Geoffrey A Ozin

List of Publications by Year
in descending order

246 papers	20,692 citations	9234 74 h-index	10127 140 g-index
266 all docs	266 docs citations	266 times ranked	18390 citing authors

#	Article	IF	Citations
1	Large-scale synthesis of a silicon photonic crystal with a complete three-dimensional bandgap near 1.5 micrometres. Nature, 2000, 405, 437-440.	13.7	1,512
2	Synthesis of inorganic materials with complex form. Nature, 1996, 382, 313-318.	13.7	1,130
3	Photonic-crystal full-colour displays. Nature Photonics, 2007, 1, 468-472.	15.6	822
4	Synthesis of oriented films of mesoporous silica on mica. Nature, 1996, 379, 703-705.	13.7	705
5	Morphogenesis of shapes and surface patterns in mesoporous silica. Nature, 1997, 386, 692-695.	13.7	675
6	Greening Ammonia toward the Solar Ammonia Refinery. Joule, 2018, 2, 1055-1074.	11.7	603
7	Free-standing and oriented mesoporous silica films grown at the airâ€“water interface. Nature, 1996, 381, 589-592.	13.7	566
8	From colour fingerprinting to the control of photoluminescence in elastic photonic crystals. Nature Materials, 2006, 5, 179-184.	13.3	392
9	Promoted Fixation of Molecular Nitrogen with Surface Oxygen Vacancies on Plasmonâ€Enhanced TiO₂ Photoelectrodes. Angewandte Chemie - International Edition, 2018, 57, 5278-5282.	7.2	365
10	Lamellar aluminophosphates with surface patterns that mimic diatom and radiolarian microskeletons. Nature, 1995, 378, 47-50.	13.7	358
11	Advanced Zeolite, Materials Science. Angewandte Chemie International Edition in English, 1989, 28, 359-376.	4.4	342
12	Synthesis of Black TiO<i>_x</i> Nanoparticles by Mg Reduction of TiO₂ Nanocrystals and their Application for Solar Water Evaporation. Advanced Energy Materials, 2017, 7, 1601811.	10.2	326
13	Heterogeneous catalytic hydrogenation of CO₂by metal oxides: defect engineering â€“ perfecting imperfection. Chemical Society Reviews, 2017, 46, 4631-4644.	18.7	304
14	Fundamentals and applications of photocatalytic CO2 methanation. Nature Communications, 2019, 10, 3169.	5.8	304
15	Principles of photothermal gas-phase heterogeneous CO₂ catalysis. Energy and Environmental Science, 2019, 12, 1122-1142.	15.6	300
16	Size-Dependent Absolute Quantum Yields for Size-Separated Colloidally-Stable Silicon Nanocrystals. Nano Letters, 2012, 12, 337-342.	4.5	299
17	A New Model for Aluminophosphate Formation: Transformation of a Linear Chain Aluminophosphate to Chain, Layer, and Framework Structures. Angewandte Chemie - International Edition, 1998, 37, 46-62.	7.2	279
18	Shaped Ceramics with Tunable Magnetic Properties from Metal-Containing Polymers. Science, 2000, 287, 1460-1463.	6.0	266

#	Article	IF	Citations
19	Novel Bifunctional Periodic Mesoporous Organosilicas, BPMOs:Â Synthesis, Characterization, Properties and in-Situ Selective Hydroborationâˆ’Alcoholysis Reactions of Functional Groups. Journal of the American Chemical Society, 2001, 123, 8520-8530.	6.6	260
20	Solution phase synthesis of carbon quantum dots as sensitizers for nanocrystalline TiO₂solar cells. Journal of Materials Chemistry, 2012, 22, 1265-1269.	6.7	255
21	Challenges and advances in the chemistry of periodic mesoporous organosilicas (PMOs). Journal of Materials Chemistry, 2005, 15, 3716.	6.7	252
