

# Valeriu Mereacre

## List of Publications by Year in descending order

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74  
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147566

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77  
docs citations

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2062  
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#	ARTICLE	IF	CITATIONS
1	Heterometallic [Mn <sup>5</sup> Ln <sup>4</sup> ] Single-Molecule Magnets with High Anisotropy Barriers. <i>Chemistry - A European Journal</i> , 2008, 14, 3577-3584.	1.7	261
2	A Heterometallic Fe <sup>II</sup> -Dy <sup>III</sup> Single-Molecule Magnet with a Record Anisotropy Barrier. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 12966-12970.	7.2	235
3	A [Mn <sup>18</sup> Dy] SMM resulting from the targeted replacement of the central Mn <sup>II</sup> in the S = 83/2 [Mn <sup>19</sup> ]-aggregate with Dy <sup>III</sup> . <i>Chemical Communications</i> , 2009, , 544-546.	2.2	186
4	Combined Magnetic Susceptibility Measurements and <sup>57</sup> Fe Mössbauer Spectroscopy on a Ferromagnetic {Fe <sup>III</sup> <sub>4</sub> Dy <sub>4</sub> } Ring. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 5185-5188.	7.2	123
5	Magnetic and <sup>57</sup> Fe Mössbauer Study of the Single Molecule Magnet Behavior of a Dy <sub>3</sub> Fe <sub>7</sub> Coordination Cluster. <i>Inorganic Chemistry</i> , 2009, 48, 9345-9355.	1.9	96
6	Probing Lanthanide Anisotropy in Fe-Ln Aggregates by Using Magnetic Susceptibility Measurements and <sup>57</sup> Fe Mössbauer Spectroscopy. <i>Chemistry - A European Journal</i> , 2009, 15, 7278-7282.	1.7	95
7	Odd-Numbered Fe <sup>III</sup> Complexes: Synthesis, Molecular Structure, Reactivity, and Magnetic Properties. <i>Inorganic Chemistry</i> , 2007, 46, 756-766.	1.9	94
8	Heterometallic 20-membered {Fe <sub>16</sub> Ln <sub>4</sub> } (Ln = Sm, Eu, Gd, Tb, Dy, Ho) metallo-ring aggregates. <i>Dalton Transactions</i> , 2011, 40, 4080.	1.6	84
9	Family of Heterometallic Semicircular Mn <sup>III</sup> <sub>2</sub> Ln <sup>III</sup> <sub>3</sub> Strands. <i>Inorganic Chemistry</i> , 2009, 48, 3502-3504.	1.9	83
10	Effect of Ligand Substitution on the Interaction Between Anisotropic Dy(III) Ions and <sup>57</sup> Fe Nuclei in Fe <sub>2</sub> Dy <sub>2</sub> Coordination Clusters. <i>Journal of the American Chemical Society</i> , 2011, 133, 15335-15337.	6.6	80
11	Structures and magnetic properties of Mn <sup>III</sup> <sub>4</sub> Ln <sup>III</sup> <sub>4</sub> aggregates with a square-in-square topology. <i>Dalton Transactions</i> , 2010, 39, 4918.	1.6	78
12	Family of Mn <sup>III</sup> <sub>2</sub> Ln <sub>2</sub> (¼ <sub>4</sub> -O) Compounds: Syntheses, Structures, and Magnetic Properties. <i>Inorganic Chemistry</i> , 2010, 49, 5293-5302.	1.9	72
13	Homo- and Heterovalent Polynuclear Cerium and Cerium/Manganese Aggregates. <i>Helvetica Chimica Acta</i> , 2009, 92, 2507-2524.	1.0	71
14	Tridecanuclear [Mn <sup>III</sup> <sub>5</sub> Ln <sup>III</sup> <sub>8</sub> ] Complexes Derived from N-t-butyl-diethanolamine: Synthesis, Structures, and Magnetic Properties. <i>Inorganic Chemistry</i> , 2009, 48, 6713-6723.	1.9	71
15	Effect of Ligand Field Tuning on the SMM Behavior for Three Related Alkoxide-Bridged Dysprosium Dimers. <i>Inorganic Chemistry</i> , 2016, 55, 68-74.	1.9	70
16	High-nuclearity 3d-4f [Fe <sup>III</sup> <sub>5</sub> Ln <sup>III</sup> <sub>8</sub> ] complexes: synthesis, structure and magnetic properties. <i>Dalton Transactions</i> , 2007, , 5245.	1.6	65
17	Synthesis, structures and magnetic properties of heterometallic tetranuclear complexes. <i>Polyhedron</i> , 2009, 28, 1698-1703.	1.0	64
18	Unprecedented chemical transformation: crystallographic evidence for 1,1,2,2-tetrahydroxyethane captured within an Fe <sub>6</sub> Dy <sub>3</sub> single molecule magnet. <i>Chemical Communications</i> , 2013, 49, 1696.	2.2	62

