Geoffrey A Ozin

List of Publications by Citations

147 papers	20,027 citations	65 h-index	141 g-index
156 ext. papers	21,006 ext. citations	17 avg, IF	6.76 L-index

#	Paper	IF	Citations
147	Periodic mesoporous organosilicas with organic groups inside the channel walls. *Nature*, **1999**, 402, 867-871	50.4	1535
146	Large-scale synthesis of a silicon photonic crystal with a complete three-dimensional bandgap near 1.5 micrometres. *Nature*, **2000**, 405, 437-40	50.4	1323
145	Nanochemistry: Synthesis in diminishing dimensions. *Advanced Materials*, **1992**, 4, 612-649	24	1132
144	Synthesis of inorganic materials with complex form. *Nature*, **1996**, 382, 313-318	50.4	1031
143	Photonic-crystal full-colour displays. *Nature Photonics*, **2007**, 1, 468-472	33.9	708
142	Synthesis of oriented films of mesoporous silica on mica. *Nature*, **1996**, 379, 703-705	50.4	625
141	Morphogenesis of shapes and surface patterns in mesoporous silica. *Nature*, **1997**, 386, 692-695	50.4	596
140	Bottom-up assembly of photonic crystals. *Chemical Society Reviews*, **2013**, 42, 2528-54	58.5	515
139	Colloidal crystal films: advances in universality and perfection. *Journal of the American Chemical Society*, **2003**, 125, 15589-98	16.4	515
138	Free-standing and oriented mesoporous silica films grown at the air□water interface. *Nature*, **1996**, 381, 589-592	50.4	493
137	Past, present, and future of periodic mesoporous organosilicas-the PMOs. *Accounts of Chemical Research*, **2005**, 38, 305-12	24.3	400
136	Size-dependent extinction coefficients of PbS quantum dots. *Journal of the American Chemical Society*, **2006**, 128, 10337-46	16.4	362
135	From colour fingerprinting to the control of photoluminescence in elastic photonic crystals. *Nature Materials*, **2006**, 5, 179-184	27	346
134	Lamellar aluminophosphates with surface patterns that mimic diatom and radiolarian microskeletons. *Nature*, **1995**, 378, 47-50	50.4	316
133	Promises and problems of mesoscale materials chemistry or why meso?. *Chemistry - A European Journal*, **2004**, 10, 28-41	4.8	300
132	Advanced Zeolite, Materials Science. *Angewandte Chemie International Edition in English*, **1989**, 28, 359-376		286
131	Non-aqueous synthesis of giant crystals of zeolites and molecular sieves. *Nature*, **1993**, 365, 239-242	50.4	267

130	Size-dependent absolute quantum yields for size-separated colloidally-stable silicon nanocrystals. *Nano Letters*, **2012**, 12, 337-42	11.5	260
129	Multigram scale, solventless, and diffusion-controlled route to highly monodisperse PbS nanocrystals. *Journal of Physical Chemistry B*, **2006**, 110, 671-3	3.4	251
128	Controlling morphology and porosity to improve performance of molecularly imprinted sol-gel silica. *Chemical Society Reviews*, **2014**, 43, 911-33	58.5	247
127	Self-Assembling Frameworks: Beyond microporous oxides. *Advanced Materials*, **1996**, 8, 13-28	24	245
126	Novel bifunctional periodic mesoporous organosilicas, BPMOs: synthesis, characterization, properties and in-situ selective hydroboration-alcoholysis reactions of functional groups. *Journal of the American Chemical Society*, **2001**, 123, 8520-30	16.4	244
125	Challenges and advances in the chemistry of periodic mesoporous organosilicas (PMOs). *Journal of Materials Chemistry*, **2005**, 15, 3716		241
124	Silicon Inverse-Opal-Based Macroporous Materials as Negative Electrodes for Lithium Ion Batteries. *Advanced Functional Materials*, **2009**, 19, 1999-2010	15.6	240
123	Nanofabrication by self-assembly. *Materials Today*, **2009**, 12, 12-23	21.8	239
122	Electroactive inverse opal: a single material for all colors. *Angewandte Chemie - International Edition* , **2009**, 48, 943-7	16.4	231
121	Non-aqueous supramolecular assembly of mesostructured metal germanium sulphides from (Ge4S10)4□clusters. *Nature*, **1999**, 397, 681-684	50.4	228
120	Periodic mesoporous organosilicas containing interconnected [Si(CH2)]3 rings. *Science*, **2003**, 302, 266-9	33.3	213
119	Materials chemistry for low-k materials. *Materials Today*, **2006**, 9, 22-31	21.8	208
118	Metamorphic Channels in Periodic Mesoporous Methylenesilica This work was supported by the NSERC of Canada. M.J.M. is grateful to NSERC for postgraduate (1995-1999) and postdoctoral fellowships (1999-2001). G.A.O. thanks the Killam Foundation for the award of an Isaac Walton Killam research fellowship (1995-1997). *Angewandte Chemie - International Edition*, **2000**, 39, 1808-1811	16.4	208
117	Morphogenesis of Biomineral and Morphosynthesis of Biomimetic Forms. *Accounts of Chemical Research*, **1997**, 30, 17-27	24.3	190
116	Metamorphic materials: Restructuring siliceous mesoporous materials*. *Advanced Materials*, **1995**, 7, 842-846	24	188
115	Why PMO? Towards functionality and utility of periodic mesoporous organosilicas. *Small*, **2010**, 6, 2634-42	11	173
114	Periodic Mesoporous Organosilica with Large Cagelike Pores. *Chemistry of Materials*, **2002**, 14, 1903-1905	9.6	147
113	Graphene oxide-periodic mesoporous silica sandwich nanocomposites with vertically oriented channels. *ACS Nano*, **2010**, 4, 7437-50	16.7	143