22	Efficient Electrocatalytic Reduction of CO₂ by Nitrogenâ€Doped Nanoporous Carbon/Carbon Nanotube Membranes: A Step Towards the Electrochemical CO₂ Refinery. Angewandte Chemie - International Edition, 2017, 56, 7847-7852.	7.2	252
23	Cu2O nanocubes with mixed oxidation-state facets for (photo)catalytic hydrogenation of carbon dioxide. Nature Catalysis, 2019, 2, 889-898.	16.1	234
24	Stacking the Nanochemistry Deck: Structural and Compositional Diversity in Oneâ€Dimensional Photonic Crystals. Advanced Materials, 2009, 21, 1641-1646.	11.1	223
25	Photoexcited Surface Frustrated Lewis Pairs for Heterogeneous Photocatalytic CO₂ Reduction. Journal of the American Chemical Society, 2016, 138, 1206-1214.	6.6	210
26	Greenhouse-inspired supra-photothermal CO2 catalysis. Nature Energy, 2021, 6, 807-814.	19.8	198
27	Black indium oxide a photothermal CO2 hydrogenation catalyst. Nature Communications, 2020, 11, 2432.	5.8	192
28	Illuminating CO₂ reduction on frustrated Lewis pair surfaces: investigating the role of surface hydroxides and oxygen vacancies on nanocrystalline In₂O_{3âˆ’x}(OH)_y. Physical Chemistry Chemical Physics, 2015, 17, 14623-14635.	1.3	186
29	Panoscopic materials: synthesis over â€˜allâ€™ length scales. Chemical Communications, 2000, , 419-432.	2.2	183
30	The Rational Design of a Singleâ€Component Photocatalyst for Gasâ€Phase CO₂ Reduction Using Both UV and Visible Light. Advanced Science, 2014, 1, 1400013.	5.6	182
31	Tuning Cu/Cu₂O Interfaces for the Reduction of Carbon Dioxide to Methanol in Aqueous Solutions. Angewandte Chemie - International Edition, 2018, 57, 15415-15419.	7.2	175
32	The nature of active sites for carbon dioxide electroreduction over oxide-derived copper catalysts. Nature Communications, 2021, 12, 395.	5.8	170
33	New nanocomposites: putting organic function â€œinsideâ€•the channel walls of periodic mesoporous silica. Journal of Materials Chemistry, 2000, 10, 1751-1755.	6.7	166
34	Niobium and Titanium Carbides (MXenes) as Superior Photothermal Supports for CO₂ Photocatalysis. ACS Nano, 2021, 15, 5696-5705.	7.3	164
35	Ambient Electrosynthesis of Ammonia: Electrode Porosity and Composition Engineering. Angewandte Chemie - International Edition, 2018, 57, 12360-12364.	7.2	160
36	Photomethanation of Gaseous CO₂ over Ru/Silicon Nanowire Catalysts with Visible and Nearâ€Infrared Photons. Advanced Science, 2014, 1, 1400001.	5.6	150

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37	Photocatalytic Hydrogenation of Carbon Dioxide with High Selectivity to Methanol at Atmospheric Pressure. Joule, 2018, 2, 1369-1381.	11.7	148
38	Throwing New Light on the Reduction of CO₂. Advanced Materials, 2015, 27, 1957-1963.	11.1	145
39	The Role of Defects in the Formation of Mesoporous Silica Fibers, Films, and Curved Shapes. Advanced Materials, 1998, 10, 883-887.	11.1	144
40	Clay Bragg Stack Optical Sensors. Advanced Materials, 2008, 20, 4079-4084.	11.1	139
41	Chemically Addressable Perovskite Nanocrystals for Lightâ€Emitting Applications. Advanced Materials, 2017, 29, 1701153.	11.1	139
42	Synergy of Slow Photon and Chemically Amplified Photochemistry in Platinum Nanocluster-Loaded Inverse Titania Opals. Journal of the American Chemical Society, 2008, 130, 5420-5421.	6.6	137
