

# Yves Huttel

## List of Publications by Year in descending order

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104  
papers

2,207  
citations

236925

25  
h-index

276875

41  
g-index

115  
all docs

115  
docs citations

115  
times ranked

3336  
citing authors

#	ARTICLE	IF	CITATIONS
1	Production and processing of graphene and related materials. 2D Materials, 2020, 7, 022001.	4.4	333
2	The ultimate step towards a tailored engineering of core@shell and core@shell@shell nanoparticles. Nanoscale, 2014, 6, 13483-13486.	5.6	101
3	Patterning Polymeric Structures with 2 nm Resolution at 3 nm Half Pitch in Ambient Conditions. Nano Letters, 2007, 7, 1846-1850.	9.1	80
4	Generation of Nanoparticles with Adjustable Size and Controlled Stoichiometry: Recent Advances. Langmuir, 2012, 28, 11241-11249.	3.5	79
5	Citric juice-mediated synthesis of tellurium nanoparticles with antimicrobial and anticancer properties. Green Chemistry, 2019, 21, 1982-1998.	9.0	60
6	A novel Co@Au structure formed in bimetallic core@shell nanoparticles. Chemical Communications, 2015, 51, 8442-8445.	4.1	55
7	Functional Hybrid Nanopaper by Assembling Nanofibers of Cellulose and Sepiolite. Advanced Functional Materials, 2018, 28, 1703048.	14.9	49
8	Nanopatterning of carbonaceous structures by field-induced carbon dioxide splitting with a force microscope. Applied Physics Letters, 2010, 96, .	3.3	43
9	Study of the valence state and electronic structure in Sr <sub>2</sub> FeMO <sub>6</sub> (M = W, Mo, Re and Sb) double perovskites. Physical Chemistry Chemical Physics, 2010, 12, 13616.	2.8	41
10	Surface charge density waves at Sn/Ge(111)? Applied Surface Science, 1998, 123-124, 440-444.	6.1	40
11	Induced V and reduced Co magnetic moments at the V/Co interface. Physical Review B, 2003, 68, .	3.2	40
12	Angle-resolved photoemission study and first-principles calculation of the electronic structure of GaTe. Physical Review B, 2002, 65, .	3.2	38
13	X-ray magnetic circular dichroism study of the blocking process in nanostructured iron-iron oxide core-shell systems. Physical Review B, 2011, 84, .	3.2	37
14	Thermal Diffusion at Nanoscale: From CoAu Alloy Nanoparticles to Co@Au Core/Shell Structures. Journal of Physical Chemistry C, 2013, 117, 3101-3108.	3.1	35
15	Epitaxial growth of AlN on sapphire (0001) by sputtering: a structural, morphological and optical study. Journal of Crystal Growth, 2002, 242, 116-123.	1.5	34
16	Temperature and thickness dependence at the onset of perpendicular magnetic anisotropy in FePd thin films sputtered on MgO(001). Physical Review B, 2006, 73, .	3.2	34
17	Size effects in the magneto-optical response of Co nanoparticles. Physical Review B, 2005, 72, .	3.2	33
18	Core@shell, Au@TiO <sub>x</sub> nanoparticles by gas phase synthesis. Nanoscale, 2017, 9, 6463-6470.	5.6	29

