Gonzalo AbellÃ;n

List of Publications by Year in descending order

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94 papers

4,743 citations

34 h-index 98622 67 g-index

109 all docs $\begin{array}{c} 109 \\ \\ \text{docs citations} \end{array}$

109 times ranked 6641 citing authors

#	Article	IF	CITATIONS
1	Room temperature synthesis of two-dimensional multilayer magnets based on α-CoII layered hydroxides. Nano Materials Science, 2022, 4, 36-43.	3.9	14
2	Influence of Fe-clustering on the water oxidation performance of two-dimensional layered double hydroxides. Dalton Transactions, 2022, 51, 4675-4684.	1.6	7
3	Atomically resolved TEM imaging of covalently functionalised graphene. Npj 2D Materials and Applications, 2022, 6, .	3.9	3
4	The Missing Link in the Magnetism of Hybrid Cobalt Layered Hydroxides: The Odd–Even Effect of the Organic Spacer. Chemistry - A European Journal, 2021, 27, 921-927.	1.7	10
5	Interface Amorphization of Twoâ€Dimensional Black Phosphorus upon Treatment with Diazonium Salts. Chemistry - A European Journal, 2021, 27, 3361-3366.	1.7	15
6	Exfoliation of Alphaâ€Germanium: A Covalent Diamondâ€Like Structure. Advanced Materials, 2021, 33, e2006826.	11.1	27
7	Controlling the Formation of Sodium/Black Phosphorus IntercalationCompounds Towards High Sodium Content. Batteries and Supercaps, 2021, 4, 1304-1309.	2.4	3
8	Continuousâ€Flow Synthesis of Highâ€Quality Fewâ€Layer Antimonene Hexagons. Advanced Functional Materials, 2021, 31, 2101616.	7.8	8
9	Acid Catalysis with Alkane/Water Microdroplets in Ionic Liquids. Jacs Au, 2021, 1, 786-794.	3.6	12
10	Improving the onset potential and Tafel slope determination of earth-abundant water oxidation electrocatalysts. Electrochimica Acta, 2021, 388, 138613.	2.6	30
11	Covalent and non-covalent chemistry of 2D black phosphorus. RSC Advances, 2021, 11, 26093-26101.	1.7	8
12	Phonon properties and photo-thermal oxidation of micromechanically exfoliated antimonene nanosheets. 2D Materials, 2021, 8, 015018.	2.0	17
13	Ruddlesdenâ€Popper hybrid lead bromide perovskite nanosheets of phase pure n = 2: stabilized colloids stored in the solid state. Angewandte Chemie, 2021, 133, 27518.	1.6	1
14	Carbon Nano-onions: Potassium Intercalation and Reductive Covalent Functionalization. Journal of the American Chemical Society, 2021, 143, 18997-19007.	6.6	15
15	Ruddlesden–Popper Hybrid Lead Bromide Perovskite Nanosheets of Phase Pure <i>n</i> =2: Stabilized Colloids Stored in the Solid State. Angewandte Chemie - International Edition, 2021, 60, 27312-27317.	7.2	8
16	Layered double hydroxide nanocomposites based on carbon nanoforms., 2020,, 411-460.		5
17	Noncovalent Functionalization and Passivation of Black Phosphorus with Optimized Perylene Diimides for Hybrid Field Effect Transistors. Advanced Materials Interfaces, 2020, 7, 2001290.	1.9	19
18	Quantifying the Covalent Functionalization of Black Phosphorus. Angewandte Chemie - International Edition, 2020, 59, 20230-20234.	7.2	25