43	Slow photons in the fast lane in chemistry. Journal of Materials Chemistry, 2008, 18, 369-373.	6.7	135
44	Visible and Nearâ€Infrared Photothermal Catalyzed Hydrogenation of Gaseous CO₂ over Nanostructured Pd@Nb₂O₅. Advanced Science, 2016, 3, 1600189.	5.6	133
45	Bismuth atom tailoring of indium oxide surface frustrated Lewis pairs boosts heterogeneous CO2 photocatalytic hydrogenation. Nature Communications, 2020, 11, 6095.	5.8	129
46	Living Atomically Dispersed Cu Ultrathin TiO₂ Nanosheet CO₂ Reduction Photocatalyst. Advanced Science, 2019, 6, 1900289.	5.6	128
47	Towards the synthetic all-optical computer: science fiction or reality?. Journal of Materials Chemistry, 2004, 14, 781-794.	6.7	120
48	Spatial Separation of Charge Carriers in In₂O_{3â€"<i>x</i>}(OH)_{<i>y</i>} Nanocrystal Superstructures for Enhanced Gas-Phase Photocatalytic Activity. ACS Nano, 2016, 10, 5578-5586.	7.3	118
49	Catalytic CO2 reduction by palladium-decorated siliconâ€"hydride nanosheets. Nature Catalysis, 2019, 2, 46-54.	16.1	116
50	Nanotechnologyâ€Enabled Closed Loop Insulin Delivery Device: In Vitro and In Vivo Evaluation of Glucoseâ€Regulated Insulin Release for Diabetes Control. Advanced Functional Materials, 2011, 21, 73-82.	7.8	113
51	Ring-Opening Polymerization of a [1]Silaferrocenophane Within the Channels of Mesoporous Silica: Poly(ferrocenylsilane)-MCM-41 Precursors to Magnetic Iron Nanostructures. Advanced Materials, 1998, 10, 144-149.	11.1	109
52	Nanostructured Indium Oxide Coated Silicon Nanowire Arrays: A Hybrid Photothermal/Photochemical Approach to Solar Fuels. ACS Nano, 2016, 10, 9017-9025.	7.3	109
53	Cobalt Plasmonic Superstructures Enable Almost 100% Broadband Photon Efficient CO₂ Photocatalysis. Advanced Materials, 2020, 32, e2000014.	11.1	109
54	Efficient CO2 electroreduction on facet-selective copper films with high conversion rate. Nature Communications, 2021, 12, 5745.	5.8	108

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55	Pore architecture affects photocatalytic activity of periodic mesoporous nanocrystalline anatase thin films. Journal of Materials Chemistry, 2007, 17, 82-89.	6.7	106
56	Nickel@Siloxene catalytic nanosheets for high-performance CO2 methanation. Nature Communications, 2019, 10, 2608.	5.8	104
57	Polymorph selection towards photocatalytic gaseous CO2 hydrogenation. Nature Communications, 2019, 10, 2521.	5.8	102
58	Mesoporous silica with micrometer-scale designs. Advanced Materials, 1997, 9, 811-814.	11.1	97
59	Photothermal Catalyst Engineering: Hydrogenation of Gaseous CO₂ with High Activity and Tailored Selectivity. Advanced Science, 2017, 4, 1700252.	5.6	97
60	Title is missing!. Journal of Materials Chemistry, 2001, 11, 3202-3206.	6.7	95
61	Color from colorless nanomaterials: Bragg reflectors made of nanoparticles. Journal of Materials Chemistry, 2009, 19, 3500.	6.7	95
62	Surface-engineered sponges for recovery of crude oil microdroplets from wastewater. Nature Sustainability, 2020, 3, 136-143.	11.5	94
63	Heterogeneous reduction of carbon dioxide by hydride-terminated silicon nanocrystals. Nature Communications, 2016, 7, 12553.	5.8	93