#	ARTICLE	IF	CITATIONS
19	Gas-phase synthesis of nanoparticles: present status and perspectives. MRS Communications, 2018, 8, 947-954.	1.8	29
20	Aspect-ratio and lateral-resolution enhancement in force microscopy by attaching nanoclusters generated by an ion cluster source at the end of a silicon tip. Review of Scientific Instruments, 2011, 82, 023710.	1.3	27
21	Matrix and interaction effects on the magnetic properties of Co nanoparticles embedded in gold and vanadium. Physical Chemistry Chemical Physics, 2013, 15, 316-329.	2.8	27
22	Precisely controlled fabrication, manipulation and in-situ analysis of Cu based nanoparticles. Scientific Reports, 2018, 8, 7250.	3.3	27
23	Experimental evidence of long-range magnetic order in the $c(2\sqrt{2})\text{MnCu}(100)$ surface alloy. Physical Review B, 2001, 64, .	3.2	26
24	Direct synthesis of graphene on silicon oxide by low temperature plasma enhanced chemical vapor deposition. Nanoscale, 2018, 10, 12779-12787.	5.6	26
25	O 1s investigation of SiO <sub>2</sub> /Si interface formation using an alkali metal promoter. Applied Surface Science, 1993, 65-66, 840-846.	6.1	25
26	Application of diamond-like carbon coatings to elastomers frictional surfaces. Tribology International, 2009, 42, 584-590.	5.9	24
27	Magnetic coupling between Fe nanoislands induced by capping-layer magnetic polarization. Physical Review B, 2004, 69, .	3.2	23
28	Cobalt nanoparticles deposited and embedded in AlN: Magnetic, magneto-optical, and morphological properties. Journal of Applied Physics, 2004, 96, 1666-1673.	2.5	23
29	Morphological, structural, and magnetic properties of Co nanoparticles in a silicon oxide matrix. Journal of Nanoparticle Research, 2011, 13, 5321-5333.	1.9	23
30	High-Performance n-type SnSe Thermoelectric Polycrystal Prepared by Arc-Melting. Cell Reports Physical Science, 2020, 1, 100263.	5.6	23
31	Surface analysis of NBR and HNBR elastomers modified with different plasma treatments. Vacuum, 2007, 81, 1489-1492.	3.5	21
32	Electronic and structural properties of Mn/Cu superstructures. Physical Review B, 2000, 61, 4948-4957.	3.2	20
33	Interface magnetic properties of epitaxial Fe-InAs heterostructures. IEEE Transactions on Magnetics, 2002, 38, 2652-2654.	2.1	20
34	Linear and quadratic magneto-optical Kerr effects in continuous and granular ultrathin monocrystalline Fe films. Physical Review B, 2003, 68, .	3.2	20
35	Influence of thermal ageing on surface degradation of ethylene- $\epsilon$ -propylene- $\epsilon$ -diene elastomer. Journal of Applied Polymer Science, 2011, 119, 242-251.	2.6	20
36	Capping layer effects in the structure and composition of Co nanoparticle ultrathin films. Applied Physics Letters, 2005, 86, 032510.	3.3	19