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19	Magnetic coordination clusters and networks: synthesis and topological description. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 1509-1536.	1.6	61
20	Ferromagnetic heteronuclear {Fe <sub>4</sub> (Er,Lu) <sub>2</sub> } cyclic coordination clusters based on ferric wheels. Chemical Communications, 2012, 48, 9825.	2.2	56
21	Magnetic anisotropy of a Co <sup>II</sup> single ion magnet with distorted trigonal prismatic coordination: theory and experiment. Physical Chemistry Chemical Physics, 2016, 18, 30135-30143.	1.3	56
22	An octanuclear {Cu <sub>4</sub> Dy <sub>4</sub> } coordination cluster showing single molecule magnet behaviour from field accessible states. Chemical Communications, 2014, 50, 1882.	2.2	54
23	Magnetic anisotropy and exchange coupling in a family of isostructural Fe <sup>III</sup> Ln <sup>III</sup> complexes. Dalton Transactions, 2013, 42, 8926.	1.6	53
24	Mechanism of magnetisation relaxation in {M <sup>III</sup> 2Dy <sup>III</sup> 2} (M = Cr, Mn, Fe, Al) "butterfly" complexes: how important are the transition metal ions here?. Chemical Science, 2019, 10, 5528-5538.	3.7	50
25	Antiferromagnetically Coupled Iron Ions in a Polynuclear Fe <sup>III</sup> -Dy Complex: Confirmation by Variable-Field <sup>57</sup> Fe Mössbauer Spectroscopy. Chemistry - A European Journal, 2011, 17, 123-128.	1.7	49
26	Para versus meta ligand substituents as a means of directing magnetic anisotropy in Fe <sub>2</sub> Dy <sub>2</sub> coordination clusters. Chemical Communications, 2013, 49, 9666.	2.2	41
27	A Three-Pronged Attack To Investigate the Electronic Structure of a Family of Ferromagnetic Fe <sub>4</sub> Ln <sub>2</sub> Cyclic Coordination Clusters: A Combined Magnetic Susceptibility, High-Field/High-Frequency Electron Paramagnetic Resonance, and <sup>57</sup> Fe Mössbauer Study. Inorganic Chemistry, 2017, 56, 4796-4806.	1.9	41
28	The role of coordinated solvent on Co(II) ions in tuning the single molecule magnet properties in a {Co <sub>2</sub> Dy <sub>2</sub> } system. Dalton Transactions, 2017, 46, 5337-5343.	1.6	40
29	Contribution of Spin and Anisotropy to Single Molecule Magnet Behavior in a Family of Bell-Shaped Mn <sub>11</sub> Ln <sub>2</sub> Coordination Clusters. Inorganic Chemistry, 2011, 50, 12001-12009.	1.9	39
30	Synthesis, structure and magnetic properties of unsymmetrical dodecanuclear Mn <sup>II</sup> -Ln clusters. Polyhedron, 2008, 27, 2459-2463.	1.0	36
31	Field-Induced Co(II) Single-Ion Magnets with mer-Directing Ligands but Ambiguous Coordination Geometry. Inorganic Chemistry, 2017, 56, 6056-6066.	1.9	35
32	Structure and magnetic properties of hexanuclear 3d <sup>4f</sup> clusters with {Mn <sup>III</sup> 2Ln <sup>III</sup> 4} (Ln=Sm, Eu, Gd). Dalton Transactions, 2010, 39, 10000-10000.	1.8	33
33	Electrochemical insertion of Li into nanocrystalline MnFe <sub>2</sub> O <sub>4</sub> : a study of the reaction mechanism. RSC Advances, 2013, 3, 23001.	1.7	32
34	Developing a "Highway Code" To Steer the Structural and Electronic Properties of Fe <sup>III</sup> /Dy <sup>III</sup> Coordination Clusters. Inorganic Chemistry, 2015, 54, 3218-3227.	1.9	32
35	Synthesis, Magnetism, and <sup>57</sup> Fe Mössbauer Spectroscopic Study of a Family of [Ln <sub>3</sub> Fe <sub>7</sub> ] Coordination Clusters (Ln = Gd, Tb, and Er). Inorganic Chemistry, 2013, 52, 11767-11777.	1.9	30
36	Is there a universal reaction mechanism of Li insertion into oxidic spinels: a case study using MgFe <sub>2</sub> O <sub>4</sub> . Journal of Materials Chemistry A, 2015, 3, 1549-1561.	5.2	30

