Michael J Bucknum

List of Publications by Year in Descending Order

35 papers	291 citations	8 h-index	16 g-index
39 ext. papers	318 ext. citations	3.3 avg, IF	2.97 L-index

#	Paper	IF	Citations
35	On the proposal of an Eddington ratio of natural energies, *Indian Journal of Physics*, **2021**, 95, 911-914	1.4	
34	Approximation of the electron proton mass ratio as a series in powers of (uppi). *Journal of Mathematical Chemistry*, **2018**, 56, 1360-1364	2.1	1
33	Sommerfeld fine structure constant approximated as a series representation in e and (pi). *Journal of Mathematical Chemistry*, **2018**, 56, 651-655	2.1	2
32	Preservation of C hexagons in the transformation of C allotropes. *Journal of Mathematical Chemistry*, **2014**, 52, 2013-2019	2.1	
31	Squaroglitter: A 3,4-Connected Carbon Net. *Journal of Chemical Theory and Computation*, **2013**, 9, 3855-9	5.4	7
30	Classification of Carbon Allotropes and Graphs **2013**, 57-88		
29	Spiro Quantum Chemistry **2013**, 1-35		
28	Synthesis of Glitter **2013**, 37-55		
27	Isoglitter. *Journal of Mathematical Chemistry*, **2012**, 50, 2281-2290	2.1	3
26	On the n-diamond and i-carbon nanocrystalline forms. *Journal of Mathematical Chemistry*, **2012**, 50, 1034-1038	2.1	13
25	High Pressure Synthesis of the Carbon Allotrope Hexagonite with Carbon Nanotubes in a Diamond Anvil Cell. *Carbon Materials*, **2011**, 79-93		2
24	Playing the quantum chemical slot machine: an exploration of ABX(2) compounds. *Inorganic Chemistry*, **2010**, 49, 249-60	5.1	5
23	Trigohexagonite. *Journal of Mathematical Chemistry*, **2010**, 48, 816-826	2.1	2
22	Chemical topology of crystalline matter and the transcendental numbers ?, e and *Journal of Mathematical Chemistry*, **2009**, 46, 117-138	2.1	7
21	The squarographites: A lesson in the chemical topology of tessellations in 2- and 3-dimensions. *Solid State Sciences*, **2008**, 10, 1245-1251	3.4	17
20	First-principles studies of diamond polytypes. *Diamond and Related Materials*, **2008**, 17, 356-364	3.5	53
19	Instabilities in cubic diamond under non-hydrostatic compressive stress. *Diamond and Related Materials*, **2008**, 17, 1353-1355	3.5	9

18	New Molecular Descriptors based upon the Euler Equations for Chemical Graphs. *Journal of Mathematical Chemistry*, **2007**, 41, 193-208	2.1	8
17	Some Comments on the Matter Wave-light Wave Hypothesis. *Journal of Mathematical Chemistry*, **2007**, 42, 367-372	2.1	1
16	Some Comments on the Topological Features of Some 3-,4-connected Networks and their Relationships with the Numbers e and *Journal of Mathematical Chemistry*, **2007**, 42, 373-376	2.1	1
15	POTENTIAL UNUSUAL CHEMICAL BONDING IN MIXED METAL STRUCTURES OF THE 3d TRANSITION SERIES CONTAINING THE ELEMENT Ni. *Journal of Theoretical and Computational Chemistry*, **2007**, 06, 165-175	1.8	
14	ON THE STRUCTURE OF i-CARBON. *Journal of Theoretical and Computational Chemistry*, **2006**, 05, 175-185	1.8	13
13	On topological form in structures. *Journal of Mathematical Chemistry*, **2006**, 39, 33-46	2.1	2
12	Dynamic Elasticity of Cubic Diamond. *Journal of Mathematical Chemistry*, **2006**, 40, 341-347	2.1	1
11	Hexagonite: A Hypothetical Organic Zeolite. *Journal of Mathematical Chemistry*, **2006**, 39, 611-628	2.1	6
10	On topological form in structures. *Journal of Mathematical Chemistry*, **2006**, 40, 327-340	2.1	3
9	Electronic structure and bulk modulus of silicon dicarbide: a glitter phase. *Computational and Theoretical Chemistry*, **2005**, 716, 73-78		6
8	Moravia: A 3-, 8-connected cubic structural pattern in space group Pm3m. *Open Chemistry*, **2005**, 3, 169-178	1.3	4
7	Anharmonic compression of the glitter lattice. *Journal of Molecular Modeling*, **2005**, 12, 111-24	2	1
6	Towards a microscopic theory of the modulus of elasticity in crystalline covalent materials and a survey of potential superhard materials. *Journal of Mathematical Chemistry*, **2005**, 38, 27-42	2.1	4
5	Jubilite: A 4-,8-connected Cubic Structural Pattern in Space Group Pm3. *International Journal of Molecular Sciences*, **2005**, 6, 177-187	6.3	6
4	Spiroconjugation in 1-, 2-, and 3-Dimensions: The Foundations of a Spiro Quantum Chemistry. *Journal of Mathematical Chemistry*, **2004**, 36, 381-408	2.1	9
3	Thinking about metal-metal quadruple bonding in extended structures: a hypothetical A2M6E8 network. *New Journal of Chemistry*, **2004**, 28, 185	3.6	3
2	Effects of spiroconjugation in the electronic band structure of glitter. *Carbon*, **1997**, 35, 1-16	10.4	20
1	A Hypothetical Dense 3,4-Connected Carbon Net and Related B2C and CN2 Nets Built from 1,4-Cyclohexadienoid Units. *Journal of the American Chemical Society*, **1994**, 116, 11456-11464	16.4	81