64	Band Engineering of Carbon Nitride Monolayers by N-Type, P-Type, and Isoelectronic Doping for Photocatalytic Applications. ACS Applied Materials & Interfaces, 2018, 10, 11143-11151.	4.0	92
65	Tailoring Surface Frustrated Lewis Pairs of In₂O_{3âˆ’}<i>_x</i>(OH)_y for Gasâ€Phase Heterogeneous Photocatalytic Reduction of CO₂ by Isomorphous Substitution of In³⁺ with Bi³⁺. Advanced Science, 2018, 5, 1700732.	5.6	91
66	Shining light on CO₂: from materials discovery to photocatalyst, photoreactor and process engineering. Chemical Society Reviews, 2020, 49, 5648-5663.	18.7	91
67	Hydrogen Spillover to Oxygen Vacancy of TiO_{2â€“<i>x</i>}H_{<i>y</i>}/Fe: Breaking the Scaling Relationship of Ammonia Synthesis. Journal of the American Chemical Society, 2020, 142, 17403-17412.	6.6	91
68	Carrier dynamics and the role of surface defects: Designing a photocatalyst for gas-phase CO ₂ reduction. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E8011-E8020.	3.3	89
69	Silicon Photovoltaics Using Conducting Photonic Crystal Backâ€Reflectors. Advanced Materials, 2008, 20, 1577-1582.	11.1	84
70	Enhanced photothermal reduction of gaseous CO₂ over silicon photonic crystal supported ruthenium at ambient temperature. Energy and Environmental Science, 2018, 11, 3443-3451.	15.6	83
71	High-performance light-driven heterogeneous CO2 catalysis with near-unity selectivity on metal phosphides. Nature Communications, 2020, 11, 5149.	5.8	82
72	Surface Analogues of Molecular Frustrated Lewis Pairs in Heterogeneous CO₂ Hydrogenation Catalysis. ACS Catalysis, 2016, 6, 5764-5770.	5.5	80

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73	Metadynamics-Biased ab Initio Molecular Dynamics Study of Heterogeneous CO₂ Reduction via Surface Frustrated Lewis Pairs. ACS Catalysis, 2016, 6, 7109-7117.	5.5	78
74	Efficient Electrocatalytic Reduction of CO₂ by Nitrogenâ€Doped Nanoporous Carbon/Carbon Nanotube Membranes: A Step Towards the Electrochemical CO₂ Refinery. Angewandte Chemie, 2017, 129, 7955-7960.	1.6	78
75	Mixed Surfactant Assemblies in the Synthesis of Mesoporous Silicas. Chemistry of Materials, 1996, 8, 2188-2193.	3.2	76
76	Persistent CO2 photocatalysis for solar fuels in the dark. Nature Sustainability, 2021, 4, 466-473.	11.5	74
77	Ordered 2D arrays of ferromagnetic Fe/Co nanoparticle rings from a highly metallized metallopolymer precursor. Journal of Materials Chemistry, 2004, 14, 1686.	6.7	73
78	Roomâ€Temperature Activation of H₂ by a Surface Frustrated Lewis Pair. Angewandte Chemie - International Edition, 2019, 58, 9501-9505.	7.2	72
79	Heterogeneous photocatalysis with inverse titania opals: probing structural and photonic effects. Journal of Materials Chemistry, 2009, 19, 2675.	6.7	70
80	Layer-by-Layer Self-Assembly of Organicâ^'Organometallic Polymer Electrostatic Superlattices Using Poly(ferrocenylsilanes). Langmuir, 2000, 16, 9609-9614.	1.6	68
81	Towards Solar Methanol: Past, Present, and Future. Advanced Science, 2019, 6, 1801903.	5.6	63
82	Tungsten inverse opals: The influence of absorption on the photonic band structure in the visible spectral region. Applied Physics Letters, 2004, 84, 224-226.	1.5	61
83	Highly Efficient Ambient Temperature CO₂ Photomethanation Catalyzed by Nanostructured RuO₂ on Silicon Photonic Crystal Support. Advanced Energy Materials, 2018, 8, 1702277.	10.2	58