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37	Low-energy Ar <sup>+</sup> ion bombardment-induced modification of surface atomic bond lengths on InP(100) wafer. <i>Applied Physics Letters</i> , 1993, 63, 1957-1959.	3.3	18
38	Structural characterization of Fe(110) islands grown on $\alpha$ -Al <sub>2</sub> O <sub>3</sub> (0001). <i>Thin Solid Films</i> , 2003, 434, 228-238.	1.8	18
39	Interface alloying effects in the magnetic properties of Fe nanoislands capped with different materials. <i>Physical Review B</i> , 2008, 78, .	3.2	18
40	Understanding the role of thiol and disulfide self-assembled DNA receptor monolayers for biosensing applications. <i>European Biophysics Journal</i> , 2010, 39, 1433-1444.	2.2	18
41	Synergic antibacterial coatings combining titanium nanocolumns and tellurium nanorods. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2019, 17, 36-46.	3.3	17
42	Electronic instabilities of the two-dimensional Sn/Ge(111) $\sqrt{3}\times\sqrt{3}$ -phase. <i>Surface Science</i> , 1999, 433-435, 327-331.	1.9	16
43	<p></p>Comparison of cytocompatibility and anticancer properties of traditional and green chemistry-synthesized tellurium nanowires</p>. <i>International Journal of Nanomedicine</i> , 2019, Volume 14, 3155-3176.	6.7	16
44	Aloe Vera-Mediated Te Nanostructures: Highly Potent Antibacterial Agents and Moderated Anticancer Effects. <i>Nanomaterials</i> , 2021, 11, 514.	4.1	16
45	Promoted oxidation of aluminum thin films using an alkali metal catalyst. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1993, 11, 2186-2192.	2.1	14
46	Growth and magnetic characterization of Co nanoparticles obtained by femtosecond pulsed laser deposition. <i>Physical Review B</i> , 2009, 79, .	3.2	14
47	Capping-layer-induced magnetic coupling in a two-dimensional nanostructured system. <i>Applied Physics Letters</i> , 2004, 84, 2139-2141.	3.3	13
48	Epitaxy and lattice distortion of V in MgO/V/MgO(001) heterostructures. <i>Journal of Crystal Growth</i> , 2005, 273, 474-480.	1.5	13
49	Core-shell nanocrystalline structures in oxidized iron thin films prepared by sputtering at very low temperatures. <i>Journal of Applied Physics</i> , 2007, 101, 113914.	2.5	13
50	Optical and magneto-optical properties of Au:Co nanoparticles and Co:Au nanoparticles doped magnetoplasmonic systems. <i>Journal of Applied Physics</i> , 2015, 117, .	2.5	13
51	Magnetic V embedded in copper evidenced by x-ray magnetic circular dichroism. <i>Physical Review B</i> , 2003, 67, .	3.2	12
52	Surface localized nitrogen incorporation in epitaxial FePd films and its effect in the Magneto-Optical properties. <i>Surface Science</i> , 2004, 571, 63-73.	1.9	12
53	Structural and magnetic properties of $\sqrt{3}\times\sqrt{3}$ -Co fcc and $\sqrt{3}\times\sqrt{3}$ -V bilayers grown on MgO(100): A comparative study. <i>Journal of Applied Physics</i> , 2006, 100, 053917.	2.5	12
54	X-ray absorption and magnetic circular dichroism characterization of a novel ferromagnetic MnN <sub>x</sub> phase in Mn/Si <sub>3</sub> N <sub>4</sub> multilayers. <i>Applied Physics Letters</i> , 2008, 93, .	3.3	12

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55	Dispersion and Functionalization of Nanoparticles Synthesized by Gas Aggregation Source: Opening New Routes Toward the Fabrication of Nanoparticles for Biomedicine. <i>Langmuir</i> , 2015, 31, 13813-13820.	3.5	12
56	Structural Features, Anisotropic Thermal Expansion, and Thermoelectric Performance in Bulk Black Phosphorus Synthesized under High Pressure. <i>Inorganic Chemistry</i> , 2020, 59, 14932-14943.	4.0	12
57	Photoinduced Charge Transfer and Trapping on Single Gold Metal Nanoparticles on TiO <sub>2</sub> . <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 50531-50538.	8.0	12
58	Sb-induced surface stabilization of InP(100) wafer beyond 500°C. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1993, 11, 1603.	1.6	11
59	Influence of the linker type on the Au-S binding properties of thiol and disulfide-modified DNA self-assembly on polycrystalline gold. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 3301.	2.8	11
60	Tuning the size, composition and structure of Au and Co <sub>50</sub> Au <sub>50</sub> nanoparticles by high-power impulse magnetron sputtering in gas-phase synthesis. <i>Nanotechnology</i> , 2019, 30, 065606.	2.6	11
61	Photoinduced Self-Cleaning and Wettability in TiO <sub>2</sub> Nanocolumn Arrays Obtained by Glancing Angle Deposition with Sputtering. <i>Advanced Sustainable Systems</i> , 2021, 5, 2100071.	5.3	11
62	Visualization of the Active Zone of an Irregular Electrode by Optical Absorption. <i>Journal of the Electrochemical Society</i> , 1997, 144, 1713-1717.	2.9	10
63	Growth and magnetic properties of copper on Cu(100)c(2Å)-Mn surface alloy. <i>Surface Science</i> , 1999, 433-435, 434-439.	1.9	10
64	Effect of a capping layer on the magnetic properties of island nanostructured Fe(110). <i>Journal of Applied Physics</i> , 2005, 97, 104302.	2.5	10
65	Morphology and capping effects in the magnetic and magneto-optical properties of nanoparticulate Co films. <i>Physical Review B</i> , 2008, 77, .	3.2	10
66	Green synthesis of starch-capped Cu <sub>2</sub> O nanocubes and their application in the direct electrochemical detection of glucose. <i>RSC Advances</i> , 2021, 11, 13711-13721.	3.6	10
67	Composition-Dependent Cytotoxic and Antibacterial Activity of Biopolymer-Capped Ag/Au Bimetallic Nanoparticles against Melanoma and Multidrug-Resistant Pathogens. <i>Nanomaterials</i> , 2022, 12, 779.	4.1	10
68	A study of the response of Y3Al5O12:Ce phosphor powder screens in the vacuum ultraviolet and soft X-ray regions using synchrotron radiation. <i>Journal of Synchrotron Radiation</i> , 2000, 7, 215-220.	2.4	9
69	Growth and characterization of FeB nanoparticles for potential application as magnetic resonance imaging contrast agent. <i>Materials Research Express</i> , 2014, 1, 025008.	1.6	9
70	Nanostructured carbon-metal hybrid aerogels from bacterial cellulose. <i>RSC Advances</i> , 2017, 7, 42203-42210.	3.6	9
71	Versatile Graphene-Based Platform for Robust Nanobiohybrid Interfaces. <i>ACS Omega</i> , 2019, 4, 3287-3297.	3.5	9
72	Electrocatalytic Behavior of PtCu Clusters Produced by Nanoparticle Beam Deposition. <i>Journal of Physical Chemistry C</i> , 2020, 124, 23683-23689.	3.1	9

