemical Society</i> , 1997, 119, 4311-4312.	13.7	27
101	Synthesis of Thin, Oriented Zeolite A Membranes on a Macroporous Support. <i>Advanced Functional Materials</i> , 2008, 18, 952-958.	14.9	27
102	Ultrafast Electron Transfer Dynamics in Ruthenium Polypyridyl Complexes with a $\pi$ -Conjugated Ligand. <i>Journal of Physical Chemistry B</i> , 2010, 114, 14679-14688.	2.6	27
103	Topotactic Transformation of Zeolite Supported Cobalt(II) Hydroxide to Oxide and Comparison of Photocatalytic Oxygen Evolution. <i>ACS Catalysis</i> , 2014, 4, 9-15.	11.2	27
104	Building Selectivity for NO Sensing in a NO <sub>x</sub> Mixture with Sonochemically Prepared CuO Structures. <i>Chemosensors</i> , 2016, 4, 1.	3.6	27
105	Spectroscopic Studies of Colloidal Solutions of Nanocrystalline Ru(bpy) <sub>3</sub> <sup>2+</sup> /Zeolite Y. <i>Journal of Physical Chemistry B</i> , 2001, 105, 1537-1542.	2.6	26
106	The effect of iron on the biological activities of erionite and mordenite. <i>Environment International</i> , 2003, 29, 451-458.	10.0	26
107	Influence of Solid-State Reactions at the Electrode-Electrolyte Interface on High-Temperature Potentiometric NO <sub>x</sub> -Gas Sensors. <i>Journal of Physical Chemistry C</i> , 2007, 111, 8307-8313.	3.1	26
108	Solution-based synthesis of efficient WO <sub>3</sub> sensing electrodes for high temperature potentiometric NO <sub>x</sub> sensors. <i>Sensors and Actuators B: Chemical</i> , 2009, 136, 523-529.	7.8	26

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109	Selective detection of part per billion concentrations of ammonia using a p <sup>n</sup> semiconducting oxide heterostructure. <i>Sensors and Actuators B: Chemical</i> , 2016, 226, 156-169.	7.8	26
110	Structure-sensitive Raman bands in hydrated zeolite A. <i>Journal of the Chemical Society Chemical Communications</i> , 1985, , 1297.	2.0	24
111	Infrared and resonance Raman spectroscopic studies of 1-hydroxy-9,10-anthraquinone and its metal complexes. <i>Journal of Raman Spectroscopy</i> , 1987, 18, 339-344.	2.5	24
112	Carbon monoxide sensor for PEM fuel cell systems. <i>Sensors and Actuators B: Chemical</i> , 2002, 87, 414-420.	7.8	24
113	Zeolite-supported ruthenium oxide catalysts for photochemical reduction of water to hydrogen. <i>Microporous and Mesoporous Materials</i> , 2003, 62, 107-120.	4.4	24
114	Mixed Ionic and Electronic Conduction in Li <sub>3</sub> PO <sub>4</sub> Electrolyte for a CO <sub>2</sub> Gas Sensor. <i>Journal of the Electrochemical Society</i> , 2006, 153, H4.	2.9	24
115	Raman spectroscopy of metal complexes in zeolite cavities: Cause and removal of interfering photoemission. <i>Zeolites</i> , 1988, 8, 179-182.	0.5	23
116	Macrophage-Mediated Endothelial Inflammatory Responses to Airborne Particulates: Impact of Particulate Physicochemical Properties. <i>Chemical Research in Toxicology</i> , 2004, 17, 1303-1312.	3.3	23
117	Influence of Microwave Radiation on the Growth of Gold Nanoparticles and Microporous Zincophosphates in a Reverse Micellar System. <i>Langmuir</i> , 2006, 22, 4825-4831.	3.5	23
118	Physicochemical and Toxicological Properties of Commercial Carbon Blacks Modified by Reaction with Ozone. <i>Environmental Science &amp; Technology</i> , 2011, 45, 10668-10675.	10.0	23
119	Vibrational spectroscopic study of the evolution of the framework of the zeolite ferrierite. <i>Langmuir</i> , 1992, 8, 722-726.	3.5	22
120	Intrazeolitic Photoreactions of Ru(bpy) <sub>3</sub> <sup>3+</sup> with Methyl Viologen. <i>Langmuir</i> , 1998, 14, 5121-5126.	3.5	22
121	Zeolite-Induced Solvation Effects on Excited-State Properties of Ru(bpy) <sub>3</sub> <sup>2+</sup> : Implications for Intrazeolitic Photochemical Quenching Reactions. <i>Journal of Physical Chemistry B</i> , 2000, 104, 10783-10788.	2.6	22
122	Oxygen transport in zeolite Y measured by quenching of encapsulated tris(bipyridyl)ruthenium. <i>Microporous and Mesoporous Materials</i> , 2003, 60, 79-90.	4.4	22
123	Comparison of Ultrastructural Cytotoxic Effects of Carbon and Carbon/Iron Particulates on Human Monocyte-Derived Macrophages. <i>Environmental Health Perspectives</i> , 2005, 113, 170-174.	6.0	22
124	Contrast of the Biological Activity of Negatively and Positively Charged Microwave Synthesized CdSe/ZnS Quantum Dots. <i>Chemical Research in Toxicology</i> , 2011, 24, 2176-2188.	3.3	22
125	Evolution of Silver Nanoparticles within an Aqueous Dispersion of Nanosized Zeolite Y: Mechanism and Applications. <i>Journal of Physical Chemistry C</i> , 2014, 118, 28580-28591.	3.1	22
126	Bendable Zeolite Membranes: Synthesis and Improved Gas Separation Performance. <i>Langmuir</i> , 2015, 31, 6894-6901.	3.5	22