84	Crowd oil not crude oil. Nature Communications, 2019, 10, 1818.	5.8	58
85	Thermally Stable Selfâ€assembling Openâ€Frameworks: Isostructural Cs⁺ and (CH₃)₄N⁺ Iron Germanium Sulfides. Chemische Berichte, 1996, 129, 283-287.	0.2	56
86	Theoretical Investigation: 2D N-Graphdiyne Nanosheets as Promising Anode Materials for Li/Na Rechargeable Storage Devices. ACS Applied Nano Materials, 2019, 2, 127-135.	2.4	56
87	High-Performance, Scalable, and Low-Cost Copper Hydroxyapatite for Photothermal CO2 Reduction. ACS Catalysis, 2020, 10, 13668-13681.	5.5	55
88	Effect of Precursor Selection on the Photocatalytic Performance of Indium Oxide Nanomaterials for Gas-Phase CO₂ Reduction. Chemistry of Materials, 2016, 28, 4160-4168.	3.2	52
89	Pd@H_{<i>y</i>}WO_{3â€"<i>x</i>} Nanowires Efficiently Catalyze the CO₂ Heterogeneous Reduction Reaction with a Pronounced Light Effect. ACS Applied Materials & Interfaces, 2019, 11, 5610-5615.	4.0	52
90	How to make an efficient gas-phase heterogeneous CO₂ hydrogenation photocatalyst. Energy and Environmental Science, 2020, 13, 3054-3063.	15.6	52

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91	Non-aqueous synthesis of mesostructured tin dioxide. Journal of Materials Chemistry, 2003, 13, 969-974.	6.7	51
92	The synthesis of mesostructured silica films and monoliths functionalised by noble metal nanoparticles. Journal of Materials Chemistry, 2003, 13, 328-334.	6.7	51
93	Activation of Ultrathin Films of Hematite for Photoelectrochemical Water Splitting via H₂ Treatment. ChemSusChem, 2015, 8, 1557-1567.	3.6	51
94	Intrazeolite Topotaxy. Advanced Materials, 1992, 4, 11-22.	11.1	48
95	Sizeâ€Tunable Photothermal Germanium Nanocrystals. Angewandte Chemie - International Edition, 2017, 56, 6329-6334.	7.2	47
96	New black indium oxideâ€"tandem photothermal CO2-H2 methanol selective catalyst. Nature Communications, 2022, 13, 1512.	5.8	47
97	Measurement of group velocity dispersion for finite size three-dimensional photonic crystals in the near-infrared spectral region. Applied Physics Letters, 2005, 86, 053108.	1.5	46
98	Promoted Fixation of Molecular Nitrogen with Surface Oxygen Vacancies on Plasmonâ€Enhanced TiO₂ Photoelectrodes. Angewandte Chemie, 2018, 130, 5376-5380.	1.6	45
99	Switchingâ€On Quantum Size Effects in Silicon Nanocrystals. Advanced Materials, 2015, 27, 746-749.	11.1	43
100	Vapor swellable colloidal photonic crystals with pressure tunability. Journal of Materials Chemistry, 2005, 15, 133-138.	6.7	42
101	Green Syngas by Solar Dry Reforming. Joule, 2018, 2, 571-575.	11.7	42
102	Infrared magnetic response in a random silicon carbide micropowder. Physical Review B, 2009, 79, .	1.1	41
103	Synthesis and characterization of ordered mesoporous silicas with high loadings of methyl groups. Journal of Materials Chemistry, 2002, 12, 3452-3457.	6.7	40
104	Synthesis and characterization of highly amine functionalized mesoporous organosilicas by an â€œall-in-oneâ€•approach. Journal of Materials Chemistry, 2005, 15, 4010.	6.7	40
105	Tailoring the Electrical Properties of Inverse Silicon Opals â€•A Step Towards Optically Amplified Silicon Solar Cells. Advanced Materials, 2009, 21, 559-563.	11.1	40
