Michael G Pravica

List of Publications by Year in Descending Order

75 papers	1,494 citations	21 h-index	36 g-index
76 ext. papers	1,614 ext. citations	3.4 avg, IF	4.27 L-index

#	Paper	IF	Citations
75	Structure and vibration spectra of strontium and magnesium oxalates at high pressure. *High Pressure Research*, **2021**, 41, 52-64	1.6	
74	Observation of pressure-induced electron transfer in SnCO. *Physical Chemistry Chemical Physics*, **2021**, 23, 5969-5974	3.6	
73	Observation of second harmonic generation in doped polymeric carbon monoxide. *Materials Letters* , **2019**, 256, 126629	3.3	1
72	High pressure behavior of mercury difluoride (HgF2). *Chemical Physics Letters*, **2019**, 724, 35-41	2.5	3
71	Synthesis of a novel strontium-based wide-bandgap semiconductor via X-ray photochemistry under extreme conditions. *Journal of Materials Chemistry C*, **2018**, 6, 12473-12478	7.1	7
70	Cationic Dependence of X-ray Induced Damage in Strontium and Barium Nitrate. *Journal of Physical Chemistry A*, **2018**, 122, 8722-8728	2.8	3
69	High-pressure-assisted X-ray-induced damage as a new route for chemical and structural synthesis. *Physical Chemistry Chemical Physics*, **2018**, 20, 18949-18956	3.6	9
68	When Do Scientific Explanations Compete? Steps Toward a Heuristic Checklist. *Metaphilosophy*, **2017**, 48, 96-122	0.3	
67	Inner-shell chemistry under high pressure. *Japanese Journal of Applied Physics*, **2017**, 56, 05FA10	1.4	11
66	Measurement of the Energy and High-Pressure Dependence of X-ray-Induced Decomposition of Crystalline Strontium Oxalate. *Journal of Physical Chemistry A*, **2017**, 121, 7108-7113	2.8	7
65	Forcing Cesium into Higher Oxidation States Using Useful hard x-ray Induced Chemistry under High Pressure. *Journal of Physics: Conference Series*, **2017**, 950, 042055	0.3	
64	X-ray induced synthesis of a novel material: Stable, doped solid CO at ambient conditions. *Chemical Physics Letters*, **2017**, 686, 183-188	2.5	8
63	A novel method for generating molecular mixtures at extreme conditions: The case of fluorine and oxygen **2017**,		3
62	Giant Pressure-Driven Lattice Collapse Coupled with Intermetallic Bonding and Spin-State Transition in Manganese Chalcogenides. *Angewandte Chemie*, **2016**, 128, 10506-10509	3.6	6
61	Pressure-Driven Cooperative Spin-Crossover, Large-Volume Collapse, and Semiconductor-to-Metal Transition in Manganese(II) Honeycomb Lattices. *Journal of the American Chemical Society*, **2016**, 138, 15751-15757	16.4	50
60	Why do I need to take physics? *The National Teaching & Learning Forum*, **2016**, 25, 8-9	0	
59	A novel synthesis of polymeric CO via useful hard X-ray photochemistry. *Cogent Physics*, **2016**, 3,	3.5	6

