Michael G Pravica

List of Publications by Year
in descending order

76 papers	1,752 citations	331670 21 h-index	289244 40 g-index
76 all docs	76 docs citations	76 times ranked	1996 citing authors

#	Article	IF	Citations
1	Structure and vibration spectra of strontium and magnesium oxalates at high pressure. High Pressure Research, 2021, 41, 52-64.	1.2	1
2	Observation of pressure-induced electron transfer in SnC2O4. Physical Chemistry Chemical Physics, 2021, 23, 5969-5974.	2.8	0
3	Observation of second harmonic generation in doped polymeric carbon monoxide. Materials Letters, 2019, 256, 126629.	2.6	1
4	High pressure behavior of mercury difluoride (HgF2). Chemical Physics Letters, 2019, 724, 35-41.	2.6	7
5	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.	5.5	11
6	Cationic Dependence of X-ray Induced Damage in Strontium and Barium Nitrate. Journal of Physical Chemistry A, 2018, 122, 8722-8728.	2.5	6
7	High-pressure-assisted X-ray-induced damage as a new route for chemical and structural synthesis. Physical Chemistry Chemical Physics, 2018, 20, 18949-18956.	2.8	14
8	When Do Scientific Explanations Compete? Steps Toward a Heuristic Checklist. Metaphilosophy, 2017, 48, 96-122.	0.3	0
9	Inner-shell chemistry under high pressure. Japanese Journal of Applied Physics, 2017, 56, 05FA10.	1.5	11
10	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.	2.5	10
11	X-ray induced synthesis of a novel material: Stable, doped solid CO at ambient conditions. Chemical Physics Letters, 2017, 686, 183-188.	2.6	9
12	A novel method for generating molecular mixtures at extreme conditions: The case of fluorine and oxygen. AIP Conference Proceedings, 2017, , .	0.4	3
13	Forcing Cesium into Higher Oxidation States Using Useful hard x-ray Induced Chemistry under High Pressure. Journal of Physics: Conference Series, 2017, 950, 042055.	0.4	0
14	Reversible switching between pressure-induced amorphization and thermal-driven recrystallization in VO2(B) nanosheets. Nature Communications, 2016, 7, 12214.	12.8	47
15	Robust high pressure stability and negative thermal expansion in sodium-rich antiperovskites Na3OBr and Na4OI2. Journal of Applied Physics, 2016, 119, .	2.5	13
16	Hexafluorobenzene under Extreme Conditions. Journal of Physical Chemistry B, 2016, 120, 2854-2858.	2.6	9
17	High pressure studies of potassium perchlorate. Chemical Physics Letters, 2016, 660, 37-42.	2.6	12
18	Giant Pressureâ€Driven Lattice Collapse Coupled with Intermetallic Bonding and Spinâ€State Transition in Manganese Chalcogenides. Angewandte Chemie - International Edition, 2016, 55, 10350-10353.	13.8	32

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19	Giant Pressureâ€Driven Lattice Collapse Coupled with Intermetallic Bonding and Spinâ€State Transition in Manganese Chalcogenides. Angewandte Chemie, 2016, 128, 10506-10509.	2.0	6
20	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.	13.7	91
21	â€œWhy do I need to take physics?â€• The National Teaching & Learning Forum, 2016, 25, 8-9.	0.1	0
22	A novel synthesis of polymeric CO via useful hard X-ray photochemistry. Cogent Physics, 2016, 3, .	0.7	6
23	Pressure-induced cation-cation bonding in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="normal">V</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2015, 92, .	3.2	17
24	Pressure induced structural transitions in CuSbS2 and CuSbSe2 thermoelectric compounds. Journal of Alloys and Compounds, 2015, 643, 186-194.	5.5	54
25	Note: Loading method of molecular fluorine using x-ray induced chemistry. Review of Scientific Instruments, 2014, 85, 086110.	1.3	10
26	Communication: A novel method for generating molecular mixtures at extreme conditions: The case of hydrogen and oxygen. Journal of Chemical Physics, 2014, 141, 091101.	3.0	7
27	Carbon tetrachloride under extreme conditions. Journal of Chemical Physics, 2014, 140, 194503.	3.0	10
28	Studies in useful hard x-ray photochemistry: decomposition of potassium halates. Journal of Physics: Conference Series, 2014, 500, 022009.	0.4	6
29	Hydrazine at high pressure. Chemical Physics Letters, 2013, 555, 115-118.	2.6	31
30	High pressure infrared and Xâ€ray Raman studies of aluminum nitride. Physica Status Solidi (B): Basic Research, 2013, 250, 726-731.	1.5	6
31	High pressure X-ray photochemical studies of carbon tetrachloride: Cl2 production and segregation. Chemical Physics Letters, 2013, 590, 74-76.	2.6	14
32	High pressure investigations of melamine. High Pressure Research, 2013, 33, 40-54.	1.2	4
33	Measurement of the Energy Dependence of X-ray-Induced Decomposition of Potassium Chlorate.. Journal of Physical Chemistry A, 2013, 117, 2302-2306.	2.5	21
34	X-ray induced mobility of molecular oxygen at extreme conditions. Applied Physics Letters, 2013, 103, .	3.3	11
35	1,1-diamino-2,2-dinitroethylene under high pressure-temperature. Journal of Chemical Physics, 2012, 137, 174304.	3.0	35
36	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.	1.3	17