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19	Quantifizierung der kovalenten Funktionalisierung von schwarzem Phosphor. Angewandte Chemie, 2020, 132, 20406-20411.	1.6	3
20	The Role of Covalent Functionalization in the Thermal Stability and Decomposition of Hybrid Layered Hydroxides. Physica Status Solidi - Rapid Research Letters, 2020, 14, 2000380.	1.2	9
21	Innenrýcktitelbild: Rational Chemical Multifunctionalization of Graphene Interface Enhances Targeted Cancer Therapy (Angew. Chem. 33/2020). Angewandte Chemie, 2020, 132, 14267-14267.	1.6	O
22	Organic Field Effect Transistors: Noncovalent Functionalization and Passivation of Black Phosphorus with Optimized Perylene Diimides for Hybrid Field Effect Transistors (Adv. Mater.) Tj ETQq0 0 0 rgE	вт /Ом .e rloch	≀ 1@Tf 50 617
23	Two-Dimensional Antimony Oxide. Physical Review Letters, 2020, 124, 126101.	2.9	22
24	Unveiling the oxidation behavior of liquid-phase exfoliated antimony nanosheets. 2D Materials, 2020, 7, 025039.	2.0	33
25	Fundamental Insights into the Covalent Silane Functionalization of NiFe Layered Double Hydroxides. Chemistry - A European Journal, 2020, 26, 6504-6517.	1.7	12
26	Fewâ€layer Black Phosphorous Catalyzes Radical Additions to Alkenes Faster than Lowâ€valence Metals. ChemCatChem, 2020, 12, 2226-2232.	1.8	14
27	Boosting the Supercapacitive Behavior of CoAl Layered Double Hydroxides via Tuning the Metal Composition and Interlayer Space. Batteries and Supercaps, 2020, 3, 499-509.	2.4	24
28	Mechanical cleaning of graphene using in situ electron microscopy. Nature Communications, 2020, 11, 1743.	5.8	36
29	Rational Chemical Multifunctionalization of Graphene Interface Enhances Targeted Cancer Therapy. Angewandte Chemie, 2020, 132, 14138-14143.	1.6	10
30	Rational Chemical Multifunctionalization of Graphene Interface Enhances Targeted Cancer Therapy. Angewandte Chemie - International Edition, 2020, 59, 14034-14039.	7.2	25
31	Insights into the formation of metal carbon nanocomposites for energy storage using hybrid NiFe layered double hydroxides as precursors. Chemical Science, 2020, 11, 7626-7633.	3.7	9
32	Interface Molecular Engineering for Laminated Monolithic Perovskite/Silicon Tandem Solar Cells with 80.4% Fill Factor. Advanced Functional Materials, 2019, 29, 1901476.	7.8	43
33	A Straightforward Approach to Multifunctional Graphene. Chemistry - A European Journal, 2019, 25, 13218-13223.	1.7	12
34	Influence of the Interlayer Space on the Water Oxidation Performance in a Family of Surfactant-Intercalated NiFe-Layered Double Hydroxides. Chemistry of Materials, 2019, 31, 6798-6807.	3.2	71
35	Halide-Mediated Modification of Magnetism and Electronic Structure of α-Co(II) Hydroxides: Synthesis, Characterization, and DFT+U Simulations. Inorganic Chemistry, 2019, 58, 9414-9424.	1.9	16
36	Real Sociedad Española de QuÃmica Awards 2019. Angewandte Chemie - International Edition, 2019, 58, 13625-13627.	7.2	2

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37	Liquid phase exfoliation of antimonene: systematic optimization, characterization and electrocatalytic properties. Journal of Materials Chemistry A, 2019, 7, 22475-22486.	5.2	54
38	Monolayer black phosphorus by sequential wet-chemical surface oxidation. RSC Advances, 2019, 9, 3570-3576.	1.7	28
39	Liquid phase exfoliation of carbonate-intercalated layered double hydroxides. Chemical Communications, 2019, 55, 3315-3318.	2.2	45
40	Gitteröffnung durch reduktive kovalente Volumenâ€Funktionalisierung von schwarzem Phosphor. Angewandte Chemie, 2019, 131, 5820-5826.	1.6	12
41	Lattice Opening upon Bulk Reductive Covalent Functionalization of Black Phosphorus. Angewandte Chemie - International Edition, 2019, 58, 5763-5768.	7.2	60
42	Giant Enhancement in the Supercapacitance of NiFe–Graphene Nanocomposites Induced by a Magnetic Field. Advanced Materials, 2019, 31, e1900189.	11.1	21
43	Solvent-Free Synthesis of ZIFs: A Route toward the Elusive Fe(II) Analogue of ZIF-8. Journal of the American Chemical Society, 2019, 141, 7173-7180.	6.6	76
44	Few layer 2D pnictogens catalyze the alkylation of soft nucleophiles with esters. Nature Communications, 2019, 10, 509.	5.8	61
45	Fundamental Insights into the Reductive Covalent Cross-Linking of Single-Walled Carbon Nanotubes. Journal of the American Chemical Society, 2018, 140, 3352-3360.	6.6	38
46	Deciphering the Role of Dipolar Interactions in Magnetic Layered Double Hydroxides. Inorganic Chemistry, 2018, 57, 2013-2022.	1.9	21
47	Influence of morphology in the magnetic properties of layered double hydroxides. Journal of Materials Chemistry C, 2018, 6, 1187-1198.	2.7	29
48	Isomerically Pure Starâ€Shaped Triphenylene–Perylene Hybrids Involving Highly Extended Ï€â€Conjugation. Chemistry - A European Journal, 2018, 24, 4671-4679.	1.7	8
49	Recent Progress on Antimonene: A New Bidimensional Material. Advanced Materials, 2018, 30, 1703771.	11.1	245
50	Electronic Properties of Airâ€Sensitive Nanomaterials Probed with Microwave Impedance Measurements. Physica Status Solidi (B): Basic Research, 2018, 255, 1800250.	0.7	2
51	Effect of TCNQ Layer Cover on Oxidation Dynamics of Black Phosphorus. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800179.	1.2	4
52	Unifying Principles of the Reductive Covalent Graphene Functionalization. Journal of the American Chemical Society, 2017, 139, 5175-5182.	6.6	54
53	Exploring the Formation of Black Phosphorus Intercalation Compounds with Alkali Metals. Angewandte Chemie, 2017, 129, 15469-15475.	1.6	12
54	Exploring the Formation of Black Phosphorus Intercalation Compounds with Alkali Metals. Angewandte Chemie - International Edition, 2017, 56, 15267-15273.	7.2	69

