

# Valeriu Mereacre

## List of Publications by Year in descending order

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74  
papers

3,242  
citations

147566

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77  
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77  
docs citations

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times ranked

2062  
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis, structures, and magnetic properties of Fe <sub>4</sub> Ln <sub>2</sub> (Ln = Tb, Ho, and Er) clusters with N <sub>2</sub> , N <sub>2</sub> , N <sub>2</sub> , N <sub>2</sub> -tetrakis-(2-hydroxyethyl)ethylenediamine. <i>Inorganica Chimica Acta</i> , 2022, 537, 120920.	1.2	2
2	Strong-Acid-Catalyzed Formation of Crystalline LiNbO <sub>3</sub> at Low Ambient Temperatures. <i>Inorganic Chemistry</i> , 2022, , .	1.9	2
3	Improved performance of high-voltage Li-ion batteries using a novel chemically activated coating process. <i>Materials Research Bulletin</i> , 2021, 134, 111095.	2.7	7
4	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. <i>Nanomaterials</i> , 2021, 11, 548.	1.9	13
5	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. <i>ACS Applied Energy Materials</i> , 2021, 4, 4271-4276.	2.5	12
6	Assisted Self-Assembly to Target Heterometallic Mn <sub>4</sub> and Mn <sub>6</sub> 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> ] <sub>n</sub> (Ln = Nd, Sm, Eu, Gd)**. <i>Chemistry - A European Journal</i> , 2021, 27, 15096-15102.	1.7	7
7	Magnetic chains of Fe <sub>3</sub> clusters in the {Fe <sub>3</sub> YO <sub>2</sub> } butterfly molecular compound. <i>Dalton Transactions</i> , 2020, 49, 2979-2988.	1.6	2
8	Butterfly-shaped, heterometallic, hexanuclear, [Fe <sub>3</sub> Ln <sub>3</sub> ] (Ln = Gd, Tb, Dy and Ho) Complexes: Syntheses, structure and magnetism. <i>Inorganica Chimica Acta</i> , 2019, 486, 458-467.	1.2	4
9	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. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 89-95.	1.3	11
10	Mechanism of magnetisation relaxation in {M <sub>3</sub> Dy <sub>2</sub> } (M = Cr, Mn, Fe, Al) butterfly complexes: how important are the transition metal ions here?. <i>Chemical Science</i> , 2019, 10, 5528-5538.	3.7	50
11	Influence of lanthanides on spin-relaxation and spin-structure in a family of Fe <sub>7</sub> Ln <sub>4</sub> single molecule magnets. <i>Journal of Materials Chemistry C</i> , 2018, 6, 2862-2872.	2.7	16
12	Targeted replacement: systematic studies of dodecanuclear {M <sub>6</sub> Ln <sub>6</sub> } coordination clusters (M = Cr, Tj ETQq0 Q 0 0 rgBT / Overlock 10	1.6	23
13	Synthesis, structures and magnetic properties of linear {Co <sub>2</sub> Ln <sub>2</sub> } coordination clusters. <i>New Journal of Chemistry</i> , 2018, 42, 1284-1289.	1.4	6
14	Butterfly M <sub>2</sub> Er <sub>2</sub> (M <sup>III</sup> = Fe and Al) SMMs: Synthesis, Characterization, and Magnetic Properties. <i>ACS Omega</i> , 2018, 3, 6360-6368.	1.6	13
15	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. <i>Inorganic Chemistry</i> , 2017, 56, 4796-4806.	1.9	41
16	Field-Induced Co(II) Single-Ion Magnets with <i>mer</i> -Directing Ligands but Ambiguous Coordination Geometry. <i>Inorganic Chemistry</i> , 2017, 56, 6056-6066.	1.9	35
17	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. <i>Inorganic Chemistry Frontiers</i> , 2017, 4, 927-934.	3.0	28
18	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. <i>Dalton Transactions</i> , 2017, 46, 5337-5343.	1.6	40