58	Reversible switching between pressure-induced amorphization and thermal-driven recrystallization in VO2(B) nanosheets. *Nature Communications*, **2016**, 7, 12214	17.4	30
57	Robust high pressure stability and negative thermal expansion in sodium-rich antiperovskites Na3OBr and Na4OI2. *Journal of Applied Physics*, **2016**, 119, 025901	2.5	11
56	Hexafluorobenzene under Extreme Conditions. *Journal of Physical Chemistry B*, **2016**, 120, 2854-8	3.4	8
55	High pressure studies of potassium perchlorate. *Chemical Physics Letters*, **2016**, 660, 37-42	2.5	9
54	Giant Pressure-Driven Lattice Collapse Coupled with Intermetallic Bonding and Spin-State Transition in Manganese Chalcogenides. *Angewandte Chemie - International Edition*, **2016**, 55, 10350-3	16.4	24
53	Pressure induced structural transitions in CuSbS2 and CuSbSe2 thermoelectric compounds. *Journal of Alloys and Compounds*, **2015**, 643, 186-194	5.7	41
52	Pressure-induced cation-cation bonding in V2O3. *Physical Review B*, **2015**, 92,	3.3	12
51	Studies in useful hard x-ray photochemistry: decomposition of potassium halates. *Journal of Physics: Conference Series*, **2014**, 500, 022009	0.3	6
50	Note: Loading method of molecular fluorine using x-ray induced chemistry. *Review of Scientific Instruments*, **2014**, 85, 086110	1.7	10
49	Communication: A novel method for generating molecular mixtures at extreme conditions: the case of hydrogen and oxygen. *Journal of Chemical Physics*, **2014**, 141, 091101	3.9	7
48	Carbon tetrachloride under extreme conditions. *Journal of Chemical Physics*, **2014**, 140, 194503	3.9	9
47	Hydrazine at high pressure. *Chemical Physics Letters*, **2013**, 555, 115-118	2.5	29
46	High pressure infrared and X-ray Raman studies of aluminum nitride. *Physica Status Solidi (B): Basic Research*, **2013**, 250, 726-731	1.3	4
45	High pressure X-ray photochemical studies of carbon tetrachloride: Cl2 production and segregation. *Chemical Physics Letters*, **2013**, 590, 74-76	2.5	13
44	High pressure investigations of melamine. *High Pressure Research*, **2013**, 33, 40-54	1.6	3
43	Measurement of the energy dependence of X-ray-induced decomposition of potassium chlorate. *Journal of Physical Chemistry A*, **2013**, 117, 2302-6	2.8	20
42	X-ray induced mobility of molecular oxygen at extreme conditions. *Applied Physics Letters*, **2013**, 103, 224103	3.4	11
41	High-pressure X-ray diffraction studies of potassium chlorate. *Journal of Applied Crystallography*, **2012**, 45, 48-52	3.8	13

40	1,1-Diamino-2,2-dinitroethylene under high pressure-temperature. *Journal of Chemical Physics*, **2012**, 137, 174304	3.9	29
39	Note: Experiments in hard x-ray chemistry: in situ production of molecular hydrogen and x-ray induced combustion. *Review of Scientific Instruments*, **2012**, 83, 036102	1.7	17
38	A high-pressure far- and mid-infrared study of 1,1-diamino-2,2-dinitroethylene. *Journal of Applied Physics*, **2012**, 111, 103534	2.5	34
37	Charge transfer in spinel Co3O4 at high pressures. *Journal of Physics Condensed Matter*, **2012**, 24, 435401	1.8	30
36	In-situ synchrotron x-ray study of phase transitions in melamine under high pressures and high temperatures. *Diamond and Related Materials*, **2011**, 20, 1090-1092	3.5	5
35	A high pressure, high temperature study of 1,1-diamino-2,2-dinitro ethylene. *High Pressure Research* , **2011**, 31, 80-85	1.6	11
34	Note: A novel method for in situ loading of gases via x-ray induced chemistry. *Review of Scientific Instruments*, **2011**, 82, 106102	1.7	21
33	High-pressure studies of melamine. *High Pressure Research*, **2010**, 30, 65-71	1.6	10
32	High pressure infrared study of 1,3,5,7-cyclooctatetraene (COT). *Journal of Physics: Conference Series*, **2010**, 215, 012050	0.3	1
31	A far- and mid-infrared study of HMX (octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine) under high pressure. *Chemical Physics Letters*, **2010**, 500, 28-34	2.5	26
30	Organic cyclic difluoramino-nitramines: infrared and Raman spectroscopy of 3,3,7,7-tetrakis(difluoramino)octahydro 1,5-dinitro-1,5-diazocine (HNFX). *Journal of Raman Spectroscopy*, **2009**, 40, 964-971	2.3	6
29	High-pressure far- and mid-infrared study of 1,3,5-triamino-2,4,6-trinitrobenzene. *Journal of Physical Chemistry A*, **2009**, 113, 9133-7	2.8	43
28	A novel method to dope diamond Ion Beam Nuclear Transmutation Doping (IBNTD). *Diamond and Related Materials*, **2009**, 18, 846-849	3.5	2
27	Raman spectroscopic study of cyclopentane at high pressure. *Journal of Chemical Physics*, **2009**, 130, 204505	3.9	5
26	High-pressure studies of 1,3,5,7-cyclooctatetraene: experiment and theory. *Journal of Physical Chemistry A*, **2008**, 112, 11501-7	2.8	11
25	Radiation-induced decomposition of explosives under extreme conditions. *Journal of Physics and Chemistry of Solids*, **2008**, 69, 2208-2212	3.9	5
24	Radiation-induced decomposition of PETN and TATB under extreme conditions. *Journal of Physical Chemistry A*, **2008**, 112, 3352-9	2.8	27
23	High-pressure studies of cyclohexane to 40 GPa. *Journal of Physical Chemistry B*, **2007**, 111, 4103-8	3.4	30