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37	The first specimen of tetranuclear (Fe III , Ln III ) clusters assembled by carboxylate ligands: synthesis, structure, Mössbauer spectra, and magnetic properties of [Fe <sub>3</sub> EuO <sub>2</sub> (CCl <sub>3</sub> COO) <sub>8</sub> H <sub>2</sub> O(THF) <sub>3</sub> ] · THF. Inorganic Chemistry Communication, 2004, 7, 576-579.	1.8	29
38	Tetradecanuclear Iron(III)-Oxo Nanoclusters Stabilized by Trilacunary Heteropolyanions. Inorganic Chemistry, 2015, 54, 6136-6146.	1.9	29
39	A single molecule magnet to single molecule magnet transformation via a solvothermal process: Fe <sub>4</sub> Dy <sub>2</sub> · Fe <sub>6</sub> Dy <sub>3</sub> . Dalton Transactions, 2016, 45, 98-106.	1.6	29
40	Systematic studies of hexanuclear {M <sub>4</sub> Ln <sub>2</sub> } complexes (M = Fe, Ga; Ln = Er, Ho): structures, magnetic properties and SMM behavior. Inorganic Chemistry Frontiers, 2017, 4, 927-934.	3.0	28
41	Spin Helicity in Chiral Lanthanide Chains. Inorganic Chemistry, 2016, 55, 10068-10074.	1.9	25
42	A New Hexaferrocene Complex with a [M <sub>3</sub> (μ <sub>3</sub> -O)] <sup>7+</sup> Core. Inorganic Chemistry, 2006, 45, 10443-10445.	1.9	24
43	Multiple superhyperfine fields in a {DyFe <sub>2</sub> Dy} coordination cluster revealed using bulk susceptibility and <sup>57</sup> Fe Mössbauer studies. Physical Chemistry Chemical Physics, 2016, 18, 21469-21480.	1.3	23
44	Targeted replacement: systematic studies of dodecanuclear {M <sub>6</sub> Ln <sub>6</sub> } coordination clusters (M = Cr, Tj ETQq0 Q 0 rgBT /Overlock 10	1.6	23
45	Direct observation of the role of lanthanides in stabilizing a ferromagnetic spin orientation in a weak Fe <sup>II</sup> –Fe <sup>III</sup> antiferromagnet. Chemical Communications, 2013, 49, 7385.	2.2	22
46	The synthesis, structural characterization, magnetochemistry and Mössbauer spectroscopy of [Fe <sub>3</sub> LnO <sub>2</sub> (CCl <sub>3</sub> COO) <sub>8</sub> H <sub>2</sub> O(THF) <sub>3</sub> ] (Ln=Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Lu and Y). Polyhedron, 2009, 28, 3017-3025.	1.0	21
47	One-pot synthesis of an unusual manganese–lanthanide–ferrocene cluster: A combination of d-, f-metals and an organometallic fragment. Polyhedron, 2010, 29, 244-247.	1.0	21
48	First heterometallic Ga <sup>III</sup> –Dy <sup>III</sup> single-molecule magnets: implication of Ga <sup>III</sup> in extracting Fe–Dy interaction. Dalton Transactions, 2016, 45, 9336-9344.	1.6	21
49	Evidence of slow relaxation of magnetization in dysprosium-based ionic liquids. Chemical Communications, 2013, 49, 9215.	2.2	20
50	Homometallic Fe <sup>III</sup> <sub>4</sub> and Heterometallic {Fe <sup>III</sup> <sub>4</sub> Ln <sup>III</sup> <sub>2</sub> } (Ln = Dy, Tb) Complexes – Syntheses, Structures, and Magnetic Properties. European Journal of Inorganic Chemistry, 2015, 2015, 156-165.	1.0	19
51	Spin relaxation in antiferromagnetic Fe–Fe dimers slowed down by anisotropic Dy <sup>III</sup> ions. Beilstein Journal of Nanotechnology, 2013, 4, 807-814.	1.5	18
52	Squashed {Fe <sub>2</sub> Ln <sub>4</sub> M <sub>4</sub> } octahedra (M = Y, Gd, Dy) from the first use of the cyanoacetate ligand in 3d/4f coordination chemistry. RSC Advances, 2015, 5, 10763-10767.	1.7	17
53	Influence of lanthanides on spin-relaxation and spin-structure in a family of Fe <sub>7</sub> Ln <sub>4</sub> single molecule magnets. Journal of Materials Chemistry C, 2018, 6, 2862-2872.	2.7	16
54	Differentiation of Highly Anisotropic Tb <sup>III</sup> and Dy <sup>III</sup> with <sup>57</sup> Fe Mössbauer Spectroscopy. Angewandte Chemie - International Edition, 2012, 51, 9922-9925.	7.2	15