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19	Tuning of Hula-Hoop Coordination Geometry in a Dy Dimer. <i>Inorganics</i> , 2016, 4, 2.	1.2	5
20	Self-assembly of 3d-4f $\text{Å}^2$ coordination clusters based on substituted diethanolamine ligands. <i>Inorganica Chimica Acta</i> , 2016, 451, 52-58.	1.2	7
21	First heterometallic $\text{Ga}^{\text{III}}$ $\text{Å}^2$ $\text{Dy}^{\text{III}}$ single-molecule magnets: implication of $\text{Ga}^{\text{III}}$ in extracting $\text{Fe}^{\text{II}}$ $\text{Dy}^{\text{III}}$ interaction. <i>Dalton Transactions</i> , 2016, 45, 9336-9344.	1.6	21
22	Magnetic anisotropy of a $\text{Co}^{\text{II}}$ single ion magnet with distorted trigonal prismatic coordination: theory and experiment. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 30135-30143.	1.3	56
23	Multiple superhyperfine fields in a $\{\text{DyFe}_2\text{Dy}\}$ coordination cluster revealed using bulk susceptibility and $^{57}\text{Fe}$ Mössbauer studies. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 21469-21480.	1.3	23
24	Spin Helicity in Chiral Lanthanide Chains. <i>Inorganic Chemistry</i> , 2016, 55, 10068-10074.	1.9	25
25	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
26	Unusual metal-ligand charge transfer in ferrocene functionalized $\text{Å}^3$ -O iron carboxylates observed with Mössbauer spectroscopy. <i>Journal of Magnetism and Magnetic Materials</i> , 2016, 407, 87-91.	1.0	5
27	A single molecule magnet to single molecule magnet transformation via a solvothermal process: $\text{Fe}_4\text{Dy}_2 \text{ Å}^2 \text{ Fe}_6\text{Dy}_3$ . <i>Dalton Transactions</i> , 2016, 45, 98-106.	1.6	29
28	A Strongly Spin-Frustrated $\text{Fe}^{\text{III}}$ <sub>7</sub> Complex with a Canted Intermediate Spin Ground State of $S = 7/2$ or $9/2$ . <i>Chemistry - A European Journal</i> , 2015, 21, 10835-10842.	1.7	15
29	Tetradecanuclear Iron(III)-Oxo Nanoclusters Stabilized by Trilacunary Heteropolyanions. <i>Inorganic Chemistry</i> , 2015, 54, 6136-6146.	1.9	29
30	A temperature induced ferrocene $\text{Å}^2$ ferrocenium interconversion in a ferrocene functionalized $\text{Å}^3$ -O chromium carboxylate. <i>Journal of Magnetism and Magnetic Materials</i> , 2015, 381, 478-480.	1.0	4
31	Squashed $\{\text{Fe}_2\text{M}_4\text{Å}^2\}$ octahedra (M = Y, Gd, Dy) from the first use of the cyanoacetate ligand in 3d/4f coordination chemistry. <i>RSC Advances</i> , 2015, 5, 10763-10767.	1.7	17
32	Developing a $\text{Å}^2$ Highway Code To Steer the Structural and Electronic Properties of $\text{Fe}^{\text{III}}$ / $\text{Dy}^{\text{III}}$ Coordination Clusters. <i>Inorganic Chemistry</i> , 2015, 54, 3218-3227.	1.9	32
33	Homometallic $\text{Fe}^{\text{III}}$ <sub>4</sub> and Heterometallic $\{\text{Fe}^{\text{III}}$ <sub>4</sub> $\text{Ln}^{\text{III}}$ <sub>2</sub> $\}$ (Ln = Dy, Tb) Complexes $\text{Å}^2$ Syntheses, Structures, and Magnetic Properties. <i>European Journal of Inorganic Chemistry</i> , 2015, 2015, 156-165.	1.0	19
34	Is there a universal reaction mechanism of Li insertion into oxidic spinels: a case study using $\text{MgFe}_2\text{O}_4$ . <i>Journal of Materials Chemistry A</i> , 2015, 3, 1549-1561.	5.2	30
35	An octanuclear $\{\text{Cu}4\text{Dy}4\}$ coordination cluster showing single molecule magnet behaviour from field accessible states. <i>Chemical Communications</i> , 2014, 50, 1882.	2.2	54
36	Enhancement of Spin Relaxation in an $\text{FeDy}_2\text{Fe}$ Coordination Cluster by Magnetic Fields. <i>Chemistry - A European Journal</i> , 2014, 20, 12381-12384.	1.7	8