106	Cu Atoms on Nanowire Pd/H_{<i>y</i>}WO_{3â€“<i>x</i>} Bronzes Enhance the Solar Reverse Water Gas Shift Reaction. Journal of the American Chemical Society, 2019, 141, 14991-14996.	6.6	40
107	Singleâ€Stimulusâ€Induced Modulation of Multiple Optical Properties. Advanced Materials, 2019, 31, e1900388.	11.1	39
108	Photocatalytic Properties of All Four Polymorphs of Nanostructured Iron Oxyhydroxides. ChemNanoMat, 2016, 2, 1047-1054.	1.5	38

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109	Highly Ordered Magnetic Ceramic Nanorod Arrays from a Polyferrocenylsilane by Nanoimprint Lithography with Anodic Aluminum Oxide Templates. Chemistry of Materials, 2009, 21, 1781-1783.	3.2	37
110	Solar Urea: Towards a Sustainable Fertilizer Industry. Angewandte Chemie - International Edition, 2022, 61, .	7.2	37
111	Imaging the surfaces of nanoporous semiconductors by atomic force microscopy. Advanced Materials, 1995, 7, 64-68.	11.1	36
112	Two-Photon Poly(phenylenevinylene) DFB Laser. Chemistry of Materials, 2011, 23, 805-809.	3.2	36
113	Enhanced CO₂ Photocatalysis by Indium Oxide Hydroxide Supported on TiN@TiO₂ Nanotubes. Nano Letters, 2021, 21, 1311-1319.	4.5	35
114	CO₂ Footprint of Thermal Versus Photothermal CO₂ Catalysis. Small, 2021, 17, e2007025.	5.2	35
115	Photocatalytic dry reforming: what is it good for?. Energy and Environmental Science, 2021, 14, 3098-3109.	15.6	33
116	Photochemistry of Transition-Metal Atoms: Reactions with Molecular Hydrogen and Methane in Low-Temperature Matrices. Angewandte Chemie International Edition in English, 1986, 25, 1072-1085.	4.4	32
117	Non-wettable, Oxidation-Stable, Brightly Luminescent, Perfluorodecyl-Capped Silicon Nanocrystal Film. Journal of the American Chemical Society, 2014, 136, 15849-15852.	6.6	32
118	Kinetics versus Charge Separation: Improving the Activity of Stoichiometric and Non-Stoichiometric Hematite Photoanodes Using a Molecular Iridium Water Oxidation Catalyst. Journal of Physical Chemistry C, 2016, 120, 12999-13012.	1.5	32
119	Plasmonic Titanium Nitride Facilitates Indium Oxide CO₂ Photocatalysis. Small, 2020, 16, e2005754.	5.2	32
120	Solar methanol energy storage. Nature Catalysis, 2021, 4, 934-942.	16.1	32
121	Effect of microgravity on the crystallization of a self-assembling layered material. Nature, 1997, 388, 857-860.	13.7	31
122	Absolute quantum yields in NaYF4:Er,Yb upconverters â€“ synthesis temperature and power dependence. Journal of Materials Chemistry, 2012, 22, 24330.	6.7	31
123	Porous NIR Photoluminescent Silicon Nanocrystalsâ€POSS Composites. Advanced Functional Materials, 2016, 26, 5102-5110.	7.8	31
124	Silicon monoxide â€“ a convenient precursor for large scale synthesis of near infrared emitting monodisperse silicon nanocrystals. Nanoscale, 2016, 8, 3678-3684.	2.8	30
125	ZIF-supported AuCu nanoalloy for ammonia electrosynthesis from nitrogen and thin air. Journal of Materials Chemistry A, 2020, 8, 8868-8874.	5.2	30
126	Structure-Directing Lone Pairs: Synthesis and Structural Characterization of SnTiO₃. Chemistry of Materials, 2018, 30, 8932-8938.	3.2	27

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127	Emerging Atomic Energy Levels in Zero-Dimensional Silicon Quantum Dots. Nano Letters, 2020, 20, 1491-1498.	4.5	27