22	Bonding changes in single wall carbon nanotubes (SWCNT) on Ti and TiH2 addition probed by X-ray Raman scattering. *Diamond and Related Materials*, **2007**, 16, 1136-1139	3.5	6
21	Infrared study of 1,3,5-triamino-2,4,6-trinitrobenzene under high pressure. *Physical Review B*, **2007**, 76,	3.3	31
20	Structural transition of PETN-I to ferroelastic orthorhombic phase PETN-III at elevated pressures. *Journal of Chemical Physics*, **2007**, 127, 094502	3.9	17
19	X-ray Raman scattering studies on C60 fullerenes and multi-walled carbon nanotubes under pressure. *Diamond and Related Materials*, **2007**, 16, 1250-1253	3.5	45
18	X-ray Raman spectroscopic study of benzene at high pressure. *Journal of Physical Chemistry B*, **2007**, 111, 11635-7	3.4	18
17	Phonon density of states of metallic Sn at high pressure. *Physical Review Letters*, **2007**, 98, 245502	7.4	20
16	X-ray diffraction study of elemental thulium at pressures up to 86GPa. *Physical Review B*, **2006**, 74,	3.3	16
15	Radiation-induced decomposition of PETN and TATB under pressure. *Chemical Physics Letters*, **2006** , 429, 304-309	2.5	14
14	Studies of phase transitions in PETN at high pressures. *Journal of Physics and Chemistry of Solids*, **2006**, 67, 2159-2163	3.9	13
13	Core/shell ZrTiO4/LiAlSi2O6 nanocrystals: A synchrotron X-ray diffraction study of high-pressure compression. *Journal of Physics and Chemistry of Solids*, **2006**, 67, 2072-2076	3.9	1
12	Raman scattering studies of the high-pressure stability of pentaerythritol tetranitrate, C(CH2ONO2)4. *Journal of Physical Chemistry B*, **2005**, 109, 19223-7	3.4	36
11	X-ray diffraction study of elemental erbium to 70GPa. *Physical Review B*, **2005**, 72,	3.3	9
10	High pressure Raman spectroscopic study of structural polymorphismin cyclohexane. *Applied Physics Letters*, **2004**, 84, 5452-5454	3.4	26
9	Characteristics of silicone fluid as a pressure transmitting medium in diamond anvil cells. *Review of Scientific Instruments*, **2004**, 75, 4450-4454	1.7	116
8	A simple and efficient cryogenic loading technique for diamond anvil cells. *Review of Scientific Instruments*, **2003**, 74, 2782-2783	1.7	11
7	A High Pressure Study of Ortho-para Conversion in Hydrogen by NMR. *Journal of Low Temperature Physics*, **1998**, 113, 711-716	1.3	2
6	NMR Study of Ortho-Para Conversion at High Pressure in Hydrogen. *Physical Review Letters*, **1998**, 81, 4180-4183	7.4	50
5	Hydrogen at megabar pressures and the importance of ortho-para concentration. *Journal of Physics Condensed Matter*, **1998**, 10, 11169-11177	1.8	4

4	Nuclear magnetic resonance in a diamond anvil cell at very high pressures. *Review of Scientific Instruments*, **1998**, 69, 479-484	1.7	32
3	Net NMR alignment by adiabatic transport of parahydrogen addition products to high magnetic field. *Chemical Physics Letters*, **1988**, 145, 255-258	2.5	335
2	Fluorine chemistry at extreme conditions: possible synthesis of HgF_4. *Papers in Physics*,11, 110001		3
1	High pressure resonant X-ray emission studies of WO3 and hydrogenated WO3		2