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55	A Strongly Spin-Frustrated Fe <sup>III</sup> <sub>7</sub> Complex with a Canted Intermediate Spin Ground State of $S = 7/2$ or $9/2$ . Chemistry - A European Journal, 2015, 21, 10835-10842.	1.7	15
56	Tetradecanuclear lanthanide-vanadium "nanochocolates" catalytically-active cationic heteropolyoxovanadium clusters. RSC Advances, 2013, 3, 6299.	1.7	14
57	New penta-nuclear and hepta-nuclear iron(II, III) complexes with ferrocenedicarboxylic acid. Polyhedron, 2009, 28, 3551-3555.	1.0	13
58	Butterfly M <sub>2</sub> <sup>III</sup> Er <sub>2</sub> (M <sup>III</sup> = Fe and Al) SMMs: Synthesis, Characterization, and Magnetic Properties. ACS Omega, 2018, 3, 6360-6368.	1.6	13
59	Enhancing the Stability of LiNi <sub>0.5</sub> Mn <sub>1.5</sub> O <sub>4</sub> by Coating with LiNbO <sub>3</sub> Solid-State Electrolyte: Novel Chemically Activated Coating Process versus Sol-Gel Method. Nanomaterials, 2021, 11, 548.	1.9	13
60	Instantaneous Surface Li <sub>3</sub> PO <sub>4</sub> Coating and Al-Ti Doping and Their Effect on the Performance of LiNi <sub>0.5</sub> Mn <sub>1.5</sub> O <sub>4</sub> Cathode Materials. ACS Applied Energy Materials, 2021, 4, 4271-4276.	2.5	12
61	Observation of electrochemically active Fe <sup>3+</sup> /Fe <sup>4+</sup> in LiCo <sub>0.8</sub> Fe <sub>0.2</sub> MnO <sub>4</sub> by <i>in situ</i> Mössbauer spectroscopy and X-ray absorption spectroscopy. Physical Chemistry Chemical Physics, 2019, 21, 89-95.	1.3	11
62	Magnetic Titanium-Pillared Clays (Ti-M-PILC): Magnetic Studies and Mössbauer Spectroscopy. Clays and Clay Minerals, 2009, 57, 433-443.	0.6	8
63	Enhancement of Spin Relaxation in an FeDy <sub>2</sub> Fe Coordination Cluster by Magnetic Fields. Chemistry - A European Journal, 2014, 20, 12381-12384.	1.7	8
64	Self-assembly of 3d-4f "square-in-square" coordination clusters based on substituted diethanolamine ligands. Inorganica Chimica Acta, 2016, 451, 52-58.	1.2	7
