Michael J Bucknum

List of Publications by Year
in descending order

37 papers	342 citations	1039880 9 h-index	839398 18 g-index
39 all docs	39 docs citations	39 times ranked	348 citing authors

#	Article	IF	Citations
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.	6.6	101
2	First-principles studies of diamond polytypes. Diamond and Related Materials, 2008, 17, 356-364.	1.8	61
3	The squarographites: A lesson in the chemical topology of tessellations in 2- and 3-dimensions. Solid State Sciences, 2008, 10, 1245-1251.	1.5	22
4	Effects of spiroconjugation in the electronic band structure of glitter. Carbon, 1997, 35, 1-16.	5.4	20
5	ON THE STRUCTURE OF i-CARBON. Journal of Theoretical and Computational Chemistry, 2006, 05, 175-185.	1.8	15
6	On the n-diamond and i-carbon nanocrystalline forms. Journal of Mathematical Chemistry, 2012, 50, 1034-1038.	0.7	13
7	Spiroconjugation in 1-, 2-, and 3-Dimensions: The Foundations of a Spiro Quantum Chemistry. Journal of Mathematical Chemistry, 2004, 36, 381-408.	0.7	11
8	New Molecular Descriptors based upon the Euler Equations for Chemical Graphs. Journal of Mathematical Chemistry, 2007, 41, 193-208.	0.7	11
9	Chemical topology of crystalline matter and the transcendental numbers Ï•, e and Ï€. Journal of Mathematical Chemistry, 2009, 46, 117-138.	0.7	10
10	Instabilities in cubic diamond under non-hydrostatic compressive stress. Diamond and Related Materials, 2008, 17, 1353-1355.	1.8	9
11	Squaroglitter: A 3,4-Connected Carbon Net. Journal of Chemical Theory and Computation, 2013, 9, 3855-3859.	2.3	8
12	Electronic structure and bulk modulus of silicon dicarbide: a glitter phase. Computational and Theoretical Chemistry, 2005, 716, 73-78.	1.5	7
13	Jubilite: A 4-,8-connected Cubic Structural Pattern in Space Group Pm3. International Journal of Molecular Sciences, 2005, 6, 177-187.	1.8	6
14	Hexagonite: A Hypothetical Organic Zeolite. Journal of Mathematical Chemistry, 2006, 39, 611-628.	0.7	6
15	Playing the Quantum Chemical Slot Machine: An Exploration of ABX₂ Compounds. Inorganic Chemistry, 2010, 49, 249-260.	1.9	6
16	Thinking about metal-metal quadruple bonding in extended structures: a hypothetical A2M6E8 network. New Journal of Chemistry, 2004, 28, 185.	1.4	5
17	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.	0.7	5
18	Moravia: A 3-, 8-connected cubic structural pattern in space group Pm3m. Open Chemistry, 2005, 3, 169-173.	1.0	4

#	Article	IF	Citations
19	Trigohexagonite. Journal of Mathematical Chemistry, 2010, 48, 816-826.	0.7	4
20	On topological form in structures. Journal of Mathematical Chemistry, 2006, 40, 327-340.	0.7	3
21	Isoglitter. Journal of Mathematical Chemistry, 2012, 50, 2281-2290.	0.7	3
22	On topological form in structures. Journal of Mathematical Chemistry, 2006, 39, 33-46.	0.7	2
23	Sommerfeldâ€™s fine structure constant approximated as a series representation in e and $$pi $$ Ï€. Journal of Mathematical Chemistry, 2018, 56, 651-655.	0.7	2
24	High Pressure Synthesis of the Carbon Allotrope Hexagonite with Carbon Nanotubes in a Diamond Anvil Cell. Carbon Materials, 2011, , 79-93.	0.2	2
25	Anharmonic compression of the glitter lattice. Journal of Molecular Modeling, 2005, 12, 111-124.	0.8	1
26	Dynamic Elasticity of Cubic Diamond. Journal of Mathematical Chemistry, 2006, 40, 341-347.	0.7	1
27	Some Comments on the Matter Wave-light Wave Hypothesis. Journal of Mathematical Chemistry, 2007, 42, 367-372.	0.7	1
28	Some Comments on the Topological Features of Some 3-,4-connected Networks and their Relationships with the Numbers e and Ï€. Journal of Mathematical Chemistry, 2007, 42, 373-376.	0.7	1
29	Hypothetical Allotropes of Carbon Built from 1,4-Cyclohexadiene Rings. Nature Precedings, 2008, , .	0.1	1
30	Approximation of the electronâ€“proton mass ratio as a series in powers of $$uppi $$ Ï€. Journal of Mathematical Chemistry, 2018, 56, 1360-1364.	0.7	1
31	Spiroconjugation in 1-, 2-, and 3-Dimensions: The Foundations of a Spiro Quantum Chemistry. ChemInform, 2005, 36, no.	0.1	0
32	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	0
33	Isoglitter. Nature Precedings, 2011, , .	0.1	0
34	Preservation of C hexagons in the transformation of C allotropes. Journal of Mathematical Chemistry, 2014, 52, 2013-2019.	0.7	0
35	On the proposal of an Eddington ratio of natural energies, Îµ. Indian Journal of Physics, 2021, 95, 911-914.	0.9	0
36	Classification of Carbon Allotropes and Graphs. , 2013, , 57-88.		0

#	Article	IF	Citations
37	Spiro Quantum Chemistry. , 2013, , 1-35.		0