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37	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
38	Evidence of slow relaxation of magnetization in dysprosium-based ionic liquids. <i>Chemical Communications</i> , 2013, 49, 9215.	2.2	20
39	Para versus meta ligand substituents as a means of directing magnetic anisotropy in Fe <sub>2</sub> Dy <sub>2</sub> coordination clusters. <i>Chemical Communications</i> , 2013, 49, 9666.	2.2	41
40	Electrochemical insertion of Li into nanocrystalline MnFe <sub>2</sub> O <sub>4</sub> : a study of the reaction mechanism. <i>RSC Advances</i> , 2013, 3, 23001.	1.7	32
41	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
42	Magnetic anisotropy and exchange coupling in a family of isostructural Fe <sub>III</sub> Ln <sub>III</sub> complexes. <i>Dalton Transactions</i> , 2013, 42, 8926.	1.6	53
43	Tetradecanuclear lanthanide-vanadium “nanochocolates” catalytically-active cationic heteropolyoxovanadium clusters. <i>RSC Advances</i> , 2013, 3, 6299.	1.7	14
44	Direct observation of the role of lanthanides in stabilizing a ferromagnetic spin orientation in a weak Fe <sub>III</sub> –Fe <sub>III</sub> antiferromagnet. <i>Chemical Communications</i> , 2013, 49, 7385.	2.2	22
45	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). <i>Inorganic Chemistry</i> , 2013, 52, 11767-11777.	1.9	30
46	Spin relaxation in antiferromagnetic Fe–Fe dimers slowed down by anisotropic Dy <sup>III</sup> ions. <i>Beilstein Journal of Nanotechnology</i> , 2013, 4, 807-814.	1.5	18
47	Differentiation of Highly Anisotropic Tb <sup>III</sup> and Dy <sup>III</sup> with <sup>57</sup> Fe Mössbauer Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 9922-9925.	7.2	15
48	Ferromagnetic heteronuclear {Fe <sub>4</sub> (Er,Lu) <sub>2</sub> } cyclic coordination clusters based on ferric wheels. <i>Chemical Communications</i> , 2012, 48, 9825.	2.2	56
49	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. <i>Inorganic Chemistry</i> , 2011, 50, 12001-12009.	1.9	39
50	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
51	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
52	Structure and magnetic properties of hexanuclear 3d–4f clusters with {Mn <sub>III</sub> 2Ln <sub>III</sub> 4} (Ln=Sm, Eu, Gd, Tb, Dy, Ho). <i>Journal of the American Chemical Society</i> , 2010, 132, 10000-10000.	1.8	33
53	Antiferromagnetically Coupled Iron Ions in a Polynuclear Fe <sup>III</sup> –Dy Complex: Confirmation by Variable-Field <sup>57</sup> Fe Mössbauer Spectroscopy. <i>Chemistry - A European Journal</i> , 2011, 17, 123-128.	1.7	49
54	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

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55	One-pot synthesis of an unusual manganese-“lanthanide”ferrocene cluster: A combination of d-, f-metals and an organometallic fragment. <i>Polyhedron</i> , 2010, 29, 244-247.	1.0	21
56	Family of Mn <sup>III</sup> <sub>2</sub> Ln <sub>2</sub> ( <sup>1</sup> / <sub>4</sub> -O) Compounds: Syntheses, Structures, and Magnetic Properties. <i>Inorganic Chemistry</i> , 2010, 49, 5293-5302.	1.9	72
57	Magnetic coordination clusters and networks: synthesis and topological description. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2010, 368, 1509-1536.	1.6	61
58	Structures and magnetic properties of Mn <sup>III</sup> Ln <sup>III</sup> 4 aggregates with a “square-in-square” topology. <i>Dalton Transactions</i> , 2010, 39, 4918.	1.6	78
59	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
60	Homo- and Heterovalent Polynuclear Cerium and Cerium/Manganese Aggregates. <i>Helvetica Chimica Acta</i> , 2009, 92, 2507-2524.	1.0	71
61	Synthesis, structures and magnetic properties of heterometallic tetranuclear complexes. <i>Polyhedron</i> , 2009, 28, 1698-1703.	1.0	64
62	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). <i>Polyhedron</i> , 2009, 28, 3017-3025.	1.0	21
63	New penta-nuclear and hepta-nuclear iron(II, III) complexes with ferrocenedicarboxylic acid. <i>Polyhedron</i> , 2009, 28, 3551-3555.	1.0	13
64	Magnetic Titanium-Pillared Clays (Ti-M-PILC): Magnetic Studies and Mössbauer Spectroscopy. <i>Clays and Clay Minerals</i> , 2009, 57, 433-443.	0.6	8
65	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
66	A [Mn <sub>18</sub> Dy] SMM resulting from the targeted replacement of the central Mn <sup>II</sup> in the S = 83/2 [Mn <sub>19</sub> ]-aggregate with Dy <sup>III</sup> . <i>Chemical Communications</i> , 2009, , 544-546.	2.2	186
67	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
68	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
69	Heterometallic [Mn <sub>5</sub> Ln <sub>4</sub> ] Single-Molecule Magnets with High Anisotropy Barriers. <i>Chemistry - A European Journal</i> , 2008, 14, 3577-3584.	1.7	261
70	Synthesis, structure and magnetic properties of unsymmetrical dodecanuclear Mn-“Ln clusters. <i>Polyhedron</i> , 2008, 27, 2459-2463.	1.0	36
71	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
72	High-nuclearity 3d-“4f [Fe <sup>III</sup> Ln <sup>III</sup> 8] complexes: synthesis, structure and magnetic properties. <i>Dalton Transactions</i> , 2007, , 5245.	1.6	65

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73	A New Hexaferrocene Complex with a $[M_3(\mu_3-O)]_7+$ Core. <i>Inorganic Chemistry</i> , 2006, 45, 10443-10445.	1.9	24
74	The first specimen of tetranuclear (Fe III , Ln III ) clusters assembled by carboxylate ligands: synthesis, structure, Mössbauer spectra, and magnetic properties of $[Fe_3 EuO_2 (C(COO)_3)_8 H_2 O(THF)_3 ] \cdot THF$ . <i>Inorganic Chemistry Communication</i> , 2004, 7, 576-579.	1.8	29