65	Improved performance of high-voltage Li-ion batteries using a novel chemically activated coating process. Materials Research Bulletin, 2021, 134, 111095.	2.7	7
66	Assisted Self-Assembly to Target Heterometallic Mn-Nd and Mn-Sm SMMs: Synthesis and Magnetic Characterisation of [Mn <sub>7</sub> Ln <sub>3</sub> (O) <sub>4</sub> (OH) <sub>4</sub> (mdea) <sub>3</sub> (piv) <sub>9</sub> (NO <sub>3</sub> ) <sub>3</sub> ] <sup>+</sup> (Ln=Nd, Sm, Eu, Gd)**. Chemistry - A European Journal, 2021, 27, 15096-15102.	1.7	7
67	Synthesis, structures and magnetic properties of linear {CoII <sub>2</sub> LnIII <sub>2</sub> } coordination clusters. New Journal of Chemistry, 2018, 42, 1284-1289.	1.4	6
68	Tuning of Hula-Hoop Coordination Geometry in a Dy Dimer. Inorganics, 2016, 4, 2.	1.2	5
69	Unusual metal-ligand charge transfer in ferrocene functionalized <sup>1/3</sup> -O iron carboxylates observed with Mössbauer spectroscopy. Journal of Magnetism and Magnetic Materials, 2016, 407, 87-91.	1.0	5
70	A temperature induced ferrocene-ferrocenium interconversion in a ferrocene functionalized <sup>1/3</sup> -O chromium carboxylate. Journal of Magnetism and Magnetic Materials, 2015, 381, 478-480.	1.0	4
71	Butterfly-shaped, heterometallic, hexanuclear, [FeIII <sub>2</sub> LnIII <sub>4</sub> ] (LnIII = GdIII, TbIII, DyIII and HoIII) Complexes: Syntheses, structure and magnetism. Inorganica Chimica Acta, 2019, 486, 458-467.	1.2	4
72	Magnetic chains of Fe <sub>3</sub> clusters in the {Fe <sub>3</sub> YO <sub>2</sub> } butterfly molecular compound. Dalton Transactions, 2020, 49, 2979-2988.	1.6	2

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73	Synthesis, structures, and magnetic properties of Fe <sub>4</sub> -Ln <sub>2</sub> (Ln = Tb, Ho, and Er) clusters with N, N'-tetrakis-(2-hydroxyethyl)ethylenediamine. <i>Inorganica Chimica Acta</i> , 2022, 537, 120920.	1.2	2
74	Strong-Acid-Catalyzed Formation of Crystalline LiNbO <sub>3</sub> at Low Ambient Temperatures. <i>Inorganic Chemistry</i> , 2022, , .	1.9	2