128	Electrolyte-Phobic Surface for the Next-Generation Nanostructured Battery Electrodes. Nano Letters, 2020, 20, 7455-7462.	4.5	25
129	Construction of New Active Sites: Cu Substitution Enabled Surface Frustrated Lewis Pairs over Calcium Hydroxyapatite for CO₂ Hydrogenation. Advanced Science, 2021, 8, e2101382.	5.6	25
130	Stable Cu Catalysts Supported by Twoâ€dimensional SiO₂ with Strong Metalâ€"Support Interaction. Advanced Science, 2022, 9, e2104972.	5.6	25
131	Highly Selective Wet Etch for High-Resolution Three-Dimensional Nanostructures in Arsenic Sulfide All-Inorganic Photoresist. Chemistry of Materials, 2007, 19, 4213-4221.	3.2	24
132	See-through amorphous silicon solar cells with selectively transparent and conducting photonic crystal back reflectors for building integrated photovoltaics. Applied Physics Letters, 2013, 103, 221109.	1.5	24
133	Cryogenic Inorganic Chemistry: A Review of Metal-Gas Reactions as Studied by Matrix-Isolation Infrared and Raman Spectroscopic Techniques. Progress in Inorganic Chemistry, 2007, , 105-172.	3.0	23
134	Near-Perfect Absorbing Copper Metamaterial for Solar Fuel Generation. Nano Letters, 2021, 21, 9124-9130.	4.5	23
135	You can't have an energy revolution without transforming advances in materials, chemistry and catalysis into policy change and action. Energy and Environmental Science, 2015, 8, 1682-1684.	15.6	22
136	Solutionâ€"Liquidâ€"Solid Growth and Catalytic Applications of Silica Nanorod Arrays. Advanced Science, 2020, 7, 2000310.	5.6	22
137	Hybrid Photo- and Thermal Catalyst System for Continuous CO₂ Reduction. ACS Applied Materials & Interfaces, 2020, 12, 33613-33620.	4.0	22
138	Plasma within Templates:â€‰ Molding Flexible Nanocrystal Solids into Multifunctional Architectures. Nano Letters, 2007, 7, 3864-3868.	4.5	21
139	Building a Bridge from Papermaking to Solar Fuels. Angewandte Chemie - International Edition, 2019, 58, 14850-14854.	7.2	21
140	A core-shell catalyst design boosts the performance of photothermal reverse water gas shift catalysis. Science China Materials, 2021, 64, 2212-2220.	3.5	21
141	Hydrosilylation kinetics of silicon nanocrystals. Chemical Communications, 2013, 49, 11361.	2.2	20
142	Heterostructure Engineering of a Reverse Water Gas Shift Photocatalyst. Advanced Science, 2019, 6, 1902170.	5.6	20
143	Postâ€Illumination Photoconductivity Enables Extension of Photoâ€Catalysis after Sunset. Advanced Energy Materials, 2021, 11, 2101566.	10.2	20
144	Fe2O3/Cu2O heterostructured nanocrystals. Journal of Materials Chemistry A, 2014, 2, 8525-8533.	5.2	19

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145	A Highlyâ€Ordered 3D Covalent Fullerene Framework. Angewandte Chemie - International Edition, 2015, 54, 7577-7581.	7.2	19
146	Waveguide photoreactor enhances solar fuels photon utilization towards maximal optoelectronic â€“ photocatalytic synergy. Nature Communications, 2021, 12, 402.	5.8	19
147	Chalcogenide Distribution in Microporous Layered Tin(IV) Thioselenide, TMA2Sn3SxSe7-x, Materials. Journal of Physical Chemistry B, 1998, 102, 2356-2366.	1.2	18
148	Roomâ€Temperature Activation of H₂ by a Surface Frustrated Lewis Pair. Angewandte Chemie, 2019, 131, 9601-9605.	1.6	18