112	Synthesis and properties of 1,3,5-benzene periodic mesoporous organosilica (PMO): novel aromatic PMO with three point attachments and unique thermal transformations. *Journal of the American Chemical Society*, **2002**, 124, 13886-95	16.4	137
111	Block copolymers under periodic, strong three-dimensional confinement. *Journal of the American Chemical Society*, **2005**, 127, 9954-5	16.4	131
110	Aluminophosphate Chain-to-Layer Transformation. *Chemistry of Materials*, **1996**, 8, 2391-2398	9.6	130
109	Large-scale synthesis of ultrathin Bi2S3 necklace nanowires. *Angewandte Chemie - International Edition*, **2008**, 47, 3814-7	16.4	123
108	Mechanical stability enhancement by pore size and connectivity control in colloidal crystals by layer-by-layer growth of oxide. *Chemical Communications*, **2002**, 2736-7	5.8	115
107	Slow photons in the fast lane in chemistry. *Journal of Materials Chemistry*, **2008**, 18, 369-373		114
106	Metamorphosis of ordered mesopores to micropores: periodic silica with unprecedented loading of pendant reactive organic groups transforms to periodic microporous silica with tailorable pore size. *Journal of the American Chemical Society*, **2002**, 124, 6383-92	16.4	113
105	Writing on the wall with a new synthetic quill. *Chemistry - A European Journal*, **2000**, 6, 2507-11	4.8	112
104	Towards the synthetic all-optical computer: science fiction or reality?. *Journal of Materials Chemistry*, **2004**, 14, 781-794		106
103	Polyferrocenylsilane microspheres: synthesis, mechanism of formation, size and charge tunability, electrostatic self-assembly, and pyrolysis to spherical magnetic ceramic particles. *Journal of the American Chemical Society*, **2002**, 124, 12522-34	16.4	105
102	Low-k periodic mesoporous organosilica with air walls: POSS-PMO. *Journal of the American Chemical Society*, **2011**, 133, 18082-5	16.4	102
101	Superparamagnetic Ceramic Nanocomposites: Synthesis and Pyrolysis of Ring-Opened Poly(ferrocenylsilanes) inside Periodic Mesoporous Silica. *Journal of the American Chemical Society*, **2000**, 122, 3878-3891	16.4	97
100	Photonic clays: a new family of functional 1D photonic crystals. *ACS Nano*, **2008**, 2, 2065-74	16.7	96
99	Aromatic PMOs: tolyl, xylyl and dimethoxyphenyl groups integrated within the channel walls of hexagonal mesoporous silicas. *Journal of Materials Chemistry*, **2001**, 11, 3202-3206		93
98	Shell mimetics. *Advanced Materials*, **1997**, 9, 662-667	24	92
97	Slow Photons for Photocatalysis and Photovoltaics. *Advanced Materials*, **2017**, 29, 1605349	24	91
96	Mesoporous silica with micrometer-scale designs. *Advanced Materials*, **1997**, 9, 811-814	24	84
95	P-Ink and Elast-Ink from lab to market. *Materials Today*, **2008**, 11, 44-51	21.8	84