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55	Noncovalent Functionalization and Charge Transfer in Antimonene. Angewandte Chemie - International Edition, 2017, 56, 14389-14394.	7.2	83
56	Noncovalent Functionalization and Charge Transfer in Antimonene. Angewandte Chemie, 2017, 129, 14581-14586.	1.6	26
57	Electronic and Magnetic Properties of Black Phosphorus. Physica Status Solidi (B): Basic Research, 2017, 254, 1700232.	0.7	17
58	Fundamental Insights into the Degradation and Stabilization of Thin Layer Black Phosphorus. Journal of the American Chemical Society, 2017, 139, 10432-10440.	6.6	232
59	Metal-functionalized covalent organic frameworks as precursors of supercapacitive porous N-doped graphene. Journal of Materials Chemistry A, 2017, 5, 4343-4351.	5.2	91
60	Self-Assembly of $1D/2D$ Hybrid Nanostructures Consisting of a Cd(II) Coordination Polymer and NiAl-Layered Double Hydroxides. Polymers, 2016, 8, 5.	2.0	13
61	Small-pore driven high capacitance in a hierarchical carbon via carbonization of Ni-MOF-74 at low temperatures. Chemical Communications, 2016, 52, 9141-9144.	2.2	51
62	Modulation of the exfoliated graphene work function through cycloaddition of nitrile imines. Physical Chemistry Chemical Physics, 2016, 18, 29582-29590.	1.3	16
63	Highly Integrated Organic–Inorganic Hybrid Architectures by Noncovalent Exfoliation of Graphite and Assembly with Zinc Oxide Nanoparticles. Advanced Materials Interfaces, 2016, 3, 1600365.	1.9	9
64	Few‣ayer Antimonene by Liquidâ€Phase Exfoliation. Angewandte Chemie, 2016, 128, 14557-14561.	1.6	74
65	Few‣ayer Antimonene by Liquidâ€Phase Exfoliation. Angewandte Chemie - International Edition, 2016, 55, 14345-14349.	7.2	346
66	Noncovalent Functionalization of Black Phosphorus. Angewandte Chemie, 2016, 128, 14777-14782.	1.6	71
67	Noncovalent Functionalization of Black Phosphorus. Angewandte Chemie - International Edition, 2016, 55, 14557-14562.	7.2	199
68	Alkoxide-intercalated NiFe-layered double hydroxides magnetic nanosheets as efficient water oxidation electrocatalysts. Inorganic Chemistry Frontiers, 2016, 3, 478-487.	3.0	58
69	Graphene enhances the magnetoresistance of FeNi ₃ nanoparticles in hierarchical FeNi ₃ –graphene nanocomposites. Journal of Materials Chemistry C, 2016, 4, 2252-2258.	2.7	17
70	CVD synthesis of carbon spheres using NiFe-LDHs as catalytic precursors: structural, electrochemical and magnetoresistive properties. Journal of Materials Chemistry C, 2016, 4, 440-448.	2.7	22
71	Electrical Conductivity and Strong Luminescence in Copper Iodide Double Chains with Isonicotinato Derivatives. Chemistry - A European Journal, 2015, 21, 17282-17292.	1.7	31
72	Hybrid Materials Based on Magnetic Layered Double Hydroxides: A Molecular Perspective. Accounts of Chemical Research, 2015, 48, 1601-1611.	7.6	135