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37	A high-pressure far- and mid-infrared study of 1,1-diamino-2,2-dinitroethylene. Journal of Applied Physics, 2012, 111, .	2.5	37
38	Charge transfer in spinel Co₃O₄at high pressures. Journal of Physics Condensed Matter, 2012, 24, 435401.	1.8	36
39	High-pressure X-ray diffraction studies of potassium chlorate. Journal of Applied Crystallography, 2012, 45, 48-52.	4.5	13
40	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.	3.9	5
41	A high pressure, high temperature study of 1,1-diamino-2,2-dinitro ethylene. High Pressure Research, 2011, 31, 80-85.	1.2	13
42	Note: A novel method for in situ loading of gases via x-ray induced chemistry. Review of Scientific Instruments, 2011, 82, 106102.	1.3	21
43	High pressure infrared study of 1,3,5,7-cyclooctatetraene (COT). Journal of Physics: Conference Series, 2010, 215, 012050.	0.4	1
44	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.	2.6	30
45	High-pressure studies of melamine. High Pressure Research, 2010, 30, 65-71.	1.2	11
46	Organic cyclic difluoraminoâ€nitramines: infrared and Raman spectroscopy of 3,3,7,7â€tetrakis(difluoramino)octahydro 1,5â€dinitroâ€1,5â€diazocine (HNFX). Journal of Raman Spectroscopy, 2009, 40, 964-971.	2.5	6
47	High-Pressure Far- and Mid-Infrared Study of 1,3,5-Triamino-2,4,6-trinitrobenzene. Journal of Physical Chemistry A, 2009, 113, 9133-9137.	2.5	48
48	A novel method to dope diamond â€" Ion Beam Nuclear Transmutation Doping (IBNTD). Diamond and Related Materials, 2009, 18, 846-849.	3.9	2
49	Raman spectroscopic study of cyclopentane at high pressure. Journal of Chemical Physics, 2009, 130, 204505.	3.0	5
50	Radiation-induced decomposition of explosives under extreme conditions. Journal of Physics and Chemistry of Solids, 2008, 69, 2208-2212.	4.0	6
51	Radiation-Induced Decomposition of PETN and TATB under Extreme Conditions. Journal of Physical Chemistry A, 2008, 112, 3352-3359.	2.5	30
52	High-Pressure Studies of 1,3,5,7-Cyclooctatetraene: Experiment and Theory. Journal of Physical Chemistry A, 2008, 112, 11501-11507.	2.5	12
53	ANISOTROPIC DECOMPOSITION OF ENERGETIC MATERIALS.. AIP Conference Proceedings, 2008, , .	0.4	1
54	Infrared study of 1,3,5-triamino-2,4,6-trinitrobenzene under high pressure. Physical Review B, 2007, 76, .	3.2	34

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55	Structural transition of PETN-I to ferroelastic orthorhombic phase PETN-III at elevated pressures. Journal of Chemical Physics, 2007, 127, 094502.	3.0	18
56	X-ray Raman scattering studies on C60 fullerenes and multi-walled carbon nanotubes under pressure. Diamond and Related Materials, 2007, 16, 1250-1253.	3.9	53
57	X-ray Raman Spectroscopic Study of Benzene at High Pressure. Journal of Physical Chemistry B, 2007, 111, 11635-11637.	2.6	21
58	Phonon Density of States of Metallic Sn at High Pressure. Physical Review Letters, 2007, 98, 245502.	7.8	23
59	High-Pressure Studies of Cyclohexane to 40 GPa. Journal of Physical Chemistry B, 2007, 111, 4103-4108.	2.6	32
60	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.	3.9	9
61	Radiation-induced decomposition of PETN and TATB under pressure. Chemical Physics Letters, 2006, 429, 304-309.	2.6	15
62	Studies of phase transitions in PETN at high pressures. Journal of Physics and Chemistry of Solids, 2006, 67, 2159-2163.	4.0	14
63	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.	4.0	1
64	X-ray diffraction study of elemental thulium at pressures up to86GPa. Physical Review B, 2006, 74, .	3.2	17
65	X-ray diffraction study of elemental erbium to70GPa. Physical Review B, 2005, 72, .	3.2	10
66	Raman Scattering Studies of the High-Pressure Stability of Pentaerythritol Tetranitrate, C(CH2ONO2)4. Journal of Physical Chemistry B, 2005, 109, 19223-19227.	2.6	38
67	High pressure Raman spectroscopic study of structural polymorphismin cyclohexane. Applied Physics Letters, 2004, 84, 5452-5454.	3.3	28
68	Characteristics of silicone fluid as a pressure transmitting medium in diamond anvil cells. Review of Scientific Instruments, 2004, 75, 4450-4454.	1.3	126
69	A simple and efficient cryogenic loading technique for diamond anvil cells. Review of Scientific Instruments, 2003, 74, 2782-2783.	1.3	11
70	A High Pressure Study of Ortho-para Conversion in Hydrogen by NMR. Journal of Low Temperature Physics, 1998, 113, 711-716.	1.4	2
71	NMR Study of Ortho-Para Conversion at High Pressure in Hydrogen. Physical Review Letters, 1998, 81, 4180-4183.	7.8	55
72	Hydrogen at megabar pressures and the importance of ortho-para concentration. Journal of Physics Condensed Matter, 1998, 10, 11169-11177.	1.8	4

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73	Nuclear magnetic resonance in a diamond anvil cell at very high pressures. Review of Scientific Instruments, 1998, 69, 479-484.	1.3	36
74	Net NMR alignment by adiabatic transport of parahydrogen addition products to high magnetic field. Chemical Physics Letters, 1988, 145, 255-258.	2.6	391
75	Fluorine chemistry at extreme conditions: possible synthesis of HgF_4. Papers in Physics, 0, 11, 110001.	0.2	3
76	High pressure resonant X-ray emission studies of WO₃ and hydrogenated WO₃. , 0, , .		2