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127	Silver-coated faujasitic zeolite crystals as surface-enhanced Raman spectroscopic substrates. <i>Langmuir</i> , 1991, 7, 2004-2006.	3.5	21
128	Zeolite-Mediated Photochemical Charge Separation Using a Surface-Entrapped Ruthenium <sup>II</sup> -Polypyridyl Complex. <i>Inorganic Chemistry</i> , 2003, 42, 4215-4222.	4.0	21
129	Oxidative stress-mediated inhibition of intestinal epithelial cell proliferation by silver nanoparticles. <i>Toxicology in Vitro</i> , 2015, 29, 1793-1808.	2.4	21
130	Acidic groups in coal and coal-derived materials. <i>Fuel</i> , 1983, 62, 732-737.	6.4	20
131	Sensing of carbon monoxide gas in reducing environments. <i>Sensors and Actuators B: Chemical</i> , 2002, 84, 189-193.	7.8	20
132	A phosphate-based proton conducting solid electrolyte hydrocarbon gas sensor. <i>Sensors and Actuators B: Chemical</i> , 2002, 87, 480-486.	7.8	20
133	High temperature sensor array for simultaneous determination of O <sub>2</sub> , CO, and CO <sub>2</sub> with kernel ridge regression data analysis. <i>Sensors and Actuators B: Chemical</i> , 2007, 123, 950-963.	7.8	19
134	Optical Spectroscopic Studies of Mononitrated Benzo[ <i>a</i> ]pyrenes. <i>Journal of Physical Chemistry A</i> , 2009, 113, 12558-12565.	2.5	19
135	Fabrication of zeolite/polymer composite membranes in a roller assembly. <i>Microporous and Mesoporous Materials</i> , 2016, 223, 247-253.	4.4	19
136	Fabrication of high-performance antifogging and antireflective coatings using faujasitic nanozeolites. <i>Microporous and Mesoporous Materials</i> , 2018, 263, 62-70.	4.4	19
137	Synthesis of free-standing chabazite-type films. <i>Microporous and Mesoporous Materials</i> , 2000, 38, 151-159.	4.4	18
138	Interface reaction and its effect on the performance of a CO <sub>2</sub> gas sensor based on Li <sub>0.35</sub> La <sub>0.55</sub> TiO <sub>3</sub> electrolyte and Li <sub>2</sub> CO <sub>3</sub> sensing electrode. <i>Sensors and Actuators B: Chemical</i> , 2013, 182, 95-103.	7.8	18
139	Zeolites. , 2003, , .		17
140	Uptake of bright fluorophore core-silica shell nanoparticles by biological systems. <i>International Journal of Nanomedicine</i> , 2015, 10, 1547.	6.7	17
141	Anchoring of cobalt hydroxide catalysts on nanozeolite crystals for photocatalytic water oxidation. <i>Microporous and Mesoporous Materials</i> , 2015, 217, 125-132.	4.4	17
142	Synthesis of chabazite/polymer composite membrane for CO <sub>2</sub> /N <sub>2</sub> separation. <i>Microporous and Mesoporous Materials</i> , 2016, 230, 208-216.	4.4	17
143	Migration of plasticizer in vinyl resins: An infrared spectroscopic study. <i>Journal of Applied Polymer Science</i> , 1984, 29, 2247-2250.	2.6	16
144	Photochemical processes in zeolites: new developments. <i>Current Opinion in Solid State and Materials Science</i> , 2003, 7, 483-490.	11.5	16

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145	Correlation of catalytic activity and sensor response in TiO <sub>2</sub> high temperature gas sensors. <i>Sensors and Actuators B: Chemical</i> , 2006, 115, 1-3.	7.8	16
146	Synthesis of zeolite L membranes with sub-micron to micron thicknesses. <i>Microporous and Mesoporous Materials</i> , 2008, 115, 389-398.	4.4	16
147	Entrapment of Ionic Tris(2,2'-Bipyridyl) Ruthenium(II) in Hydrophobic Siliceous Zeolite: O <sub>2</sub> Sensing in Biological Environments. <i>Langmuir</i> , 2008, 24, 9140-9147.	3.5	16
148	Tolerance of polymer-zeolite composite membranes to mechanical strain. <i>Journal of Membrane Science</i> , 2016, 518, 192-202.	8.2	16
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