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73	Layered gadolinium hydroxides for low-temperature magnetic cooling. Chemical Communications, 2015, 51, 14207-14210.	2.2	37
74	Stimuli-responsive hybrid materials: breathing in magnetic layered double hydroxides induced by a thermoresponsive molecule. Chemical Science, 2015, 6, 1949-1958.	3.7	40
75	Liquid exfoliation of solvent-stabilized few-layer black phosphorus for applications beyond electronics. Nature Communications, 2015, 6, 8563.	5.8	921
76	Alkoxide-intercalated CoFe-layered double hydroxides as precursors of colloidal nanosheet suspensions: structural, magnetic and electrochemical properties. Journal of Materials Chemistry C, 2014, 2, 3723-3731.	2.7	116
77	Inâ€Situ Growth of Ultrathin Films of NiFeâ€LDHs: Towards a Hierarchical Synthesis of Bambooâ€Like Carbon Nanotubes. Advanced Materials Interfaces, 2014, 1, 1400184.	1.9	39
78	A photoresponsive graphene oxide–C ₆₀ conjugate. Chemical Communications, 2014, 50, 9053.	2.2	39
79	Photoresponsive Materials: Photo-Switching in a Hybrid Material Made of Magnetic Layered Double Hydroxides Intercalated with Azobenzene Molecules (Adv. Mater. 24/2014). Advanced Materials, 2014, 26, 4188-4188.	11.1	2
80	Synthesis of FeNi3 nanoparticles in benzyl alcohol and their electrical and magnetic properties. Journal of Sol-Gel Science and Technology, 2014, 70, 292-299.	1.1	7
81	A chemical and electrochemical multivalent memory made from FeNi3-graphene nanocomposites. Electrochemistry Communications, 2014, 39, 15-18.	2.3	14
82	Photoâ€Switching in a Hybrid Material Made of Magnetic Layered Double Hydroxides Intercalated with Azobenzene Molecules. Advanced Materials, 2014, 26, 4156-4162.	11.1	52
83	Interplay between Chemical Composition and Cation Ordering in the Magnetism of Ni/Fe Layered Double Hydroxides. Inorganic Chemistry, 2013, 52, 10147-10157.	1.9	50
84	Intercalation of cobalt(II)-tetraphenylporphine tetrasulfonate complex in magnetic NiFe-layered double hydroxide. Polyhedron, 2013, 52, 216-221.	1.0	31
85	Room Temperature Magnetism in Layered Double Hydroxides due to Magnetic Nanoparticles. Inorganic Chemistry, 2013, 52, 7828-7830.	1.9	38
86	Magnetic Nanocomposites Formed by FeNi ₃ Nanoparticles Embedded in Graphene. Application as Supercapacitors. Particle and Particle Systems Characterization, 2013, 30, 853-863.	1.2	53
87	NOx selective catalytic reduction at high temperatures with mixed oxides derived from layered double hydroxides. Catalysis Today, 2012, 191, 47-51.	2.2	8
88	Hybrid Magnetic Multilayers by Intercalation of Cu(II) Phthalocyanine in LDH Hosts. Journal of Physical Chemistry C, 2012, 116, 15756-15764.	1.5	32
89	Layered double hydroxide (LDH)–organic hybrids as precursors for low-temperature chemical synthesis of carbon nanoforms. Chemical Science, 2012, 3, 1481.	3.7	45
90	Graphene as a carbon source effects the nanometallurgy of nickel in Ni,Mn layered double hydroxide–graphene oxide composites. Chemical Communications, 2012, 48, 11416.	2.2	35

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91	The synthesis of a hybrid graphene–nickel/manganese mixed oxide and its performance in lithium-ion batteries. Carbon, 2012, 50, 518-525.	5.4	105
92	Photochemical behavior in azobenzene having acidic groups. Preparation of magnetic photoresponsive gels. Journal of Photochemistry and Photobiology A: Chemistry, 2011, 217, 157-163.	2.0	18
93	Hexagonal nanosheets from the exfoliation of Ni2+-Fe3+ LDHs: a route towards layered multifunctional materials. Journal of Materials Chemistry, 2010, 20, 7451.	6.7	129
94	Hierarchical control of porous silica by pH adjustment: Alkyl polyamines as surfactants for bimodal silica synthesis and its carbon replica. Journal of Solid State Chemistry, 2009, 182, 2141-2148.	1.4	13