94	Nanoparticle one-dimensional photonic-crystal dye laser. *Small*, **2009**, 5, 2048-52	11	80
93	Intrazeolite metal carbonyl topotaxy. A comprehensive structural and spectroscopic study of intrazeolite Group VI metal hexacarbonyls and subcarbonyls. *Journal of the American Chemical Society*, **1990**, 112, 9575-9586	16.4	79
92	Using shape for self-assembly. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2012**, 370, 2824-47	3	78
91	Small silicon, big opportunities: the development and future of colloidally-stable monodisperse silicon nanocrystals. *Advanced Materials*, **2012**, 24, 5890-8	24	77
90	Molecularly imprinted mesoporous organosilica. *ACS Nano*, **2011**, 5, 2277-87	16.7	77
89	Photoluminescent Silicon Clusters in Oriented Hexagonal Mesoporous Silica Film. *Advanced Materials*, **1999**, 11, 474-480	24	77
88	Controlling the Morphologies of Organometallic Block Copolymers in the 3-Dimensional Spatial Confinement of Colloidal and Inverse Colloidal Crystals. *Macromolecules*, **2008**, 41, 2250-2259	5.5	74
87	Nanoporous tin(IV) sulfides: Mode of formation. *Advanced Materials*, **1994**, 6, 860-865	24	74
86	Periodic Mesoporous Organosilicas with Phenylene Bridging Groups, 1,4-(CH2)nC6H4 (n = 0□2). *Chemistry of Materials*, **2004**, 16, 5465-5472	9.6	71
85	Mesostructured Metal Germanium Sulfides. *Journal of the American Chemical Society*, **1999**, 121, 12005-12017	16.4	66
84	Organosilicas with Chiral Bridges and Self-Generating Mesoporosity. *Chemistry of Materials*, **2007**, 19, 2649-2657	9.6	58
83	Novel route to periodic mesoporous aminosilicas, PMAs: ammonolysis of periodic mesoporous organosilicas. *Journal of the American Chemical Society*, **2003**, 125, 11662-73	16.4	57
82	New directions in self-assembly:: materials synthesis over □ll□length scales. *Current Opinion in Colloid and Interface Science*, **1999**, 4, 325-337	7.6	56
81	Enhanced photothermal reduction of gaseous CO2 over silicon photonic crystal supported ruthenium at ambient temperature. *Energy and Environmental Science*, **2018**, 11, 3443-3451	35.4	53
80	Direct Probe Fourier Transform Far-Infrared Spectroscopy of Metal Atoms, Metal Ions, and Metal Clusters in Zeolites. *Catalysis Reviews - Science and Engineering*, **1985**, 27, 591-651	12.6	52
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78	Mesochemistry. *Current Opinion in Colloid and Interface Science*, **1998**, 3, 181-193	7.6	50
77	Periodic mesoporous phenylenesilicas with ether or sulfide hinge groups--a new class of PMOs with ligand channels. *Chemical Communications*, **2004**, 2426-7	5.8	50

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75	C60-PMO: periodic mesoporous buckyballsilica. *Journal of the American Chemical Society*, **2007**, 129, 15644-9	16.4	48
74	Assembling photoluminescent silicon nanocrystals into periodic mesoporous organosilica. *Journal of the American Chemical Society*, **2012**, 134, 8439-46	16.4	47
73	Nanoporous tin(IV) chalcogenides: Flexible open-framework nanbmaterials for chemical sensing. *Advanced Materials*, **1995**, 7, 375-378	24	47
72	Zeolates: a coordination chemistry view of metal-ligand bonding in zeolite guest-host inclusion compounds. *Chemistry of Materials*, **1992**, 4, 511-521	9.6	47
71	Nanoparticle films and photonic crystal multilayers from colloidally stable, size-controllable zinc and iron oxide nanoparticles. *ACS Nano*, **2011**, 5, 2861-9	16.7	46
70	Distributed feedback lasing from a composite poly(phenylene vinylene)-nanoparticle one-dimensional photonic crystal. *Nano Letters*, **2009**, 9, 4273-8	11.5	46
69	Thermally Stable Self-assembling Open-Frameworks: Isostructural Cs+ and (CH3)4N+ Iron Germanium Sulfides. *Chemische Berichte*, **1996**, 129, 283-287		45
68	Measurement of group velocity dispersion for finite size three-dimensional photonic crystals in the near-infrared spectral region. *Applied Physics Letters*, **2005**, 86, 053108	3.4	43
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62	Tailoring the electrical properties of inverse silicon opals - a step towards optically amplified silicon solar cells. *Advanced Materials*, **2009**, 21, 559-63	24	38
61	Nanochemistry: what is next?. *Small*, **2009**, 5, 1240-4	11	38
60	Exceptional reduction of the diffusion constant in partially disordered photonic crystals. *Physical Review Letters*, **2008**, 101, 123901	7.4	38
59	Vapor swellable colloidal photonic crystals with pressure tunability. *Journal of Materials Chemistry*, **2005**, 15, 133-138		38