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73	Atomic Structure and Lattice Dynamics of CoSb <sub>3</sub> Skutterudite-Based Thermoelectrics. Chemistry of Materials, 2022, 34, 1213-1224.	6.7	9
74	Al <sub>2</sub> O <sub>3</sub> +x/Al interface formation by promoted oxidation using an alkali metal and removal of the catalyst. Applied Physics Letters, 1993, 62, 2437-2439.	3.3	8
75	Auger electron diffraction study of V/Fe(100) interface formation. Surface Science, 1998, 402-404, 609-613.	1.9	8
76	Structure of MgO/V/MgO(001) thin films studied by the combination of X-ray photoemission and ion beam analysis techniques. Surface Science, 2006, 600, 497-506.	1.9	8
77	Core-Satellite Gold Nanoparticle Complexes Grown by Inert Gas-Phase Condensation. Journal of Physical Chemistry C, 2020, 124, 24441-24450.	3.1	8
78	New electronic states close to the Fermi edge in the c(2 $\sqrt{3}$ ×2) MnCu(1 0 0) surface alloy. Surface Science, 2001, 482-485, 540-545.	1.9	7
79	Induced ferromagnetism in Mn <sub>3</sub> N <sub>2</sub> phase embedded in Mn/Si <sub>3</sub> N <sub>4</sub> multilayers. Journal of Applied Physics, 2009, 106, .	2.5	7
80	Structural properties of the Na/Si(111)2 $\sqrt{3}$ ×1 surface studied by photoemission extended x-ray-absorption fine structures. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1994, 12, 2694.	1.6	6
81	Dynamical fluctuation and surface phase transition at the Sn/Ge(111) $\sqrt{3}$ × $\sqrt{3}$ R30°-1 $\times$ 1 interface. Applied Surface Science, 2000, 162-163, 48-55.	6.1	6
82	Interface effects, magnetic, and magneto-optical properties of Al <sub>x</sub> Co <sub>1-x</sub> V <sub>1-x</sub> MgO(100) structures. Physical Review B, 2008, 77, .	3.2	6
83	Optical and magneto-optical properties of Co-SiO <sub>x</sub> thin films. Journal of Nanoparticle Research, 2011, 13, 2653-2659.	1.9	6
84	Unveiling the infrared complex dielectric function of ilmenite CdTiO <sub>3</sub> . Journal of Alloys and Compounds, 2020, 813, 152136.	5.5	6
85	Characterization of a new rechargeable Zn/PVA-KOH/Bi <sub>2</sub> O <sub>3</sub> battery: structural changes of the Bi <sub>2</sub> O <sub>3</sub> electrode. Sustainable Energy and Fuels, 2020, 4, 4497-4505.	4.9	6
86	Sb-induced interatomic bond distance stabilization on InP(100) surface. Applied Physics Letters, 1994, 64, 863-865.	3.3	5
87	INITIAL STEPS OF ALKALI-METAL-PROMOTED OXIDATION OF THE Al(111) SURFACE. Surface Review and Letters, 1995, 02, 549-556.	1.1	5
88	Role of volume versus defects in the electrical resistivity of lattice-distorted V(001) ultrathin films. Physical Review B, 2007, 76, .	3.2	5
89	Investigation of the Working Parameters of a Single Magnetron of a Multiple Ion Cluster Source: Determination of the Relative Influence of the Parameters on the Size and Density of Nanoparticles. Dataset Papers in Science, 2013, 2013, 1-8.	1.0	5
90	Synthesis and characterization of Fe-B nanoparticles for potential magnetic applications. Journal of Materials Science: Materials in Electronics, 2014, 25, 659-663.	2.2	5