149	Photoconductivity in inverse silicon opals enhanced by slow photon effect: Yet another step towards optically amplified silicon photonic crystal solar cells. Applied Physics Letters, 2011, 98, 072106.	1.5	17
150	UVâ€Blocking Photoluminescent Silicon Nanocrystal/Polydimethylsiloxane Composites. Advanced Optical Materials, 2017, 5, 1700237.	3.6	17
151	Solar CO2hydrogenation by photocatalytic foams. Chemical Engineering Journal, 2022, 435, 134864.	6.6	16
152	Germanium nanocrystal doped inverse crystalline silicon opal. Journal of Materials Chemistry, 2011, 21, 15895.	6.7	15
153	Pure Blue Emitting Poly(3,6-dimethoxy-9,9-dialkylsilafluorenes) Prepared via Nickel-Catalyzed Cross-Coupling of Diarylmagnesate Monomers. Macromolecules, 2013, 46, 6794-6805.	2.2	15
154	Enhancing photovoltaics with broadband high-transparency glass using porosity-tuned multilayer silica nanoparticle anti-reflective coatings. RSC Advances, 2014, 4, 31188-31195.	1.7	15
155	Tailoring CO₂ Reduction with Doped Silicon Nanocrystals. Advanced Sustainable Systems, 2017, 1, 1700118.	2.7	15
156	Oxygen Evolution Catalysis with MÃ¶ssbaueriteâ€”A Trivalent Ironâ€Only Layered Double Hydroxide. Chemistry - A European Journal, 2018, 24, 9004-9008.	1.7	15
157	Cu-H2 Photochemistry in the Matrix; ESR, FTIR, UV/VIS Spectroscopic and Kinetic Studies. Angewandte Chemie International Edition in English, 1982, 21, 380-381.	4.4	14
158	Sandwichâ€Type Nanocomposite of Reduced Graphene Oxide and Periodic Mesoporous Silica with Vertically Aligned Mesochannels of Tunable Pore Depth and Size. Advanced Functional Materials, 2017, 27, 1704066.	7.8	14
159	Ambient Electrosynthesis of Ammonia: Electrode Porosity and Composition Engineering. Angewandte Chemie, 2018, 130, 12540-12544.	1.6	14
160	Selective Cï£¿H Bond Activation in Ethane Using Photoexcited Cu Atoms. Angewandte Chemie International Edition in English, 1982, 21, 211-211.	4.4	13
161	Tunable Microcellular Morphologies from Poly(ferrocenylsilane) Ceramic Precursors Foamed in Supercritical CO2. Macromolecular Chemistry and Physics, 2004, 205, 2398-2408.	1.1	13
162	Engineering porosity in bifunctional periodic mesoporous organosilicas with MT- and DT-type silica building blocks. Journal of Materials Chemistry, 2005, 15, 764.	6.7	13

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163	Channel Crossing by a Catalytic Nanomotor. ChemCatChem, 2013, 5, 2798-2801.	1.8	13
164	The next big thing for silicon nanostructures â€“ CO₂ photocatalysis. Faraday Discussions, 2020, 222, 424-432.	1.6	13
165	Making sense out of sulfated tin dioxide mesostructures. Journal of Materials Chemistry, 2003, 13, 1406.	6.7	12
166	Synthesis of poly(spirosilabifluorene) copolymers and their improved stability in blue emitting polymer LEDs over non-spiro analogs. Polymer Chemistry, 2015, 6, 3781-3789.	1.9	12
167	Permanently porous hydrogen-bonded frameworks of rod-like thiophenes, selenophenes, and tellurophenes capped with MIDA boronates. Dalton Transactions, 2016, 45, 9754-9757.	1.6	12
168	Photophysics of atomic magnesium isolated in solid methane and perdeuteromethane. II. Temperature dependence of steady state and timeâ€resolved luminescence. Journal of Chemical Physics, 1988, 89, 1844-1857.	1.2	11
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