58	From the molecule to an expanded I-VII semiconductor quantum superlattice: silver, sodium halo-sodalites. *Journal of the American Chemical Society*, **1990**, 112, 904-905	16.4	37
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56	Synthesis and compositional tuning of the band properties of isostructural TMA□nSxSe1□□ Nanoporous Materials. *Advanced Materials*, **1995**, 7, 370-374	24	33
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53	A step towards optically encoded silver release in 1D photonic crystals. *Small*, **2009**, 5, 1498-503	11	31
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51	Intrazeolite topotaxy: sodium-23 double-rotation NMR study of transition-metal hexacarbonyls and oxides encapsulated in sodium zeolite Y. *The Journal of Physical Chemistry*, **1992**, 96, 5949-5953		28
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48	Spatially confined redox chemistry in periodic mesoporous hydridosilica-nanosilver grown in reducing nanopores. *Journal of the American Chemical Society*, **2011**, 133, 17454-62	16.4	27
47	Beyond the hemicylindrical micellar monolayer on graphite: AFM evidence for a lyotropic liquid crystal film. *Advanced Materials*, **1997**, 9, 917-921	24	27
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36	Does Microgravity Influence Self-Assembly??. *Advanced Materials*, **1997**, 9, 1133-1149	24	18
35	Sodium-23 MAS-NMR and FT-mid-far-IR cation/proton probes of the phototopotactic oxidation of intrazeolite hexacarbonyltungsten(0) to tungsten(VI) oxide quantum dots and supralattices: exploring anchoring sites and aggregation processes. *The Journal of Physical Chemistry*, **1990**, 94, 6939-6943		18
34	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	3.4	17
33	New Insights into the Mode of Formation of AlPO4-n Molecular Sieves. *Studies in Surface Science and Catalysis*, **1994**, 219-225	1.8	17
32	Assembling a semiconductor quantum supralattice one atom at a time: nonstoichiometric silver, sodium bromosodalites. *The Journal of Physical Chemistry*, **1990**, 94, 6943-6948		16
31	Chalcogenide Distribution in Microporous Layered Tin(IV) Thioselenide, TMA2Sn3SxSe7-x, Materials. *Journal of Physical Chemistry B*, **1998**, 102, 2356-2366	3.4	15
30	Exploring the possibilities and limitations of a nanomaterials genome. *Small*, **2015**, 11, 64-9	11	14
29	Synthesis and characterization of methyl- and vinyl-functionalized ordered mesoporous silicas with high organic content. *Studies in Surface Science and Catalysis*, **2002**, 141, 197-204	1.8	14
28	Germanium nanocrystal doped inverse crystalline silicon opal. *Journal of Materials Chemistry*, **2011**, 21, 15895		13
27	Nonaqueous Synthesis of Large Zeolite and Molecular Sieve Crystals. *Studies in Surface Science and Catalysis*, **1994**, 84, 93-100	1.8	13
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21	Anomalous flow of light near a photonic crystal pseudo-gap. *Optics Express*, **2011**, 19, 25320-7	3.3	8
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16	Electroactive Nanoporous Metal Oxides and Chalcogenides by Chemical Design. *Chemistry of Materials*, **2017**, 29, 3663-3670	9.6	6
15	From ideas to innovation: nanochemistry as a case study. *Small*, **2011**, 7, 49-54	11	5
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13	Zeolates: A Coordination Chemistry View of Metal-Ligand Bonding in Intrazeolite MOCVD Type Precursors and Semiconductor Nanoclusters. *Materials Research Society Symposia Proceedings*, **1992**, 277, 105		4
12	Nanometer-Scale Precision Tuning of 3D Photonic Crystals Made Possible Using Polyelectrolytes with Controlled Short Chain Length and Narrow Polydispersity. *Advanced Materials Interfaces*, **2014**, 1, 1300051	4.6	3
11	Periodic Mesoporous Organosilicas (PMOs): Nanostructured Organic-Inorganic Hybrid Materials. *Materials Research Society Symposia Proceedings*, **2000**, 628, 1		3
10	Doping and Band-Gap Engineering of an Intrazeolite Tungsten(Vi) Oxide Supralatiice. *Materials Research Society Symposia Proceedings*, **1991**, 233, 109		2
9	5.2: Photonic Crystal Display Materials. *Digest of Technical Papers SID International Symposium*, **2011**, 42, 40-41	0.5	1
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1	Hierarchical Inorganic Materials: Stealing Nature Best Secrets **1997**, 323-333	