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91	Antimony on metal and semiconductor surfaces: interface formation and passivation. Surface Science, 1996, 352-354, 845-849.	1.9	4
92	Magnetic order of Cr thin films in Nb/Cr/Fe-nanoisland hybrid: A comparative study between magnetic and superconducting properties. Journal of Applied Physics, 2009, 105, .	2.5	4
93	Spontaneous Formation of Core@shell Co@Cr Nanoparticles by Gas Phase Synthesis. Applied Nano, 2020, 1, 87-101.	2.0	4
94	Multiple Ion Cluster Source for the Generation of Magnetic Nanoparticles: Investigation of the Efficiency as a Function of the Working Parameters for the Case of Cobalt. Dataset Papers in Science, 2014, 2014, 1-9.	1.0	4
95	Angle-scanned photoemission spectrum from Cu(1 0 0): theory vs experiment. Surface Science, 2001, 482-485, 718-722.	1.9	3
96	Perpendicular magnetic anisotropy in chemically disordered FePd $\epsilon$ -FeV(100) alloy thin films. Journal of Applied Physics, 2006, 99, 073903.	2.5	3
97	Photoemission study of fluorination atmospheric pressure plasma processes on EPDM: Influence of the carrier and fluorinating gas. Applied Surface Science, 2010, 257, 832-836.	6.1	3
98	LEED and EXAFS study of the crystallographic structure of Cu/c(2 $\sqrt{2}$ )-MnCu(100) slab. Surface Science, 2003, 544, 261-268.	1.9	2
99	Electronic configuration of the c(2 $\sqrt{2}$ )MnCu two-dimensional alloy in layered structures supported on Cu(100). Journal of Physics Condensed Matter, 2003, 15, 1183-1200.	1.8	2
100	Layer-resolved elemental-composition determination at the Co/V interface in Co/V/MgO(100). Surface Science, 2008, 602, L139-L144.	1.9	2
101	Pulsed Electrodeposition of Tree-Like Copper Aggregates. Materials Research Society Symposia Proceedings, 1994, 367, 177.	0.1	1
102	Magnetism and magneto-optics of Co nanoparticles embedded in dielectric and metallic matrices. , 2005, , .		1
103	Magnetic and topographic correlations in Co nanoparticles. Journal of Magnetism and Magnetic Materials, 2007, 316, e787-e790.	2.3	1
104	Compositional and structural medium energy ion scattering study of the temperature mediated diffusion determination at the Co/V interface in Co/V/MgO(100). Surface Science, 2010, 604, 2177-2183.	1.9	1